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## Who can help a student to do their homework?

### Reflections on the knowledge and beliefs used to support students in their individual work

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Abstract: This article examines a homework assistance scheme implemented in French secondary schools since 2017, and more specifically the characteristics of the staff members who supervise these sessions. The present study highlights considerable diversity both in the practices observed, but also in the types of knowledge and beliefs held by the homework assistants. In particular, it seems that the supervising staff rarely has all the a priori knowledge necessary for teaching. This leads us to wonder about the qualities required to be able to support a student in their individual work, and to consider whether or not it is essential to be a teacher in the subject in question to be able to help with completing homework.

Keywords: knowledge; beliefs; practices; homework; help with homework.

## **1. Introduction**

In many countries around the world, schoolwork is not confined to the classroom: when students return home, they must often open their notebooks and textbooks again to complete homework assignments set by their teachers. Whether the homework involves lessons to be learned, texts to be read or exercises to be completed, this ritual punctuates the evenings of most learners from their early years of school through to higher education.

Although there have been many conflicting opinions on this subject over the years (Gill and Schlossman, 2000), most research and studies today agree on the interest of this type of practice. As such, Walberg (1991) cited how a survey conducted in 11 countries showed that nations in which students spent an average of more than 8 hours per week on homework were also those achieving the highest scores on international assessments. Furthermore, Cooper, Civey et al. (2006) analysed American studies conducted between 1987 and 2003 and showed how setting homework assignments seems to be correlated with students' academic success, particularly in secondary education. Xu (2020), having observed more than 700 Chinese middle school students, also highlights reciprocal influences of efforts and achievement. The repercussions of this practice could, moreover, extend beyond the field of academic learning. Indeed, Bempechat (2004) explained how through homework assignments, students are better able to manage their difficulties or mistakes, and are more motivated in their learning, which, according to this author, enables them to become "mature learners". In the

same vein, Ramdass and Zimmerman (2011) demonstrated how doing homework in primary and middle schools helps to develop motivation and self-regulation among students, including at-risk students, as long as the homework is adapted to each of their abilities. Corno and Xu (2004) even compared the completion of homework assignments (which they consider to be the quintessential job of childhood) with the occupational activity students went on to performed later in life and argued that the autonomy gained from the homework experience could well prepare students for their future occupation.

However, this task is complex to implement in practice, and many students find it difficult to do the work expected of them. Consequently, Warton (2001) and Coutts (2004) highlighted how students generally have difficulty understanding the value of homework, especially in terms of long-term benefits such as academic success or gaining life skills. Additionally, the organisation required to plan the tasks and deliver assignments on time requires skills which not all students possess (Xu, 2013). Furthermore, analysing homework assignments, Félix (2001) shows that homework is strongly influenced by the teaching methods (Brousseau, 1998) implemented in the classroom. To carry out the work required, the student must therefore have understood the specific nature of the teacher's expectations, which particularly depend on the discipline in question and are sometimes difficult to grasp. Joshua and Félix (2002) also identify differences in the type of work done by students depending on their level of ability. They observe that only the 'good' students spontaneously manage to establish links between the homework requested and work done in class to answer the questions asked. These considerations, drawn from various approaches (sociological, ergonomic and didactic), raise the question of whether all students have the means to carry out the tasks expected of them on their own and thus derive the benefits of homework.

This is why many parents try to help their children to do their homework, but this initiative will not necessarily address the problem. By taking control of doing homework, some parents deny their children the autonomy required for completing individual work. Other parents, due in particular to gaps in knowledge of subjects, do not feel competent to answer their children's questions or assess their individual work, so much so that supervising homework arouses a deep uneasiness in them (Hoover-Dempsey, Bassler et al., 1995) and homework is often experienced as the source of significant tensions between parents and children (Solomon, Warin et al., 2002). Di Stephano, O'Brien et al. (2020) found that parents with high levels of anxiety about mathematics may transmit this feeling on to their children when they help them with their math homework. Moreover, studies (Rayou, 2009; Kakpo, 2012) have found that family assistance with homework can even accentuate difficulties encountered by students. As a result, some studies have even concluded that the help provided by parents is not useful and perhaps even counterproductive in terms of their child's academic success (Robinson & Harris, 2013).

We can therefore see that the completion of homework, despite the interest it can represent, particularly for academic learning, sometimes proves to be difficult for students and their parents are not always able to provide them with the necessary help. This realization has led to the emergence of various measures, both face-to-face and online (Michaelson, 2009; Puustinen, Bernicot et al., 2015) to support students in their individual work. However, this type of organization does not always bring the help students need and certain shortcomings have been identified (Kakpo & Netter (2013). This article examines one of these measures for assisting students with their homework. Drawing especially on the work of Shulman (1986), it studies the specific characteristics of various homework assistants and

the repercussions of these characteristics on their practices. This analysis leads us to question what knowledge the homework assistant should have to be able to help with homework. And finally, is it necessary to be a teacher to help students with their individual work?

