# WHAT MAKES LEARNING EASIER AND MORE DIFFICULT? THE PERSPECTIVE OF TEENAGERS

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**ABSTRACT.** This qualitative study aimed to understand the perceptions of adolescent students about what facilitates and hinders their learning. The knowledge of students' perceptions about their learning allows to improve the quality of the learning processes quality. Five focus groups were conducted, with a semi-structured script, in five different private schools from the North of Portugal, having participated in 32 students randomly selected. Participants were students from 7th, 8th and 9th grades, with ages between 12 and 15 years old. The data analysis followed a semi-inductive process and descriptive coding of data. The results highlighted the key role of teachers in students' learning; the importance of students action versus passivity in the classroom; the relevance of emotional and relational dimension to enhance students' engagement, and the relevance of learning self-regulation strategies. As for implications, it is suggested that actions be carried out with teachers and students based on the data collected and analyzed, in order to promote metacognition of both.

**Keywords**: School learning; teaching; adolescence.

# O QUE FACILITA E DIFICULTA A APRENDIZAGEM? A PERSPETIVA DE ADOLESCENTES

**RESUMO.** Este estudo qualitativo teve como objetivo analisar as perceções de alunos adolescentes acerca dos aspetos que facilitam e dificultam a sua aprendizagem. O conhecimento das perceções dos alunos sobre a sua aprendizagem permite melhorar a qualidade dos processos de ensino-aprendizagem. A partir de um guião semiestruturado, foram realizados cinco grupos focais, em cinco escolas privadas do Norte de Portugal, tendo participado 32 alunos selecionados aleatoriamente. Os participantes eram alunos do 3º ciclo do Ensino Básico (7º, 8º e 9º anos), com idades compreendidas entre os 12 e os 15 anos. A análise dos dados seguiu um processo semi-indutivo de codificação descritiva. Os resultados realçam o papel fundamental do professor na aprendizagem; a importância da ação vs passividade dos alunos na sala

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de aula; a relevância da dimensão emocional e relacional para o envolvimento do aluno; e a relevância das estratégias de autorregulação da aprendizagem. Como implicações sugere-se a concretização de ações junto de professores e alunos assente nos dados recolhidos e analisados, que sejam promotoras da metacognição de ambos.

**Palavras-chave:** Aprendizagem escolar; ensino; adolescência.

# ¿QUÉ FACILITA Y DIFICULTA EL APRENDIZAJE? LA PERSPECTIVA DE LOS ADOLESCENTES

**RESUMEN.** Este estudio cualitativo tuvo como objetivo analizar las percepciones de alumnos adolescentes acerca de los aspectos que facilitan y dificultan su aprendizaje. El conocimiento de las percepciones de los alumnos sobre su aprendizaje permite mejorar la calidad de los procesos de enseñanza-aprendizaje. A partir de un guión semiestructurado, cinco discusiones en grupos focales se llevaron a cabo en cinco escuelas privadas en el Norte de Portugal, que han participado 32 estudiantes seleccionados aleatoriamente. Los participantes eran alumnos del 3º ciclo de la Enseñanza Básica (7º, 8º y 9º años), con edades comprendidas entre los 12 y los 15 años. El análisis de los datos siguió un proceso semi-inductivo de codificación descriptiva. Los resultados subrayan el papel fundamental del profesor para el aprendizaje; la importancia de la acción de los alumnos en el aula versus pasividad; la relevancia de la dimensión emocional y relacional para la participación del alumno y de las estrategias de autorregulación del aprendizaje. Como implicaciones se sugiere la concreción de acciones junto a profesores y alumnos acerca de los datos recogidos y analizados, que sean promotores de la metacognición de ambos.

**Palabras clave**: Aprendizaje escolar; enseñanza; adolescencia.

## Introduction

Learning is a complex concept, influenced by various processes and factors inherent to the teacher, the student and the school context (Araújo & Almeida, 2014). The students (designation throughout which elementary education includes children, adolescents and youngsters under the age of 18 years) continue to appear as an excluded social group in today's society: non-participation on behalf of students in decision-making on issues directly related to them is systematic, also there is 'relative invisibility' of students "[...] in the face of public policies and their effects" (Sarmento, Fernandes & Tomás, 2007, p. 183). Within the framework of this reality, school establishes an ambiguous dialogue, at times controversial, between the implementation of pedagogical projects based on the student construct as co-builder of knowledge, and the organisation of a well-defined decision hierarchy that "[...] remains based on actions of logic that perpetuate the historical inscription of the designation" (Sarmento et al., 2007, p. 183). Of these two factors, maintaining an academic performance below expectations and students' levels of discourse on demotivation and motivation towards learning is justified.

