Breaking OWN BORR i ERS

Presentation and Analysis of Supervised Personal Work in France (T.P.E. / Travaux Personnels Encadrés): From Technicist Barriers (or "walling up") to an Opening up to Pedagogy and Education for Information

Vincent Liquete
IUFM Aquitaine
France
Translation assistant Nathalie Peynaud

Since 1999, the French Educational System has spread some units based upon the encounter between some teaching disciplines and the school documentation centre with an emphasis on the pupils' interests, research and information re-writing methods and multi-disciplinary approaches. A set of "pedagogical barriers" seem to become open to change (a fragmented relationship of disciplines and knowledge, new constructions and assessments of the pupils' work); however some new forms of barriers appear (such as technicist barriers, discrimination in access to information, new misunderstandings among pupils, etc)

Depuis 1999, le système éducatif français a généralisé des dispositifs reposant sur la rencontre entre des disciplines d'enseignement et la documentation scolaire, mettant l'accent sur les centres d'intérêt des élèves, les méthodes de recherche et de réécriture documentaires et les démarches pluri-disciplinaires. Un ensemble de «barrières pédagogiques» semblent devenir «perméables» au changement (le rapport segmenté des disciplines aux savoirs, de nouvelles constructions et évaluations du travail de l'élève, ...), tandis que de nouvelles formes d'enfermement se dessinent (enfermement techniciste, discriminations dans les accès à l'information, nouvelles incompréhensions de l'élève,...).

Research Problem And Hypothetical/Deductive Elements

In France, until the end of the 90's, the activities in the school's Documentation and Information Centre (C.D.I.) essentially resulted from the initiative of the documentalist (teacher librarian) and/or from the wish of the individual teacher to collaborate in a partnership process. The new school year in 1999 brought the implementation of a new unit called "Supervised Personal Work" (T.P.E.). It was meant for lower sixth form students (then for final year students) and focused on research, selection of information, a collective re-writing of the information before communicating it as various documentation products followed by a viva in front of a jury composed of teachers from their school. At first, the unit was not accepted by many teachers, especially because, on an institutional level, it was viewed as a command or injunction from the National Education Ministry, and also because pedagogically, it required re-thinking and re-organising traditional teaching methods.

By surveying such a unit for three school years, we plan to try to understand the effects of the T.P.E. on the following:

- the mission of the school's Documentation & Information Centre (CDI)
- the relationships between the teacher-documentalist (teacher librarian) and the subject teachers
- the way the pupils perceive the institutional expectation as far as building and gaining skills are concerned.

We wondered whether, contrary to the aims of the innovation, new barriers had not been erected between the teachers and the documentalists and between the school and the private sphere. If indeed new barriers were discovered, we wished to examine the role of the T.P.E. in such processes.

We assumed that implementing an innovative, multi-disciplinary documentary unit with an injunction aspect would reveal a certain number of obstacles and limitations in the traditional pedagogy, but that the various parties implied in the T.P.E. (teachers, pupils and documentalists) would have both elaborated a set of strategies, which may be complex, in order to circumvent them, and initiated some actions which the school institution would never have considered formerly.

Research Methodology Mobilized For A Longitudinal Approach

The findings we are going to present were obtained by analysing data collected thanks to four methods combined and interconnected.

First: we conducted a rigorous survey of the information offered on the web, provided to promote the implementation of the T.P.E., essentially since September 2000, by various institutional sites (such as Libraries, the National Centre for Pedagogical Documentation, the University Institutes for Teachers' Training, The National Education Ministry, The Education Portal, the Rectorate websites, etc...). The technical units surveyed came as websites, circulation lists and educational portals.¹

Second: we created then issued a questionnaire for all the documentalist teachers (teacher librarians) in the Aquitaine region high schools (that is 50 documentalist teachers). The questionnaire focused on: the access systems to information, the implementation of the T.P.E., the pedagogical aspects of the T.P.E., and the pupils' personal working methods with regard to their handling of information sources (documentation).

