Hybrid Teaching in Schools: Pedagogical Innovation and Professional Well-Being in a Time of Pandemic

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Abstract

At a time where education seems submerged by crisis, some teachers manage to be resilient in order to innovate to adapt and meet educational expectations. This research’s objectives are twofold: 1) to report on their pedagogical innovations and 2) to describe their professional well-being during this unprecedented time. A multi-case study with 20 teachers working in Quebec, in primary and secondary schools, made it possible to present 1) the guidelines teachers followed which directly affected their work context and modulated their professional task, 2) the practices specific to planning, teaching and evaluating, and 3) the evolution of professional well-being, shown alongside with the findings.

Keywords: pedagogical innovation, teachers’ well-being, hybrid teaching, pandemic

1. Introduction

1.1 Times Call for Pedagogical Innovation

Hybrid instruction as a mode of teaching in schools emerged as one of the most important pedagogical innovations of 2020. Indeed, the disruptions caused by Covid-19 forced teachers to quickly adapt their practice to fulfill the mission of educational institutions and offer an education to all. More specifically, in a situation where the usual practices no longer applied, teachers initiated a deliberate, voluntary and well-thought-out process to transform them (Lacroix & Potvin, 2009). Indeed, Lacroix and Potvin (2009) maintain that pedagogical innovation occurs when a teacher breaks with traditions, customs and habits to develop something new and inventive. Such a process involves three phases: 1) invention, that can present itself as a creation, innovation or novelty; 2) practical application, i.e., experimentation, mobilization or contextualization; and 3) institutionalization, i.e., generalization or implementation of innovation within the institution (Lacroix & Potvin, 2009). The purpose of this article is to report on teachers’ struggles during this unprecedented situation and demonstrate how, despite a host of challenges, some managed to overcome difficulties, innovate and exercise creativity by modifying their practices to create, develop and transform teaching in the twenty-first century.

1.2 Pandemic: Threat or Change Initiator for Teachers?

The pandemic forced teachers to rethink teaching, hardly an easy process. Indeed, a new reality emerged with the arrival of digital environment in education and teachers’ obligation to embrace and use it (Aye, 2020; Perret & Plantard, 2020). Pedagogical approaches aside, interaction with students and group-class management had to be literally reconceived. To this end, new distance learning platforms were created and visited (Papi, 2020), and new support measures were offered (Pelissier, 2020), yet still need to be explored.

Many teachers managed learning and evaluation situations by alternating online and modified in-person instruction owing to COVID-19. As regards online instruction, teachers had difficulty monitoring learning outcomes (Aye, 2020; Stordeur & Colognesi, 2020), regulating learning (Coulombe et al., 2020; Lollia & Issaeva, 2020) and having to urgently find evaluation measures (Detroz, Tessaro, & Younès, 2020). Modified in-person learning, for its part, forced teachers to maintain physical distancing with or between students, which affected the sense of proximity (Carrillo & Flores, 2020; Lollia & Issaeva, 2020; Moreau, Smith, Larose, & Chamberland-Black, 2020). What’s more, the many distancing and disinfecting protocols imposed during
in-person teaching represented an additional burden (Coulombe et al., 2020). To make matters worse, a context of sudden, uncertain and recurring changes afforded teachers little time to adapt (Coulombe et al., 2020; Lollia & Issaeva, 2020; Stordeur & Colognesi, 2020), causing a reactive dynamic (Stoloff, Goyette, De Guise & Girard, 2022). Adaptation required them to follow government and school guidelines—confusing at best—to orient their practice (Lollia & Issaeva, 2020; Stoloff et al., 2022) while taking into account the teacher’s and student’s capacity to understand and use digital teaching practices. The heavy workload resulting from these conditions of overstimulation appeared to have a negative effect on teachers’ psychological health. Examples of added stress include the pressure to fulfill their changing task (Carignan, Beaudry, & Cohene, 2020; Carrillo & Flores, 2020; Filipi et al., 2020) and the expectations of the administration (Lollia & Issaeva, 2020). The daily emotional challenges produced anxiety in some teachers because of their lack of familiarity with Information and Communication Technology (ICT) (Filipi et al., 2020; Lollia & Issaeva, 2020), a pervasive tension regarding work-life balance (Brunon & Cau-Bareille, 2020) or a sense of isolation due to physical distancing.

