Project Number: 2019-1-FR01-KA201-063149

NATIONAL REPORT – FRANCE

How and to What Extent French Educational Institutions are Addressing Environmental and Digital issues at Secondary School Level

Co-funded by the Erasmus+ Programme of the European Union

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1. National trends

1.1: Liminaires

In France, on the National Education website, environmental and digital issues seem to occupy an important place at every stage of a pupil's education (from primary to final year) and are included in teaching programmes.

Since the beginning of the 2019 school year, measures have been implemented in the environmental field (the election of one eco-delegate per class, in middle and high schools), education for sustainable development is included in the curricula and in high schools.

The new programmes that come into force at the start of the 2019 school year include a significant focus on climate and environmental issues.

On the digital level, the school system claims to contribute to the project of an information and communication society for all and wants to train students to master digital tools and to live in a society whose environment is constantly changing.

In the new school and college curricula, digital knowledge and skills are reinforced and are present in the syllabuses: the national education service has set up a responsible Internet portal to support teachers and pupils in the new uses of the Internet.

1.2: Method

We consulted:

- On the site of the Ministry of National Education: the common base of knowledge, skills and culture which brings together all the knowledge, skills, values and attitudes necessary to succeed in school, in life as an individual and as a future citizen. It concerns pupils aged 6 to 16. ***Decree n°2015-372 of 31 March 2015***

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- On the National Education website: the teaching programmes for middle schools and the special BO of the general and technological high school teaching programmes (***start of the 2019 academic year***)

- On the Eduscol site: media and information literacy (EMI) in the curriculum of the collège which came into force at the start of the 2016 school year; certification and assessment of digital skills for pupils in cycle 4 and terminal cycle (***order of 30 August 2019***).

- Education for sustainable development, implemented since 1977 and entering a new phase since 2015. It is anchored in all disciplines, throughout the school year, offers partnerships with other State services and local authorities, and enables schools to be part of an "E3D" approach (Etablissement en Démarche de Développement Durable).

1.3: The environmental theme in the different lessons

- **At the college level:** Since the beginning of the 2019 school year, programs have been redesigned to give more credit to the ecological transition. Eco-delegates are elected in each class. Each class must install equipment that contributes to the protection of biodiversity. Sustainable development (a term replaced by global change) is the guiding thread throughout the geography curriculum from 5th to 3rd grade. But it also appears in the civic education programme in 6ème.
In the other subjects, the curricula are less targeted but teachers can set up projects on transversal approaches to obtain the E3D label.

- **At the high school level:** Eco-delegates are elected in each class. Global change is the guiding thread of the geography curriculum for the second year of secondary school. In the SVT première class (speciality teaching 4 h), contemporary issues of the planet are taught in the physical and chemical sciences, the energy challenge. A new stream has been created, STI2D, with a targeted programme in physics and chemistry.
The teachers have a partial knowledge of the official volume and deplore the lack of precision in the curricula and the lack of involvement of the hierarchy. Eco-delegates are elected at the collège and lycée levels but initiatives depend very much on the management.
In general, teachers attach importance to the subject but do not feel sufficiently trained and find the number of hours devoted to it insufficient.

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Table 1: Presence of the Anthropocene theme in the reference frames.

School level	Subjects	Answers (*the most chosen answer in bold*)
Lower of secondary level	Literary Subjects	☐ **Non-existent or almost non-existent** ☐ Relatively little addressed ☐ Significantly
	Humanities	☐ Non-existent or almost non-existent ☐ Relatively little addressed ☐ **Significantly**
	Sciences	☐ Non-existent or almost non-existent ☐ **Relatively little addressed** ☐ Significantly
	Technological / Professional Education	☐ **Non-existent or almost non-existent** ☐ Relatively little addressed ☐ Significantly
General upper secondary level	Literary Subjects (national and foreign languages)	☐ Non-existent or almost non-existent ☐ **Relatively little addressed** ☐ Significantly
	Humanities (History / Geography, Social scienc-es, eco, philosophy..)	☐ Non-existent or almost non-existent ☐ Relatively little addressed ☐ **Significantly**
	Sciences (Math, Physics, Bilogyo)	☐ Non-existent or almost non-existent ☐ Relatively little addressed ☐ **Significantly**
	Technological / Professional Education	☐ Non-existent or almost non-existent ☐ Relatively little addressed ☐ **Significantly**