At a third stage, we continued with a longitudinal lengthwise analysis thanks to semi-directive interviews conducted with 20 teachers, about one year after implementing the T.P.E. The interviews tried to find out if the views, the representations and the practices revealed, while analysing the questionnaires, were confirmed. Such an approach enabled us to see some changes in the analysis when confronted with the professional and pedagogical practice of the T.P.E. ("representation confronted to pragmatism").

As a conclusion, we undertook a few immersions in school sites by means of an ethno-methodological approach during the pupils' working sequences in T.P.E., as well as during the oral viva for a final assessment of their work. This phase provided the most valuable and most significant findings.

Presentation Of The Missions Of The Documentalist - Teacher In The French Educational System

The Centres of Documentation and Information (C.D.I.) are managed by some documentalist-teachers who have to carry out four main missions as pointed out in circular n° 86-123 dated March 13th 1986. The first essential point which has to be insisted on, is that the documentalist-teacher's status is that of a teacher. He holds a Certificate of Capacity for teaching in Secondary Schools (C.A.P.E.S.) in Documentation since 1991, as it is requested for any other teaching discipline. He is essentially:

¥ Responsible for initiating and training the pupils into documentary research

This mainly consists in initiating the pupils into the methods of information research (R.I.), helping them retrieve the documentary holdings in the C.D.I. and organising, selecting and understanding the information contained in the documents.

¥ Responsible for the action linked with the pedagogical activity in the school

His action is in keeping with the methodological projects of the teaching team, especially by finding a support on the various cross themes and the various discipline programmes. He is an active intermediary between the pedagogical projects, the teachers' will to collaborate and the information resources he handles in the school.

¥ Participation in the opening up of the school

The documentalist-teacher is the main party in the school's communication policy in order to "advertise" the school outside the school. He has to promote the relationships with a variety of partners such as the local press, other schools, cultural and technological bodies, etc...

¥ Responsible for the centre of multimedia documentary resources

Finally, he has to see to the proper functioning of the C.D.I. especially for the documentary resources he keeps at the users' disposal. The documents handled are varied, such as books, magazines, photographs, snapshots, films and soundtracks.² Moreover, he is answerable for the maintenance of the equipment he is responsible for and acts as advisor in relation to his technical expertise (in a broad sense) to everyone in the school.

Presentation Of The T.P.E. Unit . Supervised Personal Work :

We are going to deal with the major unit in high schools³, which was implemented at the beginning of the new school year in 2000, that is the T.P.E. "Supervised Personal Work". For the first time, we seem to be facing a more ambitious organisation which foreshadows the massive entry of the Internet in teaching (Pantanella, 2000), at least in the R.I. phase; even in the elaboration of the final production.⁴

Such a unit is based upon eight major principles:

1: The audience it is meant for:

The T.P.E. are not meant for pupils below the fifth form, but for those who are in lower sixth forms (for whom T.P.E. are compulsory) and for final year students, for whom they are optional. That year called "final year" (as being the last one in Secondary schools) ends with a final exam about all the subjects taught: this exam is the "baccalauréat" (a secondary school exam which is necessary for entry to university). ⁵ The mark obtained in T.P.E. is taken into account only when it is superior to an average (10/20). The T.P.E. constitutes a "mark bonus".

2: The multi-disciplinary aspect:

The T.P.E. units are based upon a real multi-disciplinary organisation (Blanchard-Laville, 2001). The project has to cross two teaching disciplines at least, which theoretically have nothing in common. 6 In addition to the traditional disciplines, we can add the discipline of "documentation" or information handling, which brings some methodological challenges, information accessing, some access to virtual information together with the documentary holdings of the C.D.I.

3: The specific role of the school documentation centre:

Documentation is implied in any stage of the pupils' T.P.E. project: its preparation, its elaboration, analysing the set of problems concerning the subject, building up a corpus of documentary units, R.I., selecting information, re-writing a personal document, issuing the results to the others, and at last, elaborating a documentary product which had been clearly defined since the very beginning. For the first time in an innovative context, documentation is being both integrated into every stage of the project and articulated with discipline objectives. That is essentially the reason why it is a unique information research object in our teaching system up to date.