From a salutogenic perspective, centered on solutions and opportunities, an educational system that builds on each person’s strengths appears essential. Indeed, from a philosophical point of view, Van Nuland et al. (2020) insist on the need to consider new ways of thinking in which an advanced educational system focused on meaningful relations with students determines the education of the future. From a practical point of view, emergency conditions force teachers to adapt their practices to meet challenges in the field (Brunon & Cau-Bareille, 2020; Stoloff et al., 2022) and stimulate creativity in action (Amado, Bouilloud, Lhuilier, & Ulmann, 2017). Lhuilier (2015), in fact, presents emergency or crisis situations as moments of alternative reorganization that can provide a basis for individual growth. In the opinion of Mongeau and Tremblay (2009), imbalance created by a rupture forces change, and consequently, becomes a learning opportunity. Thanks to familiarity with digital tools and mastery of digital skills, some teachers were able to diversify their practice in a digital environment (Brunon & Cau-Bareille, 2020; Filipi, Félix, Martin, & Gebeil, 2020) and achieve learning objectives via stimulating activities for students (Carignan, Beaudry, & Cohene, 2020). In short, this critical period brought out the human potential for multitasking (Carignan et al., 2020; Stoloff et al., 2022) and the professional potential—with notable regard to teachers in their proximal zone of development—for making effective changes in teaching practices (Filipi, Félix, Martin & Gebeil, 2020). These changes no doubt explain teachers’ fluctuating sense of well-being during this time.

1.3 Framework

The concept of well-being is complex and therefore difficult to define (Seligman, 2011; Stoloff, Boulanger, Lavallée & Glaude-Roy, 2020). It is derived from two perspectives: the hedonic approach, which focuses on pleasure and happiness, and the eudemonic approach, which focuses on optimal functioning (Laguardia & Ryan, 2020). These two approaches are integrated in the present study as being the optimal functioning, based on realizing or actualizing one’s potential, self-determined and resulting in a sense of accomplishment, pleasure and happiness. Seligman (2011), more specifically, presents five components of well-being in his PERMA model: 1) Positive emotions, 2) Engagement, 3) positive Relationships, 4) Meaning, and 5) Accomplishment. The component of meaning, defined as belonging to and serving something that you believe is bigger than self (Seligman, 2011), has proved to be the central determinant of professional well-being in teaching (Goyette, 2016). In addition, Stoloff and her colleagues (2020) recently proposed a sixth component, vitality, which consist of overall physical and psychological state composed of level of energy, serenity, healthy fatigue and enthusiasm about going to work each day. These authors also relate accomplishment to all positive professional emotions, including sense of freedom and creativity, autonomy, competence, self-determination and control.

1.4 Correspondence to Research Design

Well-being falls within the field of positive psychology, which studies the “conditions and processes that contribute to the flourishing or optimal functioning of people, groups and institutions” (Gable & Haidt, 2005, p. 103). Such field is founded on the idea that development of individuals’ strengths and psychological competencies builds greater resilience in the face of life’s stresses (Seligman & Peterson, 2004). Adopting an approach structured around personal strengths instead of weaknesses (Magyar-Moe, 2015) thus allows us to explore additional interventions to better achieve and maintain well-being. The goals of positive psychology are, specifically, 1) to build strengths while repairing and healing disorders, difficulties or illnesses; 2) to strive for the good life; and 3) to invest on a continuum from least happy to most happy in the achievement of excellence (Seligman, 2004). Positive psychology as a science aims to know and understand the factors allowing individuals and societies to grow and flourish despite the obstacles encountered (Gaucher, 2010). Many areas of research, however, document problems and pathologies only; for this reason, a better balance in knowledge is needed to fully understand the phenomenon and thereby take all aspects of human nature into account (Seligman, 2002).
These theoretical and conceptual underpinnings color the focus of the research which is to know and understand teachers’ experience during the pandemic. Its objectives are twofold: 1) to report on their pedagogical innovations and 2) to describe their professional well-being during this unprecedented time.