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1.4: The digital theme in the various courses

- **In secondary school:** From the 6th to the 3rd year, the BO sets the digital skills to be acquired by students during their schooling and in all subjects. These skills will be assessed online on the PIX platform which delivers a certification replacing the B2I.The platform will be generalized to all schools at the end of this year. In the texts, teachers are recommended to encourage students to adopt a responsible attitude. In civic and moral education, students are made aware of the issues and dangers relating to the use of social networks.
- **In High school:** In the general and technological second class, in the new programmes, the Digital Sciences and Technology programme is very much focused on computer technologies and quite little on societal issues. Even if in the Social Networks section the issues of cyber-violence and the "Small World" are mentioned, there is no explicit reference to the stakes of data collection as a source of progress but also as a source of risks in terms of commercial manipulation and other risks for individual liberties.

Beyond the Second class, there are hardly any specific instructions concerning these subjects. It is therefore the sensitivity of teachers that may or may not lead them to address these issues in their teaching. Moral and Civic Teaching and Philosophy are finally the common teachings that are most conducive to addressing the risks and opportunities brought about by the digital acceleration, especially on the issue of freedom. Some specialities such as Economic and Social Sciences or Digital and Computer Sciences also lend themselves to this but are only attended by a fraction of the students.

The expressions "fake news" and "big datas" are nowhere to be found in the instructions in either middle school or high school.

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Table 2: Presence of the Homodata theme in the repositories

	Subjects	Answers (*the most chosen answer in bold*)
Lower of secondary level	Literary Subjects	☐ Non-existent or almost non-existent ☐ **Relatively little addressed** ☐ Significantly
	Humanities	☐ Non-existent or almost non-existent ☐ Relatively little addressed ☐ **Significantly**
	Sciences	☐ Non-existent or almost non-existent ☐ **Relatively little addressed** ☐ Significantly
	Technological / Professional Education	☐ Non-existent or almost non-existent ☐ **Relatively little addressed** ☐ Significantly
General upper secondary level	Literary Subjects (national and foreign languages)	☐ Non-existent or almost non-existent ☐ **Relatively little addressed** ☐ Significantly
	Humanities (History / Geography, Social sciences, eco, philosophy..)	☐ Non-existent or almost non-existent ☐ Relatively little addressed ☐ **Significantly**
	Sciences (Math, Physics, Bilogyo)	☐ Non-existent or almost non-existent ☐ Relatively little addressed ☐ **Significantly**
	Technological / Professional Education	☐ Non-existent or almost non-existent ☐ Relatively little addressed ☐ **Significantly**

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2. The point of view of Teachers

2.1: Quantitative data about teachers involvement

We received 46 questionnaire responses between February 2 and March 13, 2020. The teachers came from a variety of schools, ranging from primary to senior classes. Some schools offer post-baccalaureate classes. The answers are distributed as follows: 13 teachers in collège (lower secondary level) and 33 teachers in lycée (upper secondary level). Among secondary school teachers: 7 teachers of literary subjects, 18 teachers of science subjects, 5 teachers of technological subjects and 3 teachers of vocational subjects.

