Team-teaching philosophy in upper secondary school
A Swedish Experience

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Abstract

This paper discusses a team-taught course we designed, executed and evaluated at Tibble Gymnasium, an upper secondary school in Stockholm, Sweden. With the use of a two-teacher system we wanted to overcome typical difficulties philosophical novices face. After discussing the justifications for designing and teaching the course, we continue to detail its structure and content. Next we evaluate the project with reference to data collected from the students and from reference groups. The resulting effects on students as well as teachers are considerable. The students in the project are, according to the data, more satisfied with their learning and earned higher grades than students in the reference group and the teachers have improved their philosophical and pedagogical skills.

1. Introduction

Novices often find philosophy difficult. The subject matter is rather abstract and the method differs from mathematical as well as from empirical methods. The difficulties are likely to impede learning and to discourage students to develop their philosophical skills. In this paper we will describe how we, with reference to a two-teacher system, were able to meet these difficulties.

There are good reasons to believe that team teaching is beneficial to learning, especially when the subject matter allows for much discussion and argumentation. Our hypothesis was therefore, in outline, that a two-teacher system would reduce the indicated difficulties without compromising the complexity of philosophical problems and theories and at the same make philosophy studies inspiring and eye opening. We have evaluated this hypothesis with reference to quantitative as well as qualitative data.

According to our evaluation the hypothesis is confirmed. The students in the two-teacher system found the teaching more stimulating and engaging as compared to students in two reference groups that have not been team-taught. Our students benefitted from the fact that we as teachers have different areas of expertise. This allows the students to learn more than if they had had only one instructor. The different philosophical competences and perspectives were expressed in class and stimulated the students to develop their own thinking. In a nutshell, the two-teacher system made the learning situation dynamic and engaging. This was also manifested in the grades. The students that took part of the two-teacher system had on average significantly higher grades than students in the reference groups.

The effects on the teachers were also considerable. By learning from each other, the teachers made better philosophers and better teachers. An additional benefit is that the two-teacher system does not put any additional economic strain on the school budget.

In the next section we describe the method used to evaluate our hypothesis and in section 3 we put our teaching in relation to the Swedish upper secondary school curriculum. Thereafter, in section 4, we elaborate the reasons why philosophy students find philosophy troublesome. We relate these reasons to our educational goals and to our hypothesis. In section 5 we describe research implying that team-teaching is beneficial to philosophy learning. In the same section we give a thorough portrayal of the way in which we implemented our two-teacher system. In section 6 we give a detailed account of the philosophy course and its modules as we taught them. In section 7, we present the results and compare attitudes towards philosophy among the students in our project with students' attitudes in the reference groups. In the last section we portray some challenges and further implications relating to team-teaching. Although the Swedish educational system differs from other systems our findings can be generalized to other countries as well as to higher education.

2. Method

There are good reasons to believe that a two-teacher system is an effective means to achieve educational goals. In order to investigate this more thoroughly we designed a project involving 129 upper secondary high school students from Stockholm. The project spanned over two school years. 64 of the students participated in the two-teacher education 2015-2016 and 65 students participated in 2016-2017. At the end of each school year the students voluntarily filled in answers in a survey.

Our survey is based on philosopher Jan Lif's 2007 inquiry. Lif and his colleagues from Gothenburg University made a survey of Swedish upper secondary students' attitudes to philosophy. There is no other nation wide study of such attitudes available.

Lif's study includes twenty propositions, fourteen of which are of no significance to our project. For instance, we left out propositions stating claims about professional philosophers and propositions about philosophy studies at college. To the six propositions that we deemed useful from Lif we added two about the two-teacher system and one about the course curriculum.

The students that delivered the data set described by Lif constitute one reference group, hereafter, Lif's group. It is interesting to compare our data with Lif's since his study is carefully completed and involves many students. What is more, the students in that study have not been team-taught. In addition two other groups at our school have served as references, one in 2015-2016 and one in 2016-2017. These groups have been taught by one of the teachers in the two-teacher project. This teacher has made use of the same curriculum, modules, exercises and tests as in the two-teacher system. The reference groups have also filled in answers to the same survey delivered to the classes involved in our project aside from the one relating to team teaching.

In order to simplify, we have merged the two cohorts of students participating in the project into one, hereafter called the project group. The reference students at our school constitute what we will refer to as the reference group. The total number of students in the reference group is 58.

We have also considered the students' academic achievements. We have compared the average grade of the students in our project with the average grade of the students in the reference group.

The quantitative approaches are complemented by a qualitative approach. With the survey as our point of departure we interviewed the students, one group in 2016 and one group in 2017. Comments from the interviews add new meaning to the data from the surveys.

3. Outline of the Swedish educational system

The Swedish educational system involves different types of education, designed for individuals of different ages, needs and abilities. All youths in Sweden who have completed the nine-year compulsory school have a right to free upper secondary school education.