2. Method

This research employs a qualitative comprehensive-interpretative methodology (Savoie-Zajc, 2000). Thanks to a multiple-case study method (Stake, 1995), we described individual profiles for the 20 participants, who included primary and secondary teachers from Québec province, all disciplines included.

2.1 Participant Characteristics

Data were collected in June and July 2021 at the end of the school year. Teachers were recruited via social networks using a video clip presenting the project and asking them to complete a short questionnaire if they wished to participate. Of the 25 teachers who completed the form, 20 took part in individual interviews. The sociodemographic data of the participants are presented in Table 1.

| Total   | 20 |
|---------|----|
| Gender  | 15 Female / 5 Male |
| Order of teaching | 7 Primary (6F/1M) / 13 Secondary (9F/4M) |
| Disciplines taught | Art (1), Physical education (5), Languages (4), Special needs (4), French (1), Math (1), Science (2), Social universe (3), |
| Years of experience | ≤ 4 (1), = 5–9 (3), ≥ 10 (16) |
| Employment status | Contract (3), Permanent (17) |

2.2 Data Collection

Data were collected via semi-directed individual interviews conducted to encourage the sharing of expertise and experience (Savoie-Zajc, 2009). The interviews were conducted via Zoom and lasted 70 minutes on average. The participants were asked to consider a moment and place for the interview where they wouldn’t be interrupted, for optimal focus. The researchers would adapt to their availabilities. The interview grid was based on Québec’s conceptual framework for health and its determinants (Santé et services sociaux Québec, 2010) since it presented the individual’s spheres of life. Accordingly, the four general questions posed relate to: 1) the education system to know the participants’ teaching context (questions 1 and 2), 2) the work environment to know their tasks and roles (question 3), and 3) participants’ individual characteristics to know their personal and social details and state of well-being (question 4).

2.3 Analysis

Each interview was recorded, saved and retranscribed in a common Word format for audio recordings (WMA and MP4). Content was analyzed by a research assistant using conceptualizing categorization (Paillé & Mucchielli, 2012) for a phenomenological study of the interview data where a situation is explored and analyzed by the person who experienced it (Rondeau & Paillé, 2016). Next, the researcher takes note of the narratives (audio recordings or floating readings), edits the comments (identification of units of meaning) and classifies them (emergence of the first categories followed by migration of units of meaning) to identify conceptualizing categories (establishment of connections between categories and evolving representation of categories over time). Intercoder reliability was insured continuously between the research assistant and the researchers until intercoder agreement was reached, in order to process with an evolutionary epistemology, where “the relationship between the researcher and the data is not static and is constantly changing during the course of research, where the researcher and the data transform each other” (Proulx, 2019, p. 62).

3. Results

To meet the first research objective, it’s necessary to display how participants describe their teaching context. Thus, we begin by discussing the guidelines teachers followed, because these directly affected their work context and modulated their professional task. Next, we present the practices specific to planning, teaching and evaluating that were implemented after the guidelines were issued though roles and tasks. To meet the second research objective, the evolution of professional well-being is shown alongside with the findings.

3.1 Guidelines

During the first chaotic wave of the Covid-19 pandemic, governance was the key point of departure to guide
individuals working at multiple levels of a structure. Each directive implied an adaptation or change in the usual way of doing things, and the teachers interviewed said that directives were issued from various sources, as summarized in Table 2 at the end of this section. First, the Minister of Education directed ministerial guidelines dealing with 1) school organization: closing or opening schools; 2) the aims of teaching: revision, consolidation, teaching, evaluation; 3) school status: mandatory or voluntary; 4) pedagogical services offered: learning kits, learning camps; 5) teaching mandates: ensuring contact with students, adapting teaching to the modalities in effect; and 6) hygiene measures related to the pandemic. Directives were issued during a special bulletin televised each day at one p.m. Second, teachers mentioned regional school boards (CSS: Centre de services scolaire) that offered schools and teachers guidelines for 1) continuing education, 2) parent surveys to understand the needs of families, and 3) pedagogical services offered: educational cards prepared by teaching advisers. Finally, school administrations took a nuanced and differentiated view of ministerial and CSS guidelines and opted for those best suited to their particular school.

