

From observation of pupils' literacy-based practices towards the mentoring and professional development of teachers

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This article reports on research on adapting the Pacific Literacy and School Leadership Program in New Caledonia. The starting point of this study is the fact that many adults in New Caledonia have difficulties mastering the French language. In order to test the tools developed in the PLSLP program and to contextualise them in schools of New Caledonia, we first carried out a series of observations during a year with three schools. Following this phase of adaptation, the observed population was composed of six teachers in three schools, comprising one man and five women over three years. The deployment of the program throughout New Caledonia would benefit pupils encountering difficulties in learning, particularly in schools of the North Province and of the Island Province. This would enable us to measure the efficiency of the program on the scaffolding of literacy-based skills alongside the professional support of teachers, while also progressing the research on comparisons with the countries of Oceania involved in the PLSLP.

Keywords: primary school; professional development; PLSLP

INTRODUCTION

The motivation for this study was the finding that many adults in New Caledonia have difficulties mastering the French language. In its 2013 report on the literacy problems in the territory, the Institut de la statistique et des études économiques de la Nouvelle-Calédonie (ISEE) [Institute of Statistics and Economic Studies in New Caledonia] stated that one in four adults aged between 16 and 65 reported having difficulty writing and 18% of adults are believed to be functionally illiterate. In addition, tests for evaluating basic French language skills conceived by the Direction de l'évaluation, de la prospective et de la performance (DEPP) [Evaluation, Forecasting and Performance Department] of the Ministry of National Education are offered to 16-year-olds during Journée d'appel de préparation à la défense (JAPD) [Defence Preparation Day]. In 2018, 31.5% of young people encountered difficulties in reading and 17.7% of these same young people were functionally illiterate.

In francophone countries, a person is considered functionally illiterate when they have been to school but have not achieved a high enough level in reading, writing or arithmetic to be autonomous in everyday situations. The alarming situation regarding the percentage of

illiteracy in New Caledonia raises questions about the schooling of these young people and their learning processes and, especially, about school language teaching in New Caledonia's multilingual context.

New Caledonia is a former French colony which has been autonomous (named 'special status') since 1998. French is the official language for administration, education and the media; however, it is not the mother tongue of all New Caledonians. Indeed, the Cour des comptes [Court of Auditors] estimates that 28 Kanak languages currently exist alongside each other in New Caledonia. In this small territory, these languages sit alongside Polynesian languages such as Tahitian, Fijian and Wallisian, Indonesian and Asiatic languages (particularly Javanese, Vietnamese and Mandarin) as well as creoles (Pauleau, 2016; Razafimandimbimanana, 2021; Roche, 2015).

Of those pupils entering secondary education at 11 or 12 years old in 2019, the percentage with mastery of the French language was 76.8% over all New Caledonia, but there are considerable geographical disparities because the level of mastery is 82.8% in urban Greater Noumea and 58.5% in the Island Province.

As researchers and practitioners in the field of education and training of future primary school teachers, we intervene in the initial and continuous training of teachers. Our observations in the field as well as factual consequences have led us to reflect on support solutions for professionals in the field, with the objective of long-term development of students' literacy skills.

This article reports on a four-year study carried out in New Caledonia to adapt the British Oceanic Implementation Plan for the Pacific Literacy and School Leadership Program (PLSLP).

We will first outline the specificities of the New Caledonian education system and describe issues relating to the francophone concept of literacy and the PLSLP program as a means of observing teachers' practices in terms of their linguistic, cognitive and social interactions. Second, we describe the work of adapting our observations over a three-year period and our modifications from an initial focus of observing pupils to mentoring teachers to engage in reflective practices.

CONTEXT OF THE RESEARCH

Specificities of the New Caledonian education system

New Caledonia is defined as an overseas collectivity with special status. The New Caledonian education system is inspired by the organisation and demands of mainland France: children start school at the age of five, the school curriculum responds to national requirements, and the qualifications it provides are French. However, since 2016 the Congress of New Caledonia has adopted its own educational policy, legislated through 36 articles comprising the educational plans of New Caledonia (PENC, *Deliberation n°106 of 15 January 2016*).¹ These texts, which regulate primary teaching (organisation of schooling and school curricula), are contextualised and voted on by the Congress of New Caledonia. This educational plan provides the roadmap for a New Caledonian school curriculum, whose

¹ A "deliberation" is an act relating to the law, which in New Caledonia applies, among other things, to the field of education.

identity is created by adapting the French school syllabuses. The history syllabus thus integrates the history of New Caledonia, allowing pupils to draw parallels between New Caledonian, European and world history. The teaching of the basic elements of Kanak culture is a separate discipline throughout primary school and partially separate during secondary school. The teaching of Kanak languages is being developed with bilingual teaching in certain regions. From infant school onwards, the English language is an important subject on this francophone Pacific territory, surrounded as it is by neighbouring anglophone territories. English is not only a subject to be taught within a classic curriculum but also provides a medium of instruction in a bilingual educational program.