The upper secondary school consists of 18 programs, each of which lasts for three years. Six of these programs are preparatory for higher education: Business Management and Economics Program, Arts Program, Humanities Program, Natural Science Program, Social Science Program and Technology Program.

Some subjects are common to all six programs and are called foundation subjects. The syllabus contains the aims of the subject as a whole. It also contains a description of the subject's core content. Knowledge requirements are specified for each course included in the subject. It is the government that decides the syllabus for the foundational subjects, based on proposals from the National Agency for Education.

Philosophy is not a foundation subject, but is program specific to the Humanities Program, the Social Science Program and to the law orientation of the Business Management and Economics Program. This means that all students in Sweden who study any of these programs are required to study philosophy. It is the National Agency of Education that decides the subject syllabuses of these courses. Approximately 65 000 of the students in upper secondary school study philosophy.[1]

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[1] See: http://siris.skolverket.se/siris/f?p=101:181:0::NO:::

There are two courses within Philosophy called Philosophy 1 and Philosophy 2. The courses are worth 50 credits each (Each higher education preparatory program requires 2500 credits). One 50 credits course involves approximately 40 hours of teaching.

The Swedish National Agency of Education stipulates the aims of the philosophy courses. According to the agency, teaching the subject of philosophy should give students the opportunities to develop the following:

1) Knowledge of the main characteristics of different views of reality and different ways of viewing knowledge.
2) Knowledge of theoretical views in science and scientific methods.
3) Knowledge of ethics, different ethical viewpoints, and normative ethical theories, and also their application.
4) Knowledge of existential questions and social philosophy, and also current trends in modern philosophy.
5) The ability to identify philosophical issues, and also to analyse, explain and determine a position on classical and contemporary philosophical questions and theories using relevant concepts.
6) Knowledge of linguistic philosophy and the ability to clarify nuances of language by means of linguistic concepts, and also the ability to assess arguments and to distinguish and apply logical arguments (The Swedish Agency of Education 2012).

The Agency deems all aims to be equally important. It does not stipulate that an equal amount of time be allotted to the fostering of each aim, nor does it dictate that a specific teaching method be used. It is thus up to the teacher to plan the course in a way that assures that the aims are realized.

Each student gets a grade in the subject. The grade marks the degree to which the student satisfies the given aims. Grades are set from A to F. E-A are passing grades, F is a failing grade. The National Agency of Education has set knowledge requirements for the various grades associated with each aim. When the course is over the teacher makes an overall evaluation of the student's abilities. The evaluation is based upon the degree in which the student has satisfied the six aims. In order to get an A in Philosophy the student must satisfy the knowledge requirements to the highest degree (that is A) relating to each and every of the six aims.

When the students apply to higher education, the grades in the different subjects are transformed into numbers as follows: E = 10; D = 12,5; C = 15; B = 17,5; A = 20. We will make use of this transformation in section 7.

4. Diagnosis, goal and hypothesis

There are surprisingly few inquiries about Swedish students' perceptions of their philosophy education. In 2007 Lif sent a survey to all upper secondary schools that provided the Social Science Program, where Philosophy is a program specific. As stressed by Lif, the reply rate was rather low. Only 1759 replies were given. This number makes up approximately 20% of the students at the program at that time. Yet, according to Lif and his colleagues, the replies are representative for all students at the Social Science Program. In what follows we will assume that this is the case.

In Lif's study 12.5% fully agreed with "Studying Philosophy can help my performance in other subjects, e.g. Swedish, History, Social Studies and Psychology." 17.5% fully agreed with "Studying Philosophy can help me analyze societal issues, e.g. ethical debates, environmental issues, financial politics." 14% fully agreed with "Philosophy deepens the ability to critically analyze argumentative texts." These numbers suggest that students find philosophy to be of limited significance to societal issues, to other scientific disciplines and to critical thinking.

There are several explanations of these unsatisfactory results. Although all novices have been considering philosophical problems before, many of them have been unaware of the fact that when doing so they have been engaging in philosophy. The way in which philosophers think about these problems are new to them. Philosophical theories often refer to our way of thinking. To philosophize is, in a broad sense, to think about thinking, quite often with use of new terminology. This makes the subject rather abstract and constitutes a problem for some students (Booth 2006: 173). Additionally, philosophical questions are often very fundamental and general in character. What is a fact? Can we ever know the facts? Are moral opinions factual, possible to justify in a sense relevant to knowledge, or are they just a matter of taste? The fundamental nature of these and related questions might make philosophy troublesome (See, for instance, Perkins 2006). Moreover, if the very foundation is questioned, are not all answers equally good? But why bother then with which are correct and even if not all answers are equally valid, how can we tell what answers are more rational? Due to the foundational character of philosophical problems there are seldom definitive arguments for philosophical ideas. This is also part of an explanation as to why the ideas are often controversial, even among professional philosophers. This constitutes a problem for students who are eager to know the right answer to a philosophical question. It also constitutes a problem for some students with low self-confidence. "Who am I to have a say on these issues?"