4: The physical space:

In the school, the most essential places are both the C.D.I. and the computer rooms which offer access to the networks, followed by the teaching classrooms. However, one major statement with regard to theory and practice is that the notion of "space", as far as pedagogy is concerned, changes basically because a variety of information sources in the environment such as local libraries as well as those of museums or associations and cultural centres, are commonly used by the pupils. Such opening of the school to the eco-environment of information (Liquète, 2002), launches again the controversy about the responsibility of the pupils and that of the teachers, who often have to cope with the worst difficulties, trying to "control" the situation.

5: The time devoted to T.P.E.:

Even if most of the time devoted to the T.P.E. in not included in the programme and initiated freely by the pupils themselves, the T.P.E. is shared out on the basis of one semester of teaching, with a minimum of two hours per week. Such a unit is longer than the former ones used to be, but it still remains quite short in comparison with the volume of yearly teaching for the pupils.⁷

6: Some objectives of production:

The framework of T.P.E. does not expect only one type of production from the pupils, but mainly a combination of information products and of situations in relation with communication. As a priority, they involve three productions which are radically different from each other.

The first level of production is individual. It consists of:

- on one hand, a log book; that is, an individual follow up of the project where the pupils show self-analysis skills and express their successes and difficulties. The purpose of such self-assessment concerns both the processes as well as the R.I. results obtained.
- On another hand, the T.P.E. ends in an individual exercise of viva by the pupils, mainly about the documentary product achieved, in front of a jury composed of three teachers (most of the time partners of T.P.E.).

The second level of production is collective and consists of the final documentary product elaborated by a group of students. The productions are extremely varied but they all comprise information research. Some documentary files, some posters, some reviews of the press, some websites, some CDRoms, etc...are available.

7: The final assessment:

The assessment is based upon the three productions quoted above (the final product, the log book, and the viva). The purpose of the T.P.E. is to assess the candidate in a variety of individual or collective situations concerning the results obtained as well as the stages of the project and of the process.

Moreover, the teachers admit that they have to face certain difficulties when assessing the part and the investment of personal work in a collective project, and also more generally the processes and the strategies used by the pupils especially in the active stage of R.I. Though he is commonly defined as a teacher "of information", the documentalist-teacher is quite often still evicted from the viva. The very strong hold of the discipline programmes on the cross-disciplinary projects has to be pointed out. Altering centuries-old conceptions of knowledge will take a long time (Morin, 2000)

As a conclusion, after a further survey of some major and systematic criteria of assessment, we notice that they deal more with the final product than with the documentary process and the pupils' mental conception of what information consists of.

8: The massive entry of the Internet into a pedagogical unit aiming at ratifying the pupils skills and discipline knowledge:

To finish with, one strength of this new unit rests in the Internet becoming the main provider of information and help for the pupils' first identification of information. Consequently, the network is both upstream and continuous as regards the project in the long term, as the pupils regularly confront their first research results with regular returns to the Web.

The surveys conducted up to now in the framework of this new unit emphasize the appeal of the Internet for the pupils. Most of them are rather motivated to work with such a tool, though they admit they appreciate the interventions of the documentalist-teachers in order to put the Internet into a "reasoned perspective" especially by confronting the results of the R.I. with some non-virtual documentary sources available for them in the C.D.I. and in their surrounding environment.

Some New Inter-Disciplinary Situations, Some New Collegial Structures

The constant discipline referents

Implementing the T.P.E. involved associating some disciplines which had not necessarily any immediate links nor common notions in their respective teaching programmes. Most of the teachers questioned explained that the pupils were amazing in their ability to perform teamwork, to communicate their work to the teachers, especially during the oral viva (which definitely ratified the T.P.E.). However, such apparent trans-discipline satisfaction hides a certain amount of regrets which show that each discipline specialist is deeply attached to his own discipline referent in the appreciation of the pupils' work and process. I am going to quote an example reported by Christiane Etévé (Etévé, 2001) in the study we conducted on a viva, the theme of which was "Women at work during World War 2", in association with a literature teacher, a history teacher, and a documentalist-teacher. On this occasion, the literature teacher told the pupil:

You have put a lot of effort in that clear, well-documented report (...). You have found some information or literature texts and some images about women taking an active part to production or a moral support, whether it is on the back lines or on the front ones, but I would have liked the expression "female correspondent for soldiers on the front" to be mentioned.