For teachers, the multiple sources of guidelines and numerous contextual constraints to consider were highly frustrating, as summarized in Table 2 at the end of this section. A first directive concerned imminent school closures and a work stoppage. The idea of a holiday and the use of the word “vacation” by the Minister of Education created a certain discomfort insofar as so many in the workforce were experiencing emotional and professional overload. One teacher pointed out the devaluing effect of this directive: “it’s like: OK, maybe the rest of the world doesn’t think we’re all that important” (T5FS.AL8 – Note 1). Still, some teachers managed to take advantage of the situation. They enjoyed having time for themselves, engaging in physical activity, brushing up on their skills and pursuing distance training. Another teacher, moreover, viewed things more ironically: “WOW! This is the first time in the history of Quebec we’re getting paid for the overtime we’ve been doing since the existence of the education system, since the Quiet Revolution. WOW! 2 weeks of overtime (…) So that’s how I saw things myself, and that’s what I said to everybody” (T1FP.AL7).

Teachers expressed a lack of clear guidelines as the biggest problem during the first wave. Indeed, teachers reproached in particular for directives that were vague, contradictory and occasionally unrealistic. One teacher fumed about her back-to-school experience: “Oh come on! Montreal’s Canada’s hot spot, and we’re opening the city’s schools? Come on now. We had the most deaths, they’re all around here, and we’re opening our schools?!” (T1FP.AL40). Another commented: “At the time we got directives that were either contradictory or totally confusing, my colleagues and I were like: this makes no sense. We were telling each other: No, I’m not doing this, it just makes no sense” (T1FP.GL40). Still another added: “I was listening to the press releases, and I’m a person who follows instructions, so I was expecting a very structured deconfinement plan. But instructions were tossed around in the schools, and I saw that my administrators were doing the best they could, but they were informed at the same time we were” (T3FP.AL11). Finally, one said: “I think it was bizarre, the situation was chaotic; I hope things will be different next time” (T8FP.GL17). For others, directives were clearer and better guided their actions after they returned to primary school. A physical education and health teacher working from home observed that “after 1 or 2 weeks, things were clearer. My mission was online teaching to maintain the school-home relationship and the students’ tie to their school” (T7FP.GL18).

This cacophony of directives was most possibly the reason for teachers’ uneven implementation in schools. In this sense, participants observed broad differences in 1) the functioning of colleagues, schools and school boards, 2) the quality of teachers’ professional engagement, which was affected by individuals’ undeniably different levels of commitment to their professional task and, consequently, 3) teachers’ professional experience in a time of pandemic. A rather scathing extract illustrates the negative effect of these differences: “It’s embarrassing to get an email that’s not even from my student, asking me why I posted material online, when the other one [teacher] didn’t post anything. It’s not normal. So again, I’m the usual idiot [who’s working] while the other one’s out shopping for her new kitchen!” (T13FS.TL22).

The final irritation teachers discussed refers to being forced in an awkward situation. First and foremost was frustration over ministerial public announcements that left teachers no time to reflect on and process subsequent procedures. The result was a sense of “suffocating anxiety” caused by questions with no answers from parents and students who received the information simultaneously: “I go back to school, I learn the instructions on the fly on television at the same time as everybody else, (…). I found this showed no respect for teachers.” Simultaneously, some teachers explained that the regional school board’s requests regarding family surveys created a predicament by confronting them with dysfunctional families, vulnerable students and families in need when they were in no way ready or equipped to meet such needs. This led to a certain reticence and sense of powerlessness, as shown in this comment by a teacher who decided against the survey in order “to protect myself against having to deal with that kind of distress, because I’m not a social worker, I’m not a psychologist”
Table 2. Recapitulation of guidelines issued from various sources and associated irritations

