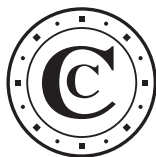Cour des comptes

THE DIGITAL PUBLIC SERVICE FOR EDUCATION

A concept lacking strategy, unaccomplished deployment

Public thematic report

Summary

July 2019

Summary of the Thematic Public Report of the Cour des comptes

Summary

Introduction

Bringing digital technology into schools has become a fully-fledged component of education policy, enshrined in the Act on Reform of the Republic's Schools of 8 July 2013. To accomplish this, a new public service has been created, the "educational digital public service", which is identified and integrated within the public education service in a unique and original manner.

The challenge for the school system is to train the citizens and professionals of tomorrow on digital technology, without which they would not be able to practice most occupations, or even integrate into society. It also involves using digital techniques as a powerful lever for pedagogic change, which can make teaching methods evolve, improve learning and allow the continuous assessment of results, and ultimately foster student success.

Five years after the Act of 2013, the survey carried out by the Cour des comptes aims to assess the way in which this public service has been deployed within the school system, and to examine if it has, at the very least, created the conditions for its profound change, if not transformation.

It is not, however, intended to estimate the specific impact of digital techniques on students' results for the reasons set out in the report, and which account for an important part of the criticisms expressed and thus the challenges that still lie ahead: pedagogic change has not been central to this new policy's implementation, and the evaluation of teachers' practices and of the effects on students' results is limited and belated, in a context of significant disparity in the deployment of digital resources and uses.
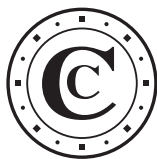
A significant financial effort since the 2013 Act was passed

Public investments in educational digital technology increased considerably under the combined action of three local authority levels, for €2 billion from 2013 to 2017, and for €300 million from the State over the same period, although its initial commitment had been announced as €1 billion.

Public expenditure on educational digital technology between 2013 and 2017 (in € million)
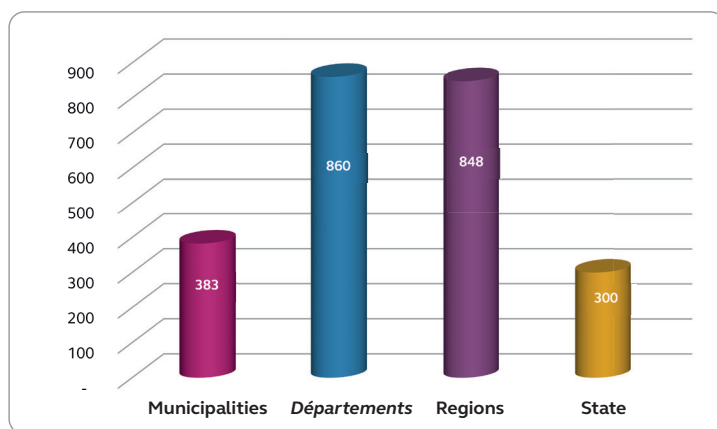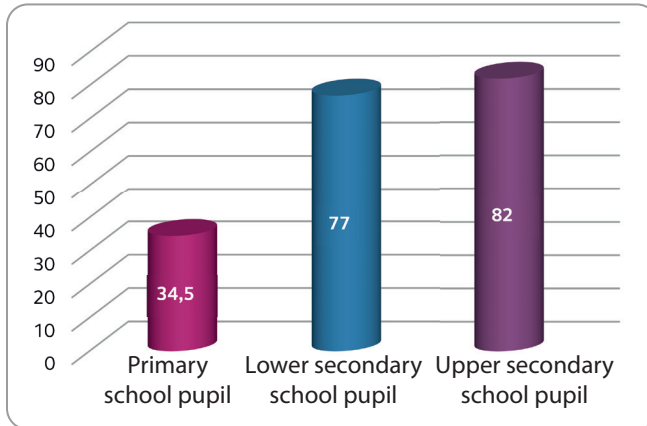

Source: Cour des comptes based on data of the Ministry of National Education and a survey on local authorities

This effort was primarily made by the départements, whose expenditure on digital technology for collèges (lower secondary schools) increased by 53 % in five years, reaching a cumulative amount of €860 million and, to a lesser extent, municipalities and rural schools, for a cumulative amount of €383 million, but with a very high increase in expenditure of 135 %. The regions, which have been involved for longer in the digital equipment of lycées (upper secondary schools), made a considerable cumulative effort of €848 million, representing a more moderate increase of 21 % over this period. The average recorded expenditure by local authorities per student rises with the level of schooling: in 2017 this average was €34.5 for a primary school pupil, €77 for a lower secondary school pupil and €82 for an upper secondary school pupil.

