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Work-Plan Heroes: Student Strategies in Lower-Secondary Norwegian Classrooms

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This article explores how individualized teaching methods, such as the use of work plans, create new student strategies in Norwegian lower secondary classrooms. Work plans, which are frequently set up as instructional tools in Norwegian classrooms, outline different types of tasks and requirements that the students are supposed to do during a specific period of time, normally two or three weeks. The current analyses shed light on what strategies girls and boys use when they approach work plans. Analyses of video observations and interviews with 93 students indicate that while girls tend to complete their plan during the first week or distribute the tasks evenly throughout the period, boys either finish the plan during the first week or postpone their work until the last few days. These findings suggest that the use of work plans might give some students, often low-achieving boys, too much responsibility for their own learning.

Keywords: student strategies, individualized teaching methods, individualized instruction, work plans

Over the past decade, Norwegian educational policies (Det Kongelige Kunnskapsdepartement, 2007; Utdannings- og forskningsdepartementet, 2003) have addressed the fact that boys underperform when compared with girls and that they continue to lag behind, especially in reading achievement (Kjærnsli & Lie, 2003; Kjærnsli, Lie, Olsen, & Roe, 2007; Kjærnsli, Lie, Olsen, Roe, & Turmo, 2004; Matti, 2009; Mejding & Roe, 2006). As reported by the Office for Standards in Education (2003), the gender gap is an international phenomenon, although Hattie (2009), Hyde (2005), and others claim that the gender gap in education is over-emphasized. According to recent meta-analyses (Hattie, 2009), gender differences are small, and girls and boys are more alike than they are different in terms of achievement patterns and school performances (Arnesen, Lahelma, & Öhrn, 2008; Hyde, 2005).

Equality between girls and boys is a central goal in Norwegian schooling. However, the current discussion emphasizes whether compulsory school has failed boys' educational needs by not providing them with adequate learning activities, thus creating learning environments that discriminate against boys. This has led to a heated debate about how different classroom practices favor girls over boys. Nordahl and Sunnevåg (2008) suggested that the extensive use of individualized teaching methods based on students' regulating their own learning has led to a wider academic gender gap in favor of girls. The widespread use of *work plans*, which give students more responsibility for their own learning and also require that

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they be able to plan and regulate their own work, has contributed to the fact that boys lag behind their female classmates, they argued. Klette (2007), a co-author of this article, claimed that the use of work plans in Norwegian classrooms implies that low achievers, mainly boys, are put in a position in which they become responsible for 'regulating their own school-failure' (p. 352). Klette (2007) questioned whether the extensive use of work plans and related methods relying on students' responsibility for their own learning is too high of a burden on the students' capacity for self-monitoring and self-regulation. She also questioned whether one of the consequences is increased gender and individual inequality. Comprehensive schools in both Norway and Sweden make extensive use of work plans, which are called *Own Work* in Sweden. However, what kind of impact the use of work plans has on students' classroom practices has not been the subject of much research.

Based on videotaped recordings from math and science classrooms, we discuss how individualized teaching practices, such as the use of work plans, affect students' learning strategies in lower-secondary classrooms. We focus on different student approaches to the use of work plans with regard to schoolwork, homework, help-seeking strategies, and cooperation strategies. The questions to be discussed are:

- (1) What strategies do high- and low-achieving students use when they work with work plans?
- (2) Are there any gender differences?

The term *gender* in the following analyses is used simply to differentiate between girls and boys. We start out by elaborating on the concept of work plans as they are used in Norwegian classrooms. We then review relevant studies that either focused on the use of work plans (e.g., *Own Work*) or on students' strategies in relation to schoolwork, homework, and help-seeking behavior. Limitations and methodological considerations regarding the data that we use are discussed before we turn to our empirical findings and present the ways in which girls and boys use and approach the assigned work plans in the analyzed classrooms.

First, it is necessary to briefly sketch out the policy context for the use of work plans in lower-secondary education in Norway. The integration of students in mixed-ability and non-streamed classes is an important Norwegian educational principle, which is a challenge for both schools and teachers (Telhaug, Mediås, & Aasen, 2006). The Education Act (Ministry of Education and Research, 1998) and the national curriculum (Norwegian Ministry of Education and Research, 2006) require that all Norwegian children, regardless of academic achievement level, receive adequate and adapted education. By accommodating curriculum and teaching to each student's individual abilities, the aim is twofold: to help students achieve the best possible progress and to narrow the attainment gap between high and low achievers (Norwegian Ministry of Education and Research, 2006). The use of work plans, which normally consist of differentiated tasks, has become a frequent setup aimed at promoting individualized teaching and adapted learning in Norwegian secondary classrooms (Klette, 2007), and 60% of students in lower-secondary schools report that they use work plans in most of their subjects (Klette, 2003; National Directorate for Teaching and Teacher Training, 2009).

Work Plans: A Brief Introduction

The ideas behind the use of work plans as an instructional tool seem to be threefold: to differentiate learning according to students' abilities, to promote students' responsibility for their own learning, and to give students autonomy and some freedom of choice in relation to

schoolwork (Klette, 2007). A work plan is a document that specifies what the students are supposed to work on in various school subjects over a certain period of time, often covering two or three weeks. In general, it is a list of required assignments, tasks, and activities to be performed during these periods, including both schoolwork and homework. Thus, homework is part of the work plan. The predominance of work plans as a teaching strategy in Norwegian classrooms today is worth noticing, because they are not prescribed in official education policy documents. Rather, they were introduced into different classrooms through teachers' collaborative efforts and mutual professional exchanges (Klette, 2007; Klette et al., 2008). Since work plans have emerged from the field of practice (Carlgren, 2005; Klette, 2007; Klette et al., 2008), there are no common rules concerning the plans' content, layout, or use, and the plans vary substantially among schools, classrooms, and teachers. In some classrooms work plans are used extensively throughout the school day, while in other classrooms fewer hours are designated for work-plan activities. Study lessons—that is, lessons devoted to working on the assignments from the work plan—are usually indicated on the timetable and vary between 2 and 10 hours per week, depending on differences in teacher and/or school policies. Since the late-1990s, work plans have become an integral part of everyday school life in many Norwegian classrooms (Klette, 2003, 2007), and, as mentioned earlier, 60% of the students in secondary classrooms report that they use work plans. Figure 1 depicts a typical work plan.