| Various sources        | Guidelines’ aims                                                                 | Irritations                                                                                                                                 |
|------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Minister of Education  | 1) school organization                                                          | ➢ Discomfort due to the idea of a vacation referring to the imminent school closures and a work stoppage,                                  |
|                        | 2) teaching aims                                                                | ➢ Vague, contradictory and occasionally unrealistic guidelines,                                                                                                                                     |
|                        | 3) school status                                                                 | ➢ Frustrations due to public announcements.                                                                                               |
|                        | 4) pedagogical services offered                                                   |                                                                                            |
|                        | 5) teaching mandates                                                             |                                                                                            |
|                        | 6) hygiene measures                                                              |                                                                                            |
| Regional school boards | 1) continuing education                                                          | ➢ Reticence and sense of powerlessness when confronted to dysfunctional families, vulnerable students and families in need during surveys. |
|                        | 2) parent surveys                                                                |                                                                                            |
|                        | 3) pedagogical services offered                                                   |                                                                                            |
| School administrations | Nuanced and differentiated view of ministerial and CSS guidelines and opted for   | ➢ Teachers’ uneven implementation and /or respect for guidelines in their practice (functioning, engagement and overall experience of teaching during pandemic). |
|                        | those best suited to their particular school.                                    |                                                                                            |

3.2 The New 2.0 Planning

Faced with the chaos of multiple directives due to their various sources, high numbers and constant changes, teachers had no choice but to act. Forced to shift from in-person to distance to hybrid teaching as key actors in a spiral of uncertainties, they had to adapt their usual practices. When describing these changes, teachers list the six factors they took into account. First, they reemphasize the acute frustration from guidelines that were vague, contradictory, unclear, variable, changing and unevenly implemented by administrations and teachers. Second, they name the different resources available, notably the ministry’s education kits or the educational cards from the school boards. Use of these resources is nuanced, ranging from “unusable and inappropriate” to “highly inspiring and helpful” depending on the teacher. Third, teachers say they have to consider the various pedagogical aims, including: 1) vocational training, 2) recreation, 3) pedagogical continuity with no new content, 4) revision, 5) consolidation, and 6) new subject matter, based on an evolving pandemic and issued guidelines. Fourth, they must continually review the orderly manner to distribute and teach the material, since the constant changes affect teaching and learning rhythm and, as a result, the content taught and learned. Fifth, teachers deal with the family realities of both colleagues and students’ parents (remote work, health, single-divorced-couple, the schedules of other children learning from home, needs satisfaction, etc.). Finally, the sixth factor teachers take into account is each student’s realities in terms of 1) capacity to function (connection, materials, follow-up), 2) emotion management (stress, anxiety, perseverance, motivation), 3) school situation (immersion, adaptation, learning difficulties, vulnerable), and 4) technological skills, which are often accompanied by a familiarization process before a level of autonomy is achieved. The following lengthy testimony, using a fictitious name (Note 2), illustrates the complex realities teachers frequently deal with:

In the first weeks, I sent emails, but then after that, I phoned right away. I picked up the phone, spoke to the parents, spoke to the children. The first contact was long. The discussions were long. The families would tell me things like: Well, we have three kids, the both of us work from home, we asked our daughter to do an hour and a half [babysitting]in the morning, an hour and a half in the afternoon, but at the same time she has to take care of the kids. But I’d say to myself: That’s not right, if you can only work if Rose minds the kids, how is that fair for her? She can’t learn if she has to look after her little brothers. This doesn’t work! So then we agreed, Rose will have to do her schoolwork while the baby’s taking a nap. Leave her alone in the morning, let her go outside and play with her brothers. These were the kinds of discussions we had with the parents…I went inside their home. Sure, I was on the phone, but I really experienced the ups and downs of their everyday life. Once maybe I had a family in distress who was struggling to survive and save their business, and the children were left to themselves. Otherwise, everybody was together, at home, at the computer. Everyone felt safe in any case. But the first contact was very long (T11FS.TL5).