Figure 1: Teaching levels of teachers

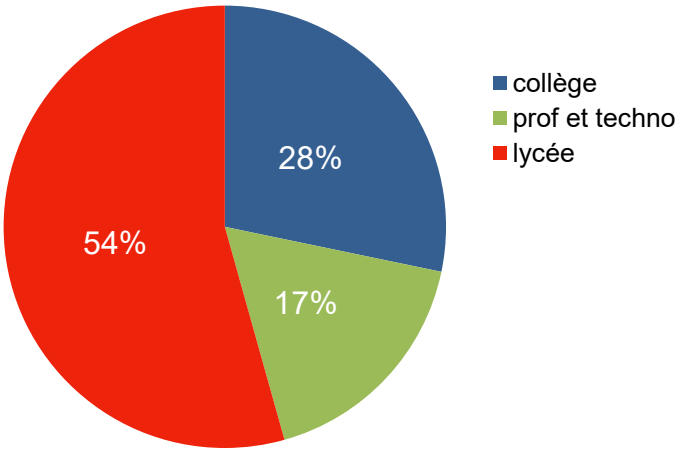

Figure 2: Areas of instruction at the college

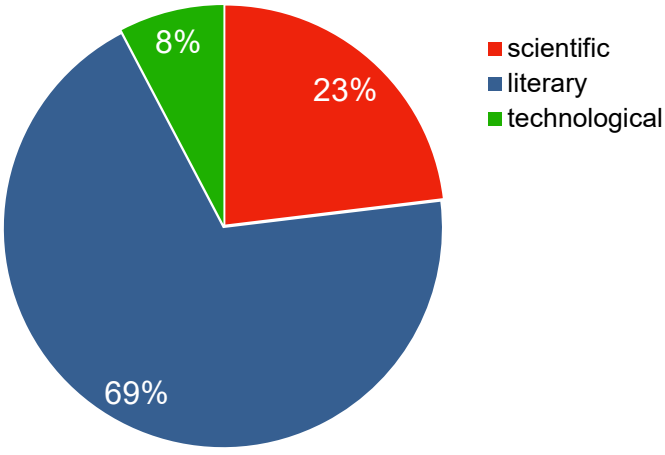

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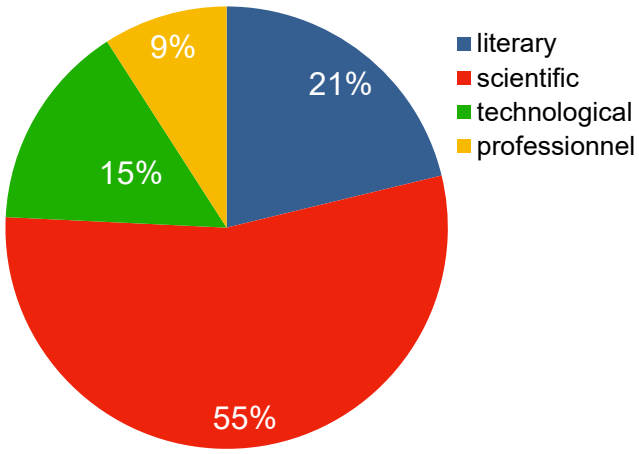
Figure 3: Areas of instruction in high school



2.2: Feedbacks on Risks and opportunities related to climate and environmental acceleration

Section 1

Feedback from teachers about the instructions of the national administration

	Secondary school First level (Middle School)	Secondary second level (High School)
Excessive	0%	0%
Appropriate	30,76%	27.7%
Insufficient	46.15%	60.40%
Not at all	23,09%	11.90%

Feedback from teachers about the instructions of the local administration

	Secondary school First level (Middle School)	Secondary second level (High School)
Excessive	0%	0%
Appropriate	23,07%	30.30%
Insufficient	30,76%	57,57%
Not at all	46,17.%	12.13%

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With regard to raising awareness of environmental issues, 68.24% of teachers in secondary schools and 72.30% of teachers consider that official national instructions are non-existent or insufficient.

This feeling is found at the level of the local hierarchy, since 76.83% of middle school teachers and 69.70% of high school teachers consider that this topic is either non-existent or insufficient in the instructions given by their local supervisors.

At the level of the national administration, there are few comments on the instructions: in lower secondary schools, some teachers emphasize the inclusion of environmental issues in the official curriculum for the 5th year of secondary school and denounce real but not very specific concerns; in upper secondary schools, there are a few more comments: some teachers regret the little information provided and the lack of space reserved for these issues in the various subjects.

At the school level: the few comments were aimed at a few isolated actions, a real willingness but without application. In some schools, for example, the election of eco-delegates did take place in September 2019 in all classes, but the meetings did not lead to greater awareness and concrete actions.

Section 2

About the annual number of hours devoted to the topics, indicate: (based on the responses at all school levels in all disciplines)

	Secondary school First level (Middle School)	Secondary second level (High School)
A. The average number of hours contained in the official curriculum	4,83h	7,44h
B. The actual average number of hours in classroom work	6,66h	12,90h
Ratio B/A	1.38	1.73
The three most involved subjects	None	None
The three less involved subjects	None	None
The 3 most cited comments	-not present in the program -the hours dedicated to the subject is not enough - they already have project for their classe and they don't have time to include other project in their program	- not present in the program - the hours dedicated to the subject is not enough - these subjects are important and must be in the program

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In general, teachers report spending more time on environmental topics than official instructions suggest. Especially in high school where they consider spending 12.9 hours compared to 7.44 hours in the curriculum.

