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Swedish students' everyday school life and teachers' assessment dilemmas: peer strategies for ameliorating schoolwork for assessment

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Abstract

In contemporary ways of thinking about education there is an enhanced focus on individual students' results and less on students' collaborative processes for attaining good results. This may appear peculiar, given that the Swedish curriculum for the nine-year compulsory school states that students should be given opportunities to compose texts together with others and give and receive feedback on them. This is also in line with societal desires to motivate students to take responsibility for their lifelong learning. The evolving ethnographic research design, comprising observations, audio-visual recordings and follow-up interviews with students at a Swedish lower secondary school (Years 8 and 9), investigated the informal social strategies that students enacted when doing formal schoolwork and how they reflected on them. Goffman's (1959/1990) dramaturgical metaphors of the back region, front region and impression management were applied as theoretical points of departure. The findings showed that some students worked hard at their schoolwork in ways that corresponded with societal desires and ideal learning curves. Other students aimed at more effortless achievements and relied heavily on peers and digital devices when taking shortcuts to produce formal assignments. These students' potential learning curves showed a broken arrow of knowledge development, resulting in assessment dilemmas for teachers and possible mismatches in their grading.

Keywords Assessment · Curriculum · Grades · Impression management · Informal networking

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1 Introduction

There is an extensive body of research on students' activities and learning inside the classroom (e.g., Boekaerts & Corno, 2005; Harris et al., 2014; Harris & Brown, 2013; Nuthall, 1999; Rönn, 2021; Rönn, 2022). However, in recent years the importance of computers and digital devices has evolved both inside and outside the classroom. Besides changing the opportunities and conditions for learning, it has also facilitated collaborations with peers and ameliorating assignments using different sources and peers. This has created new dilemmas for teachers as how to assess students' levels of knowledge. In the following, and from a Swedish perspective, we elaborate on how students attending lower secondary school (Years 8 and 9) collaborate on and ameliorate assignments submitted to the teachers for assessment. What kind of strategies are in use, and what are the consequences of these strategies in relation to how assessments are thought about and acted on?

The Swedish discourse of performativity (Beach & Dovemark, 2007) for nine-year compulsory schools, with an enhanced focus on performativity (Erlandson et al., 2020), resembles the European policy discourse on performance-based curricula (Wahlström, 2016). In the Swedish curriculum that was implemented in 2011, grades were introduced from Year 6 (12-year-olds) and twice a year for the three final years of compulsory school (Swedish National Agency for Education, 2011/2018, 2022). Previously, the students had only been graded during the Years 8 and 9, the two final years of compulsory schooling. Along with an enlarged national testing, a new grading scale was launched ranging from F (Fail) to A, with pass grades E, D, C, and B in-between. Since 2011, students with grade F in the core subjects have not been eligible for the national programmes at the upper secondary school level. In the last decade, between 13-14 % of the students in the final year of compulsory school (Year 9, aged 15) have not been admitted to the national upper secondary programmes due to having obtained grade F in the core subjects[1] (Swedish National Agency for Education a. Downloaded 2022-07-11).

A report from the Ministry of Education in 2020 regarding the Swedish grading system stated that students found the grading system demotivating (SOU 2020:43). Specifically, the students found that *all* knowledge requirements had to be obtained for the grades A, C and E, and considered that they had been graded on their weakest, rather than their strongest, performances. The report proposed a compensatory grading system in which all the grading criteria did not have to be fulfilled. However, in the new curriculum that was launched in the autumn of 2022, new directives for grading were introduced, which enabled teachers to make more comprehensive evaluations of students' knowledge because now the dividing line between the grades is less distinctive. However, the boundary between F and E remains as sharp as in the past (Swedish National Agency for Education c. Downloaded 2022-07-17).

[1] During the academic years 2015/2016, 2016/2017, 2017/2018 and 2018/2019 (the years during and after the great migration wave in Europe) there was a peak of approximately 16-17 % of children who, due to having obtained grade F were prevented from entering the national programmes at the upper secondary school level.

An individual student's results in the national tests are now taken more into account in the final grade and teachers are expected to take students' results in the national tests into consideration in their final grades – even though exceptions to this are still possible (Swedish National Agency for Education b. Downloaded 2022-07-17).

In Sweden, like in many other countries, there has been an enhanced focus on the individual student's responsibility for their learning in line with lifelong learning (cf. Carlgren, 2015; Lundahl & Olson, 2013). There has also been an increased focus on formative and summative assessments (cf. Hirsh, 2020). The 2011 curriculum for the Swedish compulsory school (Swedish National Agency for Education, 2011/2018, 2022) highlighted that students were to take responsibility for their own learning and success in their studies. Further, the teaching should be adapted to every individual's needs and prerequisites, regardless of their previous experience, background, language and knowledge, and students are expected to develop problem-solving skills and be eager to learn. However, Dovemark (2004) has argued that an increased focus on the individual student's responsibility for their achievements also means that they could be held responsible for possible failures.

Teachers often act on the assumption that students act responsibly (cf. Bartholdsson, 2008) and perform conscious actions for their learning (see for instance Bandura, 1977 on self-efficacy, Uus et al., 2020 on self-directed learning). In addition, education is usually framed by a specific reasoning and the assumption that different kinds of knowledge need to be developed from a basic level to one that is more complex by means of teaching and learning. Furthermore, in most countries school attendance is compulsory and students are expected to achieve the necessary knowledge requirements set by law. In relation to this enforcement, and in combination with student assessments and grading, an important aspect of student proficiency is to discern how these requirements are positioned in an intellectually imagined taxonomy of knowledge (cf. Bloom et al., 1956; Carlgren, 2012).

In our study we call this imagined ordering of knowledge 'the arrow of development' to indicate that knowledge is intellectually normally sorted and organised based on a reasoning of different values or an increased complexity, which is said to equal the 'nature' of knowledge – from the memorising of facts to the more complex proficiencies of e.g., understanding, applying, analysing, evaluating and creating (cf. Bloom et al., 1956). Accordingly, students need to learn to present the higher level of knowledge on the imagined arrow of development to gain recognition and higher grades from the teachers. Hence, ideas about students' knowledge along the arrow of development are important to acknowledge in order to understanding how education and assessments are thought about and enacted in educational systems. For instance, in the curriculum and annotations for the Swedish mother tongue course syllabus it is stressed that students should be given opportunities to compose texts both on their own and together with others (Swedish National Agency for Education, 2018; 2022) and learn to give and receive feedback on them (Swedish National Agency for Education, 2017) in order to develop their knowledge along the arrow. This is also considered important for future studies and working life.

Imagined futures (cf. Beckert, 2016) thus become visible, as well as ideas about required knowledge. However, contemporary education's focus on individual products and gradings, rather than on collaborative learning processes (Prøitz & Nordin, 2020), may seem uncharacteristic in relation to the sought proficiencies of creating, revising and giving feedback to texts written together with or by classmates in a thought process of formative assessment (William & Thompson, 2008). Exposing students to successful writing models that demonstrate strategies, provide constructive feedback (including peer-evaluation) and allow them to experience successful learning progress enables them to develop self-efficacy (cf. Schunk & Zimmerman, 2007; Zimmerman et al., 1996). However, regulation assumes that learners have purposes and goals but these are not necessarily transparent or in line with the objectives and goals set by others.

Consequently, a gap appears between how students are expected to interact in collaborative learning processes and the assessment of their individual performances. In the Swedish context, this can be seen in recommendations to turn to peers for assistance in creating and revising texts and giving and receiving feedback (Swedish National Agency for Education, 2017, 2018). Giving feedback to peers is to be interspersed with self-regulated learning, where students are to take responsibility for their own learning, as desired by a society in which willingness for lifelong learning is a prerequisite for future citizens. The national commentary material does not regulate in any detail how this peer assistance in learning is to be carried out, which suggests that students and teachers are expected to find their own ways forward, as this study points out. For some students, their own ways are not in line with the formally stipulated self-regulated learning.