The first step following the announcement of vacations, school closures and the start of distance teaching was supposedly initiated by a sort of “2.0 planning”. Teachers explain that the shift to online teaching meant they needed to embrace digital supports to make the most judicious choices possible. The extent of the interfaces they used reflects the diversity of possibilities and their appropriation proactivity. As part of that diversity, they list
Chromebook, Classroom, Facebook, Google Drive, Google Forms, Google Slide, Messenger, Mozaïk, Stream, Teams, Pluriportail, Youtube, and Zoom. Note that some of these were imposed, some were already used in their schools and others were chosen to meet the needs of distance and hybrid teaching. The choice of digital support also depended on various objectives to achieve, including: 1) surveying, 2) catching up with the students, 3) monitoring, 4) managing critical situations, 5) tracking or 6) teaching.

This kind of planning in the digital era also required the organization of various pedagogical tools, sixteen (16) of which are audio recordings, factsheets, forums, interactive calendar, Minderaf, online consultation, online exercises, photographs, texts, questionnaires, screenshots, slides, student tracking, video clips, video recordings, and WhiteBoard. In order to be effective with their 2.0 planning, teachers combined different of above pedagogical tools to make the teaching-learning sequence more complex. At the same time, complementary documentation had to be offered to students with no access to digital supports. This included 1) printed versions, 2) comic strips, or 3) arts and crafts materials (in primary school). Teachers were constantly seeking solutions with a view to educational success. For many, this meant adapting some of the usual pedagogical approaches to explore new ways of teaching, notably through 1) reverse classroom, 2) virtual classroom, 3) project-based approach or 4) creation of a menu “à la carte”. Thus, teachers had to react promptly and question, oversee, comprehend, anticipate, organize, adapt and adjust their traditional practice to deal effectively with ongoing change.

To facilitate changes, teachers say they relied on their colleagues to conceive, develop, improve and share. Indeed, the pandemic along with educational issues stimulated collaboration. First, the difficult context sparked a wave of sharing in terms of creating and planning: “a lot of solidarity between teachers and the school’s professionals… this too is going to be the positive side of COVID. Adversity tends to bring out the positive side of human nature a bit more” (T7FP.AL54). This solidarity impulse was marked by new trends of collaboration beyond traditional borders, especially with social media. Second, the interaction with colleagues offered a moral support that helped assuage many teachers’ feelings of anxiety, helplessness and isolation. An Anglophone secondary school teacher reported that in his school: “When we began getting in touch with each other, this reduced the stress, I think when we realized that, okay, everybody’s having a tough time, that it was good “just having time to chat. Then, uh, after we went back to school, we had a big enough space with tables, and we could be five, six teachers, or more” (T14MS.TL9) supporting, comforting and listening to each other. Third, many types and levels of collaboration could be identified. Depending on the different environments, forms of collaboration could be more or less structured, ranging from a fixed weekly time-slot to an on-the-spot response to an immediate need. To start with, teachers mentioned the collaboration between teachers, between those who taught the same grades and/or the same subjects. They explained the distribution of tasks related to planning, including: 1) developing tools, 2) preparing documents, 3) developing learning plans, 4) updating content, or 5) practicing use of interfaces before synchronous teaching with students. Next, teachers discussed their close collaboration with other school professionals involved in students’ learning, such as special need specialist, which allowed them to share information on the situation, perform follow-ups and disclose students’ course evaluations. This work with internal resources is seen as an added value, as the following extract clearly indicates:

Each week we had meetings. (…) There was good follow-up by the special ed teacher and the psycho-educator who were really part of our meetings. There wasn’t only teachers, internal resources were brought in too. I thought this was great because usually we operate pretty much behind closed doors… Even during pedagogical days, we don’t necessarily have time to meet up with each other (T12MS.TL19).

Finally, teachers could rely on support from in-school committees organized to assist and accompany those having difficulty with the new situation. One teacher, for example, said she felt happy to help colleagues: “I accompanied teachers a good deal, especially the ones teaching kindergarten, because they were older teachers who weren’t familiar with computers, so I enjoyed showing them how to prepare their task and we really worked together (…). This made me feel I had a little something to contribute as well” (T8FP.AL4). Another notable example is the teacher who mentioned “the tactical squad” in his school (T15MS.GL4), which was formed by the school administration in order to assist anxious students and teachers. The members of this squad pitched in to support those lacking the requisite skills and help them: 1) understand the different digital platforms, 2) create, propose and adjust teaching-learning modalities, or 3) solve computer-related problems. As an example, this teacher described a colleague’s lack of computer skills explaining that over time, “he [the colleague] was stressed and embarrassed. [The colleague] didn’t even dare tell the administration: ‘I don’t know how to send my students an email’ or ‘I don’t know how to contact my students’ or ‘I don’t know how to find telephone numbers on the internet’” (T15MS.TL8).
Subsequent to the planning process, teachers needed to change the way they addressed learning and evaluation situations (LES).