Such remark shows well that the teacher, even in a multi-discipline unit, sticks to his discipline field and fundamentally expects only one notion which is significant in his own teaching programme. Then, the history teacher claimed:

You have clearly shown that the emancipation of women was initiated by conquering such work which started in weapon-factories but I expected the word "munitionnettes" (defining the women working in such factories).

At last, the main remark from the documentalist-teacher was:

You have selected a relevant information from the Internet but you do not mention its bibliographical reference nor the site you consulted.

Worse again, as with such type of assessment, the documentalist-teacher confirms his institutional position in the paradigm of "technical documentation by processing the contents" (Fondin, 2002) and thereby chooses a position which differs from that of most traditional teaching disciplines. These various comments from the three teachers certainly show a very strong commitment both on a personal and discipline level to convey some notions and methods which cannot be circumvented. However the T.P.E. unit does not appear to have succeeded in building in a collective way common objects and notions.

Discipline contacts

Though the T.P.E. units are focused on cross notions and reference concepts, we have to admit that the interdisciplinary aspect is often viewed by the parties as bridges between the disciplines within the same reflexive field. The combination of two, even three disciplines (out of the documentation) that we found, principally brings three fields together:

- the field of "classics" with History/ Geography, Economic and Social Sciences, and Literature
- the field of "pure Sciences" with Sciences of Life and Earth, Physics and Mathematics
- the field of "Arts and Culture" with modern languages, plastic arts, and musical education.

Apart from any interaction between the disciplines, it is rare, even exceptional, to see a T.P.E. associating for example, History with Physics and/or Plastic arts. More or less consciously, the teachers accept the official views which mention an inter-disciplinary aspect in order to help the pupils link the various types of knowledge between themselves. But our survey and an analysis of the facts show us that such associations are far more limited and do not go further than one of the three meta-discipline fields quoted above, where experience, the legitimacy of knowledge and the transferability of notions are emphasized.

In this framework, the documentary integration is quite slow and has to face lots of obstacles. The inter-disciplinary contacts provide the Documentation Centres and the documentalist-teachers with various time-and energy-consuming tasks, in relation to the organisation of the T.P.E. Each stage of the project -up requires follow-up from the selection of a corpus of documents to the technologies of information necessary to the final achievement of the project becoming operational. However, though documentation was for a long time regarded as "a service at the service of pedagogy" by the teachers, it becomes gradually more and more visible. It now benefits from the expansion of the latest techniques of information/communication (Internet effect) and demonstrates the first fruits of a "documentary didactic" (Béguin, 1996) or of information (Charbonnier, 1997). Little by little, some types of writing and some methods of information processing have proved to be necessary to achieve a documentary product in T.P.E. The T.P.E. requires beforehand teaching which up to now wasn't available for the pupils: taking notes, a synthesis, a condensation of a document, an analysis of the images, the elaboration of a scheme, the preparation of an oral communication, a structured argumentation. New views of the School Documentation Centre work can appear among the teaching community thanks to such a framework.

The didactic continuum of the follow-up tools

We have no option but to admit that the T.P.E. units rely on a constant and regular follow-up of the pupils both for the collective and individual aspects of their work. But, the Ministry of National Education beforehand chose a range of options for every school, shown in its directive leaflets (distributed at the beginning of each session), log books (in order to follow the process of the pupil all along the T.P.E.), and methodological guides. At first, such objects appeared to be tools open to any kind of interpretation from the teachers' part - sometimes rejection, sometimes an appropriation surprising to the school institution, and often acceptance by the teachers as a pedagogical guide to the T.P.E.

Then, after a softening of the habits, the documentalist-teachers played a key-part at the level of the school, as they were often more likely to explain them to their colleagues and to the pupils. Moreover, lots of documentalist-teachers worked on unique and common versions of the documents, making them available for the C.D.I. as well as for the Intranet of the school. Then, gradually, a shared culture was elaborated in order to construct a set of common collection.