It is general knowledge that students often turn to each other during lessons (cf. Nuthall, 2007; Rönn, 2022). An educational challenge and assessment dilemma thus appears: Are teachers assessing the performances of individual students or those achieved by several students in a collaborative learning process? This dilemma is especially evident when modern information technology facilitates the creation of new strategies and spaces for collaboration that are 'invisible' or 'hidden' to teachers (e.g., Messenger, Snapchat, Google docs etc.). An example of such a new space is what Aaen and Dalsgaard (2019) call the third space. The authors make a distinction between the students' activities at school (including digital platforms where teachers share information with the students) and their activities during their leisure time, which are said to constitute the first two spaces. A third space is then described consisting of a hybrid between leisure time/home and school/schoolwork, such as when students use social media outside school and after school hours for school assignments. This third space is where collaborations for learning and ameliorations of assignments take place that are out of sight of the teachers. In a previous study, Rönn (2022) has shown that in a Swedish school context, with its focus on assessing and grading the achievements of the individual student, the students' strategies have turned *formal* assignments into *informal* activities. Moreover, *individual* assignments have been dealt with *socially*, and the supposed *visual* learning as a foundation for the formative assessment has been made *opaque* for the teachers. This aligns with the findings of Selwyn and Bulfin (2016), who showed that students do not necessarily express their dissatisfaction with school but instead develop strategies

where they can work "around", rather than "against", the rules that are imposed on them at school.

Based on this brief introduction, our study focuses on students' informal social strategies for improving the assignments they submit to their teachers for assessment. In other words, what kinds of strategies do students use to demonstrate their knowledge and what do they think about these strategies? Based on an acknowledged gap in research on informal social strategies amongst students when doing schoolwork (see for instance Carlgren, 2020; Hietajärvi et al., 2020; Nilsson, 2008; Selwyn, 2009a, b; Quintana & Osuna-Acedo, 2020), a self-regulation of performance outside the classroom (Schunk & Greene, 2018) and the importance of teachers knowing more about students' hidden lives when doing schoolwork (Nuthall, 2007), the study provides new empirical knowledge about how students act to illuminate the products that are to be assessed by their teachers, while at the same time hiding from them how these products are produced and ameliorated both inside the classroom and in a third space (Aaen & Dalsgaard, 2019).

This article draws on a more extensive research project studying students' perspectives on doing schoolwork in their local compulsory school context. This larger research project focuses on the informal social strategies that students use in Sweden to collaborate on and ameliorate assignments set by the teachers for assessment and/or grading. A particular interest is related to what students do and say without the teachers' awareness. Based on the insights from this larger research project, the aim of this article is to describe, analyse and provide an account of how students reflect on and act in relationship to schoolwork in a context of assessment. Our study was carried out at a municipal Swedish lower secondary school (Years 8 and 9) and is guided by the following research questions:

1. *What kind of informal social peer strategies do students use when ameliorating written assignments to be assessed by their teachers?*
2. *How do students reflect on these informal social peer strategies?*

By posing the above questions, the aim is to contribute to a more in-depth understanding of students' tacit strategies that are enacted out of the teachers' sight and supervision in the context of assessment.

2 Using Goffman's dramaturgical metaphors as a theoretical framework

To illuminate and analyse the informal peer strategies, Erving Goffman's dramaturgical metaphors of the *back region,* the *front region* and, to a lesser extent, *impression management* are used (Goffman, 1959/1990). The behaviour and interaction that take place in the back and front regions are the linchpins of social life: how do people strive to present themselves others? The theory facilitates an analysis of the strategies used by the students that are opaque from a teacher perspective. The front region implies that a person attempts to express a desired image of themselves to

others and manages the intended impression by trying to control the flow of information, such as what is said and how it is said. However, it is in the back region that a person learns how to act for the public (e.g., an audience) and prepare their performances – often together with other 'team members'. Solidarity is often developed in the back region. The communications and attitudes that are expressed in the back region are thus normally controlled and hidden when acting and performing in the front region. Back region interactions are not intended to be exposed and can therefore be seen as more authentic than social life in the front region. When students manoeuvre between educational societal desires and the expected learning curve's arrow of linearity, Goffman's concepts of the *front region* and the *back region* indicate to some extent where interactions take place and the impression management of what is said and what is held back. This is used as a theoretical lens (Goffman, 1959/1990) for this study. By submitting a written assignment for grading, students intend to give a good impression of themselves to the teacher in the front region. This is done by trying to control the flow of information, such as what is said and how it is said and striving to make an impression in each situation, rather like a performance on stage in front of an audience. Nonverbal and/or verbal acts are expressed in the front region along with the individual's view of themselves, of other participants and of the situation itself. The presented and managed impression of themselves is likely to be favourable and is easy to manipulate by, for example, controlling the given information in impression management.

The back region is like the backstage of a theatre where the performer, unbeknown to the audience, learns their 'lines' for an eventual public enactment. Unintended impressions are often unwillingly *given off*, to use Goffman's terminology. The *audience* may use these impressions to control the validity of an individual's expressions. The individual is reasonably aware of the impression they aim to give, while the audience is aware of a twofold communication consisting of intentional and unintentional expression.

In Goffman's theoretical work, interactions are regarded as taking place face-to-face and in the here and now (Goffman, 1959/1990). However, in today's use of digital information technologies, Goffman's metaphors are used to describe interactions that are not face-to-face, such as those via mobile phones (Persson, 2012; Rönn, 2022) or digital social networks (Gilmore, 2014; Rönn, 2022 submitted). In our study, the students' encounters with teachers aimed at giving a favourable impression are regarded as taking place in the front region, even if they are not necessarily carried out physically. Hence, written assignments are regarded as pieces of information that the students control for what Goffman calls impression management. Conclusively, student texts that are submitted for assessment and grading are thus considered as performances that aim to give a certain impression.

Individuals can establish relationships with others in the back regions in what Goffman (1959/1990) calls *teams*. In the team the members have a familiar relationship that is characterised by solidarity. This solidarity aims at preventing the

audience from accessing the secrets that are shared between the team members in the back region. In this study, the students are not only considered as individuals but also as team members who prepare their performances in the back region for their encounter with the teachers (the audience) in the writing assignments they are to submit to them (in the front region) for assessment and/or grading. During the encounters between classmates (team members), and without the presence of the teacher (audience), they can discuss advantages and disadvantages in the front region and suggest procedures in the back region whilst preparing for their enactment for the teacher. The teachers, who have no access to the back region, are therefore unable to overhear or see what is happening there. The loyalty between the members of the team contributes to undesired information not being *given off*. The study thus aims to highlight the difficulties that teachers face when assessing students' written assignments that have been produced in the back regions.

In a sub-study of the larger research project mentioned above, Rönn (2022; 2022, submitted) contributes to the development and refinement of Goffman's dramaturgical metaphors by including digital technology. What becomes visible is that digital technology enables the back regions to be face-to-face and synchronous as well as remote and asynchronous, and that students can shift between the numerous informal social strategies in four different back regions. These back regions are: a) face-to-face and synchronous (mainly inside the classroom out of the teachers' supervision), b) person-to-person and synchronous (such as when talking about schoolwork with peers on the telephone), c) person-to-person and asynchronous (such as forwarding images of completed written assignments to peers) and d) person-to-people and asynchronous (such as when one pupil communicates with several classmates simultaneously on social media and forwards leaked national tests to the class's Snapchat group). The first of these may or may not include digital technology, although the latter three back regions do. The pupils can shift between these four back regions, all of which are out of the teachers' supervision, when producing written assignments for assessment. The students' texts, which are produced in the back regions out of sight of the teachers, are to be understood as tokens of the students' impression management.

Students' encounters that take place with peers out of sight of the teachers, whether face-to-face or through digital technology, can thus be regarded as activities that are enacted in the back region. When using remote synchronous and asynchronous digital technology there is little risk that students will unintentionally reveal undesired impressions of their abilities and proficiencies to the assessing teacher. This study focuses on the back region spaces and the students' informal social strategies that they apply in interactions with peers, out of sight of the teachers, when preparing the impressions they intend to give. Consequently, the theoretical lens focuses on students' informal interactions and collaborations with peers out of the teachers' sight when producing assignments that are to be individually assessed by their teachers in the front region.