Furthermore, philosophical theories are sometimes met with rather strong emotional reactions. The theories may contradict common-sense knowledge or opinions. Some theories might force the students to reconsider some of their most firmly held beliefs about the meaning of life, personal identity, economic justice, knowledge of the external world and obligations to humans and other animals. Sometimes this causes emotional turmoil and some theories are rejected as a result of this. Other theories, or their advocates, might be met with aggression (Burns 2014).

The philosophical method might also constitute a problem. In other subjects the method used is, in general, empirical. Hypotheses are evaluated with reference to their empirical adequacy and are tested in experiments. By contrast, philosophers often make use of thought experiments (Brown and Fehige 2016). We are asked to consider what a theory implies about imaginary cases and whether the implications coincide with our considered intuitions about the cases. There are many famous thought experiments; Nozick's experience machine, Parfit's teletransportations, and Thomson's violinist to name a few. Thought experiments like these are frequently met with resistance. Novices call the philosophical as well as personal significance of the experiments into question. The experiments are considered too far-fetched (Rini 2016).

For these reasons it is likely that students find philosophy difficult. Yet, difficulties are, in themselves, no impediment to learning. On the contrary, as long as students find the difficulties manageable they actually might enhance learning. If the students are also committed to a solution to the difficulties and if the students find meaning in them the learning effect is even stronger (Hattie 2012: chapter four; Ariely 2016: chapter two).

When planning and thinking our project through, our goal was to elaborate the Philosophy 1 course in a way that fosters all six aims specified by the National Agency of Education that reduce the above indicated difficulties without compromising the complexity of philosophical problems and theories and at the same make philosophy studies inspiring and eye-opening. The hypothesis is that the two-teacher system will assure that this complex goal is satisfied to a high degree.

5. The two-teacher system

In order to realize our complex goal and to test our hypothesis we designed a two-teacher system. We jointly planned the whole course, the different modules and the very content of each and every session. Since both of us would be present at every other seminar we would have excellent opportunities to evaluate the impact of our teaching. This is, as leading educational researchers argue, of outmost importance when it comes to student achievement (Hattie 2012; Timperley 2011).

By referencing to the evaluation we would be able to know what to rehearse and what needed emphasis. We would also be able to detect and correct misunderstandings and we would be able to recognize whether the teaching was on the right level so that we could adjust the level of upcoming seminars.

The teacher not responsible for the seminar should not be a passive bystander. On the contrary, this teacher should have the opportunity to answer and raise questions, thereby acting as a model student. The positive effects of this are documented by Hammer and Giordano (2001), and have been widely confirmed over the years.

What is more, we ourselves, Lokind and Salwén, disagree over some philosophical issues. We wanted our students to note this since disagreements can be used in a constructive way (Cray and Brown 2014). The students could observe an actual philosophical debate among colleagues that offers different perspectives and arguments. Our way of teaching is important in "creating a climate in which ideas can be developed and freely exchanged" (Anderson and

Speck 1998: 673). Additionally, since we sometimes contradict each other, we cannot both be right. This may boost the students' confidence, as they realize that one of the two authorities is wrong. The dynamics would also assure a high degree of attention among the students and encourage them to contribute to philosophical discussions.

At our school we teach Philosophy 1 during one semester. We met our students twice a week and had 30 sessions at our disposal, approximating 40 hours in total. In our project we decided to have 15 joint sessions and 15 individual sessions. At the joint sessions we gathered both classes in a large classroom with both teachers present. This arrangement assures that our way of teaching does not cost the school any extra money.

One teacher has the main responsibility even if the teachers have planned the lesson together. The teachers had split the main responsibility for these sessions as fairly as possible. At the individual sessions the classes were separated and were taught by one teacher. One of the teachers followed one class, the other teacher followed the other class. The joint sessions was somewhat more theoretical and more of a lecture, whereas the separate sessions were more informal allowing for more exercises and group discussions. In this way we were able to vary the teaching and we know that varied teaching is beneficial to learning. What is more, at the theoretical sessions the students will experience teaching they are likely to encounter in higher education.

The reference group had the same educational set up, with one more theoretical session and one more informal. This means that there was no difference in the amount of group exercises or discussions between the reference group and the project group.

As we explain in section 6 below, Philosophy 1 is well suited for three different modules in the following order: "informal logic", "moral philosophy" and "existential questions". It is advisable to end each module with a test. This means that the students should receive formative evaluation on two tests. Of course, formative evaluation should also be given continuously during the course in relation exercises, discussions, questions raised and answered. Formative feedback has a major influence on student learning outcomes (Hattie and Timperley 2007; Hattie 2012).

We were eager to get our students to understand that philosophical theories and thinking can be of great help when it comes to the solution of difficult real-life problems. Our conjecture was that this awareness would motivate the students to learn philosophy as they saw that it is of significance to actual life. With reference to a recurrent concrete moral problem as a focal point in our teaching, we wanted to overcome some obstacles to successful philosophy teaching. In what follows, this problem will be referred to as the Tracy Latimer case.