Although work plans are intended to allow students more autonomy and choice with regard to content, materials, learning sources, and the pace of learning, students' options are limited. Most of the time, work plans are merely a list of tasks and assignments developed by the teacher that cover almost all school subjects (Bergem & Dalland, 2010; Klette et al., 2008). The tasks are usually divided into three levels of difficulty: low, moderate, and high, often termed levels 1, 2, and 3. The differences between the three levels are typically based on the number of tasks (Dalland, 2007), meaning that students working at the highest level have to do more of the same tasks and assignments than students working at the lower levels. In addition, work plans often include information about homework, learning goals, working methods, types of evaluations, and reminders and messages to students and parents—information that requires the students to have good reading skills. Teachers, by and large, are responsible for the content of the plan, while students are free to choose, often with the help of parents or teachers, *which level* to work at in each subject (Dalland, 2007) and *when* and *where* to do the assignments (Klette, 2007). In sum, work plans seem to allow for autonomy in terms of pace and choice of learning sources, whereas content areas and required assignments are predefined by the teacher.

Theoretical Perspectives and Relevant Research

The use of work plans as a model for individualized teaching methods has remained relatively unexplored as a research area. However, some recent studies, mainly from Norway and Sweden, have described how these plans are used in school (Bergem, 2009; Carlgren, 2005; Dalland, 2007; Helgevd, 2011; Klette, 2007; Nyroos, Rønneberg, & Lundahl, 2004; Österlind, 2005; Steen, 2007). Furthermore, existing studies focusing on student strategies in relation to schoolwork, generally, and cooperation and help-seeking strategies, specifically, are summarized in this article, as they provide information on student actions when working individually with tasks. As such, the present study combines theoretical perspectives from different research areas in order to understand how individualized teaching methods might produce new student strategies in the classroom and thus contribute to a growing body of research

Norwegian			
Theme:			
Goal 1 Be able to explain what characterises an article. Be able to write an introduction to an article.	Goal 2 In addition to Goal 1: Be able to explain how an article is structured.	Goal 3 Formulate your own goals.	
Tasks: Read pages 225-249 – about discussion and articles. Do task 7, 8, 9, 11, 12 (you have to work a lot with this task – you have to hand in the answers), 13, and 14.			
Mathematics			
Theme: Equation			
Goal 1 <ul style="list-style-type: none"> Know what the sign = means. Know what we mean with an “unknown variable”. Be able to solve equations with one component. Be able to check if the solution is correct. 	Goal 2 Same as Goal 1 +: <ul style="list-style-type: none"> Be able to solve equations with more than one component. Be able to solve equations where X is divided with a whole number. 	Goal 3 Same as Goal 1 and 2 +: <ul style="list-style-type: none"> Be able to solve equations containing parentheses. 	
Tasks: Use the computers and visit the schools SMIL pages → go to student → repetition and short explanations → equation . Read what is said about the first 7 topics. Use these pages to gain a good attainment of the different learning goals.			
Goal 1 Do the following tasks: 1.2 a,b – 1.3 a,c,e – 1.5 a,c,f – 1.6 a,c,e – 1.26 a,b,c,d,e,f 1.31 a,c,e,g – 1.32 – 1.35 a, b, c.	Goal 2 Do the following tasks: 1.2 a,b – 1.5 b,d,f – 1.7 a,c,e – 1.57 d,e – 1.58, 1.59 – 1.60 a,c,e – 1.63 a,c,e.	Goal 3 Do the following tasks: 1.2 a,b – 1.6 b,d,f – 1.8 a,d,e – 1.11 a,b,c – 1.12 d,e,f – 1.77 a,b,c,d – 1.80 – 1.88. You can also try to do the tasks on page 37 – 38 – 39. Do tasks from the SMIL-pages.	
English			
Objective 1 You should know what the times were like for the young people in the sixties and the trends in fashion. You should know how to use the relative pronouns.	Objective 2 You should know what the times were like for the young people in the sixties and the trends in fashion and pop music. You should write a text. You should know how to use the relative pronouns.	Objective 3 You should know what the times were like for the young people in the sixties and the trends in fashion and pop music. Choose your method of presentation. Vocabulary and grammar.	
Tasks: Objective 1: Work with texts ABC and do <i>one</i> task to go with each text. You should be able to translate any part of the text into Norwegian. Objective 2: Work with texts E, F and G and do <i>one</i> task to go with each text. One task should be a written text. Be prepared for glossary test from each text. Objective 3: Look at ideas for presenting this and in pairs or groups present one of the topics in texts A-G. You should read and know well each text. The presentation should be presented to the class in your own words, and with only key words to help you. Duration: 4-6 minutes.			

Figure 1. Illustration of a typical work plan.

concerned with how different instructional strategies (Ball & Cohen, 1990; Hattie, 2009; Rowan & Correnti, 2009) affect students' learning opportunities. Since there is no 'grand theory' with regard to instructional practices in secondary classrooms, we use an eclectic (Tellings, 2001) theoretical approach when attempting to understand possible student strategies in work-plan-regulated classrooms. Tellings (2001), Klette (2011), and others have argued that

studies of educational practices will most likely have to combine different theoretical positions in order to understand a given pedagogical phenomenon, such as classroom learning.

In the following section, we review the research that is relevant to analyzing student strategies with regard to schooling. We first present research on the use of work plans and then turn to student strategies in relation to schoolwork, homework, help-seeking, and cooperation with peers. We use the term *strategies* to refer to the ways in which the students operate when trying to accomplish their work plan. We thus depart from the voluminous discussion on students' learning strategies (Hewitt, 2008; Zimmermann & Schunk, 2009) and use the term *student strategy* to differentiate between the ways girls and boys approach and accomplish the required learning activities in work-plan-regulated classrooms.

Research on the Use of Work Plans

The use of work plans generates new negotiation practices between students and teachers when it comes to schoolwork (Bergem, 2009, Carlgren, 2005). As indicated above, work plans give students some control and responsibility for their own learning; they require the students to make individual interpretations and decisions with regard to *when* to work and *how* to work (Bergem, 2009; Carlgren, 1994; Klette, 2007; Österlind, 2005). By giving students the opportunity to monitor themselves, the teachers give up some of their tools for sanctions and assistance as well as their possibilities to influence, supervise, and support the students (Klette, 2007). Solhaug and Fosse (2008), Österlind (1998), and Nyroos et al. (2004) claimed that instructional practices such as work plans are better adjusted to high-achieving students than to low achievers. These scholars argued that even though the plans are meant to foster self-directed learners, students who need help and support in order to organize their own time might be negatively affected. Observations of Norwegian primary and secondary classrooms (Haug, 2006; Klette, 2007) have indicated that low-achieving students attend lessons devoted to work plans (i.e., study lessons), without doing any of the required schoolwork. From Sweden, Österlind (2005) reported that high achievers often enjoy Own Work more than low achievers. While high-achieving students frequently seek advice from teachers when they need assistance and manage to finish the plan in time, low-achieving students rarely ask the teachers for help. Low achievers often struggle to begin, and some of them do no or little schoolwork during the work plan period (Österlind, 2005). Carlgren (2005) described how low-achieving students struggle to plan their own work in Swedish classrooms. These students find it hard to use the *planning book*, a central tool for accomplishing Own Work in Sweden. They do not always manage to follow the plan, she argued, and they mainly select tasks that they enjoy doing.