Another feature of the New Caledonian curriculum is drawn from the context of finding work and is linked with the very different lifestyles experienced by those living in the conglomeration of Greater Noumea (Noumea being the capital where two thirds of the population of the archipelago live), in rural areas or in tribal communes. The division of New Caledonia into provinces (Northern, Southern and Island provinces) has created disparities in the aims of the various provincial directorates of education. These contexts thus mobilise different skills among teachers.

In addition to these specificities, there are also particularities in terms of initial teacher training and continuing professional development. Two initial primary teacher training systems co-exist; that is, potential teachers are recruited either as high school graduates or following their bachelor's degree. This creates a teaching profession with different skill sets and professional practices within schools. It should also be noted that almost 25% of teachers have not received basic teacher training and are recruited according to local needs, whether on a temporary or permanent basis. Another factor, which is not specific to the Caledonian context, comes from the developmental approach in the teaching profession, with stages, (such as child development) (Huberman, 1989). This may create skills differences to consider when supporting professional development.

Primary school teachers in New Caledonia benefit from in-service training, which is also uneven, depending variously on the aims of the New Caledonian education directorate and the directors of education within the different provinces. In-service training for primary school teachers in New Caledonia is limited; for example, in 2018, 151 periods of in-service training were offered in five areas of professional development, however more than 90% of these training programs focused particularly on two areas: the diversity of the target audiences with a focus on educational programs and the teaching of French and mathematics; and the governance of the system whose principal aim is the professionalisation of teachers, including preparation for the various professional assessments and competitive examinations. On an organisational level, the in-service training is carried out in a way which is detached from the individual teaching context of the professional. The teachers who come from different professional contexts, recruited to schools in villages, tribes, small or large towns etc., are gathered in the same space and with the same content. While there are sometimes periods of observation of class practice, these only allow the teachers to take their inspiration from existing practices without making connections with their own practices enabling useful reflective analysis.

Francophone literacy for an ecosystemic approach in the context of functional illiteracy

The 2018 report of the Observatoire de la Réussite Éducative [Centre for Educational Success] on the situational analysis of illiteracy and reading difficulties among young New Caledonians of 16 to 25 years old highlights the vast differences between the three provinces,

concerning the percentage of young people who had major problems with reading, calculated from tests taken within the framework of the Defence Preparation Day program (JAPD).² In 2017, in the Island Province, 53.7% of young people had significant problems with reading; in the Northern Province the figure was 45.6%; and in the Southern Province 25.6% (ORE, 2018). The youngsters' performance reflects the regional inequalities in terms of teaching and training. This issue is, therefore, of great concern for New Caledonia.

The aim of this study, therefore, is to respond to goals proposed within the framework of *Deliberation n°106 of 15 January 2016*. First on the topic of issues in teacher training, and second, on the development of language and the mastering of basic skills in reading and writing.

In this regard, the concept of literacy in a francophone context allows us to measure the interactions which go beyond the simple formal mastering of a language. While the translation of the concept from English into French has rendered the term complex and polysemous (Lebrun, 2007), the literature review of about a hundred francophone articles realised by Hébert and Lépine (2013) brings to light 10 additional values³ which foreground the multidimensional and interdisciplinary aspects of the concept, as illustrated in Figure 1.

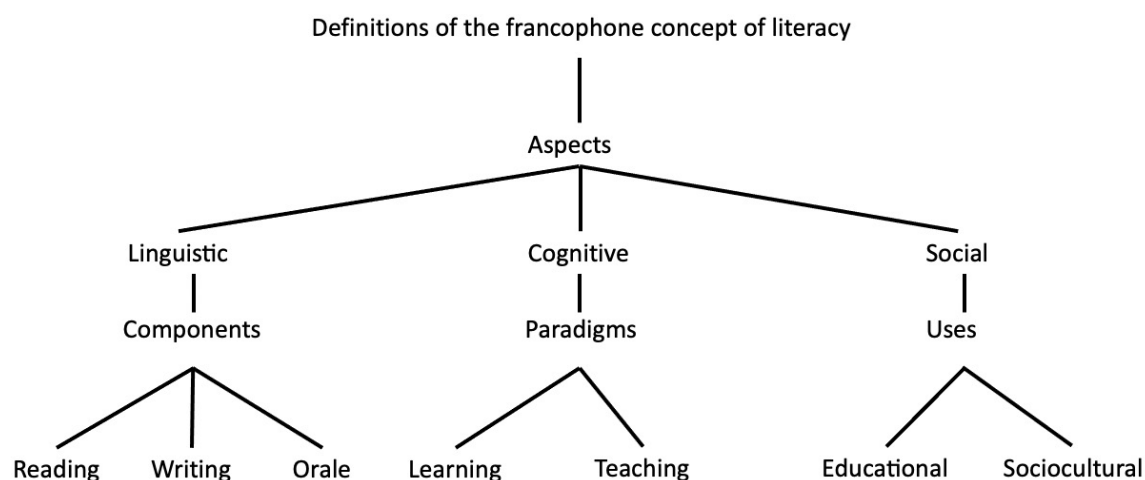


Figure 1: Adaptation of Moreau, Hébert & Ruel's (2013) schema reclaiming the analytical aspects of the definitions of the francophone concept of literacy

This interdisciplinary approach allows us to assess the classical linguistic aspect comprising reading, writing and oral skills. A cognitive dimension has been identified and this widens the reflection to include teachers, namely in the ways in which they teach and facilitate learning, in an interaction with the pupils' reception. The last aspect to be identified is the social dimension, which applies as much to educational as to sociocultural uses. The concept

² Since 1998, this compulsory day for all young people has replaced national army service in France. During the course of the day, the attendees have presentations on defence missions, peacekeeping, and French and European citizenship, and learn about warning systems and first aid, as well as taking French language assessment tests.