> Tracy Latimer, a 12-year-old victim of cerebral palsy, was killed by her father in 1993. Tracy lived with her family on a prairie farm in Saskatchewan, Canada. On a Saturday morning while his wife and other children were at church, Robert Latimer put Tracy in the cab of his pickup truck and piped in exhaust fumes until she died. At the time of her death, Tracy weighed less than 40 pounds; she was described as "functioning at the mental level of a three-month-old baby." (Rachels 2003: 8)

Philosophical novices are, like most people, interested in moral problems. Since motivation is so closely related to learning, it is advisable to choose a moral problem as a focal point. What is more, the Tracy Latimer case constitutes a real moral problem; it is not a philosophical invention. This assures that our upcoming philosophy teaching is of significance to the students' perceptions of the world and the moral problems the world actually gives rise to.

The Tracy Latimer case involves not only a problem that engages students, it is also a very difficult problem. The combination of challenge and commitment has documented effect on learning (Hattie 2012: chapter 4). Additionally, Cray and Brown stress that a debate style team teaching is suitable when students have developed some sort of personal view and where the topic is relevant to their lives and interests (Cray and Brown 2014: 478). The Tracy Latimer case suits this description very well. It is also well suited to make students realize that different philosophical subdomains relate to each other and to make students realize that philosophy in general relates to other subjects like Psychology and Social Studies.

6. The modules

Before starting the critical thinking module, we introduced the Philosophy 1 course by asking the students what they believed philosophy is about and what kinds of problems are philosophical in nature. We also asked what expectations they had of the course. We wanted to get a clearer picture of the students' level of understanding and perhaps prejudicial opinions about philosophy. These are crucial factors when it comes to successful course design, regardless of what subject is being taught (See, for instance, Barton 2015). In the introduction we also introduced the Tracy Latimer case as a paradigmatic example of a philosophical problem.

Did the father do the right or the wrong thing? When discussing this with the students we were able to establish the meaningfulness of the whole Philosophy 1 course. For instance, we asked them for reasons for their opinions. What arguments did they have? We thereby introduced informal logic. The students also become aware that in order to reason about the moral question they needed to refer to fundamental moral principles. We then explained that Moral philosophy is the second module of the course. With reference to Tracy's severe handicap the students also touched upon profound issues relating to questions about the meaning of life and what it means to be human as opposed to inanimate objects. Questions like these stand in focus in existential thought. "Existential questions" is, we explained, the name of the last module of the course.

6.1 Informal logic

We allotted eight sessions to this module, including an examination session. Within the module the students had the opportunity to develop four out of six aims: 1, 2, 5 and 6 stated in section two above.

In order to satisfy these aims we set out to give the students an elementary understanding of crucial concepts in informal logic and in scientific reasoning as well as the ability to use these concepts when evaluating the strength of various arguments. The students learned the difference

between reconstruction and evaluation of arguments with the use of notions like premise, implicit premise, and conclusion. When reconstructing arguments students learned that linguistic expressions are often ambiguous or vague, but that these difficulties can be overcome with the use of definitions. We allocated four sessions to argument reconstruction and made use of examples not only of everyday reasoning found in newspapers, but also found in scientific reasoning.

Relating to various examples, students then learned that an argument is strong only if the premises are tenable as well as jointly relevant to the conclusion. We explicated 'tenability' and 'relevance' with reference to further examples and to theoretical ideas connected to knowledge (as true, justified belief) and to scientific method. The students had the opportunity to test and develop their ability to evaluate arguments with reference to numerous examples. The exam consisted of a text wherein an argument is expressed. The students' task was to reconstruct the argument expressed in the text and evaluate the argument as reconstructed by making use of the relevant concepts.

We evaluated the students' tests and gave substantial feedback. What was especially well done, what was unclear and what could be done better and in what way? The results were in themselves also a partial evaluation of our teaching. We also discussed the content of the module. The students also had the opportunity to express opinion about the test.

6.2 Moral philosophy

Moral philosophy is easily motivated with reference to the syllabus for Philosophy 1. This is a somewhat boring but, for a philosophy teacher in Sweden, crucial consideration to bear in mind. Four out of six aims are treated within this module, namely aims 3, 4, 5 and 6. Thus, some of the aims in focus in the previous module recur here. This is due to the fact that informal logic and semantic analysis as well as the ability to raise philosophical questions are crucial to all philosophical thinking. What is more, the moral theories we discussed with the students all have highly competent contemporary advocates.

A more poignant motivation is that it is impossible to evaluate the arguments relating to the moral quality of Robert Latimer's intentional killing of Tracy without reference to fundamental moral principles or theories. What content do the theories have and how tenable are they? In this module we considered utilitarianism, duty based ethics (Kantianism) and Nozick's theory of rights.

After an introductory session where we stated the considerations above and where we, with reference to the Tracy Latimer case and other examples, distinguished moral issues from psychological, economic and juridical ones, we continued with the moral theories. We allocated two sessions for each theory. In the first session we elaborated on the content of the theory. In the second session the students evaluated arguments for and against the theory with techniques and concepts learned in the previous module. All in all we dedicated nine seminars, including examination, to the Moral philosophy module.