Drawing on video observations from mathematics classrooms, Bergem (2009) distinguished between three different student strategies when using work plans in lower-secondary mathematics classrooms: the strategy of completing the work in a day or two (Strategy 1), the strategy of postponing the work (Strategy 2), and the strategy of working throughout the whole period (Strategy 3). He claimed that the use of the first and the second strategies is problematic when it comes to learning mathematics, which often requires the students to be exposed to the mathematical problem a number of times and over a longer period.

Student Strategies in Relation to Schoolwork and Homework

The studies presented below reported how girls and boys in lower and secondary schools approach learning activities in the classroom. In this review, we summarize existing research from Anglo-American classrooms and supplement it with Nordic studies when available.

Francis and Skelton (2005) showed that whereas girls often seem to favor discussion and group work, boys seem to like whole-class instruction and competition. Studies have also indicated that while boys tend to work harder when they are given individual attention and close monitoring, girls tend to take the initiative in promoting their own learning, often by working more consistently and regularly and showing more determination and effort (Office for Standards in Education, 2003; Younger, Warrington, & Williams, 1999).

Even though high achievers are generally more positive about schooling than low achievers, achieving academically is usually more important for girls than boys (Nyroos et al., 2004; Solhaug & Fosse, 2008; Tinklin, 2003; Tinklin, Croxford, Ducklin, & Frame, 2001). While high-achieving females tend to take school more seriously than their male counterparts, low-achieving females are more positive about school than low-achieving males (Tinklin, 2003). Harris, Nixon, and Rudduck (1993) extended these findings and suggested that girls, both high and low achievers, generally prioritize schoolwork to a greater extent than boys do and that they are more prepared to both regulate and organize their time devoted to schoolwork. Findings from a study of the gender gap in English schools (Warrington, Younger, & Williams, 2000) indicated that while girls often do all the required schoolwork, boys are more likely to be selective and often end up doing only a minimum amount.

When trying to understand the relationship between students and schoolwork, Jackson (2003, 2006) described four different self-worth-protecting strategies: 'procrastination,' 'intentional withdrawal of effort and rejection of academic work,' 'avoiding the appearance of working and promoting the appearance of effortless achievement,' and 'disruptive behavior' (2006, pp. 32–34). Procrastination as a strategy is especially relevant when analyzing students' use of work plans. Procrastination refers to students who postpone the required work until the last few available days (Jackson, 2006). Thus, the distinction between 'massed practice,' which refers to being exposed to the learning experience over a few long sessions, and 'distributed practice,' which refers to being exposed to the learning experience over many short sessions (Willingham, 2002), is relevant in relation to students' work-plan strategies. Distributed practice normally promotes deep and meaningful learning, scholars argue, while massed practice promotes rote learning (Hattie, 2009; Willingham, 2002).

While girls tend to spend more time on homework than boys do, boys work less regularly and often prioritize out-of-school activities (Harris et al., 1993). Findings from a study conducted by Warrington and Younger (1996) showed that boys and students who struggle academically are more likely to ignore their homework. High-ability girls, on the other hand, spend more time on homework-related tasks and assignments. Although low-achieving students are likely to procrastinate for as long as possible, low-achieving girls hand in their assignments more often than low-achieving boys (Warrington & Younger, 1996).

So far, we have discussed research findings regarding student strategies relevant to schoolwork and homework. In the next section, we summarize existing research concerning student strategies with regard to help-seeking and cooperation with classmates.

Student Strategies in Help-Seeking and Cooperation

Students who are engaged in what Newman (2008) calls "*adaptive help seeking*" (p. 316) are not only self-regulated (Newman, 2000), they also know when and whom to ask for help. Although adaptive help-seeking is important, findings have indicated that poor learners tend

to be less willing to seek help and often disengage themselves from learning activities (Zimmerman & Schunk, 2009). Some students are disinclined to use adaptive help-seeking out of fear of exposing their need for help (Newman, 2008), while students who regard themselves as competent normally seek help when needed (Newman, 1990).

Interviews with students regarding their adaptive help-seeking strategies (Newman, 1990) have suggested that teachers and parents are preferred as learning sources and that students who want to do well academically frequently seek help from teachers. The reason might be that help from peers is considered less sufficient (Newman, 2000). Furthermore, an American study of help exchange in the classroom showed that when receiving assistance from peers, both girls and boys prefer to ask students of the same sex (Nelson-Le Gall & DeCooke, 1987). A study from English classrooms showed that in terms of cooperation strategies, boys are not as willing to collaborate as girls (Warrington et al., 2000). Boys are less likely to see themselves as team players, are more unwilling to engage themselves in cooperative talk, and are primarily interested in the correct answers (p. 396). Girls collaborate with other girls and are more likely to engage in cooperating activities in order to overcome their difficulties (p. 396). Studies from Norwegian and Swedish classrooms suggest that although the use of work plans supports peer learning and cooperation, students normally work alone even when seated in pairs or groups (Klette, 2007; Österlind, 1998; Steen, 2007).

Taken together, these studies indicate possible individual and gendered differences when it comes to approaches to school activities relevant to analyzing work-plan-regulated classrooms. Other researchers, however, have claimed that even if there are differences between girls and boys, those dissimilarities are not very dramatic (Arnesen et al., 2008; Bakken, Borg, Hegna, & Backe-Hansen, 2008; Francis, 2006; Gillborn & Mirza, 2000; Younger et al., 1999). In his meta-analyses of teaching and learning practices, Hattie (2009) suggested that there are only small differences between girls and boys and that educators should stop worrying about them. Before we discuss how this plays out in our material, we present data sources and analytical approaches.

Data Sources and Methods

These analyses draw on data from the PISA+ video study (Dalland, 2011; Klette, 2009; Klette et al., 2008), consisting of video observations of six ninth-grade math, science, and reading classrooms in Norway. Although not designated for analyzing gendered and individual patterns with regard to work plans specifically, the video material from the PISA+ study is so broad and comprehensive that it allows for analyses from a variety of perspectives (Bergem, 2009; Dalland, 2011). In this article, we present a qualitative analysis of students' strategies with regard to work plans. The six classes, from as many schools, were selected to cover a variety of pedagogical organizations, demographics, and ethnicities. Thus, two of the schools are located in suburban districts, two are in rural areas, and two are inner-city schools. Two of the six schools recruit students from multicultural and multiethnic backgrounds (Klette, 2009; PISA+, 2011). For our purposes, the analysis is restricted to five of the classrooms, and we use the subject areas of mathematics and science to explore student strategies with regards to work plans. The data sources from the sixth school lacked sufficient information on how the students worked with the work plans in these subjects. Hence, both the video recordings ($n = 11$) and the student interviews ($n = 10$) from this school are excluded in the present analysis.