Regardless, research has contributed to the importance of understanding how learning is experienced by students, and for the most part, highlights the relevant role of the

teacher in learning: "[...] what the teacher does, matters" (Hattie, 2009, p. 22). Studies show that students' academic results depend on their perceptions about the teacher's teaching skills - where the clarity of teaching (Ferguson, 2012), use of questioning to construct meaning (Fin & Zimmer, 2013), presentation of classes in an interesting and engaging way for students (Ferguson, 2012), ability to encourage and assign an active role to students in class, keeping them occupied (McHatton, Farmer, Besette, Shaunessy-Dedrick, & Ray, 2014), as well as enhancing student/student interactions (e.g., cooperative learning) (Finn & Zimmer, 2013) are valued. On the other hand, teacher's behaviours such as not having control over class management and the idea that the teacher is not 'in the mood for class', are aspects indicated as contributing to the decrease of students' involvement (McHatton et al., 2014).

Still associated to the teacher's role, demonstrating concern and support to students is one of the dimensions most found in the literature as significant for the engagement of students in their learning and for their development (Hattie, 2009). Particularly, adolescents do not appreciate a 'just teach' approach, but rather teachers concerned with their well-being (McHugh, Horner, Coldtiz, & Wallace, 2013). As such, the building of positive teacher-student relationships also appears to be one of the dimensions most valued by students and "[...] research shows the importance of the quality of these relationships in the students' educational trajectories" (Araújo & Almeida, 2014, p. 259).

In a complementary and interwoven way, in several studies on learning, the student is indicated as a determining element in his/her learning through, for example, his/her involvement in school, a multifaceted and multi-determined construct (Mahatmya, Lohman, Matjasko, & Farb, 2013) that enables the understanding of several dimensions in an integrated way, namely: emotional, cognitive and behavioural (Fredricks, Blumenfeld, & Paris, 2004).

Emotional involvement includes the student's sense of belonging, as well as positive and negative reactions to teachers, colleagues, academic activities, and school overall. Research has acknowledged the central relevance of emotions in academic success and learning, as they affect effort, motivation, persistence and learning strategies (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

On the other hand, cognitive involvement mainly means cognitive investment in the task, willingness to strive to understand complex ideas in depth and master skills. The importance of promoting self-regulated learning and study strategies has been highlighted in the literature (Rosário et al., 2010; Zimmerman, 2002).

Also, behavioural involvement parts from the idea of participation, considered crucial to attaining academic success. This is revealed in the student's behaviour by being assiduous, silent, punctual and following the rules (Fredricks et al., 2004), as well as being able to perceive learning as the space where they can make themselves heard, exchange thoughts, discuss, argue, a space where the *major* aim is to boost other spaces of action, engagement, work on projects in school and in the community (Dias, 2016).

Student involvement is seen as an "[...] antidote […] to students' alienation" (Fredricks et al., 2004, p. 60). Research consistently and repeatedly shows its positive effects on student academic success and socio-emotional and cognitive development (Finn & Zimmer, 2013).

**The present study**

The present study sought to contribute to the question raised by Astin (1999, p. 522), "How do you get students involved?", appealing to students' perspectives. Knowledge of students' perceptions should involve the understanding of situations that are facilitators of learning, as well as questioning what decreases their involvement. Thus, the students' voices contribute with valuable 'insights' into how learning occurs. It should be noted that there are data on what helps, facilitates and promotes learning, on teaching or on how to be an effective teacher (Hattie, 2009). However, the literature is limited on what makes learning difficult. In this sense, this study aimed to analyse students' perceptions about what facilitates and/or hinders their school learning, knowing that this information mediates the relationships between the quality of learning environments and academic success (Beek, Jong, Wubbels, & Mimaert, 2014).