## 2. Knowledge and beliefs

Before looking at the specific case of homework assistants, we will first look at the knowledge required in order to teach. From 1986 onwards, Shulman highlighted seven categories of knowledge which teachers must employ in their profession and which condition their teaching practices:

- Content knowledge (or CK) refers to the individual's relationship with the knowledge of the discipline, and to their understanding of the concepts they must teach.
- General pedagogical knowledge (or PK) involves mobilizing the main principles concerning teaching (how to enrol students? What type of group work to establish, etc.).
- - Pedagogical content knowledge (or PCK) encompasses the knowledge required for teaching a given subject, but which does not fall into the first two categories. Indeed, it is not sufficient to know the main principles of teaching and to be an expert in the knowledge in question to be able to teach it. It is furthermore necessary to have an idea of the different didactic approaches to be able to present the concepts of the discipline, identify the obstacles raised by each concept and anticipate the most common errors made by students in order to address these and choose the most relevant teaching situations. The importance of this knowledge for improving teaching is often highlighted (Ball, Thames & Phelps, 2008; Berry, Depaepe et al., 2016) and for Coe, Aloisi, Higgins, & Major (2014), It is in fact the category of knowledge which has the greatest impact on student learning. Although Shulman initially presented PCK as an amalgam of the first two categories, several researchers have subsequently highlighted the specific characteristics of PCK compared to CK and PK (Neumann, Kind et al., 2018). Evens, Elen et al. (2018) demonstrated, for example, that working with future teachers on only two of these types of knowledge does not enable them to develop the third.
- Curriculum knowledge refers to the teacher's knowledge of the official curricula and institutional expectations of the classes they teach.
- Knowledge of students enables the teacher to rely on their perception of the profile of each student in their class to anticipate how their sessions will proceed and can thus adapt their practices according to the needs of their audience.
- Knowledge of educational context requires a certain familiarity with the specific features of the school, as well as with the students' living environments (the socio-economic category of the families, etc.).
- Knowledge of educational ends, purposes and values refers to consideration of the objectives of teaching as defined by society.

Beyond these types of knowledge, several studies (Pajares, 1992; Fives & Buehl, 2012; Belbase, 2012 and others) have demonstrated the impact of certain beliefs held by the teacher concerning their own practices:

« The way a teacher practices teaching and learning mathematics in class depends upon various key factors. One of these key factors that influences one's practice is teacher's

mental schemas that constitutes a system of beliefs concerning teaching and learning mathematics (Ernest, 1989a,b)” (Belbas, 2012, p.2)

Beliefs differ from knowledge in their relation to objective reality: knowledge necessarily proves to be consistent with established and indisputable facts, whereas a belief corresponds to a certain interpretation of reality, specific to an individual or a group of individuals, which does not necessarily meet with consensus and could be challenged. For a teacher, beliefs can impact certain practices in various ways, such as those to be implemented to foster learning or the type of support to be provided to students, etc. Beliefs may be conscious or, conversely, may remain implicit for the individual despite the impact they have on their practices and, although beliefs may evolve, they prove to be relatively stable over time. Beliefs constitute a functional vision, insofar as they directly impact on the practices implemented by the individual and justify them (at least in their eyes and in the eyes of those who share the same beliefs).

Consequently, beliefs and knowledge influence an individual’s practices. According to Buehl & Beck (2014), these two notions play a role in how a task is carried out on different levels: first of all, in interpreting information perceived by the individual, secondly, in formulating a response adapted to these perceptions and finally, in implementing the resulting action. These authors also highlighted the interdependence between teachers' beliefs and practices: beliefs influence practices which themselves can contribute to changing an individual's beliefs. Belbase (2012) furthermore demonstrates how knowledge, beliefs and practices prove to be inextricably linked and argues that these concepts need to be understood together. Therefore, these indicators can help us to better describe and understand the practices of those who help students with their homework. This is why this article investigates the knowledge (disciplinary, pedagogical, didactic, etc.) and beliefs of these homework assistants, as well as the influence of such knowledge and beliefs on their actions, in order to determine what is needed to be able to really help students with their homework.