Each of the classrooms was video-recorded for a period of three weeks using a three-camera approach. One camera captured the whole classroom, one camera was remotely controlled and followed the teacher, and one camera focused on a pair of students (the focus group). A total of 34 video recordings were made of math lessons and 32 of science lessons, making 66 video recordings in total. (Video recordings from science field trips, such as ‘Visit to a farm,’ are not included in the present analyses). The video recordings of the focus groups were supported by video-recorded interviews with the observed students, in addition to ethnographic observations (Bergem, 2009; Klette, 2009). The students in the focus group were selected before the start of each lesson, and the researchers made sure that different students were picked out each time. There is an overlap of five students in the interviews of School 2. In that classroom, the same five students were interviewed in both mathematics and science.

The data material consists of 66 video recordings and 47 interviews from math and science classrooms, covering 93 students in total. The number of video recordings of classrooms, estimated at $n = 66$, covers both single-period and double-period lessons. Due to the fact that some of the students were at the center of the focus-group camera for a double period and then interviewed, there are more video recordings ($n = 66$) of lessons than of interviews ($n = 47$). In order to ensure that the students’ memories were fresh (Jeffries, 1997), the interviews were conducted shortly after the end of each lesson. The interviews were video-stimulated—while watching recordings of different events from the previous lesson, the students were asked questions concerning their own learning, their own meaning making, and the different classroom activities (Bergem, 2009; PISA +, 2011). The interviews were semi-structured (Kvale, 2009) and lasted for approximately 45 minutes.

As shown in Table 1, all five schools used work plans. The teachers designed the work plans in advance of each period, and the duration of the plans varied from one to three weeks (Bergem, 2009; Dalland 2007). Three of the five schools organized the weekly timetable so that some lessons, so-called ‘study lessons,’ were assigned to do work-plan-related activities during the school day. Table 1 summarizes the number of study lessons and the duration of the work plan period across the five classrooms.

In sum, the selected material for the analyses that follow builds on 66 video recordings representing 34 math lessons, 32 science lessons, and 47 video-stimulated interviews with pairs of students from the same lessons. The data material also includes copies of students’ work, resources used by the teachers, work plans used during the observation period, and various handouts used in the videotaped lessons. The video-stimulated interviews comprise the main corpus for analysis, while video recordings from the foregoing lessons are used for

Table 1
Number of Study Lessons per Week and Duration of the Work-Plan Period in the Schools

Schools	Work plans	Time spent on study lessons per week	Duration of the work-plan period
School 1	Yes	8 hours	3 weeks
School 2	Yes	3 hours	2 weeks
School 3	Yes	0 hours	3 weeks
School 4	Yes	9 hours	3 weeks
School 5	Yes	0 hours	2 weeks

Note. Based on Bergem (2009).

checking what the same students actually did in class during the period they were referring to. Copies of students' work, handouts, and assignments defined in the work plans were used as complementary data.

The Interviews

The material consists of 47 interviews with 93 students. Students were interviewed in pairs, apart from one individual interview based on a math lesson. The interviews covered 47 students from mathematic classrooms (26 girls and 21 boys) and 46 students from science classrooms (27 girls and 19 boys). In total, we analyzed video-stimulated interviews with 53 girls and 40 boys. Most of the students were interviewed in single-sex pairs, while 18 students were interviewed in mixed-sex pairs. As indicated above, one math student (male) was interviewed unaccompanied.

Although the interviews were originally performed in order to answer research questions such as how work plans can be mediating artifacts (Bergem, 2009) and how students make meaning during math and science lessons, video data have the potential to be analyzed for several purposes (Jacobs, Kawanaka, & Stigler, 1999; Sherin, 2006). Video data make it possible to perform analyses from different perspectives (Klette, 2009), to freeze situations, and to perform analyses at a later time (Sherin, 2006) and, therefore, segments from the interviews and video recordings can be analyzed for new and different purposes (Dalland, 2011). Based on the available video material, we can examine students' strategies, for example, when they are working individually with tasks during work plan sessions. As such, the interview data also provide information on students' cooperation and thinking when they solve problems as well as whom they approach for help when working with work-plan-related tasks.

The Interview Situation

The interviews lasted for approximately 45 minutes per pair. The interview guides in mathematics and science were intended to serve a common purpose and paid attention to the same set of critical questions. However, the interview guides were used with considerable flexibility by the researchers. Therefore, not all questions in the interview guides were used in every interview. As a consequence, there might be some variation in the information provided by each interview, and in some cases, answers were not followed up with clarifying questions. Hence, the number of students included in the presentations of the findings may vary.

Limitations of the Data Material

As noted above, our analyses draw on material collected for the PISA+ video study. On the one hand, the PISA+ video data are rich in terms of the recorded classroom activities and students' meaning making. On the other hand, they have limitations due to initial research interests, angles of the video cameras, interview focus, and so on. For example, not all questions in the interview guides were asked during each and every interview, yielding some variation in the numbers of students referred to in the presentation of findings. This variation is apparent in the Tables in the Appendix. In Table A3, for example, 84 of 93 interviewees provided adequate information on their help-seeking strategies, while Table A1 shows that only 63 students delivered sufficient information regarding strategies for approaching the work

plan. As already mentioned, discrepancies here reflect flexibility in the researchers' use of the interview guides and their use of follow-up questions (Bergem, 2009; Klette, 2009). Despite inconsistency in the numbers of students reporting on ways of working with the work plans (varying from 63 to 84 respondents), we did not consider this a major weakness in the material, and, in sum, the informants provided a rich overview on different student approaches regarding work plans.

Due to ethical considerations, the students were not checked for grades, social class, and parental education. For the interviews in focus groups, however, the students were asked to give a self-estimate of their grade level in mathematics and science. Based on that rough self-reporting method, the students were divided into high and low achievers. Table 2 summarizes the number of students interviewed per classroom and the number of high- and low-achieving girls and boys.