In the years of schooling that include pre-adolescence and adolescence, school is often focused on the cognitive development and learning of the students, where there is greater formalisation of the organisation of teaching-learning structures (Faria, 2014). Also, during adolescence students' academic expectations increase (Mahatmya et al., 2013); and student involvement changes as schooling progresses, namely, there is a decrease in emotional involvement during adolescence and, in turn, an increase in the capacity of cognitive involvement during this phase (Mahatmya et al., 2013). It should also be noted that the few studies encountered with students' *voice* analysis are mostly focused on university (Lumpkin, Achen, & Dodd, 2015) or on specific topics, such as motivation (Martinez, Currás, Valcárcel, & Garcia, 2015). For these reasons, the focus of this study was on students between the ages of 12 and 15, corresponding to the 7th to 9th grade levels (Portuguese educational system).

**Method**

**Research questions**

This study aimed to answer two research questions: according to students' perspective, (Q1) what facilitates their learning? and, (Q2) what hinders their learning?

**Methodological basis**

Viewing students as producers of meaning and subjects of knowledge (Dias, 2016), this study fits into the qualitative methodology. This methodology is characterised by seeking to understand the meanings that participants give to the phenomenon under study, to obtain informative 'insights' of students' perspectives in relation to their experiences regarding teaching and learning processes (Winlow, Simm, Marvell, & Schaaf, 2013). Thus, this study focuses on the perception and experience of participating students, to understand the phenomenon of learning, as reflected by the research questions.

The data were collected through focus groups (FG). This is a strategy used to generate data through a group interview (Finch & Lewis, 2003). As a qualitative method that integrates the research repertoires, FG are seen as an effective tool for their levels of "[...] synergy, snowball effect, stimulation and spontaneity [...]" that the group dynamic can generate (Williams & Katz, 2001, p. 2).

The objective of this study is to know, and above all else, to understand the perception of students, so it was considered appropriate to listen to the protagonists of the learning phenomenon through a discussion of ideas in which students manifest and express themselves, as they do in their daily life, allowing the participants, in interaction, to take on the main role in shaping the research (Winlow et al., 2013).

## Participants

For this study, five FG were carried out in five different school contexts, with a total of 32 participants, 19 girls (59,4%) and 13 boys (40,6%), between 12 and 15 years old ($M$[3] = 14,03, $DP$[4]= 0.85), with nine students (28,1%) in the 7th grade, 12 students (37,5%) in the 8th grade and 11 students (34,4%) in the 9th grade. Between five and nine students participated in each FG, following the indications in the literature (Finch & Lewis, 2003).

In each FG there were students from the same school, knowing that the homogeneity of participants is important because they share information more easily with others they perceive as similar. Furthermore, efforts were made to ensure diversity within the group (Finch & Lewis, 2003), by randomly selecting students from different school years (7th, 8th and 9th grades) for the same FG, both female and male, with varied school performance and parents with varied educational qualifications.

None of the participants have any history of failing in school and the overall school performance of participants is positive, with final grades ranging between two and five ($M$ = 4, $DP$ = 0.80). More than half of the participants have parents with university qualifications (between a Graduate degree and PhD), and45% of students have parents with secondary school education or below 9th grade level.

## Instrument

For data collection, a semi-structured interview script was used for the FG, designed by the research team and covered three main topics: school, teaching and learning. This study paid particular attention to the topic of learning. The answers given by students to the following scripted questions were considered: 'In which situations do you feel you learn more? In which situations do you feel you learn less? Why?; What does the teacher do/ do you do that helps you to learn?; What does the teacher do/ do you do that hinders you from learning?'.

## Data collection procedures

The data collection process began with the identification of the schools where the FG would be carried out (7th, 8th and 9th grades).The selection of participants from each school was random, using the Monte Carlo[5] method, through Microsoft Excel. Each student selected was then contacted, as well as their guardians to get their signed informed consent.

The groups were conducted by members of the research team, who had previously met to fine-tune the script and define similar performance criteria. Each FG was

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[3] Average
[4] Standard deviation
[5] Mathematical tool that uses sequences of random numbers.

approximately 50-minutes long. The data were audio recorded, permission was granted by the participants and their guardians.