### **3. Method**

This research examines a scheme that has been implemented in French secondary schools since 2017 and is called ‘Devoirs Faits’ (‘Homework Done’). According to official directives (MEN, 2017), this scheme aims to help students with their individual work in an attempt to reduce educational inequalities caused by the various externalized support measures available: it is a designated time, outside of school hours, and within the [school] establishment, during which the student carries out the homework requested by their teachers” (p.5). The homework assistants who supervise these sessions may be teachers (from a variety of disciplines and who may or may not know the students) or Educational Assistants (AED<sup>1</sup> in French) who have never taught.

For two years, this research followed the implementation of the ‘Devoirs Faits’ scheme in a secondary school in Marseilles and data collection was organized along three axes:

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<sup>1</sup> Educational Assistants are recruited "to assist the educational team, particularly in supervising and monitoring students, helping with the reception and integration of disabled students at school"(Circular n°2003-092 dated 11-6-2003, <https://www.education.gouv.fr/bo/2003/25/MENP0301316C.htm>)

- Collecting accounts from those involved: 29 semi-directive individual interviews were conducted with the deputy headmistress, 8 homework assistants (including 4 teachers) and 20 students attending the "Devoirs Faits" sessions.
- Observations about implementation: seven sessions supervised by different homework assistants were filmed.
- Recording of work sessions between homework assistants and researchers. Three 2-hour discussion sessions with all those involved in the 'Devoirs Faits' scheme were conducted to allow them to exchange both about their practices but also their difficulties and their expectations within these measures.

It is not possible to detail the analysis of all these data herein, but such analysis has revealed many differences in how individuals implement the scheme (Guille-Biel Winder, Gobert et al., 2019; Gobert, Guille-Biel Winder et al., submitted; Assude, Millon-Fauré et al., submitted): in some sessions, the students all worked on the same exercises at the same time whereas in others, each student completed different tasks. Some sessions were prepared by the homework assistant in advance while others were entirely unprepared. Significant variations in the type of knowledge covered were also observed: some homework assistants devoted their sessions to assisting with the homework asked of the students, others revised lessons taught in class or focused on reactivating knowledge learned long before, etc. It would now be useful to better understand the reasons for these differences. This article explores the factors which can influence the practices of each homework assistant and lead them to make different choices within in the 'Devoirs Faits' scheme.

The works of Schulman enabled a grid of categories of teachers' knowledge to be developed, with which the accounts of each homework assistant observed was analysed. Interest was also focused on one type of belief which could have a significant impact on homework assistants' practices: their beliefs about how to help students. Finally, an attempt was made to identify the potential impact of all of these criteria on the practices of these homework assistants by analysing the sessions delivered to students. This article first points out, for each type of knowledge or belief, the specific characteristics of certain homework assistants to illustrate the variations observed. It then goes on to present, in the discussion section, an extract of the analysis grid, focussing on 9 homework assistants (named HA1 to HA9) to provide an overview of relevant information about them. This all enables us to explore the possible variations that may appear, as well as to determine the knowledge or beliefs that are necessary to assist students with their individual work.

#### **4. Results concerning the knowledge held by homework assistants**

Regarding knowledge of educational ends, purposes and values, all the homework assistants interviewed were aware of the general purpose of the 'Devoirs Faits' scheme, which is to help students with their individual work. However, many differences in the other types of knowledge could be observed:

- general pedagogical knowledge. We can begin by studying one case in particular: one of the homework assistants (named HA1) was a schoolteacher for many years, and this characteristic arguably explains certain elements of the sessions she delivered. Indeed, her way of conducting the sessions is typical of that usually observed in primary school classes, particularly her choice of materials

(Gobert, Guille-Biel et al., submitted). In addition, in her sessions, she reactivates knowledge theoretically taught in the first years of schooling, taking the trouble to explain techniques that usually remain tacit in college. Indeed, she told the researchers that she relies on her experience as a schoolteacher in the choice of tasks or explanations proposed to secondary school students, having observed that "it worked well" with primary school students to remedy the same types of difficulties. Regarding the other homework assistants studied, not all have the status of teachers: educational assistants do not a priori possess the general pedagogical knowledge that their teaching colleagues may have acquired through training or classroom experience. These homework assistants say that they encounter difficulties in managing a group or instigating a working environment. This could explain their practices, which are sometimes less effective than those employed by other homework assistants to encourage students to stay focussed on their homework:

*"I don't have the teaching skills to be able to make a class get to work. Other than shouting, but even when I shout, it only works one time out of three. And I know it is because I am lacking the methodology."*

As such, for this category of knowledge, three types of homework assistants are identified: secondary school teachers, individuals who have some experience of teaching but in another context (such as primary school teachers) and those who do not have any particular teacher training or experience (like many educational assistants).