The meaning of the words

The preparation exchanges for the T.P.E., the construction of working-sessions, the joint trainings in the pupils' presence, enabled the teachers and the documentalists to notice that sometimes the words, the terminology, the jargon used by some of them, didn't have the same meaning for the others. Little by little, in the framework of such interdisciplinary units, each party learns how to become acquainted and understand the other. Some misunderstandings, interpretations, apprehensions decrease after the words are explained. We have noted here and there a few significant examples which, according to the documentalists we questioned, enabled the teachers to give more consideration to the complex situation the pupils had to face when under similar words, the discipline referents and the teachers' expectations are different. In order to illustrate our example, we have mainly located:

- the notions of "primary document" and of "secondary document" for the historian and the documentalist
- the notion of "authentic document" for the modern language teacher and for the documentalist
- the notion of "silence or noise" for the documentalist in comparison with the physicist
- the notion of "completed task" for the documentalist in comparison with the musician or the plastician.

The modification of the expectations about the pupils assessment

Assessment is a specific, reflexive time for the pedagogical teams. No longer does it deal only with the final production and the oral viva of the T.P.E., but it is conducted regularly all along the research and information restitution process. The former and intermediary processes are assessed by the teaching team, and the capacity for self analysis shown by the pupils while approaching the subject, is taken into account (as an example, the log book) (Duplessis, 2001).

However, the environment becomes more complex when we observe which teachers are associated in the assessment. We have got no option but to notice that about 70% of the documentalists we questioned confirmed that they were not associated to the final assessment, that is the oral viva, whereas they were following a whole class and their projects.

The documentalist-teacher seems to be excluded from the oral viva, which becomes the ultimate time for consultation and exchange about the conventional discipline contents.

The Information System And The Documentary Management In The School

Gradually, the pupils and the teachers show a certain tendency to learn how to become acquainted with the documentalist-teacher's activities and they particularly rely on him to prepare, to animate and to guide their learning. His professional image has shifted from that of a mere manager of the documentary holdings, to the more complete one of a consultant as regards methodological research and expert as regards information contents. Such extension of his representation and field of action makes the articulation of mission a complex task for the profession of school documentation (Chapron, 1999).

Sixty-nine percent (69%) of the documentalist-teachers questioned claim that they are supports for the collective work of the pupils especially during the stage when common productions are achieved, such as bibliographies, documentary files, web pages. Such will from the documentalists' part really created new forms of solidarity and of organised shared work, by privileging the group rather than the pupils' strictly individual strategies and results. After considering the survey we conducted, four essential trends seem to define the new aspects of the documentalist-teacher's mission.

An active intermediary in information

Before, for most documentalist-teachers, the T.P.E. were interesting insofar as they created authentic situations for information research, combining various approaches and discipline contents, the research and the method of which were at the core of the unit. The "C.D.I. tool", as well as the class space, no longer hold a central place of reference in the pupils' and the teachers' information system. The information research method, the analysis of their contents, and their re-writing in a purpose of shared communication, are at a crossroads of the projects. The documentalist-teacher claims that his position is that of a link in order to guide the teachers and the pupils in the C.D.I. and outside, in other places in the school and out of the school. Such mediation reinforces the obligation for the documentalist-teacher to be well-acquainted with the information on offer in the surroundings (Boyer, 2002).

According to the documentalists, in order to succeed with the implementation of the T.P.E. and to ensure an efficient mediation, the three prevailing trends would be – in an descending order of importance, a reinforcement in the collaboration with the teachers, the consultation and the training of the pupils (Data 1). Inversely, the three points which are the most difficult to implement are, once again in a descending order of importance, that very consultation, the follow up of the pupils' work and the final assessment of the pupils (Data 2).

The documentalist –teachers admit a significant change in their relationship with the pupils. They feel better acknowledged thanks to their missions and skills being more visible. The T.P.E. seem to constitute an image-enhancing unit for them, on the whole.

As a counterpart, many of them express their difficulties in working jointly with certain teachers, which often obliges them to perform insistent interventions with the pupils, especially as far as the stage of active research of information is concerned. Mediation remains an essential action, a continuum for the time devoted to research by the pupils "out of the T.P.E. time".