It should be noted that if we consider that the overall average annual volume for a teacher in a subject is between 100 and 120 hours. That is nearly 10% of the time that would be devoted to this subject. With important variations according to the fields of teaching. Less time is spent on literature, mathematics than on Life and Earth Sciences or Geography.

At the middle school level, teachers explain that the subject is not present in the curriculum, that the number of hours allocated to it is not sufficient, or that teachers already have a busy schedule and unfortunately do not have the time to include it.

In high school, teachers say that they do not have time for this subject, that the subject is not present in the curriculum even though they think the subject is important and should be included.

The most relevant comments:

- the official volumes are insufficient
- the work is carried out across subjects
- the subject should be better distributed between levels

Section 3

Feedback from teachers about the number of hours that are scheduled in the official curriculum

	Secondary school First level (Middle School)	Secondary second level (High School)
Excessive	0%	6.06%
Appropriate	23.07%	27.28%
Insufficient	76.93%	66.66%

Three-quarters of middle school teachers and two-thirds of high school teachers consider that the time allotted is not sufficient. In this sample, 6% of high school teachers consider that too much time is spent on it.

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Estimation by the teachers of their own level of training

	Secondary school First level (Middle School)	Secondary second level (High School)
Good	23.08%	30.03%
A little weak	46.15%	57.57%
Insufficient	30.77%	12.4%

The teachers stress the fact that environmental issues are often addressed in a project approach and in an interdisciplinary or transdisciplinary manner.

Group work, debates, visits outside the school, projects built by students in the school, and exhibitions organized at the CDI complete the openness to environmental issues.

Topics the teachers would like to receive additional training? (%)

	Secondary school First level (Middle School)	Secondary second level (High School)
Scientific field(pareil)	30.77%	54.55%
Societal issues	46.16%	36.36%
Teaching methods	61.54%	57.58%
Nombre total de répondants	13	33

76.82% of middle school teachers and 69.97% of high school teachers consider that their level of training in teaching environmental issues is either low or insufficient.

Requests for training concern three fields, namely scientific contents, societal issues and pedagogical and didactic methods.

Most teachers would like additional training in several areas. A reading of the results shows a strong demand for teaching methods (61.54% in middle schools and 57.58% in high schools), which suggests that teachers, even if they recognize the existence of environmental content in the curricula, have difficulty in adapting them in their practices.

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It should be noted that middle school teachers (46.16%) are more in demand for training on societal issues related to environmental acceleration than their high school counterparts (36.36%).
The rates are reversed on the scientific level, which is a greater concern among high school teachers (54.55%) than middle school teachers (30.77%). This seems quite logical insofar as, generally speaking, the level requirements for the content taught are higher in lycées than in collèges.

In the comments, all the teachers stress the fact that this is an important issue that deserves to be addressed in teaching. Some teachers would like other subjects to deal with the subject due to lack of time.

2.3: Feedbacks on Risks and opportunities related to big data

Section 1

Feedback from teachers about the instructions of the national administration

	Secondary school First level (Middle School)	Secondary second level (High School)
Excessive	0%	0%
Appropriate	38.46%	21.21%
Insufficient	7.69%	54.55%
Not at all	53.85%	24.24%

Feedback from teachers about the instructions of the local administration

	Secondary school First level (Middle School)	Secondary second level (High School)
Excessive	0%	0%
Appropriate	46.20%	24.24%
Insufficient	23.07%	45.46%
Not at all	30.76%	30.30%

At the middle school level, the question of big datas does not seem to be a priority in the official instructions: 61.54% of teachers consider that this question does not appear or is insufficiently included in the

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instructions. This is even more pronounced at the high school, where the figure rises to 78.79%, i.e. nearly 8/10.

It should be noted that 53.85% of middle school teachers consider that there are absolutely no official national instructions on this subject, compared to 24.24% of high school teachers, who consider that there is a lack of official instructions on this subject.