The first theory under consideration was utilitarianism. The reason is that it has initial plausibility (Prima facie, it is hard to dissent from the dictum "Make the world as good as

possible"). Moreover, the other theories can be seen as plausible answers to influential objections to utilitarianism. Utilitarianism implies that it might be right to convict an innocent human being to death (McCloskey 1957). But this flies in the face of our considered moral judgments. Utilitarianism thus allows, the argument goes, too much. With this argument as a point of departure the students understood why a duty-based ethic, like Kantianism, might be called for. You are simply not allowed to convict an innocent human being to death. We then spelled out the gist of that theory, and considered arguments for and against it. Another influential objection to utilitarianism is that it is too demanding. The theory arguably implies that we ought to sacrifice most of our wealth in order to fight famine and life-threatening diseases (Unger 1996). But this, many complain, demands too much of us. If we want to make such sacrifices we are welcome to do so, but we do not have a moral obligation to do so. On the contrary, we are allowed to do whatever we like with our possessions (given certain constraints). This is the very core of right-based theories. We then explained the theory of rights (negatively construed) and evaluated it with reference to the knowledge and abilities developed in the previous module. When it came to examination, feedback and evaluation of the module, we followed the procedure described in section 6.1.

6.3 Existential questions
In the last module we discussed existential and epistemological questions. The aims in focus were 1, 4, 5 and 6. This shows that there is a close connection between this module and the earlier ones. In this module the students also applied their abilities to analyze arguments and theories relating to existential questions. By eliminating vagueness and ambiguity the students realized that questions connecting to the meaning of being can be discussed in a systematic way. We also returned to Tracy Latimer. We allotted eight seminars to this module, including two examination sessions where the students, in smaller groups discussed existential questions. In addition to the oral examination the students submitted a summary.

Many young persons, especially girls, experience anxiety. It is near at hand to assume that this, at least partially, can be explained with reference to the fact that young persons face questions of an existential nature. These questions involve (1) The Self (Who am I?), (2) The relation between the Self and other beings and (3) The relation between the Self and the world, a world that has undergone profound changes the last 20 years, all ranging from globalization to digitalization.

The students had the opportunity to acquaint themselves with philosophical theories that address some of these existential questions. For instance, we discussed the Self on the assumption that there is a fundamental difference between human and non-human beings. But is the assumption correct? If so, wherein does the difference consist? We discussed (2) and (3) based on the assumption that the others have a profound influence on us when it comes to our own identity making. For instance, consciously or not, we identify with others. Yet, equally often we distance ourselves from others. This means that the others are always there, whether we like it or not. This is partly due to the workings of language. To think about oneself is to think with use of language. Since language is a public phenomenon, categorizations,

connotations and denotations not of our own making, are, as it were, forced upon us. This will inevitably affect our sense of ourselves.

In our last seminars we discussed the profound changes in modern society and their influence on our understanding of the Self. For instance, what is the difference between an IRL-self and a digital one?

One important goal of ours was to get the students to understand how all the above-mentioned aspects affects us, not least young people. What is, when it really comes down to it, the meaning of existence?

7. Outcomes

Our hypothesis was that the two-teacher system would reduce difficulties that philosophy novices typically face without compromising the complexity of philosophical problems and theories and at the same make philosophy studies inspiring and eye-opening. This hypothesis is tested in our project and is confirmed by the data.

In this section we will describe some salient outcomes. In doing so, we will distinguish between the impacts on the students from the impacts on the teachers. We describe the impacts on the students first.

7.1. Student feedback

As compared with students in previous Philosophy 1 courses we have taught, the students were more active. The students raised more questions and problematized more philosophical perspectives than previous groups. This opinion of ours might, of course, be influenced by wishful thinking, but it is supported by the results from a survey made as well as the grades set.

The survey

When designing our survey we made use of six propositions from Lif's 2007 nationwide study. In addition to the six propositions used (1-6 below), we added two about the two-teacher system and one about the course curriculum. The students were asked to mark to what extent they agreed with the propositions (Fully agree, somewhat agree, have no opinion, somewhat disagree and fully disagree).

1. Studying Philosophy can help my performance in other subjects, e.g. Swedish, History, Social Studies and Psychology.
2. I think Philosophy is interesting.
3. Studying Philosophy can help me analyze societal issues, e.g. ethical debates, environmental issues, financial politics.
4. Philosophical questions leave me completely unfazed.
5. Philosophy can help me develop my ability to think clearly.
6. Studying Philosophy deepens the ability to critically analyze argumentative texts.
7. The two-teacher system has made classes more fun than classes taught by only one teacher.

8. The two-teacher system has made classes more stimulating than classes taught by only one teacher.
9. The course curriculum (informal logic, moral philosophy and existential questions) has made me realize that philosophical issues are connected.

114 out of 129 students in our project answered the survey.