Figure 1

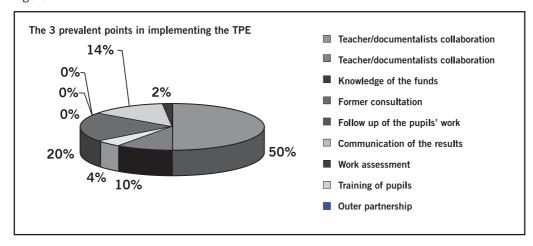
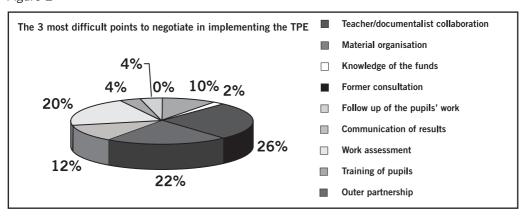


Figure 2



A supervising guide of information on the Internet

The main institutional providers have organised part of their information on line in order to promote the implementation of the T.P.E.¹⁰, and thereby they have guided the educationalists towards some institutional sites with a proper reference. By surveying such practices, we can notice now a broader research process where pre-selected sites offered by the documentalist –teachers are more numerous and more varied than the institutional and/or pedagogical sites on offer. Consequently, the Internet obliges the documentation professional to see to the conditions of the information offered on a regular basis, which compels him to give a new orientation to his process of information handling, in which gradually the non-virtual documentary sources no longer fill a unique even central space. An incompressible time is devoted to checking the information off-line which is likely to be included in the pupils' documentary project, in fields as varied as sciences, cultural offers, architecture, ...

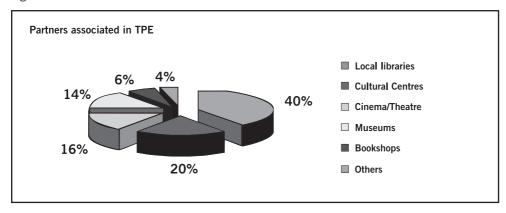
A methodologist for information

The documentalist-teachers would be required to focus more on a set of methodological processes especially in the field of information research, identification of subject sites of reference or analysis of information around relevance criteria. According to them, an improvement of the reception and work conditions around methodology would be tightly linked with the installation of a larger and more functional work-space, as well as with a voluntarist policy as far as recruiting professionals is concerned (Documentalist-teachers and their assistants).

In parallel, in order to facilitate the development of the T.P.E., it would be necessary, according to them, to promote some authentic conditions for information research, which would imply, among other things, resorting to the documentary funds and to the services of various information structures (local libraries, cultural centres.Data 3).

However, an approach by such method would demotivate the parties: the pupils as regards their wish to use the Internet systematically whichever the elaborated research project, or the teachers confronted to their immediate preoccupations in relation with the contents of the programmes, which results in isolating the documentalist-teacher in his methodological approach of information research.

Figure 3



Positioning the C.D.I. with regard to the information environment

The school C.D.I. can no longer be regarded as the documentation providing "core" information but as a first intermediate offer among various sites combined with it. From then on, apart from the central space filled by the Internet, the documentary and library surrounding structures (especially the local libraries) fill a considerable space and are strongly resorted to by the pupils, similarly to the C.D.I. The still extremely strong central position of the C.D.I. continues exclusively in the most remote geographic parts, where the non-virtual offer of documents is restricted to the documentary sources of the C.D.I.

The Drift Risks

Before concluding, we would like to emphasize a set of fields which show that the choice to include some systemic educational processes into information, via generalizing a T.P.E. type, inevitably poses a set of new problems which the parties of school education and documentation had not obviously considered before. In the actual French Educational System, the main question is, in order to educate to information, is it necessary to develop a set of "T.P.E. like" units, or to include some information and documentation teaching on some bases which can be comparable to those of other disciplines, or to entrust this additional mission to the actual teaching disciplines. The question is particularly complex and it may not be the only one, but it seems obvious that the "innovative" until like the T.P.E. reveal a set of barriers. We have identified five main ones:

A confirmed trend to technical walling up

Gradually, insidiously, the mastery of the tools, of the computer and digital technology, and of the networks, seems to prevail on the results of the information research obtained by the pupils (Tardif, 1998). After the first stage of seduction, we can notice that the pupils spend more time with the various techniques, at the detriment of the time for research preparation (questioning, expressing the problem and brainstorming) or of the time for reading / re-writing according to a corpus of documents which come from several sources and sites. Moreover, a strong majority of questioned pupils (68,5%) consider the T.P.E. exercise as a research exercise on the Internet. The teachers in all disciplines will have to conduct an explanatory preparation for the learners, in the future (Perriault, 2002).