As regards local supervision, the same trends are slightly less marked than at the national level. 53.82% of middle school teachers and 75.76% of high school teachers consider that the instructions issued by their local hierarchy are insufficient or non-existent.

It should be noted that there is a slightly more mixed view of local incentives, since 46.20% of them are perceived as appropriate, whereas only 24.24% of high school teachers think so.

Section 2

About the annual number of hours devoted to the topics, indicate: (based on the responses at all school levels in all disciplines)

	Secondary school First level (Middle School)	Secondary second level (High School)
A. The average number of hours contained in the official curriculum	unknown	1.14h
B. The actual average number of hours in classroom work	1.33h	2.36h
Ratio B/A	unknown	2.07
The three most involved subjects	None	- Discernment must be brought to bear in the use of these tools.
The three less involved subjects	None	None
The 3 most cited comments	- How to use digital tools - The lack of hours for the subject on digital in the teacher program - How to introduce the subject in the program	- How to use digital tools - The lack of hours for the subject on digital - How to introduce the subject in the program

At the college level, teachers are not aware of the number of hours recommended in the official curricula on the theme of digital acceleration. This indicates a lack of legibility or knowledge of the official curricula. Since the literature review showed that this topic was well provided for in the instructions.

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In high school, teachers give more time to the issue of digital acceleration than the official curricula require. This remains, however, very modest 2.07 hours for a total year for a teacher for a class between 100 and 120 hours.

Teachers' comments on the number of hours are not significant because they are few in number, which undoubtedly indicates a lack of legibility of the official curricula or an absence of pedagogical content on the theme.

Section 3

Feedback from teachers about the number of hours that are scheduled in the official curriculum

	Secondary school First level (Middle School)	Secondary second level (High School)
Excessive	0%	0%
Appropriate	38.47%	21.21%
Insufficient	61.53%	78.79%

It is clear from the table above that most teachers feel that the time allocated to the issue of digital acceleration is clearly insufficient. (61.53% of middle school teachers and 78.79% of high school teachers)

Estimation by the teachers of their own level of training

	Secondary school First level (Middle School)	Secondary second level (High School)
Good	30.77%	12.12%
A little weak	15.38%	48.48%
Insufficient	53.85%	39.40%

Topics the teachers would like to receive additional training? (%)

	Secondary school First level (Middle School)	Secondary second level (High School)
Scientific field	46.15%	60.60%
Societal issues	61.54%	51.52%
Teaching methods	53.85%	48.48%
Nombre total de répondants	13	33

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The two tables above clearly show that teachers consider their training in this area to be insufficient. In middle schools 69.23% consider it to be weak or insufficient and in high schools even more so with a figure of 87.88%. They would like additional training in the three fields: scientific, societal and pedagogical. The societal field is the most common among middle school teachers, who request it (53.85%), and scientific content in high schools (60.60%).

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3. The point of view of Students

3.1: Quantitative data about students involvement

We received 121 responses between February 2 and March 13, 2020.

The age distribution is as follows,

Age (ans)	10-11	12	13	14	14-15	16	17-18	**Total**
N	4	33	51	15	5	9	4	121
%	3,4 %	27,2 %	42,1 %	12,4 %	4 %	7,5 %	3,4 %	100 %

3.2: Students' sources of information on the Anthropocene

	Secondary school First level (Middle School)	Secondary school second level (High school)
Sources of information		
- What is the first source of information ?	TV (33.5%)	In extrascolary (29.41)
- What is the average ranking held by the courses on a scale of 1 to 10 ?	4.27	4.29
- What is the average ranking held by the extra-curricular activities at School ?	6.10	6

Television is the source of information most often ranked as the primary source of information among students, with a higher score in middle school than in high school.

High school students consider that they find the most information on this subject in activities outside the school.

It should be noted that in both middle school and high school, courses are ranked on average 4th as a source of information on this issue.

The extra-curricular activities at the school are only ranked 6th as a source of information on average, although they could be a favourable ground for this type of awareness raising.

There is a strong dispersion of rankings in the field, with some places where these issues are addressed in a very significant way and others not at all.

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This makes the situation rather random for young people depending on where they are at school.