The same survey was delivered to the students in the reference group. 47 out of 58 students filled in the survey. The difference between the reference group and the group in our project is that the reference group was taught with only one teacher. The reference group had the same recurrent theme, modules and examinations. In what follows, we will describe some striking results (for a full description of the data, see Appendix 1).

Students in the project found philosophy academically more worthwhile than the students in the reference group and more fruitful than the students in Lif's group. 26% of the students in our project fully agreed with "Studying philosophy can help me achieve more in other subjects such as History, Religion, Psychology, Social science and Swedish." In the reference group the percentage was 11 and in Lif's it was 13.

When it comes so societal issues, students in our project have benefitted. 29% fully agreed with "Studying Philosophy can help me analyze societal issues, e. g. ethical debates, environmental issues, financial politics." 27% in the reference group and 18% in Lif's group did.

Only 22% of the students in the project group fully agreed with "Philosophy is interesting." Both reference groups scored higher here. This is surprising, especially since only 1% of the students in the project fully agreed with "Philosophy leaves me completely unfazed." In the reference group 6% fully agreed with that proposition. In Lif's group 3% did.

In the survey directed to the students in our project we formulated three additional propositions, namely: "The two-teacher system has made the lessons more fun than if only one teacher had taught the course.", "The two-teacher system has made classes more stimulating than classes taught by only one teacher" and "The course content: informal logic, moral philosophy and existential questions, has made me realize that philosophical questions are related to each other." 45% fully agreed with the first proposition, 34% with the second and 34% of the students in our group fully agreed with the third. In the reference group 19% fully agreed with the last proposition. This suggests that the two-teacher system in some way makes the students realize that philosophical ideas relate to each other.

The data confirms our hypothesis, but provides, in itself no indication of explanatory mechanisms. Yet, such indications can be found in the interviews. Some students stressed that philosophy is a new subject and that they were unfamiliar with the philosophical way of thinking. As a comment to this, other students added that it is important to "keep up from the start". This suggests that students were of the opinion that the content of the modules build on each other and that philosophical ideas are not compiled of isolated bits of inquiry.

As a comment relating to propositions 1, 3, 5 and 6 students said that philosophy could help one avoiding contradictions and making more distinctive definitions of vague and/or ambiguous

terms, not only of philosophical, but of any kind. One student said she used informal logic when watching a debate from the American presidential election campaign. Another students said that philosophy had made their worldview more critical.

When it comes to propositions 7 and 8, some students commented that the teacher who was not responsible for the seminar in question became like a student, which, in turn, strengthened the personal bonds between the teachers and the students. As one student put it: "Sometimes the teacher is a student." This contributes to a more equal classroom. According to Jacques Rancière (2011) an unauthoritarian relation between teacher and student also affects the student's results in a positive direction.

Another psychological idea relates to this. Some students were of the opinion that team teaching was socially preferrable since a student who, for one reason or another, found one teacher easier to talk to than the other, could rely on the first as the go-to contact. Several students emphasized that it was good to have two teachers since they explained the same idea or theory in slightly different ways and that the teachers sometimes offered different perspectives. One student praised the two-teacher system and stressed that it resulted in a dialogue teaching style even at the theoretical sessions. This in turn made teaching more of a discussion between equals rather than a lecture. It is fair to assume that two teachers, expressing different opinions before their students, might contribute to an open minded and tolerant classroom environment.

The students interviewed in the project group concluded that we should continue to teach as a pair. Yet, they pointed out that the ability to cooperate is crucial to a successful two-teacher project. It is unlikely, they continued, that a two-teacher project forced upon two teachers who do not work that well together, would achieve a good result.

This data must of course be handled with caution. It involves a small number of students and there are many factors that might complicate the interpretation of the data and, a fortiori the overall evaluation of our project. For instance, are the answers in the survey reliable? Do they really express the students' opinions? The attitudes expressed in relation to proposition two might indicate that the survey must be handled with some caution. Yet, the answers in the survey are at large congruent with the comments made in the interviews.

However, the mere fact that our teaching differed from other courses taught in our school might be a factor to consider. The presence of two teachers is unusual and the large classroom might add a level of attention to the teaching. The fact that there was an additional teacher present perhaps made the students feel observed. This can explain the signs of attentiveness. The students simply did not want to be looked upon as uninterested or unfocused. What is more, the students in our project were from two different classes and did not know each other particularly well before our project began. Part of an explanation of the attentiveness might therefore be the fact that some of the students did want to make a good impression on the new classmates.

Additionally, the students were aware of the fact that they were part of a study (even if we did not remind them of it). This, which might give rise to a placebo-like response, is also a factor to bear in mind when it comes to an overall evaluation of our hypothesis. For all that, we

conclude that the best explanation of the various signs of engagement is the hypothesis that the students actually were engaged to a high degree and that this, in turn, at least partly is explained by the two-teacher system.