The aims of the study were explained to participants, as was the reason for audio recording. Data confidentiality and the voluntary participation of students were ensured, and the importance of interaction and discussion between group members was highlighted, promoting joint reflection on the different topics. It was explained that there were no right or wrong answers.

The consideration of ethical issues also included the assignment of a code to each participant as soon as the FG transcription was completed, eliminating participants' real names and protecting their identity.

The study was approved by the Ethics Council of the Universidade Católica Portuguesa that considered that the necessary ethical aspects had been duly taken care of.

## Data analysis procedures

The data analysis used was based on semi-inductive analysis guided by the research questions, going through the main phases: transcription of the FG interviews; their fluid reading, coding and characterisation (with no previous categories), using Nvivo 11 (Software for qualitative research).

The analysis was guided by a descriptive coding process (Saldaña, 2009). First, coding started by considering as descriptive code all units of text that reflected a complete idea, trying to keep this process as close as possible to participants' discourse and the name given to the code represented students' discourse. The code generation phase characterised by a data fragmentation process was followed by categorisation. Here, through a constant comparative process the various codes were grouped and organised into larger categories, taking into account the similarity of its characteristics. This was already a process of progressive interpretation of data that inductively emerged (Saldaña, 2009).

## Data analysis and discussion

From the data coding and categorisation process, two major categories emerged that contribute to facilitating and/or hindering learning, according to students' perception: the teacher dimension with 128 references (85 facilitators and 43 blockers) and the student dimension with 28 references (11 facilitators and 17 blockers).

Figure 1 shows a general outline of the category system of this study, starting from the two dimensions mentioned, referencing only to the second generation of categories.

It should be noted that for an understanding of the hierarchy of categories during the presentation and discussion of results, the following code will be used: in bold and underlined (1st generation category); in bold (2nd generation category); underlined (3rd generation category) and in italic (4th and 5th generation categories).

**Figure 1:** 1st and 2nd generation categories on the facilitating and blocking factors in learning, according to students' perception (*N*=32)

| Facilitating factors in learning | Blocking factors in learning |
|---|---|
| 1.1 *Teacher Dimension* | 2.1. *Teacher Dimension* |
| 1.1.1. Learning activities and teaching methods | 2.1.1. Learning activities and teaching methods |
| 1.1.2. Teacher's personal characteristics | 2.1.2. Teacher's personal characteristics and behaviours |
| 1.1.3. Instructional clarity | 2.2.3. Lack of instructional clarity by the teacher |
| 1.1.4. Learning resources | 2.2. *Student dimension* |
| 1.1.5. Teacher-student relationship | 2.2.1. Academic emotions |
| 1.2. *Student dimension* | 2.2.2. Study and learning strategies |
| 1.2.1. Academic emotions | 2.2.3. Family concerns |
| 1.2.2. Study and learning strategies | 2.2.4. Noise in the classroom |

(i) Q1: What facilitates the learning process, according to students' perception?

As a forementioned, two major dimensions emerged (teacher, student). The 'teacher dimension' was the most visible in the data, meaning that students consider the teacher as the main element for the stimulation in their learning, as mentioned by Hattie (2009).

Within this dimension, students clearly highlighted 'learning activities and methods of teaching' (43 references). Activities that lead to action and the active participation of students in the learning process were indicated. From the start, aspects such as 'practical classes' ("[...] if we carry out experiments I think that it's much easier") and 'student researching content' ("[...] interest in researching, we learn more") were referenced. In situations where activities take place outside the classroom, 'study visits' were indicated as learning facilitators ("[...] and study visits allow us to better understand the subject"), which are also related to the experimentation of theoretical content in practice.

In the same way, these students brought up the use of 'questioning' in the classroom ("It's easier when they are talking to us and asking us questions"). 'Questioning' provokes 'insight' in students (Song, Oh, & Glazewski, 2017) and, thus, each one builds their learning, integrating previous knowledge. It is related to the constructive conceptualisation of learning, by providing a way to invite students to take an active role in the classroom. Furthermore, the provocation of 'insight' in students contributes to the development of their higher level cognitive skills, essential during the adolescence phase, during which there is an improvement in processing information, reasoning and memory capacity (Allen, McGregor, Pendergast, & Ronksley-Pavia, 2019; Steinberg, 2005).