As shown in Table 2, most of the students reported that they are high achievers. One explanation might be that self-evaluation is normally based on formative assessments, such as feedback from teachers and marks on assignments. In order to test the robustness of students' self-evaluation in mathematics and science, the self-reported grades were compared with the national grade averages for 2005 (Hægeland, Kirkebøen, & Raaum, 2006). This comparison showed that the students in the present study overestimated their own level of achievement to some extent. The over-representation of high-achieving students in our material could also have been a consequence of selection mechanisms, due to the fact that students voluntarily signed up to take part in the focus groups, and this should be taken into consideration when drawing conclusions on the basis of this material.

Table 2

Characteristics of the Sample of Students in Relation to School, Subject, High or Low Achievement, and Gender

Schools and subjects	Number of students	Girls		Boys	
		High achievers	Low achievers	High achievers	Low achievers
School 1: Mathematics	5 students: 2 girls + 3 boys	1	1	1	2
School 1: Science	2 students: 2 boys			2	
School 2: Mathematics	8 students: 4 girls + 4 boys	3	1	4	
School 2: Science	14 students: 8 girls + 6 boys	6	2	6	
School 3: Mathematics	10 students: 5 girls + 5 boys	4	1	3	2
School 3: Science	8 students: 4 girls + 4 boys	2	2	4	
School 4: Mathematics	16 students: 11 girls + 5 boys	10	1	2	3
School 4: Science	12 students: 8 girls + 4 boys	8		4	
School 5: Mathematics	8 students: 4 girls + 4 boys	4		4	
School 5: Science	10 students: 7 girls + 3 boys	6	1	1	2
Schools 1–5: Mathematics	Sum	22	4	14	7
Schools 1–5: Science	Sum	22	5	17	2
Schools 1–5: Mathematics and Science	Total sum	44	9	31	9
Total: 93 students		53 girls		40 boys	

The fact that the students were interviewed in pairs made it possible for them to both correct and support each other's responses, making it hard to either embellish or underestimate their abilities. However, self-reports based on the student interviews entail certain limitations in our material and should be taken into consideration when interpreting the data. Although students' self-reporting on achievement level, as discussed, was, at least to some extent, fragile, Rowan and Correnti (2009) have claimed that students' self-reporting is more reliable than that of both teachers and parents.

Presentation of Data

All interviews were transcribed verbatim, incorporating repetitions and pauses. In order to show the degree and frequency of different strategies and in the interest of being rigorous and analytically transparent (Miles & Huberman, 1994), the findings are displayed and summarized in the Tables in the Appendix (see Tables A1, A2, A3, and A4) and in illustrative quotations. While qualitative data are traditionally presented through words (e.g., quotations) and images (e.g., videos and pictures), quantitative analyses are defined through their use of numbers, figures, and matrices (Miles & Huberman, 1994). However, recent discussions on the features of qualitative versus quantitative data (Hammersley, 2008; Hardy & Bryman, 2004; Miles & Huberman, 2002) have emphasized that there is no sharp distinction between the two approaches, and concerns regarding the trustworthiness of the representation of the data (Eisenhart, 2007) exist in both camps. Miles and Huberman (1994) discussed how numbers tend to be ignored in qualitative research. They argued that when researchers identify a theme or a pattern in a data set, they look for frequencies and consistencies across the data. We argue that numbers and frequencies, as evidence of typicality and/or unusual incidents, could serve as a possible range of evidence and act as a validity check in qualitative analyses. Regrettably, these representations are often not made visible in reports published on the basis of qualitative research (Eisenhart, 2007). Video data further undercut the distinction between textual representation and representation by numbers (Erickson, 2006, Fischer & Neumann, 2012; Klette, 2009), as both research approaches can be used when performing video analyses (Fischer & Neumann, 2012). Representing our findings through Tables *and* illustrative quotations allows us to give an overview of the students' strategies in terms of typicality and consistency or inconsistency throughout the material, thus the findings should be analytically accurate, transparent, and traceable.

Findings: Students' Strategies When Working with Work Plans

The analyses that follow are divided into four sections in which the students' strategies with regard to work plans are described. We begin with students' strategies at school and then turn to the question of whether and how they work with the work plan at home. As already mentioned, work plans include both schoolwork and homework, and exploring students' strategies when working with the work plan at home is crucial in trying to understand individual and patterned approaches with regard to work plans. Next, we discuss help-seeking strategies and whether students cooperate with their classmates. Together, these four dimensions (classroom strategies, homework strategies, help-seeking strategies, and cooperation strategies) provide a basis for achieving a broader understanding of how individualized instructional methods such as work plans affect students' classroom practices.

Strategies in the Classroom

We recognize, as did Bergem (2009), three main strategies among the students when they are working with work plans in videotaped classrooms. Unlike Bergem (2009), who used the interviews related to mathematics as the basis for his analyses, we included science interviews, and more importantly, we focused on gender. We drew upon 47 interviews with a total of 93 students, including 53 girls and 40 boys. Of 93 students, 63 answered questions concerning their work plan strategies. In the sections that follow, we describe the different student strategies and report the number of high- and low-achieving students who selected each strategy.

Strategy 1: Complete the work plan (the math and science tasks) within the first couple of days.

A total of 28 students reported using this strategy. Of these, 12 were high-achieving girls, 9 were high-achieving boys, 5 were low-achieving girls, and 2 were low-achieving boys. The students reported different justifications for doing this:

My goal is to finish the math during the first couple of days, at home. All of the math tasks. I do other things in the remaining lessons or just relax. (High-achieving girl)

Like, I just complete them. Then I do almost nothing the rest of the two weeks. (Low-achieving girl)

I normally finish the math during the first week if I work with the tasks during study lessons. (High-achieving boy)

Strategy 2: Delay the work plan (the math and science tasks) until the last few days.

A total of 20 students reported doing little required schoolwork within the first weeks of the work-plan period and delaying their required work until the last few days. Out of these, 5 were high-achieving girls, 10 were high-achieving boys, and 5 were low-achieving boys. Their explanations were:

We always do a lot during the last week of the period. We relax, do nothing the first week. (High-achieving girl)

I'm the type of guy who starts on the plan the last week. (High-achieving boy)

This is how I normally work: At school, the first couple of weeks, I do nothing, but sometimes I manage to complete a couple of tasks every lesson. (Low-achieving boy)

Strategy 3: Distribute the math and science tasks evenly throughout the period.