³ The 10 values are: multiple aims; all the attitudes, knowledge and skills needed for the appropriation of written culture; range of texts, genres and resources; dynamic, variable and situated aspects; individual/societal relations; authentic real-life tasks, both within and outside the school environment; positive concept and continuity; written-oral interdependence and interference; environmental influence; emancipating purpose.

of literacy is defined by the UNESCO declaration, the *United Nations Literacy Decade, 2003-2012*:

Literacy is about more than reading and writing—it is about how we communicate in society. It is about social practices and relationships, about knowledge, language and culture. Literacy finds its place in our lives alongside other ways of communicating. Indeed, literacy itself takes many forms: on paper, on the computer screens, on TV, on posters and signs (Ontario Ministry of Education, 2004, p. 9).

This standpoint is enshrined in an ecosystemic vision (Bronfenbrenner, 1992), which considers the processes of teaching and learning and the interactions between teachers and pupils from the point of view of the actors and is viewed contextually. We have, therefore, relied on this theoretical framework in order to approach the notion of literacy through the program described below.

The PLSLP

The Education Department of the University of Auckland and the University of the South Pacific have worked on a literacy implementation plan in the Pacific and on the PLSLP to support field-based teacher development. This program has been developed in Oceania in the schools in Tonga, the Cook Islands and the Solomon Islands (Jesson & Spratt, 2017).

The program is based on the Bronfenbrenner's ecosystemic vision (Jesson & Spratt, 2017) by using the Design-Based Research (DBR) approach defined as a “systematic but flexible methodology aimed to improve educational practices through iterative analysis, design, development, and implementation, based on collaboration among researchers and practitioners in real-world settings, and leading to contextually, sensitive design principles and theories” (Wang & Hannafin, 2005, p. 6). This DBR approach is rooted in the theoretical perspectives of teaching design, action research and collaborative research (Sanchez & Monod-Ansaldi, 2015). The program is implemented in a ‘real-life’ setting (classes, pupils and teachers) in a research-based format, with a second stage in which solutions can be created, developed and suggested in context.

The observation of literacy-based practices in class is made using an iterative system of observations focused on the teacher and then on the pupils in order to distinguish between the respective main activities. The teacher is then offered about ten minutes to reflect “in the moment” and an initial “profiling” phase allows them, through repeated observations, to distinguish the literacy-based aspects within the class. Following this collection of information, the data are presented to the teacher in order to identify the priorities and the expected results with regard to the observations on their positioning in the class and the pupils' behaviour.

This program is part of an initiative that aims to improve literacy-dependent results by producing field data through the analysis of the actions of the professionals and develop methods and practices while also offering an analysis of conditions and issues on the ground in an institutional situation. The program also facilitates support for teachers in an ecological context within a systemic and interactive perspective for:

- The researchers, who support the teachers through their perceptions as they analyse the practices by using all the tools available to them (observation grids, post-observation interviews, pupil evaluations) and who are instrumental in opening up the field of possibilities so as to develop literacy-based practices in class.

From observation of pupils' literacy-based practices towards the mentoring and professional development of teachers

- The teacher, who benefits from observation of pupils as they learn from someone who is outside the classroom context so they can adjust their professional and reflective stance.
- The educational community, through innovative practices arising from this in-house training in the schools, which, under the impetus of this program, creates a synergy that promotes the implementation of actions to produce tangible, long-term improvements in teachers' practices which, in turn, allow their pupils to succeed.
- The pupils, who, ultimately, are able to put their literacy-based skills on a firm footing, particularly in terms of the mastery of language in a multilingual context.

To sum up, this program, which is based on Bronfenbrenner's ecosystemic vision (Jesson & Spratt, 2017), takes into consideration both pupil and teacher in a "bottom-up" perspective (Clerc, 2011; Jodelet, 2011) while also considering teamwork and management. It thus leads to the development of a collaborative mechanism for a professional collective culture which feeds into a more general reflection towards the institutional aspects summarised in Figure 2.