Perception of their level of information (%)	Secondary school First level (Middle School)	Secondary school second level (High school)
- good, very good	81.73%	58.83%
- weak, very weak	18.27%	41.17%

Perception of their level of understanding (%)	Secondary school First level (Middle School)	Secondary school second level (High school)
- good, very good	83.65%	76.47%
- weak, very weak	16.35%	23.53%

Student opinion about the time the school dedicates the topics (%)	Secondary school First level (Middle School)	Secondary school second level (High school)
- too much	7.18%	0%
- enough	48.59%	29.42%
- not enough	44.23%	70.58%

Overall, students consider their level of information to be quite good to very good.

While 8 out of 10 middle school students consider their information to be good, only 6 out of 10 high school students consider themselves to be well informed. This also means that 4 out of 10 young people in secondary school consider their level of information on environmental issues to be low or very low.

80% of both middle and high school students consider that they have a good or very good level of understanding of these subjects.

However, while the majority of middle school students think that the school talks about it enough or even too much, 7 out of 10 high school students think that the school does not talk about it enough.

Students' opinions about the way and methods with which the school addresses them (%)	Secondary school First level (Middle School)	Secondary school second level (High school)
- suitable	30.76%	5.88%
- to be improved	62.5%	76.47%
- not suitable at all	6.74%	17.65%

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Both middle school and high school students think that the methods used by the school to raise these subjects could be improved. Nearly 18% of the students even think that these methods are not adapted at all.

Among the students' comments about the school are the following:

- There are delegates chosen from each class but there are no actions
- the school should allow at least one hour to raise awareness
- it's a subject that interests me and we don't talk about it at school.
- we only talk about this subject in history-geography

5 topics that the students would like to be addressed more deeply	Secondary school First level (Middle School)	Secondary school second level (High school)
- Topic 1 (the most frequently)	The pollution and the solutions to fight it	The waste separation
- Topic 2	The impact of the climatical warming on the animals like monkies, turtles	The climatical warning
- Topic 3	The climatical warming	The disappearing animals
- Topic 4	The deforestation	The ice melting
- Topic 5	The coronavirus	The deforestation

Regarding the topics the students would like to see developed at school:

- the disappearance of animal species, deforestation and biodiversity
- over-consumption, pollution, global degradation and waste recycling
- global warming, melting glaciers and the carbon transition.
- sustainable development

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3.3: Feedbacks on Risks and opportunities related to big data

	Secondary school First level (Middle School)	Secondary school second level (High school)
Sources of information		
- What is the first source of information ?	TV (37.5%)	TV (41.18%)
- What is the average ranking held by the courses on a scale of 1 to 10 ?	5.21	3.94
- What is the average ranking held by the extra-curricular activities at School ?	6.25	5.31

Perception of their level of information (%)	Secondary school First level (Middle School)	Secondary school second level (High school)
- good, very good	41.35%	52.95%
- weak, very weak	58.65%	47.05%

The most frequently cited source of information on big datas is television.

The school is on average ranked 5th in middle school and 4th in high school. This is a lower score than for environmental issues.

Extra-curricular activities at the school are also ranked quite low on average. But with less dispersion than for the environment, they are almost always placed in 4 and 10.

The perception of their level of information on digital acceleration and big data is fairly divided between a small half who consider themselves well or very well informed and a larger half who feel under-informed. 6 out of 10 middle school students even feel poorly or very poorly informed.

Perception of their level of understanding (%)	Secondary school First level (Middle School)	Secondary school second level (High school)
- good, very good	53.85%	64.70%
- weak, very weak	46.15%	35.30%

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Student opinion about the time the school dedicates the topics (%)	Secondary school First level (Middle School)	Secondary school second level (High school)
- too much	6.73%	0%
- enough	24.03%	29.42%
- not enough	69.24%	70.58%

Students' opinions about the way and methods with which the school addresses them (%)	Secondary school First level (Middle School)	Secondary school second level (High school)
- suitable	21.15%	23.52%
- to be improved	45.20%	35.30%
- not suitable at all	33.65%	41.18%

70% of the students in both middle and high school consider that the school does not devote enough time to these subjects.

Beyond the question of the time devoted by the school, the methods used are considered by 7 out of 10 students as inadequate or to be improved.