3 Methodological design

The study uses fieldwork, audio-visual recordings[2] and follow-up interviews (cf. Jeffrey & Troman, 2004) to gain access to what is said and done in different learning processes (Hammersley, 2006; Walford, 2008). To collect the empirical data, four months of contextualised participant observations were carried out by one of the authors (Rönn) on an everyday basis in the spring of 2017 at a Swedish lower secondary school. 14-year-old students in a Year 8 class were observed during lessons in all their school subjects, during the breaks and in the school dining hall. This was followed by a few weeks of audio-visual recordings of lessons in English as a foreign language, mathematics, social studies and Swedish. A Year 8 class was chosen because attendance is compulsory. Moreover, it made it possible to return to the last term of compulsory school one year later, in the spring of 2018, to conduct semi-structured interviews with the students from the same cohort: a total of 4 group interviews and 14 individual interviews. The interview guides had themes, such as "general view of school", "visualising the boundaries for an established social order" and "approaches to knowledge", as well as questions about how students helped each other. The research design was chosen to enable 'thick descriptions' (Geertz, 1973/1993) and a multi-layered analysis of the interactions. Inspired by Charmaz (2006), the collected data was coded and analysed thematically. The data (field notes and transcripts from the audio-visual recordings and interviews) was read first and codes were allocated to segments of texts. During the analysis, codes and sub-codes were used and thereafter grouped into themes such as "transparent", "semi-transparent" and "no transparency". One example of a code and sub-code relating to the theme "transparent" was "answering questions in a book", with the sub-code "blocking from being copied". One example of a code and sub-code relating to the theme "semi-transparent" was "proofreading", with the sub-code "the reading student changes". "Semi-transparency" actions between classmates tended to be transparent to some peers on the school premises but with little risk of being noticed by the teachers. An example of a code and sub-code relating to the theme "no-transparency" was "copying" with the sub-code "sending images". These themes and actions relate to Goffman's (1959/1990) theatre metaphor. For instance, "no transparency" took place in the back region out of the teachers' sight and mostly outside the school premises. Hence, the data chosen for this article explores how students acted and reflected on schoolwork to be assessed by their teachers out of the teachers' sight. In doing so it reinforces the use of Goffman's back region as a theoretical lens for students' interactions with peers in producing written assignments beyond the teachers' radar that are later to be individually assessed and/or

[2] The Swedish Research Council's ethical principles for good research (2011, 2017) were respected. One example of this is that audio-visual recordings should only be used if the same result cannot be achieved with the use of other data collection methods. In this study, it would not have been possible to gain access to the students' personal encounters and informal conversations inside the classroom without the discretely placed and non-intrusive recording devices (cf. Rönn, 2021).

graded by their teachers (a front region enactment). All the data was collected and analysed by the main author.

In this kind of study, it is important that the studied group of people have interacted long enough to have developed certain patterns of behaviour (Creswell, 2013). Hence, a Year 8 class was selected because the students would have been together long enough to develop distinctive social patterns. Of the 25 students in the class, one third were boys. About half of the students were born in Sweden and the other half abroad. As very few had arrived from other countries within the last four years, there were not many "recent arrivals". However, Swedish was by far the dominant language used by the students. The purpose of choosing a class with few recent arrivals was to access a group of students who were accustomed to the Swedish educational system and where neither teachers nor students struggled to adapt to new classroom environments. The selection of the school, with more than the national average of students born abroad, was influenced by the fact that maximising the range of qualitative perspectives within a population can increase the potential for generalisations within that population (Larsson, 2005), such as when carrying out educational research in school.

The socioeconomic conditions of the students varied, which meant that they were regarded as a heterogeneous social group. In another study based on the same data, Rönn (2022) showed that the students' informal social strategies not only tended to enhance patterns that were socially reproductive, such as gender, language mastery (in the language of instruction, Swedish) and socioeconomic issues, but also those that produced inequalities between students. Native Swedish speaking girls tended to benefit the most from high achieving written assignments, and students with smartphones and computers at home benefitted more from the shared images of peers' completed written assignments than those with old-fashioned mobile phones and/or no computers at home.

The school's merit-rating for Year 9 was about 10 percent below the Swedish national average. The class teachers were all accredited and towards the end of 2021 were all still working at the school. At the selected school, 90 percent of the teachers were accredited teachers. The teachers and head teacher have been updated on the findings of the study on several occasions. As a result, they have modified their routines and no longer, for example, assess and/or grade written assignments that are not produced during school hours.

The students and their guardians gave their written consent to participate in the study. The students were also repeatedly informed that the researcher was there to learn from them and not assess them.[3] When the data had been collected and the researcher left the classrooms, documents relating to the students' grades over the last four terms were collected. In the results section the students' names are fabricated. The study does not make any generalisability claims. The results of the study are presented in the following section. After this, the results are summarised and elaborated on.

[3] The study was reviewed by the Regional Ethical Review Board at Umeå University, Sweden.

4 The logic and inner life of schooling from a student perspective

The conception of schooling varied amongst the interviewed students. Some pointed to the importance of attending school for future studies and working life, and that it enhanced their future chances in life. Others expressed lower secondary school as mandatory. One student, Elsa, specified that "*you need to go to school […] in order to get basic [skills]*". Access to the internet meant that some students did not see the necessity of attending school, like Yasmin, who claimed that going to school was pointless, "*because there are lots of jobs where you don't need school. You can work as an influencer*". Maria expressed that "*everything at school you can learn somewhere else*" but reasoned that it might be important to attend school until around the age of 13 to learn basics skills like reading and calculating:

> *Interviewer*: Can you describe what you learn at school?
> *Maria*: I learn what you don't need to know once you've finished school (laughing quietly).

The above quotes show that some students regarded schooling as a stepping stone for enhancing future opportunities in life, while others considered it as unnecessary for their future lives. There was also a prevailing view amongst the students that the class was divided into two: those who worked hard and made an effort and those who did not. What became obvious from the fieldwork documentation and the recordings was that some students were industrious during lessons, while others talked with friends about non-school related matters. It was also clear that students usually turned to their classmates for help before asking the teacher. Different students were, as they put it, considered 'smart' in different subjects, and for this reason were approached by peers for help. A later analysis of the students' grades showed that high-achieving students were those who were expected to assist students with lower grades. As Ishak explained: "*I always ask the friend first if they understand. I don't like to ask the teacher.*" Beatrice was of a similar opinion: "*I would rather not ask the teacher. I prefer to ask friends if I want help.*" Students gave several reasons for not turning to the teachers, such as unwillingness to show a lack of understanding and fear of jeopardising their grades. For instance, Kawtar explained: "*Some [students] don't dare to ask the teacher because they are afraid it will lower their grades.*" Thus, students regarded the teacher not only as a helper inside the classroom but also as someone with the power to lower their grades.

Sometimes students preferred to turn to the teachers for help, as Michaela stressed: "*When working on a written [individual] assignment, I'd rather ask the teacher instead of disturbing those [classmates] who want to focus on their work*." Not wanting to disrupt peers was one reason for turning to the teacher, although the teacher was still regarded as the second choice. The students were generally in agreement that the teacher was the more competent person in the classroom, as Elsa clarified: "*Sometimes I don't trust what my peers explain, because the teacher always knows best. Most of the time*." Accordingly, the teachers' competence was one of the reasons for turning to them for help.

5 Informal social strategies amongst peers

According to the empirical data, the students used different kinds of strategies to carry out their schoolwork. This can be summarised as: a) explanations given by peers to facilitate understanding, b) copying answers, c) 'ghost writing' by peers, d) proofreading texts and e) reformulating peers' texts 'in their own words'. Some students wanted complete answers, while others requested help to understand and do the work (mainly) on their own. These informal strategies were carried out in the back region away from the teachers' supervision and awareness. The students thus carried out these actions: a) out of the teachers' sight and/or earshot inside the classroom, b) outside school and/or c) by using digital technology. It can therefore be said that the teachers' lack of awareness was a consequence of the students' impression management actions and the power of the technology that was sometimes used.