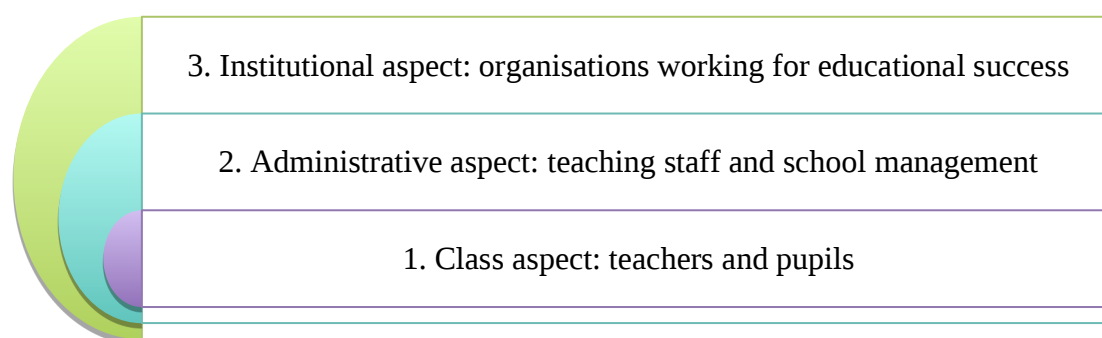


Figure 2: Overview of the aspects brought into play by the program

In order to help all the pupils to succeed, it is necessary to consider the child's environment within the contemporary ecological and systemic perspectives (Jesson & Spratt, 2017). However, by analysing teachers' professional practice in context by observation, allows us to support them in their professional practice, whatever their initial training and experience, thanks to the methodological approach of "research-design" (Anderson & Shattuck, 2012; Dupin de Saint-André et al., 2010) and a regular analysis of practices (following the reflective feedback immediately following the teaching event). The subsequent development of an observational positioning of "what the pupils do" within the framework of the presentation of class profiles allows us to be in a position of mediation concerning professional practices. Indeed, this modifies the angle of approach to a class, which allows us to go further than an observation which would be limited only to teaching practices or to a critique centred exclusively on teaching practice. In this sense, this method allows for a triangulation of the collected data around the teacher-pupil behaviours envisaged in their interactions by focusing on contextualisation and valorisation of the experiential dimensions. All the possible modifications of these practices as well as the beliefs about the pupils' activities are for the benefit of the pupils' learning (Jesson & Spratt, 2017).

ADAPTATION OF THE PLSLP OBSERVATION GRID

Testing the data collection tools in context

In order to test the tools developed in the PLSLP and to contextualise them in New Caledonia, we first carried out a series of observations throughout 2017. For this, we chose three schools: two on the outskirts of Noumea and one in the heart of the industrial zone.

We targeted three CE1 classes⁴ in which the pupils were between 7 and 8 years old to ensure they had minimal literacy-based linguistic and social skills. The three schools were selected within a context in which a serious need to develop pupils' literacy-based and linguistic skills had been identified based on school testing results on a regional scale; a multicultural and multilingual school population; and a teacher who was strongly motivated to develop their professional practices.

This initial phase concerned three volunteer teachers and 65 pupils. The observations were carried out by three researchers to enable us to combine the observational data collected. We used the PLSLP tools by applying the procedure described by the PLSLP designers. We carried out the observations and the interviews over a school term (six or seven weeks) and collected the data relating to the teachers' practices to the learning processes and to the class tools. The observations were realised at different times of the day so as to identify all the literacy-based practices used during the course of the day and without favouring any particular discipline.

The aim of this phase was to adjust the observation grid (Appendix 1). The variables considered were: the establishment (3 schools); the teachers (3 people); the observation times (the start of the morning versus the end of the morning versus the beginning of the afternoon (J3). The interest in those particular schools is that the Oceanian population of pupils implies specific teaching processes and, by using the DBR approach as described by Jesson & Spratt (2017), would allow the teacher to learn from the class (pupils attitudes and learning processes) in order to optimise teaching attitudes and, therefore, participate in teacher development within the class and, through the class, bringing to light Brofenbrenner's (1992) ecosystemic vision of human development.

Before beginning the observation, we used questionnaires to ask the pupils about their language practices. Out of a total of 65 pupils, 5% stated that they had never spoken French at home while 15% said that when their family and friends spoke in a particular language they would respond in that language. Throughout the observations realised in a school context, not one pupil spoke in a language other than French, whether with the teacher or with their peers. However, these observations, made in the Southern Province, might not necessarily apply to the Northern or Island Provinces.

Adjustments following the initial series of observations

We adapted the observation grid and added more points to observe (see Appendix 2 for the modifications given in green and in bold). Following 18 periods of observations of around one hour each of the general class contexts, the teachers and their pupils, we noted a major difference in the classroom space arising from the wall displays and literacy-based materials (type of literary materials, puzzles etc.), which we linked to the cultural practices of the class (Dufour, 2016). Over the three classes, the first had 81 wall documents, the second had 57

⁴ Year 2 in primary school education in Australia.

and the third had 138. These displays, understood to be artefacts, are defined as teaching aids (Goigoux, 2007) but, above all, as literacy-based media at the teacher/pupil interface. We took this aspect into account in the class observation grid by adding an item which was specific to pupils' consultation of the displays. By considering the scaffolding and materials for class activities as an aspect of mediation (Bruner, 2006; Vygotsky, 1992), we included in the grid an item relating to materials by distinguishing between manuals, displays, interactive white board or blackboard, worksheets and manipulatives. The aim was also to introduce a reflection among teachers on the usage of these materials and to realise a classification of disciplines and a systematic analysis of the content of displays.⁵ The referencing of literacy-based media objects in class can also lead to the referencing of the children's books made available to the pupils, for example, what types of books.