At the same time, middle school students and even more so high school students say they have a good or even very good understanding of these subjects. This statement seems quite contradictory to the feeling of being under-informed and the dissatisfaction with the school's approach to these issues, both quantitatively and qualitatively...

It is not impossible that the students interpreted the good understanding of digital acceleration through their ability to use digital tools. Good use of the tools does not exclude a lack of mastery of the modalities and stakes of collecting information in what are known as big datas.

Among the students' comments are the following :

- we almost never talk about it, so I don't know
- the problem should be investigated further
- I'd like the subject to be covered in class

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5 topics that the students would like to be addressed more deeply	Secondary school First level (Middle School)	Secondary school second level (High school)
- Topic 1 (the most frequent)	Social network	Collection of the personal datas
- Topic 2	Private life	Cyberbulling
- Topic 3	Security on internet	Private life
- Topic 4	How to use the big datas	What they do with the big datas and how to protect themselves
- Topic 5	The consequences of the big datas on the environment	The dangers of the use of big datas

Topics that middle school students would like to see covered in the classroom include the following :

- privacy: data protection, uses made of data, surveillance of individuals through social networks, the Internet, etc
- hacking information leaks internet security
- addiction to social networks
- cyber-harassment

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4. Conclusions

The purpose of this study was to observe the place of environmental and numerical accelerations in official programmes and their implementation in daily practice.

It aimed to analyse whether the school was meeting the expectations and needs of students in order to prepare them for the context that awaits them by making them understand the issues at stake, particularly in terms of individual freedom.

It was also a question of understanding the needs of teachers and supervisors in order to improve the approach to these issues in the school field.

The first part of the study focused on official instructions. It seems that at this level the ecological dimension is now clearly integrated into a number of progressions. With however, a certain imbalance according to the subjects and the levels. It appears mainly in the Earth Sciences and Life and Geography History programs. The approach is more systematic in middle school than in high school where the choice of series means that all these disciplines are not chosen by the students. Overall, the concept of Sustainable Development intended to be addressed at one time or another during schooling for any French student.

The issue of digital acceleration and big data does not have the same level of presence in official instructions. We are talking about it, certainly digital media but often more in terms of the technical capacity to use it without going very far in terms of issues in terms of freedom and life in society.

The second part aimed to understand how teachers looked at these official instructions and how they took up these questions in their practices. The objective was also to bring out their training needs.

A sample of 46 high school and college teachers was questioned. Their look at the official instructions both in terms of environment and digital acceleration, goes in the direction of an insufficient place in terms of content as of hourly volumes. They also regret a lack of details and a lack of guidance.

They indicate that they devote on average more time to these subjects than what is planned in the programs without being able to do so as much as they would like in view of the other subjects they have to address.

They consider themselves insufficiently trained to approach these two subjects with their students.

For environmental questions, their expectations relate mainly to the methods of teaching these subjects. Their expectations in terms of scientific content or approach to social issues seem to them to be less of a priority.

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On the other hand, their training expectations are much stronger on the understanding of what digital acceleration is all about and even more what it is about to entail in societal matters. Even if half of them express expectations in the field of teaching methods.

The third part of the study consisted of a survey of a sample of 121 students. The objective was to analyse the way in which they perceived the School's contributions to their information and understanding of these two phenomena and the issues at stake for their future life.
The aim was to verify that their perception of their expectations was convergent with their teachers' reading of them.

The students only gave the school as a source of information on these two subjects in the middle of the ranking. Far behind television or extra-curricular activities.

They consider themselves rather well informed about climate issues, a little less well informed about digital acceleration and collecting big datas.
However, they would like the school to devote more time to these subjects, they also and above all expect that the methods used by their teachers to address these subjects will be improved.
On the environmental side, they would like to see more and better coverage of issues related to biodiversity, climate change, over-consumption and depletion of natural resources.

In terms of digital acceleration, their expectations focus on the future and use of their personal data, cyber crime and addictions, especially to social networks.

When we compare the feedback from the three axes of this study, from official instructions to the expectations of students and teachers, we observe a certain convergence. This convergence tends to confirm the hypotheses at the origin of the project and will enable us to better orient the awareness-training module for teachers as well as the provision of a certain number of resources and tools for working with the class.

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