5.1 Chains of explanations: a resistance to short cuts

Some of the students in the class were hardworking and were therefore not tempted to copy answers from peers. In for example mathematics, they took pride in trying to master the subject and developed complex and time-consuming social strategies to achieve this. These strategies emerged in the audio-visual recordings of a lesson in which the students took a diagnostic test (see also Rönn, 2021). During this lesson, Michaela tried to calculate an exercise on percentages on her own, reached an answer but thought it was erroneous and turned to Manal for help. Manal did the calculations twice in different ways and arrived at the same answer. She too considered it incorrect and suggested that Michaela should ask Hajar rather than the teacher. Hajar and Michaela then did some calculations and arrived at the same figure, which confirmed that this was the correct answer. It was only then that Michaela turned to the teacher and explained how she had calculated the exercise and interpreted the answer. Thus, she only turned to the teacher when she had understood how to arrive at the answer, but not before. A little while later Zineb turned to Hajar for help with the same exercise. Hajar directed her to Michaela, who by now knew how to do the calculations. Zineb struggled to understand, and Michaela started over explaining parts of the exercise to her five times before eventually offering to write down the formula for her. This meant that Michaela had done parts of the same calculations ten times in the same lesson: once on her own, twice with Manal, once with Hajar, once when explaining to the teacher and then five times with Zineb. These girls made considerable efforts to help each other understand the procedure and interpret the answer. For these students it was important to know how to proceed and not just arrive at an answer to show the teacher. One way of understanding this is that these girls participated in a chain of explanations, where peers explained to Michaela and where she explained to others. The above sequences show that some hard-working students tried to avoid taking shortcuts and truly wanted to learn.

5.2 Taking shortcuts and sharing notebooks

Some of the most frequent questions asked in the classroom were: "*What page are you on?"* or "*Which exercise are you doing?*" This was often followed by a request to copy the answers. Yasmine explained how she proceeded if classmates were ahead of her: "*If a friend is on exercise 40 and I'm only on 20, then I take her maths notebook and just copy it so that I catch up. That way I don't need to know how to calculate it.*" Other students gave similar answers. Maria expressed that there were several people in the class who did not do homework and who preferred to get ready-made answers from their peers. The above examples show that the copying of schoolwork and homework among students was very common. The sharing of notebooks was also frequent. Michaela said that before a test there were always classmates who claimed to have forgotten their notes at school and therefore needed to share others' notes when studying for the test. She clarified:

> I can understand [if] it is just sometimes […] but then to ask for the answer – it makes me angry. I'd rather prefer the person to ask me more questions so that I can help with more than just giving the answer. It is as though the person does not [snorting] make any effort at all, while you yourself have made effort to get a good answer. But that person just takes it and copies it.

The above quote shows that some students took notes that other students then wanted to use. For some of the students taking notes it was also important to explain them.

Anne stated that some students required more help than others and that she gladly shared her notebooks with those who made an effort. A mutual sense of solidarity seems to have developed between these students: "*I have received [notes in notebooks] from others and they have got them from me. We share.*" With other classmates the transaction was one-sided:

> […] Some [students] don't work. They borrow your notes, practise with them, and copy them. And that's it. They don't do any work on their own. […] It has always been like that in our class and in many other classes, too. Surely.

Anne described a long history of borrowing, practising and copying. Borrowing notebooks thus seemed to serve as an imagined 'fast track' to knowledge. She also explained that sharing notebooks often occurred digitally, where some students "*contacted you via text messages*". Once contacted, she would take photographs of her notes and send them to the person asking. Resistance to this kind of sharing could be detected in the study. For instance, Hajar expressed: "*If it's a person who never helps me […] I don't like to just send what I have done.*" This resistance is exemplified further in the next section.

5.3 Chains of copying answers and resistance

In a geography lesson the teacher introduced the subject of artificial irrigation in Palestine and Israel and followed the traditional structure of

initiation-response-evaluation/feedback (IRE or IRF, cf. Heath, 1986) before asking the students to open their books. On the whiteboard the teacher wrote "*Ecological sustainability - economic sustainability - social sustainability. Pages 40–41. Read the text and try to respond to the questions. To be handed in tomorrow.*" Everyone was expected to answer the same questions. The students sat in lines of four with their desks touching. The audio-visual recordings showed that two chains of copying developed naturally.

Selma who was sitting to the left in one of the rows worked on her own, reading and writing the answers to the questions. Patricia, on her right, started to copy her and pulled Selma's arm away to free the text so that she could see it more easily. After a while, Patricia handed her notebook to Beatrice, on her right, so that she could copy what she had copied from Selma, while Patricia remained idle. Selma continued to answer the questions in the book. When Beatrice had finished copying, Yasmin who was sitting on Beatrice's right-hand side, made no attempt to copy the text or work on the assignment on her own. A little while later, Patricia took her notebook back from Beatrice and again started to copy what Selma had written. Yasmin talked to Beatrice but did not copy what she had written. When she had finished copying Selma for the second time, Patricia again handed her notebook to Beatrice, who then started to copy the second part of Selma's answers. Patricia was again idle during this process and so was Yasmin. Selma continued to read and write down her responses to the questions.

This episode shows a chain of copying that is repeated twice. Selma did the exercise independently while Patricia and Beatrice copied her work. Yasmin alternated between being idle and chatting to Beatrice. In a later comparison of the students' grades, it was clear that the grades decreased along the copying chain. The fact that the students had been involved in a complex system of systematically sharing/copying the content of their peers would not have been apparent without the audio-visual recordings made in this study.

In the following geography lesson Kawtar, Hajar and Anne sat next to each other and worked on the same exercise as the girls in the above example. Kawtar and Hajar opened their books and started to read and answer the questions. Anne had already finished the assignment and her textbook and notebook were closed on her desk. She covered both books with her left arm and, in that way, made it impossible for the other girls to copy what she had written. When, in turn, Hajar and Kawtar addressed Anne she freed her notebook and either read aloud from it or explained what she had written, while the other girls wrote down the answers. In contrast to the girls who had simply copied their peers' notebooks, Anne actively explained to Hajar and Kawtar what she had done and insisted that the girls worked independently on their own. In that way, she had several opportunities to read, memorise and reinforce her own understanding of the topic. Consequently, she applied a social strategy in which her sharing of content both improved and promoted her own learning. Unlike the students in the copying chains, Anne's assistance was conditional and ensured that Kawtar and Hajar were active in the reading, formulating and listening process. The above examples thus illustrate the different ways of dealing with formal schoolwork that were observed: working independently, copying peers, being idle or helping others.

5.4 Ghost writing

Some students did not work on their assignments or copied those of their peers but instead had their assignments written *for* them by peers. However, no student ever mentioned that the exchange of money was involved. Writing answers for peers turned out to be quite common, which Elsa described in the following way:

> *Elsa:* You can see it very often.
> *Interviewer:* (stupefied) It […] but […] that […] that […] do students write assignments for others to hand in [to teachers]?
> *Elsa:* Not complete assignments to hand in. […] [But] if we get an assignment and you have to answer some questions in a composed text, someone might say: 'Hey, I don't understand what I'm to write here.' And then maybe someone else starts telling them what to write. And then they say, 'I'm too tired to write that, can't you write it for me?' And then it ends up with someone writing maybe half a page for them and handing it over, kind of: 'here! [you are]'.
> *Interviewer:* During the lessons?
> *Elsa:* Yes. […] It happens very often in social studies.

Moreover, written individual assignments were frequent and students were often able to work on their computers in the classroom. The computers were supplied by the school and Google Classroom was used to facilitate the formative assessment of the students' work. The software made it possible for teachers to look at an individual student's written text in progress during lessons and comment on it. However, many of the students in the class considered individual written assignments difficult. Thus, an alternative strategy was developed that involved contacting classmates outside and after school as a way of getting started on or completing individual assignments. Hajar gave an example of how this was done in relation to homework: "*[…] we call each other or write to each other*".

Anne described in an individual interview how she helped her peers:

> Those [who do not make much effort] don't often come to me. It is more those who […] I know have problems writing down their words who come to me and I help them. But it's only three [classmates] I write for [Liza, Maria and Rebecka].