The overall results of these periods of observation show that the teachers speak for a significant amount of time, which is reflected by equally significant levels of active listening on the part of the pupils. Dominance of teacher's speech is followed by non-literacy-based activities (such as handiwork and putting things away). Likewise, we were able to observe that, for the most part, the pupils work alone. These observations led us to adjust the items relating to teachers' attitudes to make the "oral" item even clearer in targeting pupils' activities as well as the organisation of pupils for the learning activity.

In a similar manner, we preserved the items relating to "teacher feedback" and "teacher approach". Some modifications were realised under the heading "focus on the teacher", emphasising a teacher's approach associated with a learning experience which included a strong reflective element. The item "talk/reflect on the pupils' written work" was also reformulated as "reflection on reading strategies". Similarly, the item "orality" was transformed into "reflection on strategies in oral work".

In the observation grid relating to the pupils, we developed in more detail the "oral" item in line with the activities and expectations of the New Caledonian school curriculum. We kept the terms "speak", "listen", "read out loud", "spell out words", "draw, decorate, represent" and "other literacy-based activities". The modifications concern "reading work" and "written work", two activities for which we proposed distinguishing between: "reading isolated words", "reading one or more phrases" and "reading one or more texts", as well as "writing isolated words", "writing one or more phrases" and "writing one or more texts". Similarly, for the item "reading letters/syllables (associating sounds and written letters)" we added "numbers" because we chose to observe the school periods (morning or afternoon) without having any control over the teaching content. We also modified "meaning of words (vocabulary)" to "reflections on the meaning of words". Finally, we added the item "copy". Concerning the pupils' working conditions, we specified the item "the pupil works alone/as a class/with other pupils", which became the item: "the pupil works alone/in pairs/in a group/as a class".

To summarise, we began with a study designed to adapt the curriculum, which then led to marginal changes to some of the headings. On a contextual level, we specified the observation criteria, particularly in terms of classroom displays and the class scaffolding

⁵ We created a table for referencing all the wall displays in order to distinguish between the various materials (paper/boxes, blackboard, interactive and non-interactive whiteboards), disciplines and their associated fields (literacy, mathematics, history, geography, visual arts, sciences, civic and moral education, modern languages and music), the administrative aspect, and the concept of living together.

materials. Finally, we chose to maintain the observation of all the disciplines so as to bring out the literacy-based aspects in an interdisciplinary way and over the different time periods during the day, which also allowed us to collect the most general data possible on life in the classroom.

FROM OBSERVATION OF PUPILS' LANGUAGE PRACTICE TO REFLECTIVE PRACTICES OF TEACHERS

Description of the three years of the study

Following this initial phase, the deployment of the collaborative research continued from July 2018 to July 2020, with seven teachers in three schools, one man and five women. The average age was 43 and the average length of professional experience was 15 years. While they had had different trajectories in initial teacher training, they all shared a wish to modify their professional practices.

Based on the methodological approach of DBR, three female researchers were involved in the project from the initial phase. The underlying mechanism is based on a principle of iteration of observations, based on different types of data collection in the light of a mixed approach by combining quantitative statistical data and qualitative interviews. It will be recalled that the tools and the structure used articulated in a three-stage process:

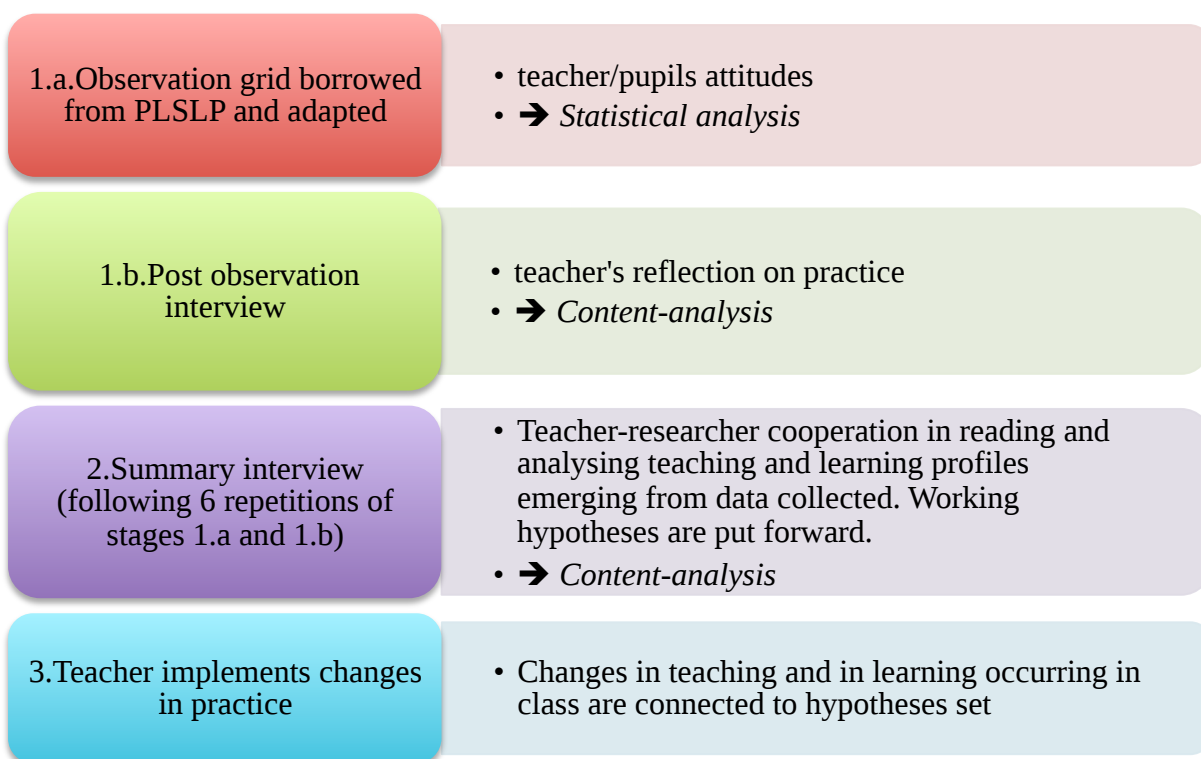


Figure 3: Diagram of the design stages of the collaborative research

Stage 1.a: The observation grid borrowed from PLSLP and adapted enabled us to draw out patterns of teaching attitudes as well as learning attitudes from statistical analysis (Appendix 2).

From observation of pupils' literacy-based practices towards the mentoring and professional development of teachers

Stage 1.b: A five to ten minute post-observation interview at the end of every observation period was offered in order to identify the reflective attitudes. Content analysis allowed us to discern the perception of the evolution of the reflections for each teacher.

Stage 2: The summary interview. Six periods of observation (stages 1a. and 1b reiterated six times) per class allowed us to discern patterns for each class so we could develop an understanding of the teaching and learning profiles through exchanges between the teacher and the researcher who had realised the observations. The aim was to coordinate the teacher's actions, the theorisation of the learning processes and the purposes in terms of pupil learning, so as to lead to the development of hypotheses specifying the ways in which the evolution of practices results in the achievement of the intended aims for the pupil.

Stage 3: Once the hypotheses were set, changes observed over time in class, concerning learning activities offered to pupils as well as pupils' attitudes, may be indicators of changes occurring in teacher practice. The relaunching of periods of observation in class brought to light new teaching and new learning attitudes. It also enabled further mentoring in order to deepen teacher practice or to implement new professional practices through new sets of hypotheses.

The design-based methodology was deployed according to the schedule illustrated in Figure 4.

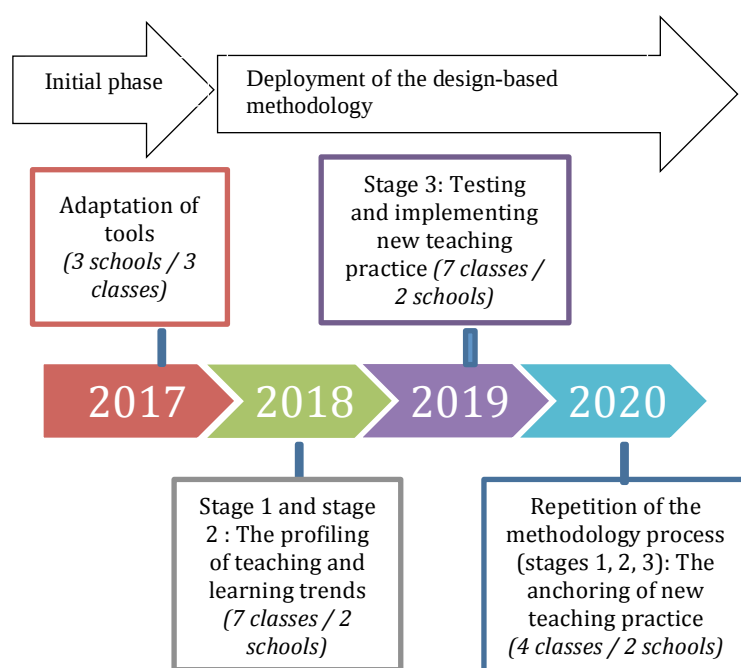


Figure 4: Diagram of the chronology of the research program

A period of trial and error concerning the individual practices of the six teachers involved in the research program occurred in 2019. In fact, because of the organisation of the educational system, it was not possible to follow a cohort of pupils, so we made the decision to follow the teachers. During this year, two periods of observations took place. In other words, 12 observations per teacher. The end-of-year summary allowed us to judge the mutual understanding of what could be prolonged and what could operate without the support of an

external contact person (consolidation of new professional practices). When new teaching and learning profiles emerged for a class, new hypotheses were defined for the following year.