A total of 15 students reported using this strategy. Of these, 9 were high-achieving girls, 5 were high-achieving boys, and 1 was a low-achieving boy. Their explanations:

If you do the tasks too quickly, you have nothing to do during the rest of the period. (High-achieving girl)

If you do the tasks too quickly, they only give you other tasks to do. (High-achieving girl)

I usually divide the tasks evenly throughout the period, because then I always know what to do. (Low-achieving boy)

Students who follow Strategy 1 finish all the tasks during the first couple of days, and the result is that they either do little schoolwork for the rest of the work plan period or work on other school subjects during the remaining math and science lessons. Students who use Strategy 2 normally say that they do very little schoolwork during the first week, and the result is that they have to work quite a lot the last few days. While Strategy 1 is the preferred strategy among high- and low-achieving girls, both high- and low-achieving boys favor Strategy 2. While most of the high-achieving students using Strategy 2 say that they know when to start in order to finish the plan in time, the low-achieving boys point out that they normally procrastinate because they struggle to get started. However, even though Strategy 1 and Strategy 2 are quite different, they share one common consequence: students who choose these strategies only work on mathematics and science a few days during the whole work plan period. Most of the students who follow Strategy 3—spreading the tasks evenly throughout the period—are high-achieving girls.

Some of the students state that they prefer to concentrate on one subject at a time, that is, to finish all tasks in one subject domain (i.e., science or mathematics), before they turn to the next domain. As one high-achieving boy put it, 'I focus on one subject at a time, and I don't begin to work with another subject before the other one is completed.'

Using this approach might thus counteract ongoing teaching activities in class and make it hard for the students to align their assignments and schoolwork to instructional activities taught in class. Table A1 in the Appendix summarizes the students' use of classroom strategies in approaching the work plan.

Homework Strategies

Using work plans affects the interaction of and the relationship between schoolwork and homework, and the amount of homework depends on how many tasks the students manage to complete at school. As one low-achieving boy explained, 'We use work plans, so it is not, like, do task 1, 2, 3 till tomorrow. We do what we want when we want. Some students have finished the plan, and others have just started.'

Homework is thus not given on a day-to-day basis, as mentioned by one high-achieving girl: 'In primary school, we had, like, 'You have to do this until Monday and this until Tuesday.' You always knew what you had to do, and it was embarrassing if you had forgotten to do your homework. It was like 'Oh my God!' because you were used to having to do the homework for Tuesday on Monday, and the homework for Wednesday on Tuesday.'

While 74 interviewees provided us with information about homework strategies, only 34 of them explicitly discussed the requirements to work with the assignments on the work plan at home. One reason that so few of the students explicitly mentioned homework requirements

might be that so many of them are able to accomplish the work-plan requirements at school. Those students who explicitly discussed how they approach homework requirements stated that they spend between half an hour and two hours on math-related homework in one week—and a lot less for science. Some said that they work a lot at home at the beginning of the work-plan period in order to complete the plan during the first week. Four high-achieving students—two girls and two boys—reported that they normally work with the plan at home and that they use the time at school for relaxing and social activities: “I do very little at school” (High-achieving girl), “I do very little during study lessons. I do most of my work at home” (High-achieving boy).

A total of 40 students, mostly high-achieving girls, claimed that they manage to complete all the assignments on the work plan at school, often during study lessons. One reason could be that the tasks are too simple for some of these students’ ability levels. However, some students reported that they choose to work at an easy level in order to avoid homework.

Information from the classroom observations and the student interviews also revealed that most teachers rarely check homework and/or other work-plan-related tasks. Subsequently, some students stated that they regard homework as unimportant. Ten students (five high achieving girls, three high achieving boys, and two low achieving girls) pointed out that they do not always finish the plan. As one of the high-achieving girls put it, ‘Well, I haven’t finished the plan in a very long time because they never check if you’ve completed it or not.’

Since this question has not been elaborated systematically throughout the interviews, and since the data is too poor at this point, we do not discuss this as a separate strategy. However, this finding is commented upon in the discussion, and further examination here is required. Table A2 in the Appendix summarizes the students’ homework strategies.

Help-Seeking Strategies

When using work plans, students are encouraged to work at their own pace. The result is that they are often occupied with tasks that the teacher has not yet explained, or are far behind what is being taught in class. The relation between instruction time and seat-work time then becomes somewhat blurred in these classrooms. However, several of the students do not regard working with unexplained tasks and assignments as difficult. High-achieving girls, for example, use multiple strategies when working at their own pace, without relying on teachers’ lectures or instructional support. Some reported that they check the textbooks for help, while others ask the teachers during study lessons. However, some students find it difficult to work with unexplained tasks, which, again, affects how they work with the plan. As one high-achieving girl said, ‘We hadn’t had lectures about equations before, so we had to wait until the teacher explained this in class. So we didn’t get to do much homework the first week of the period. So we have to do it this week.’

While 37 of the students who answered this question (help-seeking strategies) claimed that they normally ask their classmates for help, 40 students—mostly high-achieving boys—said that they ask the teacher. These students, however, specified that they normally ask the teacher if the topic or assignment is considered difficult. One of them explained, ‘It depends. If it is, like, very difficult, like, something that I don’t really understand, I’ll ask the teacher. If it’s easy, I’ll just ask the person sitting next to me.’

Some of the girls said that they only ask the teacher if he or she is available, and it might seem that while girls ask each other for help in order to relieve the teacher—who, as they say, ‘has so many students who need help’—boys ask other students in order to avoid spending their time waiting for the teacher. However, some students also use ‘waiting for teacher’ as an excuse for doing nothing, like the low-achieving boy who said, ‘The teacher always has to help everyone else before me. I always have to wait at least 15 minutes. I just take down my hand and just relax, and then I blame the teacher. It’s her fault!’

When it comes to parental support in relation to math and science assignments, some of the students, mainly girls, pointed out that they receive help from their fathers:

He thinks [referring to her father] it is very fun to help me with math, so I ask him. (Low-achieving girl)

I ask dad. I just write down my questions and ask dad at home. (High-achieving girl)

I ask my parents. Especially before math tests. (High-achieving boy)

Table A3 in the Appendix summarizes the students’ help-seeking strategies.

Cooperation Strategies

Most of the students say that they normally cooperate with peers on tasks and assignments and that they find it easy to collaborate with peers even though they are working on different tasks or are on different achievement levels.

The analysis also suggests that girls appreciate cooperation as a means to discuss answers, solutions, and problems:

If you sit and work with the person next to you, and you don’t understand the tasks, you’ll learn more if you work with someone who understands it, because then she can explain it to you. (High-achieving girl)

Like, if I cooperate and there are things I don’t understand, she [referring to her neighbor] explains it to me. (Low-achieving girl)

I like to cooperate on problem-solving and reasoning tasks—where you can discuss—instead of just calculating the correct answers. (Low-achieving girl)

It’s better to work in pairs than alone. If you’re alone and you’re stuck on a task, you just give up. (High-achieving boy)

Nine students (one high-achieving girl, seven high-achieving boys, and one low-achieving boy) said that they usually prefer not to collaborate with their classmates. While low-achieving girls said that they prefer to collaborate, especially with female friends, several high-achieving girls claim that they do not collaborate equally well with everyone, often labeling some male students as free-riders and troublemakers. When collaborating, both low-achieving girls and low-achieving boys said that they often end up copying other students’ answers.