- content knowledge. Significant disparities in knowledge held by the different homework assistants in relation to the discipline being covered in the students' homework was also observed, and yet this factor can have considerable repercussions on their practices. Indeed, when the homework assistant has sound knowledge of the subject in question, they can enrich the explanations given to the students. In this way, one of the homework assistants observed (herein named HA2) was very interested in History, which certainly accounted for his investment in the two students he supervised in this discipline, as well as the quality of the explanations he provided about the French Revolution.

It should be noted that the impact of this factor actually depends on the individual's perception of their relationship to disciplinary knowledge: this is the feeling of having sufficient cultural knowledge of a given topic that will incite the homework assistant to explain it, regardless of the actual extent of their knowledge. Indeed, some homework assistants said they did not feel capable of helping students in some subjects as they don't have the required knowledge:

*"When I signed up for 'Devoirs Faits', I said it was out of the question for me to assist with maths homework. I'm not interested in maths and I don't know how to do it. So, I'm an English teacher and I only assist with English and would be incapable of helping with certain subjects."*

During the session in which this homework assistant was observed, she immediately announced to the students: *"We will begin with English and then we will look at... the rest"*. The bell sounded before the group had had time to move on to another subject... Similarly, another homework assistant explained how they did not feel capable of helping students in English because, according to them, they did not even have secondary-level proficiency in the subject.

These accounts seem to indicate that it is necessary for the homework assistant to have sound knowledge of the subject to which the exercises relate. However, some homework assistants said they felt there were advantages in helping students in a subject area in which they were not specialised.

Indeed, this could help avoid the trap of doing the student's homework for them, or overly guiding them. Furthermore, if they do not know the answer to the exercise in question, the homework assistant will implement research techniques (looking in the lesson plan, books, the dictionary, etc.) enabling them to find the knowledge required, which could facilitate the students' acquisition of a study methodology. Finally, this situation also justifies asking the student to explain the concepts encountered in class, a highly formative exercise for the learner. One of the homework assistants (HA3) even said:

*"I wonder if we need to have any specific level, because in fact in 'Devoirs Faits' we should together be creating the conditions for students in which they can do their homework, and not do the homework with them. So, we don't need to have a given level, in English or in maths [...]. And if they haven't done their homework correctly, it doesn't matter, because the person to put that right should be the teacher."*

She therefore provides a different vision of the issues of the 'Devoirs Faits' scheme: the objective is no longer to enable new learning during the session, nor to ensure that homework is done correctly, but to help the student to really adopt skills by trying to answer (not necessarily correctly) the exercises given in class. She redefines the roles of the homework assistant and the teacher: the homework assistant must enable the student to complete their individual work, but the teacher is responsible for teaching. We can thus consider that it is the responsibility of the homework assistant to ensure that the homework is done, but not that it is accurate. She even points out the potential pitfall of allowing the student to complete an assignment correctly when they would have been unable to do it alone: the class teacher would then wrongly assume that the techniques taught have been acquired and deem it pointless to revisit them in class. In this way she reminds us of the formative assessment function of homework assignments in theory, and the importance of the information collected from homework for the teacher for them to adapt subsequent lessons:

*"Because the problem is that the student arrives with their work done, [...], they didn't understand it but they did it, and how does the teacher know that they didn't understand? The teacher only discovers this on the day of the evaluation when the student fails."*

- pedagogical content knowledge and curriculum knowledge. Even when the homework assistant has the necessary knowledge to undertake the exercise proposed, differences are observed depending on whether or not they are a teacher in the subject area in question. Knowledge pertaining to the didactics of the discipline and the official expectations relating to the notion in question enable some to provide explanations or to propose additional tasks, in line with the work done in the classroom. Thus, the English teacher, when assisting students in her subject, goes well beyond the homework they are asked to do. She speaks to them in English to communicate simple information. She asks them to read the text supporting the task aloud, correcting their pronunciation if necessary, and she gives a real lesson concerning the construction of questions in English, likely similar to the way she teaches in her classes.

In the same way, the maths teacher (HA4) behaved differently when supervising homework in his own subject or in another subject. For example, for mathematical exercises, he took the time to question the students to get them to explain the underlying properties or to make them aware of possible mistakes. But when students presented him with English exercises during a session, he simply told the students whether their proposals were correct or incorrect, without providing any further comment. It is of course not sufficient to know the answer to a question in order to be able to justify the answer,



or to help students perceive their mistakes. As one of the homework assistants explained "*When we are working in our subject, it is much simpler for us*". Indeed, each discipline has its own didactic contract, of which other teachers are generally unaware. During the observations, an illustration of this phenomenon was witnessed:

One of the homework assistants, a physics teacher, had to help a student to complete their maths homework. Initially she had no difficulty assisting the student with the operations required and even in providing certain properties involved in the operating algorithms. However, the third exercise proved more difficult for her than the first two. It was a matter of justifying equalities of the following type  $2.57 \times 348 = 894.36$  given that  $257 \times 348 = 89436$ . The teacher in question knew, however, without a doubt, how to carry out a multiplication of decimal numbers, but this knowledge was not sufficient to answer the question. Her difficulties most certainly stemmed from a misunderstanding of the didactic contract of the discipline, and more precisely of the expectations of the class teacher for this exercise. This type of task, although relatively common in younger secondary school students, requires some knowledge of the didactics of mathematics and the teaching objectives for this level. To understand the nature of the expected response, students at the end of Cycle 3 are expected to be able to deduce the result of the product of two decimal numbers from the product of two integers based on properties such as: if one of the factors is divided by 100, the result is also divided by 100. Being unaware of the expectations for this exercise, she did not know how to answer, so she asked the students for their notebooks to see if they had already done an exercise of this type, but in the end did not manage to guide them towards the expected answer.

It also happens that the answers provided by homework assistants are erroneous or partially erroneous due to their unfamiliarity with the didactics of the discipline at hand. In this regard, two cases were observed in the present study wherein, while the homework assistants' answers were correct, the accompanying justification could conflict with what the class teacher had taught. For example, one of the speakers, who was quite capable of performing the proposed literal calculation exercise, provided a questionable explanation to assist the student. To justify the fact that  $(-3) \times (-x)$  is equal to  $3x$ , he relied on the rule of signs ('the product of two negative numbers is positive') by specifying that, as  $x$  was positive,  $-x$ , was therefore negative. However, these two assertions are inaccurate ( $x$  could be negative and  $-x$  positive) and a maths teacher would generally be careful not to convey such beliefs. In the same way, when the physics teacher encountered an exercise in which the student had to distinguish a regular river from a main stem river, they explained the answer solely in terms of size (or flow to be precise). Although their justification is consistent with a commonly accepted principle (a regular river is a 'small' course of water compared to a main stem river), this answer is only partially correct and one of the objectives in geography classes in the first year of secondary school is in fact to identify the second criterion of selection (the main stem river flows directly into the sea, which is not the case for a regular river). We could in fact observe that the (clumsy...) response of the student referred to this other feature, which indicates that this point had already been discussed in class.

We can therefore imagine the confusion that could result from receiving contradictory explanations, especially for students who have difficulty grasping the didactic contract of the discipline... Nevertheless, some homework assistants do not believe it is essential to know the content of the lesson. As such, one of the homework assistants explained how they found it beneficial to be able to give students explanations which are different to those proposed by the teacher as each learner is

different, so multiplying the angles of the approach could be a way of facilitating their access to learning. Similarly, to help their students to better understand and assimilate the historical events of the French Revolution, homework assistant HA2 introduced knowledge which had not been covered in the lesson. Although the teacher and the homework assistant proposed different explanations, it is important to ensure that these different types of discourse do not perturb the student, as the French teacher feared could be the case:

*“to what extent can the explanation of someone who is not an expert in the didactics of the discipline... how this explanation can disadvantage and even confuse a student. It is sufficient to hear someone explain a spelling rule and you say to yourself ok yes, they tried to do it well, but they are repeating all the things we try to deconstruct in class.”*

- knowledge of the educational context. Here again disparities emerge: while all the homework assistants observed possess a degree of knowledge of the educational context (in the sense that they have worked in the school for more than a year), some also have a particular understanding of the situation experienced by the student. As such, one homework assistant (HA5) explained how she felt particularly well-placed to help the students, partly due to her similar social background to them (she grew up in the same socio-economic environment), and partly because she also had difficulties at school:

*“I used to be in an Educational Priority Area, I had difficulties, my parents were like their parents. So, I think I may be best placed to help them.”*

This can lead us to think that it is appropriate to work on old knowledge during scheme sessions, possibly taught a long time ago: indeed, having rapidly found herself submerged in English, she very quickly gave up. Since she could not ask for any help at home, she would have liked outside support to help her fill in the gaps by rebuilding the bases she lacked, and this is why she wants to provide the same type of help to students in the 'Devoirs Faits' scheme.