The study of the data collected led to further new adjustments of the observation grid (see the items in blue in Appendix 2) with the addition of the following items: in the section on resources, we added an item “pupil’s notebook”, under the heading of focus on the teacher; and the item “literacy at the service of other disciplines”. In the section on teacher approach, the items “facilitating inter-pupil interactions”, “valorising/advising pupils” and “inviting pupils to build on their work” were added. For the pupil observation grid, we included the “scaffolding” (classroom displays, rule book, book, IT tools, no resources)” and “activity resources (book, interactive or non-interactive whiteboard, paper, pupil workbook, manipulative, rule book, no resources)”.

In 2020 there was a further adaptation of the program. Indeed, two teachers chose to leave the program, one teacher had to go back to France even though she did not wish to leave the collaborative work engaged, another teacher changed school and did not pursue the collaborative research. As a consequence, the program continued with four teachers. Considering the international and regional health situation in 2020, it proved impossible to respect the provisional observation schedule. However, the period of lockdown and the gradual return to school life presented a situation which has proved propitious to the effective observation of the consolidation of practices for the teacher. The period of collecting observational data has thus been postponed and we intend to summarise the three years of the experimental program on the development of professional skills among teachers and school managers, and the collaborative research surrounding the results with a view to activating the reflective postures for an implementation of literacy-based practices in the classroom in the absence of a contact person from the program.

Indicators of reflective practices development and teacher attitudes

For a school period of 13 months (from July 2018 to August 2019), we were able to discern in the discourse a professional teaching dimension (the teacher in their class), a second professional teaching dimension (reflection removed from the expectations of a reflection on their professional practices), a consideration of the pupil, and team concerns (about the issue of collaboration). The developments were brought to light through an analysis of the career trajectory of each teacher in the study.

The discourses of Teacher A dwelt on professional practices and attitudes, their self-esteem as a practician, the pupil’s attitude and their acquisition of transversal skills. This led them to plan their professional development by posing the following hypothesis: promoting pupil communication by leaving more time for interactions between peers and letting them speak more will reduce the teacher’s speaking time.

Teacher B was also focused on the professional practices and attitudes, self-esteem as a practician and pupil attitude. They saw their professional development in terms of the following hypothesis: promoting pair work or small group work will develop the quality of the interactions between pupils and their speaking while also developing the pupils’ capacity for cooperation.

Teacher C’s major preoccupation was their self-esteem as a practician. This led them to envisage their professional development by posing the following hypothesis: promoting small

group work will develop the quality of the interactions and communication between pupils while also developing the pupils' capacity for cooperation.

The discourses of Teacher D were mainly orientated towards professional practices and attitudes and on pupil learning outcomes. The hypothesis in terms of professional development concerned learning in small groups to allow pupils to develop their cooperation and their autonomy.

For Teacher E, most of the exchanges concerned professional practices and attitudes and their self-esteem as a practitioner. The hypotheses were to work on differentiating teaching attitudes in learning scaffolding in order to optimise pupil learning outcomes and on a learning system based on repetition through practice so as to develop the pupils' literacy-based skills.

When it came to Teacher F, the main part of the discourse was orientated towards professional and personal practices and towards other off-topic exchanges. As a consequence, the teacher's request was mainly orientated towards a methodological framework through mastery learning.

Finally, Teacher G spent a lot of the time allotted to reflective practice to evoke other off-topic points and personal projections which were unconnected with the observations. All the same, they did express the need to know how to teach history.

With the exception of teachers F and G, the five other teachers made good use of these periods of reflection to hone their views and, during the summaries, this produced an in-depth understanding of the models discussed. Each of them was able to quantify the extent to which literacy encompasses not only linguistic and cognitive but also social dimensions. In this respect, the hypotheses converged, in a nutshell, on the improvement of the group aspects with a view to developing the cooperative practices of the pupils.

PROSPECTS FOR LARGER-SCALE DISTRIBUTION IN NEW CALEDONIA

Benefits of the program in the short, medium and long-term

The implementation of this program produces short-term results directly in the class with a reflection on professional practices and attitudes. In fact, after two years of this study, some points regarding the teacher profiles emerged which led researchers to put into perspective the multiple streams at mid-career that may occur in the teacher career cycle that Huberman (1989) puts forward through a model for possible career scenarios. Indeed, concerning the seven teachers who started the collaborative research work in 2018, teachers A, B, C, D and the teacher who had to leave for France would recognise themselves to be in a phase of experimentation or diversification; they did seem keen to experiment with different materials, different pupil groupings, different teaching and learning approaches.

The iterative nature of the research processes through the design-based methodology provided a strong mirror effect of pupils' attitudes on teacher practice. The outstanding examples to illustrate the bottom-up professional development (Clerc, 2011; Jodelet, 2011) were the developing awareness of the time of speaking for the pupils and the organisation offered to pupils for learning.

The evolution of the teachers should be seen on a case-by-case basis because, among them, they have produced original and evolutive working hypotheses centred on their own practices, which is a necessary starting stage for a flexible, high-quality study. Even

considering that the consolidation of the changes in practice for 2020 has yet to be assessed, the development in the teachers' discourses reflects a primary preoccupation with the practices and attitudes which, through reflective practice, open the way to a preoccupation with the pupil's attitudes.