It is noteworthy that Anne specified that she only wrote assignments for three girls in the class. The interview continued:

> *Interviewer:* Okay. […] Do they say […] what they want you to write? Do they?
> *Anne:* When it's the same answer on everyone's exercises, then I already have […] the answer. Then it's just so I can recall my answer and rewrite what I have written.
> *Interviewer:* But how do you know that these people have [understood the content] […]
> *Anne:* Because I know them.

Apparently, Anne applied different rules for different peers when it came to allowing classmates to copy her texts or 'ghost write' for them. For some peers, her assistance, such as sharing the content of her notebook, meant having to make some kind of effort. For others, Anne wrote down original answers/texts. Thus, different peers had different kinds of access to Anne's help.

Writing on peers' computers inside the classroom also occurred. Hugo and Samir exchanged computers with each other behind the teacher's back during an English as a foreign language lesson when the students were asked to write down answers to questions. Samir, who according to the grades had a superior knowledge of English, wrote for Hugo who passively watched. The informal social strategy of logging into peers' Google Classroom accounts and proofreading and/or writing original texts for them appeared to be a frequent occurrence. Hajar expressed that Anne occasionally logged into her Google Classroom account and proofread her texts: "*I can give her my password. She must have mine […].*" This confirmed that students exchanged passwords with peers and proofread or wrote texts for each other. An example of this in an audio-visual recorded lesson in Swedish was when Anne first logged into Hajar's computer and proofread the text for her, then logged out in order to log into Liza's computer and compose an original text for her. Even though this assistance was provided inside the classroom, it was invisible to the teachers and other peers.

Not all the students supplied the entire content for minor written assignments. Manal explained that she preferred to indicate the page in the textbook: "*I want them to look it up on their own and learn by themselves.*" By encouraging classmates to do the assignments themselves, she negotiated her assistance and, contrary to the chain of copying and Anne's mass-producing of individual written assignments, preferred her peers to take responsibility for their own learning rather than passively depending on her help. Thus, there seemed to be a double dilemma amongst the students in that the hardworking students took responsibility for their own learning, yet by assisting their classmates hindered their peers' opportunities for learning and taking responsibility for their own studies. Simultaneously, less hardworking students hindered the hard-working ones from extra curricula activities and created ethical dilemmas for them about how to act and who to 'help'.

5.5 Chains for sharing completed assignments

Forwarding completed assignments was frequent amongst the students. Based on the empirical material, we could detect that those students who had not completed their individual assignments sent text messages with requests to peers for help and confirmed that their assignments would be reformulated in the student's '*own words*' before being submitted for assessment and grading. Anne explained: "*The person takes a picture of the work and sends it. But of course, they [those receiving it] must change everything, so that it is not too obvious [to the teachers].*" The students said that this sharing of images had started in Year 6 (the first year of grading for students in Sweden). The sharing of images of assignments normally took place outside school via FaceTime or text messages. Sometimes peers who were not close friends

would call, and then, according to Kawtar, the dialogue normally took the following shape: "*When you say the answer, they say, 'just a minute, I'll just write it down'*." The sharing of assignments could be enacted through oral and/or written requests. During a group interview, some of the high-achieving girls described what could happen:

> *Manal*: When you send that image to another person you know that person will learn something. […] but that it can also spread. That is, the person sends it to someone else as well.
> *Interviewer*: Ah, so do you lose control over it? If you send it to one person, then […]
> *Michaela*: […] then others ask that person, and that person sends it, then others will ask, and that person will send it.

The above extract shows that even if the girls wanted to help someone to *learn*, which implied more than just a quick copying, there was an obvious risk that the work would be forwarded to someone else. Consequently, a kind of ethical principle among some of the high achieving students appeared to be to deny a request if the student who asked did not want to learn but simply wanted to copy and reproduce. Thus, the existing *chains of forwarding images* seemed difficult to control, in that it became almost impossible to know who had used whose text to achieve an ameliorated written assignment for submission.

5.6 Chains of mixed strategies

One and the same student could enact different strategies in the process of completing an assignment to submit to the teachers. An example of this in our material was that no student wrote entire original assignments for Hajar. Instead, she strung texts together using several informal strategies, which she described in the following way: "*I normally get a lot of help. At the beginning I might ask the teacher and if they give me good [ideas I proceed] […] If they don't give me good ideas to start I turn to another student.*" The fact that Hajar turned to others for ideas about what to write became obvious, especially when she also turned to the researcher during the fieldwork to ask for advice about which topic to choose for her assignment. Hajar said that sometimes peers (and teachers) demanded that she start to write on her own before they agreed to help her. Thus, their assistance was conditional. She explained that in such cases she watched videos first to get ideas about what to write. This made it easier for her to reformulate what was said and start writing her assignment: "*I try to write in my own words, but I don't always write in my own words. If I think one sentence [what is said orally] is very good, I do not change it. I keep it.*" This quote implied that when she turned to videos on the internet for inspiration, her source of assistance would not be transparent to teachers and peers. Moreover, reformulating and/or copying phrases from videos would not be detected in the plagiarism control provided by Urkund.[4] Once Hajar had the beginnings of a text she could then turn to classmates for help: "*If I have a good introduction, the work progresses […]*

[4] Urkund was the software used to control plagiarism at the school. Since then, Urkund and PlagScan have merged and the software is now called Ouriginal.

and then when I get stuck, I ask a student." Thus, she received help from peers to continue creating the text. When her work had progressed, Anne, who unlike Hajar was a native Swedish speaker, often helped her by revising the text. This was confirmed in the audio-visual recordings, where Anne read, erased and corrected Hajar's texts, either by hand or by logging into Hajar's Google Classroom account and proofreading them. In the interview, Hajar commented on this revision of texts on her computer: "*So when she [Anne] makes changes I can see what she has changed.*"

5.7 Reasons for assisting peers and students' strategies for schoolwork

Different reasons were given for asking peers for access to their complete answers. One reason was school weariness, another was the time aspect. A main reason for copying from peers came from Maria, who explained that she did not care much for schoolwork and that time was running out for handing in an assignment. Sami emphasised another perspective of time: "*It takes much more time to ask someone to explain.*" However, a common opinion was that if someone explained, rather than just giving away the result, it was easier to remember how to proceed. This was considered preferable in general and for mathematics in particular. Many of the students who put a lot of effort into their own studies preferred to *explain* to peers and not just give away the answers. Zineb said: "*I don't want to give away an answer – I want to explain how!*" and that helping was not to give an answer to a peer but rather to explain how to do an exercise, e.g., in mathematics. Josef claimed that in a broader perspective: "*[…] you actually do not help anyone by just giving them an answer*".

The students explained that the reason for copying from peers was largely due to a competition mentality and a desire to be ahead of others. Competing also included grades, as Beatrice said: "*They [classmates] compete, not only about which exercise [in mathematics] they are doing, but also the grades*."

Anne commented on peers copying her notebook: "*Even though they are just notes it's annoying: they take my work that I have been working on.*" The implication is that it was not fair that others profited from her efforts. There seemed to be an important distinction in the students' narratives - those who put a lot of effort into their schoolwork and those who did not. Hardworking students who worked on their own were happy to share with like-minded peers but not as happy to share with those who were regarded as less industrious, as explained in a group interview:

> *Manal:* Those you almost never talk to; they just seem to appear from nowhere and ask you things: 'Do you know this answer?' It feels as if they just abuse you.
> *Michaela:* Yes. Exactly.
> *Anne:* They only come to you when they need to.

However, amongst the students who worked hard on their schoolwork it seemed natural for them to share assignments with friends. Hajar expressed that she did not like sending her work to a student who never helped her in return: "*I've done all the work and then another person just […] gets it for free.*" What is implicit here is that she sent her work to others who did not get it for free.

The above quotes illustrate that the hardworking students felt that they did not get anything in return from those who did not put enough effort into their schoolwork. These chains of sharing were considered one-sided. However, there were indications that the hardworking students shared their assignments with each other. As Manal said: "*It has happened to me that I receive a text, even if I have still not completed the assignment myself.*" What this indicates is that the hardworking and high achieving students shared their assignments with peers who made the same kind of effort as themselves and that this was mutual. In Manal's case, she seems to have received images without having asked for them. Thus, even though the hardworking students shared their assignments with other high achieving students (and got something back in return), they did not broadcast the fact.