Grades

The grades also suggest that the two-teacher system is auspicious for learning. The median grade in the project group was B and the average grade was 16.03. The median grade in the reference group was C and the average grade was 14.26. This is indeed a big difference. Lif's study does not contain any grade information. Yet, average grade for a Swedish student when graduating from upper secondary school is 14.6.[2]

As many as 28.9% in the project group got an A and only 0.7% got an F. The corresponding numbers in our reference group was 24% and 5.1%. For further details, see Appendix 2.

7.2 Teacher feedback

It has been rewarding to plan, execute and to evaluate the course together. This is, of course partly due to the fact that we learned that the students, during the course, found the teaching challenging and worthwhile. This rather immediate feedback made us feel confident that the way in which we conducted the sessions was beneficial to learning.

With reference to the Tracy Latimer case we were able to plan the course matching the aims given by the Swedish National Agency of Education. What is more, joint planning responsibility makes teaching somewhat more relaxing. We were, as a pair, responsible for the content and design of the sessions. This meant that it was we as a team who were to be commended or blamed, not just the teacher who happened to hold the sessions.

Our teaching has improved. The importance of continuous feedback from a colleague cannot be overrated. Opinions about the use of the whiteboard, the tempo, the way in which questions are asked and answered are just a few examples of input that are of great significance for improved teaching. With reference to this we were able to change some things during the course, and other things can be changed for the next time we give the course.

We also learned a lot about successful feedback, formative as well as summative. This is due to the two-teacher system. Since we were two teachers in class every other session, we had the opportunity to learn from each other how to give formative feedback during the sessions. We had, for instance, a particular interest in the way in which students received formative feedback.

Our philosophical skills have also been developed. Since we have somewhat different philosophical specialties and interests we have had great opportunity to learn from each other. Furthermore, every now and then students asked rather intriguing questions, the answers to which were far from clear. Since we both heard the questions it was interesting to know how the other teacher understood them and his opinion about the answers. Frequently we had to take

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[2] See:
http://siris.skolverket.se/reports/rwservlet?cmdkey=common&notgeo=&report=gy_betyg&p_flik=G&p_progra
mkod=&p_ar=2016&p_lankod=&p_kommunkod=&p_hmantyp=&p_skolkod=

another look at some aspects of various theories or to reread some passages from influential philosophical texts. In this process we realized that there was an additional interpretation of an argument, which made it stronger than it first appeared, or that a certain aspect of a philosophical theory can be understood in yet another way. For instance, we reread and partly reconsidered some of Harman's ideas expressed in his "Inference to the Best Explanation." We also reviewed some aspects of Kant's moral theory when discussing whether or not it implies that we have an obligation to give money to beggars in Sweden. In relation to the last module we reexamined the notion of agency in Sartre's thinking.

8. Challenges and some further implications

A two-teacher system, or more generally team teaching, presupposes that the relation between the teachers involved is professional. This means, among other things, that they share a common understanding of the syllabus, of the way in which teaching is evaluated and of grades set. It also presupposes that the teachers have self-confidence enough and are intuitive enough to deliver and to handle constructive criticism from a colleague.

A typical class in Sweden includes approximately 30 students. This means that a system like ours presupposes that there are classrooms physically large enough to handle a group of approximately 65 persons. Our conjecture is that most upper secondary schools have the proper facilities.

It is more questionable whether educational institutions have enough students to ensure that there are two classes that study the philosophy course and that there are two philosophy teachers. Our design presupposes there are and this in turn assures that our project does not saddle the school with any additional expenses. Obviously, this is crucial since economic considerations are highly significant when it comes to the implementation of educational projects.

Our results are generalizable to other countries at least if the above conditions are met. Whether they can be generalized to higher education is somewhat more problematic. A college that administers two parallel introductory courses in philosophy and have staff enough to ensure that different teachers teach different courses (or modules within the courses) can elaborate a two-teacher system like ours. Otherwise a two-teacher system is likely to result in higher costs.

Even if team teaching is not possible it is still possible for a team of teachers to plan teaching with experienced colleagues. If that is combined with only a minimum of auscultation there is a lot to gain for students as well as for instructors.

We firmly believe that team teaching is beneficial for students as well as teachers. The results from our study suggest this. Our project involved two teachers of the same sex, ethnical background and approximately the same age. It would be interesting to explore the effects of team teaching when the involved teachers represent different sexes, ages and ethnicity. Our

conjecture is that the effects would be even more positive, but that remains to be shown in another study.[3]

References

Anderson, Rebecca S. and Speck, Bruce W. (1998), "Oh What a Difference a Team Makes: Why Team Teaching Makes a Difference", *Teaching and Teaching Education* 14 (7), 671-86.

Ariely, Dan (2016), *Payoff: the Hidden Logic That Shapes Our Motivations*, New York: TED Books.

Barton, Keith C. (2015), "Young adolescents positioning of human rights: Findings from Colombia, Northern Ireland, Republic of Ireland, and the United States", *Research in Comparative and International Education,* 10, 48-70.