An emerging documentary dilemma : the relationship between the documentary management and information management

On a political level, the generalization of such type of unit in the French educational system¹⁴ didn't result in new appointments of documentalist-teachers in schools. Thus, the documentalist-teacher has to conduct simultaneously an effective handling of the information in the C.D.I., which he continues to manage on a daily basis, while ensuring the follow up and the support of the pupils during the stage when they put together their T.P.E., which requires in the same way fundamental teaching linked with information research, with the culture of sources, and with a critical comparative analysis of the contents, etc.. This double responsibility as an information teacher and manager is more and more heavy to bear, especially in the schools with big class sizes¹⁵, and eventually opposes both functional tasks which are tightly linked.

Moreover, after the first years of experimentation, we note that the documentary magnitude expected by the teachers in the T.P.E. essentially concerns the search for a certain operational aspect in the C.D.I. Information system. The latter implies a lesser participation to the training actions in time, from the documentalist's part. Some teachers even prefer self-training or training among colleagues from the school, in order to be able to conduct information research by themselves, without any intervention from the documentalist-teachers' part. For many of the latter, when questioned, the effects noted rest on a "scale change", since there has been a growing demand for a few months, but quite often on the same bases of exchange and questioning as before the implementation of the T.P.E. The role of the documentalist seems to have been reinforced around the first initial function Eric de Grolier calls the "connection process" between "those who need to know and those who know, by organising the memories instead of the knowledge" (Fayet-Scribe et de Grolier, 1996).

A shift of the pupils work from the collective sphere in schools, to the private sphere at home

This very point constitutes, in our view, a social and political major obstacle. Consequently, the quantity of work, of energy, of necessary doubts, make the school-time devoted to T.P.E. largely insufficient. Then, one part of the T.P.E. is achieved out of the teaching time, but also out of the school time. A "social discrimination barrier" then appears between the pupils who detain information and its access from their home, and those who are "poor, information wise" and who have to use complex strategies in order to conduct such work (attending various local libraries, researching various connection points for the Internet,...). A new territorial aspect of school then appeared, where the "Domus" according to Weckerlé's meaning, becomes a functional complement for the school space for the better off.

But can school introduce and ratify some learning units which reinforce the inequalities, especially those in relation with the right to access and the mastery of information whereas it still has to deal with the worst difficulties as regards the democratic access to literacy especially?

An inflationist logic

As we formerly explained it, the central spirit of the T.P.E. was to lean on the pupils' construction process and on new forms of expression in a concrete situation (work ratified in small groups, final viva in order to argue the choice of how the subject should be treated). Gradually, the teachers were more seduced by the achieved final product, than by the processes, the choices of information selection, or the quality of restitution. In order to illustrate their speech, the teams we have met, the documentalist-teachers we questioned, have systematically shown us the better achieved final products, the "most appealing" ones in their form, at the risk of forgetting more or less consciously the pupils' process. In the schools where we inquired, some documentalists in agreement with the teachers involved in the T.P.E. even cancelled the first stage of the work by offering via the documentalist a corpus of pre-selected documents, erasing thereby any stage of the information research, of comparison in the research results, of refinement... the pendulum movement between doubts and answers, which remain indispensable to build up a meaning and to adopt a scientific questioning (Giordan, 1998). Consequently, we can say that the form prevails on the contents.

A weak transfer of T.P.E. learning to discipline teaching

As a conclusion, in the documentalists'view, the processes and methods learnt during a T.P.E. may not have been responsible for a transfer of learning from the pupils' and the teachers' part to more conventional situations in monodiscipline teaching. Out of the time devoted to T.P.E., 77% of the documentalists essentially feel that the specific learning mentioned in T.P.E. does not necessarily lead to specific reflexive situations.