5.8 Perceived consequences of taking shortcuts

The students also shared their opinions about the consequences of taking shortcuts. In a group interview, the students were asked about the consequences of copying peers' answers:

> *Interviewer:* If you copy to catch up, what happens afterwards?
> *Maria:* You don't learn anything. You don't know what you are supposed to know. It might look good in the maths book that you are expected to be at exercise 50, that you are at exercise 50 and that you show the teacher that you are at exercise 50. But when it's time for the maths test, you are supposed to know all this, but you don't know it, then it's just meaningless […]
> *Gabriella:* Copying others won't work in the long run. If you just receive answers, you'll never learn […].

During an interview, Beatrice claimed that "*You learn absolutely nothing*" by copying peers, even though she spent the entire geography lesson alternating between idleness and copying peers' work. Thus, some students enacted short-term solutions even though they knew that this was not a successful long-term strategy. There was also a common opinion that students who did not make much effort consequently did not trust their own ability and that this more short-term solution would make further studies more difficult. Samir expressed this as follows: "*So you must think; to have it easy now or later. I think it's better if you have it easy later.*"

5.9 Social strategies for enhanced grades

Grades were considered important for the students in general. A common opinion was that they wanted to get good grades. Students who did not consider themselves to be hardworking experienced getting a good grade as difficult. In a group interview, Rebecka said that some students had chilled out to such an extent that it was now difficult to improve their grades. In the same interview Ishak clarified: "*If you have poor grades in Year 8 and want to make efforts and improve in Year 9 – you will still not get good grades.*" This indicated that some students had misinterpreted

the possibility of catching up after not having worked hard for several years and implied that they had not fully understood what they needed to learn or do to keep up with the curriculum and knowledge requirements in a long-term perspective. They believed, or wanted to believe, that a quick-fix and increased efforts would bridge several years of taking it easy with schoolwork.

Even students who considered themselves to be hardworking thought it was difficult to get good grades. Zineb worried about keeping her grades: "*I often worry about being able to keep the grades I have fought for and it's very sad when something you've fought for decreases […].*" This quote shows that hard work was crucial for getting higher grades and that the fear of lowering their grades affected the students negatively. There was also a view amongst the students that it was easier to get a pass grade in a subject but more difficult to achieve a higher grade. Elsa explained this in the following way:

> It's easy to get a pass grade in a subject and I think that's good. Then you must make a little bit more effort to reach a higher level. And I think that's fair, but some think it's unfair [and say] 'Aaah, but this is hard work', but it should be hard work. […] Look, you can't get an A just like that.

Many students were dissatisfied with the grading system. Joseph expressed his dissatisfaction like this:

> You take a test for every part/topic; if we've had algebra and we're tested on it and get an A – then it's likely that A will be the grade as well. But for that you must score A on all the tests [in mathematics] that term. So, when you get A on one [test] and E on another, then you might get a D or a C as [final] grade.

This quote illustrates the impact that the different grades for tests had on the final grade. Effort was thus linked to the more elevated grades. Ishak stated his opinion like this: "*Those who get a little lower grade put less time into it [studying], and those who have good grades have put more time into it and have tried their best.*" This quote illustrates that the amount of time and effort put into schoolwork is reflected in the grades. One implication is that some students did not try to do their best. The fear of getting a lower grade was widespread and it was clear that there were numerous ways of enhancing or keeping a grade. One strategy was to forward images of a higher achieving classmate's assignments. Beatrice explained that you: "*probably can* […] *affect the grades quite a lot if someone else helps you. […] You get better [grades] than you would normally get*". This implies that the sharing of images could lead to the receiving student getting a higher grade than they would otherwise have had been able to achieve on their own.

6 Social chains and different views

Several chains of interaction and personal commitment in the students' informal social strategies were identified, ranging from explaining the same exercise numerous times, to silently handing over a text to be copied in several turns or

writing original texts for peers. These interactions linked together as a social chain and had their own characteristics:

- *Chains of explanation*, which were constituted as either a) one student requiring and receiving assistance from several peers, or b) one student repeatedly explaining to peers. These chains were applied by students who wanted to understand and learn, e.g., how to calculate exercises in mathematics and consequently did not want to depend on peers' completed exercises in order to have written assignments to hand in to teachers for assessment (see also Rönn, 2021).
- *Chains of copying*, where several students copied one or a few students' work. In these chains, a hierarchical order of decreasing grades was observed. These chains were linked to what can be characterised as students who were ready to put lots of efforts into schoolwork facilitating opportunities for other students aiming at effortless achievements in their schoolwork.
- *Chains of forwarding images of a written assignment* to a peer to be reformulated in their '*own words*'. These chains were possible due to the digital technology and the students' mobile phones. More hardworking students facilitated effortless achievements for some of their classmates out of the teachers' sight outside the classroom and after school (see also Rönn, 2022).
- *Chains of mixed strategies when composing texts* with a variety of actions such as revising and composing texts. This was gradually developed from different sources and peers and could result in a written assignment in which little was produced by the individual student. Depending on the extent of the assistance and the combination of strategies, these chains can be linked to students' degrees of willingness to put effort into their schoolwork and work hard.

These chains were largely invisible to the teachers in the classroom, especially those where digital technology was used. As described, there were no clear distinctions between what was visible and/or audible to those inside the classroom and what may have lacked visibility and audibility inside and outside it.

7 A summary of the students' different views of education and assessments and how they are enacted

Explaining modes of procedure, copying from peers and writing various kinds of original assignments for peers were frequent occurrences and did not seem to be considered problematic by the students. Numerous students were willing to help their classmates with a ready-made product to submit to the teachers for individual assessment or grading. The copying could either be done to catch up with peers who worked quickly or was an instrumental (such as in the chains of copying) and a rather mundane procedure. Giving assistance to peers was often unconditional but could sometimes be conditional. For some students, access to the high achieving students' assistance was limited, such as the student who blocked her notebook with her arm to prevent peers copying her answers, or the student who preferred to indicate the page on which an answer could be found, rather than simply giving

the answer away. Some informal social strategies included swapping computers with peers (behind the teacher's back), logging into peers' Google Classroom accounts, ghost writing for them or revising their texts inside and outside school (see also Rönn, 2022). These activities were mainly conducted using digital technology and were to some extent visible and often audible to some other students in the classroom, although no-one attracted the teachers' attention to these activities. The activities were difficult and often impossible for teachers to detect in a busy classroom and the digital devices used for the students' informal social strategies made it more difficult for the teachers to detect inside the classroom – and (almost) impossible if used outside and after school. The students who dictated, explained or wrote texts or assignments for peers also had an opportunity to revise their own assignments and reinforce the content to increase their chances of scoring well in tests.

There was no clear distinction between conditional assistance and unconditional assistance, in that one and the same student could provide both. Consequently, the various informal strategies applied by students indicate that they were both opaque and multi-layered, which perhaps reflected students' mundane life inside and outside the classroom when dealing with formal assignments in various school subjects. The informal social strategies, where digital technology was used inside but particularly outside the classroom, were in general more opaque than the informal strategies used in face-to-face synchronous interactions during lessons. The variety of social strategies indicates a complex system of informal social networks that were difficult for the teachers to acknowledge when assessing or grading the students' assignments. Consequently, and in line with the students' narratives, it was difficult, or practically impossible, for teachers to know who the author of a written assignment was, or who had contributed what to an assignment. This could cause limitations in the formative assessment of individual students' academic progress and achievement during their time at school. The students' various informal strategies could be related to the amount of effort they were willing to put into their schoolwork. Copying and/or participating in 'chains of copying' inside the classroom and copying classmates' responses to questions instead of reading the texts and answering the questions themselves were more likely amongst students aiming at effortless achievements. Students with a willingness to work hard at their schoolwork in order to learn were more likely to be the ones who provided, forwarded and shared original written assignments to peers for them to reformulate. Students who opted for more effortless achievements were more likely to reformulate their peers' written (or oral) tasks in their '*own words*' before submitting them to the teacher as an individual assignment.