It is precisely on this point that the program adapted in New Caledonia appears particularly efficient. Indeed, the PLSP program was concerned with the development of literacy-based skills for pupils in the countries in the Pacific where there is a lack of initial teacher training, but this is not the case in New Caledonia, where there is not only initial teacher training but also in-service training. However, as we have emphasised, the system of double initial training formation, the focus on in-service training in education programs, the lack of consideration of the teaching contexts and specificities during the assemblies of teachers gives little or no support to practices and, if one sets aside the work of educational consultants, even less so on the ground.

What this program has shown in the medium term is, first, the necessity to provide educational support and scaffolding for teachers whose profiles show them to be fragile for various reasons (lack of self-confidence, lack of motivation, loss of a sense of vocation etc.), all phenomena which emerge during various stages of teaching careers (Huberman, 1989). There also appears to be a lack of more intensive support for those teachers who, while not doubting their profession or vocation, seem to be hampered in the development of a reflective stance on their practices even within an underlying dynamic of modification of professional attitudes. In this type of configuration, we find ourselves within the context of the work of Schön (1983), with a view to developing practitioners who are reflective, and above all, autonomous.

Here we are touching on the long-term prospects of this program. In fact, the factors involved in teachers' professional development have already been well defined and involve processes of cooperation, collaboration and a shared culture (Hargreaves & Fullan, 1992). We also know that a progressive support of practices, which is made possible through collaboration, leads to greater professional autonomy (Clement & Vandenberghe, 2000).

These notions are embedded in a broader educational paradigm which emerges from the ecosystemic approach of Bronfenbrenner (1992) in which the individual is at the centre with a holistic vision of development, whether it is the child/pupil or the adult/teacher. Within this paradigm, the interactions in one's environment are considered to be situated in an upward dynamic; that is to say that the subject, which in this case is the teacher, acts on their environment. The methodological approach of the DBR, which provides a triangulation of the data (based on the envisaged interactive teacher/pupil behaviours), emphasises the importance of contextualising and valorising the experiential aspects, while reducing the evaluative pressure and the professional judgement from which teachers may suffer during institutional evaluation committees.

CONCLUSION

The initial wish to adapt the British PLSLP was based on the aim of supporting teachers in New Caledonia in the development of practices responding to the needs of a group of pupils characterised by their diversity of cultural and linguistic backgrounds. The main obstacle, which required great flexibility throughout the program, arose from human resources. In fact, we were able to observe that, above and beyond the atypical motivational profiles which led to people leaving the program, the fact that the same contact person followed the teacher over several years is an important point in terms of trust. This level of trust is expressed in by the

individual to “agree to be observed” but also during the periods of exchange on oneself and one's practices. This point is all the more crucial in the New Caledonian context in which the teachers change pupils every year, which prevents them from following up the pupils, as was the case in the original program. This effect becomes even more accentuated by the changes in level in the organisation in cycles and even in schools.

The original aim of this program was to focus on the development of literacy-based skills for pupils in the countries of the Pacific where there is a blatant lack of initial teacher training; this is not the case in New Caledonia. As a consequence, by basing our study on the DBR approach and on a toolkit developed in collaboration, we have been able to simultaneously develop the toolkit and more broadly the program.

This adaptability has allowed us to direct the support towards deeper auto-reflection. The concern shown by the teachers for developing collaboration between colleagues also appears in the evolution of the discourses. The commitment for a large majority of the teachers in quite a demanding program and the support of the management teams and the informal demands of the teachers are strong indicators that this program responds to a need and is a valid means of supporting professional development on the ground.

This mirrors the case of the teachers who did not want to continue and shows the importance of considering in-service training in different conditions in order to support more closely teachers' needs, which differ particularly in the New Caledonian context, through multiple initial training schemes and thus variations in the shared culture among teachers. As we have pointed out, this form of equipped support over time involves a paradigm shift towards a holistic educational approach of “awareness”, within a “bottom-up” perspective, which involves changes on an institutional level.

In these conditions, we could envisage, for example, the university researchers working in partnership with the educational advisers who would be trained in data collection and support according to the conditions described in the program. This would allow us to respond to a request for professional support on a long-term basis. Indeed, the raising of awareness of practices leading to reflexivity and, specifically, the modification of professional practices and postures to the benefit of the professional development of teachers and the success of their pupils can only be carried out over a long period.

Thus, the development operates from pupil to teacher by observation and entails a rediscovery of oneself and one's practices. Within the ecosystemic perspective, the collaborative process at school level leads to the development of a collective professional culture, a point which may be lacking in New Caledonia as a result of the initial training structures as well as a shared culture among those who train adults, involving a broader movement within the institutions to the benefit of educational success.

In conclusion, it would be beneficial to develop this program throughout New Caledonia, because the pupils in difficulty are situated particularly in the Northern and Island provinces. This would also allow us to measure the efficacy of the program on the scaffolding of literacy-based skills alongside the professional support of teachers, while also progressing the research on comparisons with the countries of Oceania which are involved in this project.

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