In this study, the 'teacher interacts' category in the context of teaching in the classroom, was the only one to arise in all FG, with eight references ("I like the classes better when teachers let the students speak, talk…interact more with each other"). Again, teacher-

student interaction reflects the bi-directionality in learning, and a way of teaching that focuses not only on transferring knowledge, but that seeks to build knowledge through a process of participation based on teacher-student and student-student interactions (Trindade, 2011).

The value of student-student interactions also appears in the learning activities with reference to activities that promote *cooperative learning* (12 references), especially 'group work' ("I think we learn more easily when it's not only the teacher explaining, for example when we have to work on a particular topic"). They also mentioned the fact of 'learning better from their colleagues' ("I sometimes think that I understand better when a colleague of mine intervenes and explains"). The cooperative approach, widely mentioned in the literature (Lopes & Silva, 2010), is considered a relevant teaching methodology for the classroom that precisely assigns an active role to student-student interactions, more so during adolescence, a time when social relationships have a key-role in the cognitive maturation of the adolescent, and in other dimensions such as defining their identity (Bakadorova, Lazarides, & Raufelder, 2019; Widjojo, 2018).

Beyond this, the way the teacher approaches content, *arousing curiosity for the subject* or 'making the subject fun', was highlighted by students. Ferguson (2012) states that the teacher's ability to make teaching stimulating and, not boring, is a key-competence with an influence on learning.

Students mentioned the use of an *interactive white board*, watching *movies* and the use of 'powerpoint' ("[...] when teachers start, they only speak, the class becomes a bit boring and when they bring something a bit more interactive [...] interactive white board"), as 'learning resources used by teachers' that facilitate students' learning; they are all audiovisual. This aspect differs from the one we encounter in the study by Stefl-Mabry, Radlick and Doane (2010) that revealed that students are tired of 'powerpoint' during classes. In fact, the integration of technologies in teaching is increasingly being asked of teachers, and these students have shown that they appreciate their use.

The 'instructional clarity of the teacher' was highlighted by students, mentioning the way the 'teacher explains the subject' ("[...] what helps us is the teachers stopping at certain moments to explain what they just said"), 'examples of the day-to-day material given' ("[...] at times there is talk of something that happened related to the subject, I think it's easier to understand"). The prevalence of clarity in the teacher's teaching is also mentioned in the literature (Ferguson, 2012). This includes following up on students' understanding, monitoring their pace of learning and explaining the content by demonstrating its usefulness and using practical examples (Lopes & Silva, 2010).

The present study also found data showing that students value the **teacher's personal characteristics**, such asbeing <u>friendly, fun and engaging</u> (seven references), as well as a <u>demanding and strict teacher</u> (four references).

Students also valued that classes not only focus on the syllabus, but that the teacher be open to 'talk about things that are not in the books' ("[...] teachers are not just throwing the content around, show curiosities and such") or a teacher who 'talks about other topics that help the students in their lives' ("[...] at times talking about other topics that are also important to us, not necessarily about the subject, but that help us in our life").

The 'teacher-student relationship' is another dimension that arises (10 references), students emphasise the importance of 'liking the teacher' ("[...] with teachers we like, we learn better"), the 'teacher helping the student' ("[...] is always trying to help us […] trying to help us understand things"), feeling that they 'motivate us' ("[...] always motivating us to do more and better"), a teacher who 'shows interestand does not give up on the students' ("I think it's teachers not giving up on us"). The relationship between teacher and student is considered prevalent to the success in learning (Araújo & Almeida, 2014). The respect the teacher has of the student, understood as the teacher respecting and considering the opinions, emotions and difficulties of the student, may be evident in this relational category, when students report that the teacher shows interest in them, helps and motivates them.