The two contrasting and co-existing views of schoolwork have some characteristics in common. These are related to grades and the grading system, in that the students: a) regarded grades as important, b) expressed dissatisfaction with the current grading system where it was considered difficult to improve grades but easy to lower them, c) were eager to show their strengths to the teachers in order to get good grades, d) were reluctant to show a lack of understanding and/or lack of skills to the teachers and were afraid of lowering their grades, e) interacted with peers in forwarding and sharing results with classmates in order to improve their results, and f) relied on digital technology and (digital) social networks inside and outside the

classroom to enhance the quality of their assignments and give the desired impression. All the above examples relate to Goffman's dramaturgical metaphors of back region, front region and impression management, where students endeavoured to control the information they revealed about themselves to their teachers by preparing written individual assignments in collaboration with classmates. In doing so, a considerable number of peer interactions took place in the back region (both the physical classroom and digital back regions) and were therefore hidden from the teachers.

Apart from the above characteristics, there were differences in the students' willingness to put some effort into their schoolwork and some students aimed at a more effortless approach to doing schoolwork without risking achieving low grades, as shown in Table 1.

The columns should not be regarded as fixed and solid, but as flexible and in constant motion. One and the same student might, in different situations and with various peers, aim at effortless achievement or putting effort into schoolwork. The situations are context bound and depend on when and where the interactions take place (inside and outside the classroom), who is involved (close friends or not), which school subject or assignment is in focus, and which methods are used (e.g., handwritten texts, texts written on computers or images of texts forwarded via smartphones). As one and the same student may move between the two columns, the model should therefore be regarded as an aid to illuminate students' contrasting views of schoolwork and school attendance.

Teachers (and formal education) tend to share the reasoning of the students who are willing to put a lot of effort into schoolwork as being consistent with a view of education that develops along an imagined arrow of development. Students who, to a greater extent, aim at effortless achievement risk being unseen or neglected, especially as their informal strategies can enable them to receive grades that are superior to their level of knowledge. This can be regarded as an ethical dilemma:

Table 1 Two contrasting and co-existing back region perspectives when dealing with schoolwork amongst students, both of which are related to the degree of willingness to work hard at it

Students who are less willing to work hard at their schoolwork…	Students who are willing to put a considerable amount of effort into their schoolwork…
…aim at effortless achievements.	...put a lot of effort into their schoolwork.
…consider formal education as limited to providing basic skills in reading, writing and arithmetic.	…consider education as a stepping stone for success in life.
…focus on the specific assignments and results.	…focus on assignments as one of many small steps.
…ask peers to write original assignments for them which are then submitted to teachers for assessment.	…write their own original assignments as well as original assignments for others.
…prefer short answers over more extensive explanations of how to proceed.	…prefer more extensive answers and procedures.
…are dependent on more high achieving peers and their completed assignments.	…express autonomy in their schoolwork and learning both amongst themselves *and* their peers.
…are more likely to interact with peers during lessons in activities that are not schoolwork related.	…are actively involved in schoolwork and schoolwork related interactions with peers during lessons.

how to reach and engage these students and motivate them to take responsibility for their individual (lifelong) learning. The table can be seen as a support for teachers to increase their awareness of students' informal social strategies and find ways of perceiving and detecting students' informal social strategies in the back region.

8 Discussion: Breaking the imagined arrow of development

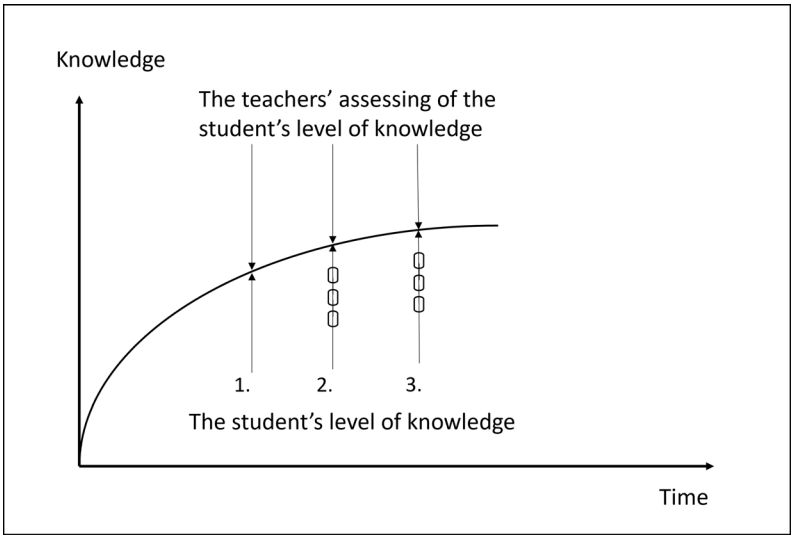
It was common for the students in the study to turn to each other during lessons (cf. Nuthall, 2007; Rönn, 2022). What became obvious in the study was that students found strategies to ameliorate their assignments by relying on peers who were considered to be more competent and/or willing to assist, which is similar to the loyalty between team members in accordance with Goffman's terminology (1959/1990) and how individuals decide what kind of information they present in the front region (impression management). The study identifies some of the key factors in the students' informal social strategies that they enacted in their formal schoolwork. As shown, key factors for students when creating and maintaining their informal strategies were: a) supportive students willing to assist, b) a view of grades as important (Hirsh, 2020), c) daily access to digital tools (Rönn, 2022) and d) assignments that are not limited to lessons at school (Aaen & Dahlsgaard, 2019).

Both the Swedish curriculum (Swedish National Agency for Education, 2011/2018, 2022) and the comment material (Swedish National Agency for Education, 2017) emphasise that students are to create and improve their own texts as well as texts in common with their classmates along with self-regulated learning. Moreover, for the school years 7-9 it is underlined that students are to receive and give feedback on texts to develop their individual ability to compose written texts. From a Goffmanian perspective (Goffman, 1959/1990), the informal assistance between peers can take place in the back region, as more or less opaque interactions inside a busy classroom, such as synchronous face-to-face interactions (Goffman, 1959/1990). However, informal assistance could also involve a few peers outside school making phone calls in synchronous person-to-person interactions (Persson, 2012; Rönn, 2022), texting messages or sending images of completed assignments in asynchronous person-to-person interactions (Rönn, 2022), or interacting in asynchronous person-to people encounters on social media (Gilmore, 2014; Rönn, 2022 submitted) in what Aaen and Dahlsgaard (2019) call a third space between schoolwork and social life. The students' social chains could be exercised in one and the same back region, such as the synchronous face-to-face chains of copying inside the classroom. However, the students could also switch between different back regions, such as in the social chains of mixed strategies where the initial assistance could be oral, face-to-face and synchronous, and thereafter person-to-person synchronous, such as phone calls or when one student logged into a classmate's Google classroom account and revised the peer's text, or person-to-person asynchronous when peers reformulated the images of completed assignments in their "own words".

The students' informal strategies, expressed here as social chains, are in line with impression management vis-à-vis the teachers. Controlling the flow of information by 'hiding' their developing processes from the teachers enhances the impression of

their level of knowledge and writing skills through their submitted assignments to the teachers in the front region. In this way, all an individual student has to do is to prove that they have an assignment to hand in for assessment. In doing so, students interact with peers in the back region, both inside and outside the classroom. In the Swedish performative-based school context (Beach & Dovemark, 2007; Erlandson et al., 2020; Wahlström, 2016) and its enhanced focus on formative and summative assessment (cf. Hirsh, 2020), where 13–14% of the students in the last year of compulsory school fail to qualify for the national programmes at the upper secondary school level (Swedish National Agency for Education a.), the students in this study turned to peers to enhance their enacted performances and intended impressions in their interactions with the teachers.

Students who are more willing to work hard at their schoolwork enact social chains, such as chains of explanation, where they strive to learn and understand the content in hand. In doing so, they follow the imagined ideal learning curve (the arrow of development) that is common amongst teachers and policymakers. Figure 1, below, illustrates an ideal arrow of development and the teachers' assessments of knowledge. The teachers' assessments and grading of students who write their own assignments and/or work hard are more likely to correspond with the students' levels of knowledge – also when chains of explanation have been applied, in that they lead to a reinforced understanding of how to proceed on one's own with schoolwork.