Moreover, the pedagogic extensions about the themes during a T.P.E. are nearly non-existent for the surveyed schools. Would it be rather an exercise for exercise's sake, where the barrier of mono-discipline teaching would win? It's impossible to erase centuries of mental representation of knowledge.

Conclusions

Undeniably, the T.P.E. type units initiate an awareness in the school of the need to train young citizens in the culture of information.

In such a scheme, the educators' and documentation professionals' missions are noticeably altered and some new forms of organisation of learning and building up of knowledge, appear. However, as a counterpart, however commendable they may be, the innovative units based upon research, selection, analysis and a re-writing of information seem to reinforce some traditional practices – contributing to certain forms of withdrawal, even to some new forms of social discrimination which have to be taken into account, and about which the parties and researchers have to question themselves, in order to take action on such situations. The documentalist-teacher seems to be likely to play a specific part in that collective reflection.

Notes

- Four sources of observation: the circulation list "T.P.E. –T.I.C.E."

 (http://www.educnet.education.fr/listes educnet/tpetice.htm), the balance of years of functioning available on Educnet (www.cndp.fr), the bulletin about EPI-Net (www.epi.asso.fr) and at last the references of "Café Pédagogique" (www.cafepedagogique.net).
- ² List of documents quoted in the official text.
- ³ The pupils in high schools are generally aged 15 to 18. As the last stage before university, the high-school teaching is divided into three years (fifth form; sixth form and final year).
- ⁴ Ministry of the National Education. *School Teaching-Implementation of Supervised Personal Work T.P.E. high-schools. New school year 2000.* Paris: Men, 2001, 60 p.
- ⁵ Passing the" baccalauréat" is a pre-requisite for entry in university.
- The links between the disciplines are established thanks to references proposed by the Ministry of National Education, each new school year. For example, "The City" (Sixth form Economics and Sociology branch), "The Water" (Sixth form Science branch), "Representing the War" (sixth form literature branch).
- In a school, the time devoted to teaching is estimated at more than 30 weekly hours.
- ⁸ This work is a research programme called "Information and pedagogical training of the teachers in the field of documentary help for the pupils" (n° 20506) in association with the National Institute of Pedagogical Research in Paris and especially the IUFM (Bordeaux).
- ⁹ This is particularly true when the crucial moment of assessment comes for the pupils, especially the final one.
- ¹⁰ In the research unit in Bordeaux, we have registered more than 50 French sites of reference about the T.P.E., gathering some sites linked to the themes of the programmes, some others where discipline prevails exclusively, some focused on assessment time, some others using records from pupils' documents, and to finish with, some sites provided by parents' representatives associations and inspection bodies.
- ¹¹ In France, in the 90's, a professional literature used to define the Documentation and Information Centre as a "centre", a "core" in a school. Such centripetal approach of the situation no longer enables us to analyse the various situations observed.
- In relation with the subject, it would be necessary to read the Acts on line of the National Conferences for Information Education, which took place in Paris (France) March 11th-12th 2003.
 Cf. http://www.ccr.jussieu.fr/urfist/Assises.
- ¹³ A quotation of the general title of the 32nd international Conference of IASL, that is "Breaking down barriers" (Durban, July 2003).
- ¹⁴ There are also the "Discovery Routes" (I.D.D.) for the pupils aged 12-13, "Civic, Legal and Social Education" (E.C.J.S.) for newcomers to high-schools aged 16, etc.
- ¹⁵ In general teaching high schools, the number of pupils can be superior to 1500 pupils.
- ¹⁶ For example, CDroms of "Urban Art", video reporting.

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Biographical Note

Research Unit EA 487 Scico – Bordeaux 2 University. Lecturer at the University Institute for the Training of Teachers in Bordeaux (France). Responsible for the Common Service of Documentation in the Institute. Researcher in Information and Documentation Sciences in the Cognitive Science (SCICO) research unit in Bordeaux 2 University. Author of various scientific articles about Information and documentation Science, and education Science. International Communications (Boston, Buenos Aires, Dakar, Berlin, Paris,...) Email: VLIQUETE@aol.com