The demonstration of concern and support to students found in the literature as prevalent for student involvement in their learning (McHugh et al., 2013) is also present in the data of this study. Especially during adolescence, when individuals transition to adulthood and become independent from their family context (Cipriano, Barnes, Pieloch, Rivers, & Brackett, 2019), the presence of teachers who support students' learning, with adjusted expectations, contributes to positive experiences during their teenage years (Roth & Brooks-Gunn, 2014). From the start, when the teacher is able to approach aspects other than content and that are related to the day-to-day life of students, it meets the idea that students do not appreciate a 'just teach' approach. They appreciate it when content is related to their personal experiences (Hattie, 2009; McHugh et al., 2013). A study by Martinez et al.  (2015, p. 608) also reinforces these ideas from a student perspective analysis: "[...] the enthusiasm of teachers, the interest they show in the subject, in addition to them trying to make students understand it and showing that they are available and concerned about the situation of their students, are the aspects that affect the motivation of the latter to learn".

All of these categories that emerge from the data regarding the dimensions related to the teacher's role reflect the adequacy of learning environments for students, getting the student active in the classroom, interacting with the teacher and colleagues, thus facilitating student involvement and actively building their own learning. Also, as Finn and Zimmer (2013) mention the teacher-student relationships, characterised by the teacher's support to the student, as well as learning activities and methods of teaching that encourage student discussion and action in the classroom, are two of the main ways of getting students involved.

Concerning the 'student dimension', references to the emotional, cognitive and behavioural dimensions of student involvement were made. In the emotional dimension students brought up a 'positive mood' (being in a good mood) as a relevant factor to learning ("[...] it also depends on our mood. There are days […] when we simply tune-out") and personal interest for the object of study (liking the subject) ("[...] that also depends on the subject, if we like x more, we do more"). Note that, during adolescence, the areas of the prefrontal cortex and the limbic system are in greater connectivity (Steinberg, 2005), so teaching strategies that appeal to the limbic system contribute in a positive way to students' learning.

Cognitive involvement appeared through 'self-regulated learning and study strategies', mentioned by students: 'organised notebooks' ("[...] having organised notebooks

to be able to understand the content"); 'take notes' and 'participation in class' at the student's initiative, either to 'clarify doubts', or to 'participate with personal topics related to the topics in class'. These results were expected considering the participants' developmental phase, because it is known that during adolescence several aspects of executive functioning improve, namely increased capacity for planning, self-regulation and self-assessment (Steinberg, 2005).

In relation to behavioural involvement, it only appeared in the data through 'silence in class' (go to a quieter class).

These data show the importance of emotions in the educational context and development of learning in students (Durlak et al., 2011). Self-regulated learning emerged in our data and is relevant to academic success; it is the embodiment of the idea of the student building his/her learning (Zimmerman, 2002). Student-centred learning orientation has implications to teaching, including increased emphasis on self-regulated learning and study, precisely by the student's active role (Araújo & Almeida, 2014).

(ii) Q2: What hinders the learning process, according to students' perception?

Once again, the 'teacher dimension' was the most highlighted by students, as well as 'learning activities and teachers' teaching methods' (33 references in total). Here, importance was given to learning activities that led to 'passivity' as an obstacle to learning, with 26 references. Note the following: 'teacher talks endlessly on the subject' ("[...] they basically give a lecture"); 'teacher reads the content' ("[...] they read from the books and repeat the content"); 'teacher does not ask questions' ("[...] is always talking, talking and doesn't question us"); 'teacher does not interact' ("[...] doesn't interact with us and, there we are, just listening […] and that's it"). Overall, 'boring/non-captivating and theoretical/abstract classes' emerged as learning obstacles. These categories appear to represent, precisely students' passivity in the learning process, pointing to the positioning on the paradigm of instruction/focus on content, and to the logic of traditional learning – teacher's concern centred on the transfer of knowledge.

Here, even if with less expression, 'group work' appeared as negative, mostly because of the social dimension associated to it: "[...] we choose a friend and then we're more focused on the conversation". 'Study visits' also came up as a negative aspect ("[...] honestly, I don't think I have ever learned anything on study visits").

'Teacher's personal characteristics and behaviour' also arose in these FG, students highlighted three specific aspects, also found in other studies (McHatton et al., 2014; McHugh et al., 2013): (i) 'teacher does not manage the behaviour of the class' ("[...] they don't seem to care if we talk, and then there's too much noise and we end up not understanding what the teacher is explaining"); 'strict teacher / us in silence but inattentive' ("[...] we may be silent, but we may not always be attentive") and a 'theoretical teacher' ("[...] we didn't understand, the teacher was also very theoretical").