I understand math, so I don't need to discuss different tasks. I don't need to ask someone else. (High-achieving boy)

I don't cooperate well with everyone. It often ends with me doing all the work. (High-achieving girl)

They just do it for you. (Low-achieving boy)

Although collaboration is a method frequently used by girls, a greater proportion of the boys—even though they are sitting together—rarely cooperate. If they do, they report that their main goal is to obtain the correct answers. Table A4 in the Appendix summarizes the students' cooperation strategies.

Discussion

From the data presented here, it might be difficult to draw clear distinctions between how girls and boys relate to the work plans. One conclusion that can be drawn is that both girls and boys adapt to work plans, but in different ways. The findings indicate some possible differences: while the majority of the girls prefer to finish the plan during the first couple of days (Strategy 1), boys tend to either finish the plan during the first couple of days (Strategy 1) or complete the plan the last couple of days (Strategy 2). Our data further reveal that low-achieving girls mainly use Strategy 1, that low-achieving boys mostly prefer Strategy 2, and that the students who favor Strategy 3, which is to distribute the tasks evenly throughout the period, are high achievers—with one exception.

When relating the students' work-plan strategies to their strategies regarding homework, help-seeking, and cooperation, our findings show that most of the high-achieving girls who follow Strategy 1 (completing the plan within the first couple of days) and Strategy 3 (spreading the tasks evenly throughout the period) rarely work on the plan at home. These girls ask both the teacher and their classmates for help, and they prefer to cooperate rather than to work alone. Low-achieving girls who reported using Strategy 1 combine this with working on the plan at home in the first couple of days. However, these students also reported that they ask the teacher for help and that they favor cooperating with classmates. Interestingly, most of the students who follow Strategy 2 (completing the work plan during the last couple of days)—mostly boys (15 boys and 5 girls)—also favor asking their peers for help. They end up, however, completing the plan at home. Since none of these students specifically said that they work with peers at home, the question to be raised is: 'Who do they actually ask for help?' Considering that students who struggle academically and/or students who prefer to work on the plan at home might receive little assistance from teachers, parents, and peers, procrastination of work could reinforce existing academic differences. As such, Strategy 2 as a form of procrastination strategy (Jackson, 2006) is problematic for these students. As argued by Newman (2000, 2008) and others, poor learners in particular tend to both avoid asking for help and to withdraw themselves from learning activities. Quite a large proportion of the high-achieving boys, irrespective of work plan strategy, ask their teacher for help. Most of them also report that they prefer to work alone. According to Newman (2000), successful learners know when to ask for help, and they are not afraid to ask for help when needed. Low-achieving boys seem to either prefer to work at school in order to get on track and to receive help from the teacher, or struggle to get started and postpone the work for home, getting help

from neither their teachers nor their parents. However, regardless of their work-plan strategy, low-achieving boys find it hard to plan and organize their work and to finish their work plan in time. Hence, while high-achieving girls normally work a great deal at school in order to have less homework, high-achieving boys, low-achieving girls, and some of the low-achieving boys tend to work mostly at home. One conclusion that can be drawn so far is that work plans deeply affect the relation between schoolwork and homework, with somewhat negative consequences for low-achieving boys in terms of getting necessary and sufficient help and assistance.

A Renegotiated Order Between Teachers and Students

The extensive use of Strategy 1 and Strategy 2 among all students ($n = 48$) in combination with their help-seeking strategies further challenges the concept of teacher(s) as facilitator(s) for student learning and renegotiates the order between teaching-learning activities in schools versus teaching-learning activities at home. Our data suggest that when so many of the learning activities depend on the students' own pacing, monitoring, and self-regulation, teachers seem to find it hard to intervene and mediate. Even though most of the students manage to complete the work plan in due time, we argue that it is problematic that 48 of the 63 students spend most of the school time 'almost doing nothing.' Likewise, it is problematic that 10 of the students reported that they never complete their work plans, nor are they checked for this.

Several of the students said that they either do most of their schoolwork at home or postpone their work until the last few days. These findings resonate with Alm (2003), who claimed that the use of individual schedules or work plans allows students to either work little at school, completing the tasks at home, or work hard at school, doing little at home. By giving students responsibility for their own pace, they are allowed to decide where and when to work. One consequence of that is that they can postpone their work until the last few days. In terms of how instructional practices support and affect student learning, postponing all schoolwork into a 'massed practice' is problematic (Rhorer & Pashler, 2010). Nuthall (2005), for example, claimed that students often need to be exposed to the learning material a number of times and over several days. Furthermore, studies have also shown that students who use 'spaced practice' perform better than students using 'massed practice' (Willingham, 2002).

A Renegotiated Order Between Schooling and Teaching

Our findings indicate that high-achieving students seem to be able to monitor and plan their own work pace. While these students manage to organize their work plan period, low-achieving boys reported—to a greater extent than low-achieving girls—that they have problems getting started and finishing the plan in time. Several studies corroborate these findings. During the 1960s, there were various attempts to reform American high schools by giving students a more flexible pedagogical organization. While this structure worked well for high-achieving students, low achievers often became frustrated, had problems organizing their time, and said that they preferred to be told what to learn and how to learn it (Cuban, 1993; Tyack & Tobin, 1994). Solhaug and Fosse (2008) claimed that classrooms organized around the use of work plans and mixed-age groups were better attuned to girls than boys and that high-achieving students were more satisfied than low achievers. This resonates with findings from Swedish studies on Own Work (Nyroos et al., 2004; Österlind, 2005), which

showed that high achievers are more positive to lessons characterized by autonomy and self-study than low achievers are. Interestingly, all low-achieving girls in our material reported that they prefer Strategy 1. Due to the small number of student responses in this group ($n = 5$), one should be cautious about drawing conclusions. However, this tendency resonates well with emergent studies (Kjærnsli & Roe, 2010; Tinklin, 2003; Warrington, Younger, & Williams, 2001) that have shown how girls give priority to schoolwork regardless of achievement level.

Drawing on our material, it is hard to tell whether some students use procrastination (Jackson, 2006) as a self-protecting strategy. It might seem as though the students who claim to work little during the first week either struggle to get started with the different tasks (low-achieving boys) or minimize their effort in order to complete the tasks within a minimum amount of time (high-achieving boys and high-achieving girls). Thus, procrastination strategies seem to be a deliberately-chosen strategy for high achievers.