The numbers indicate different strategies in doing schoolwork and accomplishing assignments for assessing:

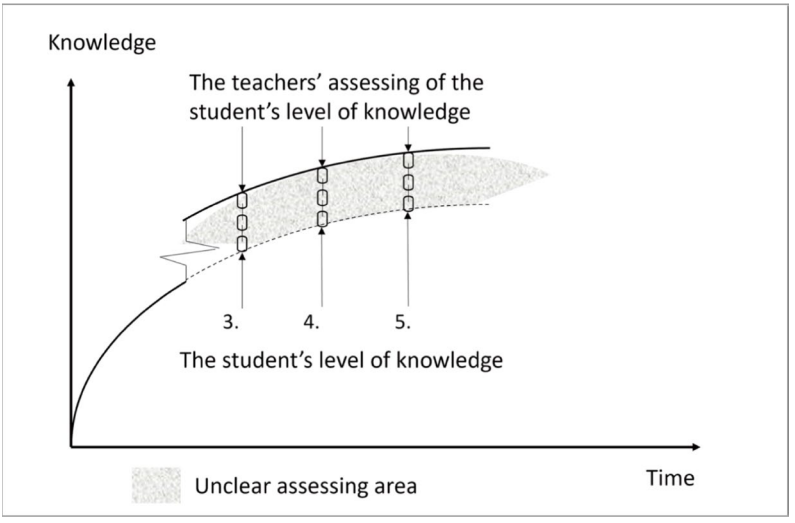
1. The student works independently.
2. The student works in social chains of explanations.
3. The student works in social chains of mixed strategies when composing texts.

Fig. 1 The ideal arrow of development concerning the individual student's knowledge development and the teachers' assessments of the same

Depending on how and when the chains of mixed strategies are used, this could be a way for students to develop their levels of knowledge, such as receiving an image of someone's assignment *after* having completed one's own, or sitting next to someone and watching while they make changes in their own text.

In the ideal arrow of development, the teachers' assessments of students' levels of knowledge correspond with the students' actual levels of knowledge. This matches the societal desires of lifelong learning, taking responsibility for one's own learning and expectations relating to learning curves in formal education, where students are to be motivated and take responsibility for their studies. The figure is also in line with teachers' imagined expectations that students' knowledge development will more or less follow a linear growth. Students who engage in chains of explanation are regarded as being willing to put the required effort into schoolwork, in that they aim to understand the procedures and content of different subjects for their future needs, all of which are well integrated in the ideal arrow of development.

In contrast, students aiming at effortless achievements tend to rely and depend on peers who put considerable effort into their schoolwork to help them, instead of relying on their own capacities. This is shown in the numerous informal chains of copying peers, where students receive images of completed written assignments to be reformulated or have original texts written for them. For students aiming at effortless achievements, the enacted social chains break the imagined arrow of development, as illustrated in Fig. 2.



The numbers indicate different social chains of informal strategies in doing schoolwork and accomplishing assignments for assessment.

3. The student works in social chains of mixed strategies when composing texts.
4. The student works in chains of copying.
5. The student receives assignments in chains of forwarding pictures of written assignments.

Fig. 2 The broken arrow of development concerning the individual student's knowledge development and the teachers' assessment of the same

Contrary to the chains of mixed strategies described in Fig. 1, the chains of mixed strategies illustrated in Fig. 2 could break the arrow of development in the student's level of knowledge, such as when little (or nothing) of the assignment for assessment is produced by the individual student. These social chains take place synchronously (face-to-face), asynchronously (person-to-person) and inside and outside the classroom (see also Rönn, 2022) with a view to improving performance/grades in line with impression management (Goffman, 1959/1990) without the teachers' awareness.

9 Conclusion

Depending on the extent of the assistance provided and the nature of the interactions in the chains of mixed strategies, the ideal arrow of development can either be reinforced or broken. Students aiming at effortless achievement take responsibility for having an assignment to submit (in line with the curriculum), but to do that often requires various forms of informal strategies. In this way, the students' assessed levels of knowledge do not necessarily correspond with their actual levels of knowledge due to their having prepared their assignments in the back regions in which they applied informal social strategies. The aim to control the information that is provided to the teachers is in line with Goffman's (1959/1990) impression management. The social chains and the students' informal social strategies thus break the imagined arrow of development. The chains of copying and forwarding images are set in motion in the back region and are therefore hidden from the teachers. Consequently, this is carried out with little risk of *giving off* (Goffman, 1959/1990) unintended information to the teachers, who therefore remain unaware of the students' informal social strategies. In these cases, the students' actual levels of knowledge, development and their needs are likely to go unnoticed by the teachers.

The ruled area in the above figure illustrates the diffuse area of students' knowledge levels. In this area, the discrepancy between the students assessed levels of knowledge and their actual levels of knowledge may vary between different student groups, different school subjects and how powerful the social chains set in motion by the students are. Thus, what becomes apparent is that students' informal strategies that takes place in the back region are important to acknowledge, in that they are usually out of the teacher's and researcher's regular sight. Against this background, teachers often assume that students take responsibility for their learning (cf. Bartholdsson, 2008) and consciously carry out actions that benefit it (cf. Bandura, 1977; Uus et al., 2020). The students' informal social strategies and social chains in the back regions thus prevent the teachers from knowing the nature of the responsibility for their learning. The students work around the rules and instructions that are imposed on them, rather than against them (Selwyn & Bulfin, 2016). Also, it can be ascertained that these social chains are important for an increased understanding of students' everyday school life and how teachers can relate to this.

The study contributes knowledge about students' informal social strategies when dealing with schoolwork (see for instance Carlgren, 2020; Hietajärvi et al., 2020;

Nilsson, 2008; Selwyn, 2009a, b; Quintana & Osuna-Acedo, 2020) and about a self-regulation of performance that includes informal performances outside the classroom (Schunk & Greene, 2018). It also sheds light on students' hidden lives when dealing with schoolwork (Nuthall, 2007; Rönn, 2022). Moreover, the study contributes new empirical knowledge about students' actions in terms of how some students act to produce written assignments that are to be assessed or graded by the teachers, and how the students simultaneously hide how these texts are produced and ameliorated from the teachers both inside and outside the classroom, in what Aaen and Dalsgaard (2019) call the third space. Hence, the study offers an understanding of students' (tacit) strategies that are out of reach of the teachers' supervision in a context that is heavily based on assessment.

The findings illustrate a complex reality for students and teachers. Simplifying this by applying a dichotomous approach to whether the students' informal social strategies and social chains of assistance are morally wrong or right could be considered as a short-term and shallow perspective on students' schoolwork strategies. More research is therefore needed to map how today's students in compulsory school perceive their everyday educational environment and whether it affects their prospects of continuous studies in, for example, higher education. This comprises teachers', parents' and the students' own educational expectations, and makes these more realistic in terms of *what* and *how* students are to perform in education. The findings need to be seen in the light of the importance of grades in the formal school context, the students' fears of having their grades lowered and the fact that 13–14 % of students in the Swedish compulsory school context do not obtain a pass grade to qualify for the national programmes at the upper secondary school level. The students' informal social strategies and social chains of assistance should be seen in the light of students' everyday use of digital technology when doing formal schoolwork, where technology opens up new back regions.

Further research on how and whether students' different approaches to schoolwork and activities in the front and back regions align with the ideal arrow of knowledge development as well as the broken arrow of knowledge development would be fruitful. Yet another focus of further research would be the dependence of classmates in the back regions and a potential decreased autonomy enabled by digital technology that is contrary to the curriculum's intentions. Our tentative conclusion is that students have long-term or short-term views of schoolwork. As such, our study points to an important field of focus for enhancing teaching and learning in today's schools.

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Data availability The data generated during and/or analysed in the current study are not publicly available due to Swedish law although they could be made available from the corresponding author on request.

Declarations

Conflict of interest No potential conflict of interest is reported by the authors.

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