Likewise, in the 'teacher dimension, lack of instructional clarity' came up as a learning blocker, especially with regards to 'not verifying and monitoring students' pace': teacher 'focused only on the subject, not concerned with the students' ("[...] is concerned with explaining the content, but not concerned with the students"); 'teacher does not answer questions' ("[...] doesn't ask us questions when we have doubts and continues to talk about

the subject, then we never understand anything"); 'gives the content very fast and teacher is very fast' ("[...] she is too fast and that affects us"). These aspects mentioned by students are in line with the study by et al. (2013), which states that, in students' perception, when the teacher does not take into account individual teaching needs, it is an obstacle to learning. In addition, it reinforces the idea that the paradigm focused on content and not on the student contributes negatively to students' learning.

The 'student dimension' also appeared in this study as a learning blocker. The low emotional involvement of students was highlighted: 'dislike for the subject' ("[...] when we don't like the subject"), 'dislike for the teacher' ("[...] but I don't like the teacher, so I don't like the subject"); 'not wanting to know about the subject' ("[...] like the fact that we don't want to know about the issue") in the sense that they do not recognise the practical utility of the subject. Students' negative mood (not in the mood) also appeared in the data. Once again, these data highlight the relevance of emotions in the school context, either as learning facilitators or blockers.

Self-regulated learning and study strategies have also emerged that, in the perception of students, do not help them to learn: 'study only to memorise' ("[...] it's one of those subjects I can only study for just before the test so I can memorise everything"); 'study at the last minute' ("[...] we study a lot at the last minute. There is no time to reinforce"); and 'distraction' during class. These strategies reported by the students only reveal the acquisition/accumulation of knowledge and not the integration/building of knowledge, also denoting a lack of activity planning. They are strategies that relate to a superficial approach to learning (Rosário, Almeida, Núñez, & Gónzalez-Pienda, 2004).

'Family concerns' create obstacles to student learning ("[...] our parents, the way they behave with their children […] I think that will end up […] harming the student"), given that this is related to the emotional dimension in the classroom context, affecting the student's ability to engage. 'Noise in class' emerged as negative for learning, especially when students talk about topics that are not related to the class subject. This is connected to low behavioural involvement during class.

(iii) Integration of data among research questions

By cross-referencing the categories that answer both research questions, some dimensions were mirrored: 'like the subject vs. dislike the subject; student in good mood vs. student not in good mood; teacher talks about things that are not in the books and teacher interacts and asks questions vs. teacher who lectures on the subject'. These elements reflect: (i) students' appreciation for the emotional and rational dimension, both in a positive and negative way, in their learning context; (ii) the crucial importance attributed by students to their active role in the classroom context, achieved by teachers mainly through teacher-student and student-student interaction.

On the other hand, activities such as 'group work' and 'study visits' mentioned by students came up as facilitators in their learning, and by others as obstacles. By combining this aspect to the vast diversity of data that the FG brought forth, reinforces the fact that learning holds different meanings to each student, different learning concepts that influence their perceptions about learning and the role of students in it.

The 'teacher dimension' was the most prominent in both study questions, which further strengthens what several studies have been defending: the teacher makes a difference in the learning process. The students' discourse underline just how much they want, desire and, value active learning experiences in the classroom, but it is the teacher who creates the real opportunities for the student to engage in learning activities. Thus, the teacher dictates the rules of the game, encouraging the student to take action and interact in class. It seems to us that teachers' concept of teaching and learning are equally influential in the learning process, contributing to a difference in teaching methods between the 'teacher who interacts' and the 'teacher who does not interact/lectures on the subject'.

Moreover, the self-regulating strategies mentioned by students as facilitators are related to the class (organised notebooks, notes, participation in class, asking questions), once again pointing to the value of the active role and engagement of students as positive in learning. Where as the self-regulating strategies seen as learning blockers were 'memorise the content' and 'study the day before'. Students' perception in relation to their learning may be linked to these data, because they affect the way they experience learning situations. Thus, a student with a transformative notion of learning will most likely adopt an in-depth approach to learning, where as a student with a reproductive notion will primarily be concerned with a superficial approach to the content (Marton & Säljö, 1976).