Several studies show that high-achieving students determinedly ask the teachers for help (Newman, 1990, 2000). The high-achieving students in our study, particularly boys, said that they normally ask the teacher, especially if the task is considered difficult. Our data also show that the use of work plans affects students' help-seeking strategies. During lessons designated for working on work plans, the students can decide which school subject they want to work on. The result is that the subject teacher present in class is often a poor match to the subject the student prefers to work with. This, in turn, makes it difficult to ask the teacher for help. While most students claimed that they work on tasks irrespective of the teacher present, six high-achieving girls pointed out that they prefer to work on mathematics and science during study lessons in which the teachers of those subjects are present. These results resonate with findings from a Swedish study on Own Work (Nyroos et al., 2004), which showed that many students work on tasks according to urgency, not according to whether the teacher of that subject is present.

Our findings resemble the results from other studies. Several scholars (Harris et al., 1993; Tinkling, 2003; Warrington et al., 2000) have shown that females generally give more priority to school and that low-achieving females work hard and take school more seriously than low-achieving males. Other studies have shown that while boys respond well to lessons in which the teachers make use of clear learning objectives, short-term tasks, and tightly scheduled activities with clear targets (Office for Standards in Education, 2003; Younger & Warrington, 2002), girls respond well to lessons in which they can collaborate, discuss, and plan their own learning (Gipps, 1996; Younger et al., 1999). The need among some boys for immediate feedback on tasks and assignments and more individual attention (Gipps, 1996; Office for Standards in Education, 2003; Younger et al., 1999) can be quite difficult to meet in classrooms organized around work plans.

Our findings suggest that the use of work plans has severe consequences for the relation between schoolwork and homework. Scholars agree that an important principle for assigning homework is that tasks and assignments should be manageable and should reflect or review the material that has already been taught in class (Cooper, 1989; Cooper, Robinson, & Patall, 2006; Warrington & Younger, 1996). In other words, it is essential that tasks related to new topics and themes are not given as homework unless they have been thoroughly explained in school. Since the use of work plans allows students to work at their own pace, the students often take on tasks they cannot manage (Bergem & Dalland, 2010). When using work plans, the relationship between schoolwork and homework becomes blurred, according to our interviewees. Traditionally, homework was given from one day to the next. Using work plans,

more long-term tasks and assignments give the students autonomy but also increase the burden on students to complete their plan during the work-plan period. Our students reported several strategies for accomplishing their work plans, varying from doing all required work (both homework and schoolwork) during the first couple of days to postponing all the work until the last day(s). Both strategies are problematic, however, and call into question the relationship between and roles of homework and schoolwork, the role of instruction time, and, more importantly, the role of the teachers as facilitators for learning. As indicated by our interviewees, teachers might find it hard to balance their role as gatekeepers and support structures in these classrooms. The extensive use of study lessons for social and non-academic activities (e.g., 'I do very little during study lessons—I do most of my work at home' or 'Like, I just complete them [the tasks]—then I do almost nothing the rest of the two weeks.') is further problematic when it comes to providing equity and equality in student learning. We argue that by allowing the students to decide when and where to work, a great deal of valuable school time is wasted. Hence, how the students spend their time at school becomes an individual and strategic decision and privilege. Even though that is not the teachers' intention, some students learn to adapt their working strategies, which might have negative repercussions on future education and work.

Even though many of the students, especially girls, said that they like to collaborate when they work on work plans, several studies suggest that the extensive use of work plans strengthens individualized learning as privatized learning (Carlgren et al., 2006; Klette, 2007; Nordahl & Sunnevåg, 2008). For instance, based on textual analyses of work plans and video observations of two classrooms from the PISA+ video data, Steen (2007) claimed that there is little and rather sporadic use of cooperation with regard to work plans and that the students mostly work individually on different tasks.

Conclusion

Although increased student control over learning and student autonomy in the classroom have been advocated for decades, emergent studies have provided little support for these instructional practices as regards student learning. The relationship between working methods and instructional practices and how they affect students' positioning and strategies regarding schoolwork have been poorly explored up to now. Recently, however, there seems to have been a renewed interest among researchers to identify and investigate how instructional practices affect students' learning strategies (Rhorer & Pashler, 2010; Rowan & Correnti, 2009).

Our study contributes to this emerging discussion by focusing on how individualized instructional programs, such as the use of work plans, produce new student strategies. Even though it is not possible to generalize the findings to other settings, careful analyses of the extensive use of work plans in Norwegian classrooms might contribute to the growing body of research on how different teaching methods affect students' abilities to learn. On the one hand, work plans allow students to work and progress at their own pace and give them autonomy, which is productive for their own learning. Our data seem to suggest that high-achievers take advantage of this. On the other hand, work plans demand that self-regulated students have the capacity to plan, monitor, and regulate their own work. What seems problematic is that these ways of organizing school learning give some students too much responsibility for their own learning, and low-achieving boys in particular seem to adapt coping strategies that might be counterproductive in this respect. Our data further suggest redesigned roles of teachers and parents. Ignoring this data could have

severe consequences with regard to the role of the teacher as the principal facilitator for student learning.

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Appendix

Table A1

An Overview of Work-Plan Strategies

Sample: 63 students (31 girls + 32 boys) Population of sample: 93 students (53 girls + 40 boys)	Girls High achievers	Girls Low achievers	Boys High achievers	Boys Low achievers
Strategy 1: 28 students	12	5	9	2
Strategy 2: 20 students	5	0	10	5
Strategy 3: 15 students	9	0	5	1

Table A2

An Overview of Homework Strategies

Sample: 74 students (44 girls + 30 boys) Population of sample: 93 students (53 girls + 40 boys)	Girls High achievers	Girls Low achievers	Boys High achievers	Boys Low achievers
Work little at home – work at school: 40 students	22	3	10	5
Work little at school – work at home: 34 students	13	6	12	3

Table A3

An Overview of Help-Seeking Strategies

Sample: 84 students (44 girls + 40 boys) Population of sample: 93 students (53 girls + 40 boys)	Girls High achievers	Girls Low achievers	Boys High achievers	Boys Low achievers
Ask fellow students: 37 students	14	5	11	7
Ask the teacher: 40 students	13	7	17	3
Ask at home: 7 students	4	1	2	0

Table A4

An Overview of Cooperation Strategies

Sample: 67 students (40 girls + 27 boys) Population of sample: 93 students (53 girls + 40 boys)	Girls High achievers	Girls Low achievers	Boys High achievers	Boys Low achievers
Cooperate: 58 students	28	11	12	7
Little cooperation/do not cooperate: 9 students	1	0	7	1