Brown, James R. and Fehige, Yiftach. (2016), "Thought Experiments", *The Stanford Encyclopedia of Philosophy* (Spring 2016 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/spr2016/entries/thought-experiment/>.

Booth, Jenny (2006), "On the mastery of philosophical concepts: Soctratic discourse and the unexpected 'affect'", in Meyer, Jan & Land, Ray (eds.) *Overcoming Barriers to Student Understanding: Threshold Concepts and Troublesome Knowledge*: 173-181. Abingdon, Oxon: Routledge.

Burns Kelly A. (2014), "Minimizing and Managing Microaggressions in the Philosophy Classroom," *Teaching Philosophy* 37(2), 131-152.

Cray, Wesley D. and Brown Steven G. (2014), "Team-Teaching the Atheism-Theism Debate", *Teaching Philosophy* 37 (4), 465-480.

Hammer, Elizabeth Y. and Giordano, Peter J. (2001), "Dual-Gender Team-Teaching Human Sexuality: Pedagogical and Practical Issues", *Teaching of Psychology* 28 (2), 132-33.

Hattie, John and Timperley, Helen (2007), "The Power of Feedback", *Review of Educational Research* 77 (1), 81-112.

Hattie, John (2012), *Visible learning for teachers: maximizing impact on learning*, London: Routledge.

McCloskey, H. J (1957). "An examination of Restricted Utilitarianism", *Philosophical Review* 66 (4), 466-85.

Lif Jan (2007), "Vad tycker gymnsieelever om filosofi?", (In Swedish) Unpublished, Department of Philosophy, Gothenburg University.

Perkins, David (2006), "Constructivism and troublesome knowledge," In Meyer, Jan & Land, Ray (eds.) *Overcoming Barriers to Student Understanding: Threshold Concepts and Troublesome Knowledge*, 33-47. Abingdon, Oxon: Routledge.

Rancière, Jaques (1991), *The ignorant schoolmaster: five lessons in intellectual emancipation*. Stanford, Calif.: Stanford Univ. Press.

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[3] Many thanks to an anonymous referee and, especially to Liisa Gellerstedt for valuable comments on an earlier version of this paper.

Rini, Regina A. (2016), "Student Resistance to Thought Experiments", APA Newsletter – *Teaching Philosophy*, 15 (2), 2-7.

The Swedish Agency of Education (2012), *Upper Secondary School 2011*. Last access: 19 September 2016.

Timperley, Helen (2011), *Realizing the Power of Professional Education*, Maidenhead: Open University Press.

Unger, Peter (1996), *Living High and Letting Die*, New York: Oxford University Press.

Appendix 1. Survey: Propositions and chart

1. Studying Philosophy can help my performance in other subjects, e.g. Swedish, History, Social Studies and Psychology.
2. I think Philosophy is interesting.
3. Studying Philosophy can help me analyze societal issues, e.g. ethical debates, environmental issues, financial politics.
4. Philosophical questions leave me completely unfazed.
5. Philosophy can help me develop my ability to think clearly.
6. Studying Philosophy deepens the ability to critically analyze argumentative texts.
7. The two-teacher system has made the lessons more fun than if only one teacher had taught the course.
8. The two-teacher system has made classes more stimulating than classes taught by only one teacher.
9. The course curriculum (informal logic, moral philosophy and existential questions) has made me realize that philosophical issues are connected.

Answers to the survey: Lif's 2007 survey, L, n = 1759. Project group, P, n = 114. Reference group R, n = 58. N.A = non-applicable. All numerals are given in percent.

	Fully agree			Somewhat agree			Have no opinion			Somewhat disagree			Fully disagree		
	L	P	R	L	P	R	L	P	R	L	P	R	L	P	R
1	13	26	11	44	44	59	28	26	19	10	4	2	5	0	9
2	24	22	28	43	52	53	11	11	4	16	14	9	6	1	6
3	18	29	27	46	44	48	25	26	15	8	2	6	3	0	4
4	3	1	6	8	2	4	15	21	26	51	49	41	23	27	19
5	17	20	23	47	53	48	23	17	17	10	10	6	3	0	6
6	14	31	28	43	45	43	32	22	19	8	2	6	3	0	4
7	N.A	45	N.A	N.A	42	N.A	N.A	9	N.A	N.A	3	N.A	N.A	1	N.A
8	N.A	34	N.A	N.A	43	N.A	N.A	16	N.A	N.A	6	N.A	N.A	1	N.A
9	N.A	30	19	N.A	40	58	N.A	30	17	N.A	0	2	N.A	0	4

Appendix 2. Grades

Project group, P: Total number of grades: 129. Average grade = 16,03, median grade = B
Reference group, R: Number of grades: 58. Average grade = 14,26, median grade = C

	A	B	C	D	E	F
P	37 (28,9%)	22 (17,1%)	38 (29,6%)	19 (14,8%)	12 (9,3%)	1 (0,7%)
R	14 (24%)	5 (8,6%)	14 (24,1%)	12 (20,6%)	10 (17,2%)	3 (5,1%)