In addition, one homework assistant explained that she found it more difficult to understand the difficulties encountered by students as she had never experienced them herself:

*“we are teachers, that means that we must have been perhaps, in quotes, good students at school, and when we were asked to do our homework, we did our homework [...]. And I think that maybe we don't know what a student who is struggling with this knows. Understanding the meaning of doing homework.”*

- knowledge of the students. When the homework assistant is also a teacher of the class, they have information about the history of the class (their experience, but also the following lessons they will have) and about the needs of each student. With this knowledge, they can provide more targeted help, by choosing both the questions asked and the explanations provided in a relevant way. Otherwise, the homework assistant has little access to this type of information. One teacher (HA6) who supervised sessions both for their own students and students she did not know, explained that she found it easier to identify the needs of each student in the first group: knowing both their difficulties and what could be expected from the class, she could immediately propose the most adapted explanations. In the second group, in contrast, she first had to assess their gaps for each type of task, which slowed the rhythm of the session.

So, the homework assistants do not all have the same knowledge of the six domains identified by Shulman, and this can be seen to explain some of the differences observed in the sessions proposed in the 'Devoirs Faits' scheme.

## 5. Results regarding the beliefs of homework assistants

Discussions with the actors involved in this scheme led to the realization that, in addition to their respective knowledge, another factor influences the implementation of their sessions: the different beliefs regarding the form of help to be provided. Indeed, while everyone shared the same desire to support the students' individual work, the means envisaged to reach this objective differed considerably:

- **Get students to do their homework:** Taking the name of the scheme at face value, many homework assistants will do their utmost to ensure that at the end of the session the homework is done (P: *"When I was told about 'Devoirs Faits', the term itself, I told myself it is imperative that homework be completed."*; P': *"Well, I really try to get them to do their homework, as that is the name of the scheme, 'Devoirs Faits'."*). Some underline the fact that this is furthermore what is expected by parents: they enrol their children in the scheme so that they will do their homework before returning home. This objective is not without interest: if the next day the student arrives in class having completed the work requested by the teacher, they will be in good conditions to take advantage of the lesson that will follow. It should be noted, however, that even if the students do not always perceive the nuance, the teacher's objective is not only that the homework be done but that it be done by the student. It is thus important for the homework assistant in the 'Devoirs Faits' scheme to allow the student to complete their homework without giving them too much guidance, which often proves to be complex. On this subject, a teacher confided that the support provided in this scheme is sometimes excessive:

*"For example, today, a student gave me a piece of work back, all done, and she had understood nothing about it! [...] she told me, 'I did it with the teacher because I didn't understand'. And she still didn't understand afterwards."*

Indeed, when the student experiences such difficulties that they are unable to do their homework alone, the homework assistant will tend to increase their guidance little by little (especially when they have the relevant knowledge and didactic content) in order to reach their goal, even if it means leaving only a little work for the student to do (risk of Topaz effects, see Brousseau, 1998). If, in these cases, the homework is actually carried out, the benefit to the student's learning is questionable: certainly, showing a given technique can lead to a form of familiarization with it, but real assimilation then requires, at the very least, its implementation by the student themselves. These reflections lead some homework assistants to think that they must provide another kind of assistance:

- **Revisit the content of the lesson.** Several homework assistants consider it pointless to try to get a student to do homework if they have not understood the lesson, the essential objective being, in their opinion, to help the student progress in their learning. They will therefore devote a proportion of the session revisiting certain parts of the lesson, even if this means leaving homework aside. This type of intervention can take different forms. It can be a 'simple' review of the lesson,

which can be presented at a slightly different pace and in a slightly different way than how it was presented in class. Thus, in one of the sessions previously described, HA2 decided to revisit the historical facts of the French Revolution, particularly drawing on analogies with everyday events. A maths teacher (HA7) also explained how, during his 'Devoirs Faits' sessions, he asks students for their maths notebooks, then revisits the day's lesson with them, adapting it to their rhythm and their questions.

Instead of repeating the explanations of the lessons themselves, some homework assistants prefer to give this role to the students. Consequently, one French teacher (HA8) confided how the previous year, he had decided to devote his 'Devoirs Faits' sessions to revisiting some lessons seen by the student during that day. Another teacher also evoked a similar measure, while highlighting reticence among homework assistants to implement the measure:

*"There's a bit of a refusal from colleagues, [...] revisiting what has already been done, well for them, it's not doing their job. [...]. If I have it redone, if I have the lesson reread, if I just say to the student 'here, let's see what you've understood' [...] I have the impression that my colleagues will say that I'm not doing my job well, because here it's the student who's working, I'm not doing anything, I'm watching them do it."*

We can note in this account that this transmissive vision of teaching is still prevalent among many teachers: they think they have to provide knowledge to truly fulfil their role and therefore do not think that the "simple" fact of listening to the student explain their lesson can be a form of assistance.