A significant financial effort since the 2013 Act was passed

Digital expenditure by student in 2017 (in euros)

Source: Cour des comptes based on data of the Ministry of National Education and a survey on local authorities

However, this financial effort was devoted to "classical" public operations based on funding individual equipment (for two thirds of State appropriations), in a rationale of calls for projects expressed by a not very selective "first come first served" policy.

The framework established by the legislator is that of a public service specifically identified within the public education service, an atypical solution. To meet the challenges of this ambitious political choice, the State should have developed a strategy based on a rigorous analysis of the existing situation and of the needs to be met, in a rationale of harmonisation of digital equipment, services and offers for pupils in accordance with educational levels. Above all, it should have focused on its own responsibilities, and first and foremost the expected pedagogic change and training of teachers that must accompany it.

Furthermore, the current level of equipment of young people makes the systematic distribution of individual equipment from public funds questionable; the Ministry has in fact interrupted the "tablets plan", although without clearly announcing it.

A significant financial effort since the 2013 Act was passed

Level of equipment in 2018 of young people aged 12 to 17
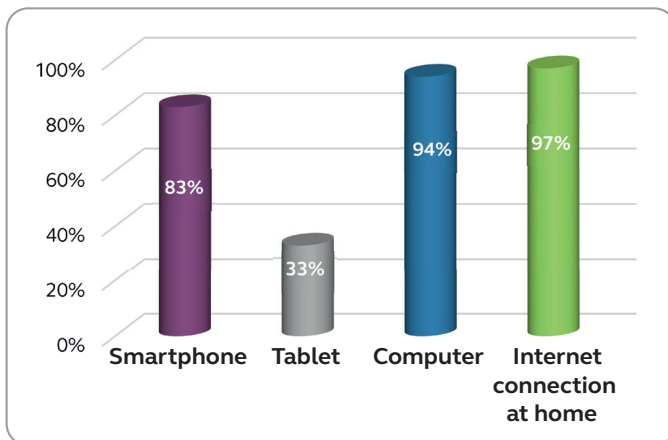
Source: Le baromètre du numérique; CREDOC
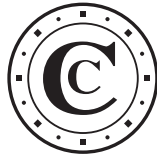
A public service
with no clear objectives

Although there was a significant increase in public investment in educational digital technology during the 2013-2017 period, the conditions under which this "educational digital public service" is being deployed are far from being always ideal: connection of schools and institutions remains inadequate, and in many cases is non-existent; there are still major inequalities between territories with regard to equipment of classes and pupils; teachers and pupils must find their way through the maze of the digital resources offer, which is extensive and often innovative but insufficiently organised for these uses; due to a lack of initial and continuing training and of appropriate support, only a minority of teachers feel comfortable with teaching methods based on digital technology and able to exploit their potential to improve pupils' learning.

The reasons for this situation, six years after the Act was passed, are choices of priorities that are open to criticism. In the framework of the Investments for the Future Programme (PIA 2), the priority was given to funding individual mobile equipment, going against its vocation and very rationale, which had the effect of turning this action into a simple "tablets plan" and allocating these resources to current expenditure. The priority given to the individual equipment of pupils quickly proved to be an outdated and pointlessly costly policy.