More aspects emerged, both in the teacher dimension and student dimension, in both questions, related to students' cognitive and emotional involvement; there were fewer references to behavioural involvement. This may be associated to the schools where these data were collected, because it is known that in private schools behavioural involvement (e.g., skipping class, misfit behaviour) has not been a prevalent problem. A study by Alves, Palmeirão, Trigo, and Cabral (2014) with students from educational territories with a priority in intervention (TEIP) regarding their perception about learning, showed more clearly the dimension of behavioural involvement as a learning blocker.

## Final considerations

This study allowed us to understand students' perception about what facilitates and what hinders learning. The search to understanding the elements that make learning difficult constitutes a driving force of this study, given the limited research in the field.

The teacher's fundamental role in the learning process is emphasised, contributing to the creation of opportunities for student involvement in class and encouraging the student's active role in building his/her learning. The learning activities and teaching methods should precisely enhance the student's action, to the detriment of his/her passivity. Students highlighted teacher-student and student-student interaction as crucial to their learning. In this sense, student participation in day-to-day decision-making regarding the planning and content of educational activities, the means to be used and the way of presenting content, cannot be seen as a "[...] mere pedagogical strategy or a fad" (Sarmento et al., 2007, p. 184), but it should form a true collaborative work based on the perspective of the student/citizen as a political actor in the school micro-system.

This study also demonstrated the importance of the emotional and relational dimension in learning, with several discourses from students revealing how positive or

negative emotions can influence their availability to learn, as well as how the relationship of support between teacher and student contributes positively to learning processes. These data reinforce the idea that learning not only involves cognitive aspects, but emotional, developmental and motivational elements as well (Durlak et al., 2011).

The data also revealed the interaction that exists between the emotional dimension and teaching, with students referring that when a teacher 'is angry', he/she also 'explains worse', showing the importance of the emotional dimension not only to the student's learning process, but also to the teacher's teaching process, and consequently teaching-learning in an interactive way.

Thus, promoting student learning does not consist of *just teach*, instead it consists of a demanding task that involves sophisticated knowledge on the part of the teacher. This study shows how essential it is for teachers to spend time actively interacting with their students, getting to know the students and establishing supportive relationships, stimulating students to also actively engage in learning. The study also shows that change to teaching environments can only happen when all educational agents – in particular, teachers– conceive the student as a "[...] subject of rights, ontogenically present and socially competent, main agent in his/her educational process, with right to a voice and participation in educational choices and policies" (Sarmento et al., 2007, p. 184).

The data brought forth by this research contribute to the practice of school psychologists, aimed at promoting the improvement of student learning in these contexts. It is suggested that the implementation of actions promoted by psychologists together with teachers is pertinent, it contributes to the reflection on the learning concepts students and teachers have. In this way, increasing the application of teaching practices congruent with the constructive perspective of learning, valued by students, namely by assigning an active/action role to the student. Another important aspect is the need to demonstrate to teachers the relevance of meeting the emotional dimension in the classroom context, and the building of teacher-student support.

Also, by considering that when students are able to control the processes that regulate their learning, they acquire more significant knowledge and are better able to achieve higher academic results, it is essential to understand the phenomenon of learning regulation in its connection with metacognitive processes. Metacognition, ability to think about thinking, is central in this process given that it involves awareness of the cognitive process and ability to control it. Both cognitive processing and metacognitive regulation lead to important results in the learning process (Malafaia, Menezes, & Neves, 2018). Thus, interventions with students are also suggested, so that they can develop a metacognitive reflection in relation to their learning, understanding how they get involved in the learning processes, what self-regulating strategies they can employ to enhance their independent learning, stimulating the progress of learning concepts to more complex levels and contributing to higher quality learning.

Lastly, it is proposed that future research aim to compare students' perceptions on learning through teaching cycles. This knowledge may be useful to understand perceptions at different developmental and school stages, identifying transversal dimensions to all stages and specific dimensions. Studies may also aim to relate students' perceptions to

teachers' perceptions, understanding matches and mismatches, congruities and incongruities.

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