○ **Work on old or related knowledge.** Several homework assistants highlighted the extent of students' gaps in knowledge. They explained how they felt students cannot understand the lessons studied in class because they have not properly acquired previously taught knowledge. This is why, in their sessions, they seek to reactivate (or activate...) this knowledge:

*"There's a student who is going to show me homework on fractions. But this student doesn't know his multiplication tables, and this is no longer taught after primary school, normally. So, he is no longer learning them. Won't I be more useful if I make him learn his multiplication tables rather than doing his homework?"*

These homework assistants will thus devote substantial portions of their 'Devoirs Faits' sessions (possibly even the whole session) to revisiting some previously taught knowledge which constitutes a prerequisite for assimilating the knowledge currently worked on in class. This sometimes involves knowledge studied at the beginning of primary school, which has not been revisited since, whereas students are expected to be able to apply this knowledge throughout their schooling. As a result, students who did not acquire this knowledge when it was taught have little chance of being able to access it and subsequently find themselves in difficulty in all the following years: this is why one of the homework assistants (HA1) decided to devote all of her sessions to improving the quality and speed of copying for certain students, who demonstrated particular difficulty on this point. Similarly, in another session, a homework assistant (HA5) re-explained how to look up a word in a dictionary, a technique taught in primary school, but which had obviously not been acquired by the students she assists.

The 'Devoirs Faits' scheme can also be a space for working on related knowledge, which is not really explicitly taught in class and yet is necessary. In one of the session observations, one homework assistant (HA5), devoted part of their session to a discussion with students about the methodology to employ to give a presentation, then later how to read and understand a text. Similarly, one French teacher said that the school reports of students in difficulty often include a comment that they need to learn their lessons, but that they were never really taught how to do so. This teacher argued that you need to teach students how to learn.

○ **Make students autonomous.** Some homework assistants explained that they would like the 'Devoirs Faits' scheme to help students to become more autonomous. However, as a Spanish teacher explained, the individual help generally provided may prove counterproductive on this point:

*"I had the impression that we systematically reformulated the exercise and that in the end they didn't really progress autonomously. [ ] I felt that we give them even more, that we repeat more, I don't have the impression that we give them the keys to make them autonomous."*

Other homework assistants shared the same concerns. One said: "*We should be able to leave them alone a while. That is the problem among children who go to support lessons too often*". "*I see them saying 'Oh great, here is a teacher to help us', meaning a teacher who will do the work for them*" said HA3. Indeed, if a student becomes accustomed to being able to ask for help at the slightest problem, they may end up not looking for the answer themselves. Herein lies the paradox of such support measures: without help, some students may not be able to carry out the required task and thus cannot access the learning required. But with help, they risk losing the habit of searching for the solution on their own, which can also lead to a failure of the learning process. Some homework assistants therefore recommend providing minimal help which could even simply consist of providing a calm workspace and a period of time explicitly dedicated to homework, which students do not always have at home:

*"So, we have children who have nowhere to work at home, no room to work in, and whose parents have not understood that they need a quiet moment for their work."*

○ **Remotivate students.** Several homework assistants also cited the lack of motivation among some students as one of the causes of their academic failure: they underline the limited involvement of these students in the 'Devoirs Faits' scheme, convinced from the outset that these sessions, which are sometimes experienced as a punishment, will serve no purpose. Some homework assistants will try to propose an approach other than the one used in class, to help the students to reconnect with what they have learned. The deputy headmistress of the school explained that she has decided to introduce sessions devoted to mathematical games for the least engaged students, the objective being to provide them with a different vision of this discipline and, more generally, to give them a taste for the activities proposed in school. Similarly, one of the homework assistants said that they devote the second half of their sessions to quizzes on academic knowledge, and the school librarian (HA9) proposes games which encourage students to broaden their lexical knowledge during 'Devoirs Faits' sessions.

## 6. Discussion

The table below provides an overview of the information collected from some of the homework assistants mentioned above:

	PK	CK	PCK	Context	Student	Beliefs regarding the help to be provided	Practices	
I1	x (Primary school)	X	X	x		Work on old knowledge	Revisit techniques taught in primary school ( <i>graphology</i> ).	
I2		X		x		Revisit the content of the lesson	Revision of the history lesson providing further information and presented in an unusual or different way.	
I3	X			x		Make students autonomous; Have students complete their homework	Support the completion of homework by researching with the student. No testing of answers given by students.	
I4	Maths exercise	X	X	X	x	Have students complete their homework	Ask students to justify their answers, provide explanations. Test answers given by students.	
	English exercise	X	X		x		Test answers given by students.	
I5				X		Work on old or related knowledge	Explain certain techniques which could be useful in several subjects ( <i>how to look up a word in the dictionary, do a presentation...</i> ).	
I6	With their students	X	X	X	x	X	Revisit the content of the lesson; Have students complete their homework	Give explanations and ask questions adapted to each student. Test answers given by students.
	With other students	X	X	X	x		Give explanations and ask questions which are not specifically adapted. Test answers given by students.	
I7	X	X	X	x		Revisit the content of the lesson	Repeat the lesson given in class with more detail according to the students' difficulties.	
I8	X			x		Revisit the content of the lesson	Ask students to explain their lessons.	
I9				x		Remotivate students; Work on related knowledge	Propose games to expand students' lexical knowledge.	