It has absorbed too many resources, in particular in local authorities' budgets, and so compromised the carrying out of investments in infrastructures and networks, crucial for the connectivity of institutions and schools, and without which the educational uses of digital technology cannot become established.
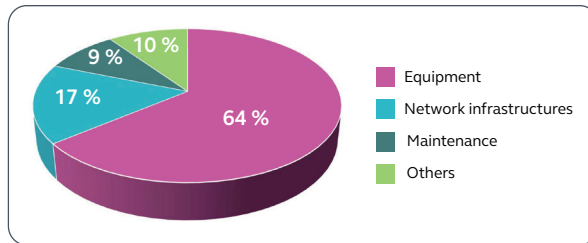
A public service with no clear objectives

Breakdown of municipalities' expenditure on educational digital technology in 2017 (perimeter: public primary schools)
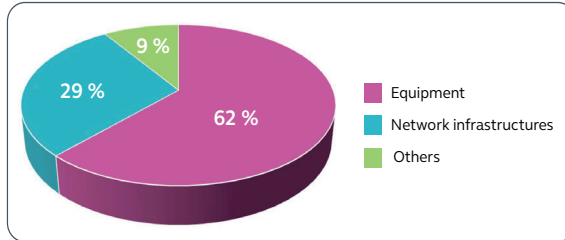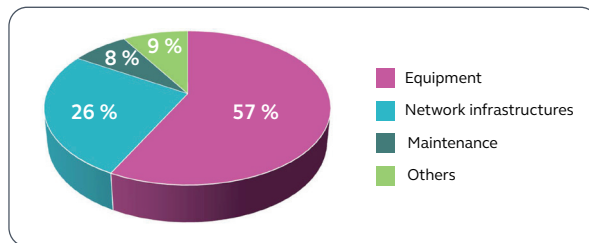

Source: Cour des comptes, based on data from the laboratory TECNE, sample of 284 municipalities

Breakdown of the expenditure of départements on educational digital technology in 2017 (perimeter: public lower secondary schools)

Source: Cour des comptes, based on survey on local authorities

Breakdown of regions' expenditure on educational digital technology in 2017 (perimeter: public upper secondary schools)

Source: Cour des comptes, based on survey on local authorities

Thus the prerequisite of the best possible level of access to networks with sufficient bandwidths for schools and scholastic institutions has been neglected, as has that of reflection on pedagogic innovation, in favour of distributing individual equipment whose use is uncertain.
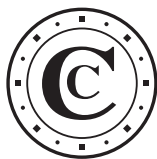
Joint construction between State and local authorities still lacking

As is the case for the whole public education service, the competences of the educational digital public service are divided between the State and local authorities, as set out by the laws of decentralisation.

The establishment of this new public service should thus have been jointly developed by the State, responsible for educational content, school programmes and pedagogy, and local authorities, responsible for buildings, equipment and logistical services.

In many cases, and despite the unquestionable commitment of rectors and of their services in charge of educational digital technology, there has been a fragmentation of public policies rather than co-construction. Local authorities' initiatives continue to focus on the development of digital technology in schools, but with no overall national context to guide them: such and such a large region announces its decision to provide all of its upper secondary school pupils with mobile equipment, while some départements do the same for their lower secondary school pupils, regardless of the devices they already own personally.

Indeed, in the absence of a clear policy framework for educational digital technology provided by the State, local authorities, confronted with the needs of institutions and which are very proactive, take control of this aspect of the public service and adopt the approaches they believe to be most appropriate. However these latter have an impact that goes far beyond matters of equipment and interfere de facto in the educational sphere.

Thus several large regions have announced their intention to implement educational digital resources corresponding to the new programmes in the framework of the upper secondary high school reform, from the start of the school year 2019, rather than renew paper textbooks, without the Ministry, whose services accompany such initiatives, having announced its position on the delicate matter of a generalised switchover to digital textbooks. Even though the academic services are consulted, they do not themselves have a national framework coming from the Ministry.

Joint construction between State and local authorities still lacking

A framework should be established that enables local authorities to make political choices in full knowledge of the facts, with the National Education's objectives in terms of equipment and services having been made clear. The comité des partenaires (partners committee), a national body coordinated by the Direction du numérique pour l'éducation (Directorate of digital technology for education) and which associates all local authority levels, would benefit from taking more initiatives and from being broken down regionally, under the auspices of the rectors of the academic region, to offer local authorities, particularly those at regional and departmental level, a common interface for the regulation of their interventions.
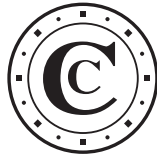
National education responsibilities that the Ministry must prioritise

The design of this policy must be thoroughly reviewed. While governance must be established that enables the State, in consultation with the local authorities, to deploy this public service much more homogeneously across the territory, the Ministry must also recover the subjects that are under its responsibility.