This table illustrates the differences observed, on the one hand with regard to the knowledge and beliefs held by the homework assistants, and on the other hand, in terms of the assistance offered through this scheme. We can note that virtually none of the homework assistants had the a priori knowledge needed to be a teacher (especially concerning knowledge of students, as those in attendance are generally not their students). These reflections lead us to the initial question of this research: what knowledge and beliefs are required to be able to truly assist students with their

individual work? Let us specify first of all that certain types of assistance do indeed seem to require specific qualities and this could explain the few dysfunctions cited previously: it does seem difficult to assess a student's work when one possesses little knowledge on the subject. Explaining a notion without knowing the didactics of the discipline or the student's level may lead the homework assistant to propose an explanation which is beyond the scope of or out of sync with that presented in class, etc. This could lead us to think that only the teacher of the class or a teacher of the subject is capable of supervising 'Devoir Faits' sessions. This is not the argument set out herein.

It does indeed seem that there is a sufficiently varied range of types of help (as the table above shows) for each homework assistant to be able to find an organization which suits their knowledge and beliefs. It is arguably not necessary to harmonise all practices and set a fixed form to the 'Devoirs Faits' scheme: on the contrary, this wealth of interventions seems likely to provide each student with a form of assistance adapted to their own needs (as highlighted in the analysis of student accounts; see Assude, Millon-Fauré et al., submitted). However, there are two particular points to watch out for: first of all, the homework assistant must be informed of the various potential issues and the precautions to be taken for each organisation (for example, not doing the student's homework for them...) in order to choose the mode of organisation for which they feel most competent. Then, it is necessary to make sure that all the actors involved (administration, students and even parents) are clearly informed of the objectives of this particular measure and of the role expected of each individual: if the objective of a given session is to revisit the course content, the student must know that completing the homework will remain their responsibility outside of "Devoirs Faits".

Once these precautions have been taken, each homework assistant can choose to position themselves either as the expert who knows and who will provide the student with knowledge or assess the answers they propose, or as the assistant who supports the student and establishes the necessary conditions required for the student to complete their work themselves (by encouraging them to explain their lesson, showing them how to find the necessary information and creating an appropriate workspace, etc.). In the former case, an adequate relation to the didactics of the discipline, or at the very least, to the knowledge concerned, is necessary. The fact of being a teacher in this subject is not, however, an indispensable prerequisite: if they are not familiar with the didactics of the subject, the homework assistant will employ another approach to the notion in question which may, for some students, prove to be more enlightening than the teacher's explanation. However, care must be taken to ensure that the explanations given in the 'Devoirs Faits' sessions are correct and do not present an obstacle to understanding what is being said in class.

Arguably, in the second case, if the homework assistant positions themselves as a study support provider, their lack of teaching skills and even of the knowledge concerned (provided that this is accepted and public knowledge), far from being a handicap, could be an asset. Indeed, this leads the homework assistant naturally to position themselves in the lower position: in this way, it becomes legitimate to ask the student to explain their lesson or work and to ask 'naive' questions, even on the most basic notions. The homework assistant is therefore no longer seen as a resource person who can be called upon to do the homework for the student, and the student should consequently feel more responsible for the task they have been asked to complete. This may also encourage interactions between peers, as the homework assistant is not in a position to rule whether the responses proposed are valid. Finally, if the homework assistant places themselves in the position of a learner like the student, they will have to implement techniques for researching information (in the lesson material, in the textbook, on the

internet...) which the student can assimilate by observation, thus improving their autonomy. This vision of teaching, fundamentally different from that usually observed in ordinary classes, evokes the "pédagogie de l'enquête" (teaching of investigation) advocated by Ladage and Chevallard:

*"[in the paradigm of questioning the world and the pedagogy of investigation], the elaboration of an answer A to a question Q thus proposed is no longer the prerogative of professor Y but is at the heart of the work of X under the direction of Y, the latter ceasing to "profess" to become a study director or director of investigation." (Ladage and Chevallard, 2011, p.87)*

All these considerations lead us to believe that it is possible for a homework assistant who is not a classroom teacher, or even an expert in the discipline, to provide support to students, provided that the nature of this assistance is clearly explained so that no actor (student, parents or colleagues) misunderstands the expected outcomes.

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