Long-term structuring factors must be dealt with in priority: teacher training; providing educational resources and services under secure conditions of use, particularly with regard to the protection of pupils' and staff's personal data; and ensuring schools have access to appropriate bandwidths, mobilising the PIA 3 if necessary.

The question of the teaching community's assimilation of these new tools and methods is of key importance. Yet six years after the law was enacted, it is still necessary to specify what is expected of teachers in terms of using digital technology in the classroom at the different teaching levels.

Teachers, like the local authorities, need a clear message from the Ministry on the place of digital technology in their pedagogic practices. Of course, almost all of them currently use digital technology to prepare their lessons; however, besides that the conditions are far from always ideal to easily use digital tools on-line during class, many teachers are not sufficiently prepared to integrate them into their teaching methods. They receive a general message in this respect without the professional expectations always being specified, and without being systematically supported in their approach by reference persons or inspectors. They do not always benefit, when necessary, from additional training.

The State, despite having reformed the initial training of teachers, does not seem to have realised the importance of renewing skills to make the digital transition a success, to the extent that the validation of this type of skill has been withdrawn from initial training and that continuing training is extremely under-calibrated. It is crucial to re-establish the certification of digital skills, encourage teachers already in service to validate the skills they have gained during their careers, and establish an obligatory continuing training plan.
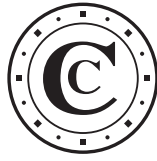
Providing all schools and scholastic institutions with a basic digital programme

In order to give the still vague notion of a Digital Public Service for Education a concrete sense, the continuing inequalities in access to this public service in institutions must be remedied in line with a framework harmonised at national level and joined with the local plan between the State and local authorities whose action is crucial in this area.

This is why the Court's main recommendation is to provide the three levels of school institution with a basic digital programme, combining the infrastructures and equipment put in place by the responsible local authority with a State commitment on training teachers and providing educational resources.

This concerted programme, homogeneous for each category of institution (primary school, lower secondary school, upper secondary school) throughout the territory, could be adapted through negotiation between the public actors concerned. It should be funded by re-deploying the financial allocations, whether regarding local authorities (with more focus on networks rather than funding the individual equipment of pupils) or the State, which can adjust its training plans in favour of digital technology and mobilise PIA 3 credits for investments in infrastructures and networks for pedagogic innovation.

Recommendations

Define a strategy for the deployment of digital technology within the national education system

1. In consultation with the local authorities, define a basic digital programme for primary schools, lower secondary schools and upper secondary schools, that is homogeneous at the national level for each category, combining the infrastructures and equipment put in place by the responsible local authority with a State commitment on training teachers and providing educational resources (Ministry of National Education (MEN), local authorities).

2. Re-establish the obligatory certification of digital skills in initial training (Master of Teaching, Education and Training (MEEF)) and certify the digital skills gained in-service; establish an obligatory continuing training plan (MEN, Ministry of Higher Education, Research and Innovation (MESRI)).

3. Manage the offer of digital pedagogic resources and services; clarify the roles of the operators of the educational digital public service, their public service missions and their modes of operation in the competitive field (MEN).

4. Facilitate pupils' and teachers' access to public digital resources and services through a single portal (MEN).

Ensure better control of the operational tools of the public service

5. Complete the mapping of bandwidths and connectivity of all public schools and scholastic institutions, by programming connections via the fibre network and/or through the possibility to connect to the networks of mobile telephone operators (MEN).

6. Restrict public support for the procurement of individual equipment to students who apply for it, based on social criteria (grant students, for example) (MEN, local authorities).

7. Develop digital workspace systems to guarantee the protection of personal data thanks to a unique identifier for each national education user (MEN).

8. Regain control of school management software (MEN).

9. Respect the doctrine of use of the Investments for the Future Programme by financing only investments or experiments related to pedagogic innovation (Budget Department - DB, MEN, General Secretariat for Investment - SGI, Caisse des Dépôts et Consignations (CDC).