3.3 #Teaching #Evaluation

Put into perspective, teaching is traditionally a process achieved when teachers interact with their groups of students, in the classroom or gym, and put into effect what they’ve planned (Government of Quebec, 2020). However, in March 2020, schools closed and teachers had to initiate distance teaching (Stoloff et al., 2022). The teachers interviewed addressed the huge challenges they experienced regarding new classroom management, teaching, co-teaching approach and evaluation modalities.

New classroom management

For a start, the introduction of distance education led to adjust composition of groups, whereby students within a same grade were redistributed into new groups to balance number of students per group. Consequently, teachers found themselves teaching students who were not in their original class. Furthermore, to respect teaching time slots, same-grade groups were merged, causing groups of 50 to 60 students during synchronous teaching. The classroom dynamic was strongly affected, with 1) more inhibited students, 2) less participation, 3) greater silence, and 4) less intervention and teaching impact, all of which exacerbated the sense of disorientation. One teacher described her first experience of online teaching as follows: “[during] my first time teaching online, I had 50 students, it was a disaster… they just totally messed with me, it was insane! I had the impression they were all so good at it: they were passing chips around on-screen, they left their mics on and were munching chips…it was pathetic. I decided I had to forget about this course! Delete it!” (T11FS.TL9). However, in the face of this less-than-ideal situation, some teachers reported that they combined these large group synchronous teachings with individual activities or sub-groups activities to encourage exchanges and increase motivation.

As classroom management goes, teachers had to 1) become rapidly familiar with the technology and different functionalities, while simultaneously 2) dealing with new behavioral issues such as multitasking when students play videogames during class, leading to 3) a renewed representation of attendance and quality of a student’s presence in class. During this first wave, teachers, mainly at the secondary level since it lasted longer leaving the teenagers at home, testified to 1) school drop-out, 2) lack of motivation and 3) increased absenteeism. Some said they felt considerable empathy for students, others experienced a sense of helplessness, and others responded with resilience and hope. In addition to the above-mentioned challenges, it must be said that the virtual mode offered new dimensions of functioning that facilitated classroom management, since teachers could control mics, cameras, speaking slots, and divide classes into sub-groups or teams. One teacher even commented that as far as he was concerned, “there was no longer need to contact the parents because their child’s behavior was unacceptable in class, because [right from] the first two or three Zoom [meetings], I (...) kicked them out” (T14MS.AL15), and it’s also true that “in Zoom classes, troublemakers don’t show up because they don’t want to be in class” (T14MS.TL21). In short, teachers report they started this new process without guidelines, meaning a phase of trial and error was needed before acceptable functioning modalities could be established to deal, notably, with the logistics of interactions, cameras and mics. They also address the importance of challenging themselves to be interesting and stimulating to facilitate behavior management. This last point is another indication that significant relationship and proximity are important to consider, satisfy and maintain, even virtually.

Unlike the sense of distance reported, teachers must handle communications from parents and students at all hours of the day or evening, during the week and on weekends. This creates a sense of pressure, with some teachers emphasizing a never-ending professional task and the difficulty of taking time off. In the words of one teacher, this is “the somewhat more negative side of things, because we’re ultra connected everywhere. So if a student contacts you at nine o’clock in the evening, even if you think: ‘no, it’s nine o’clock’ it’s difficult to put things on hold” (T16HS.CL21).

At the same time, in-person teaching reveals challenges too, caused by an organization dictated by hygiene measures involving 1) new organization and rules to circulate from one place to another within the school, 2) invasive disinfection protocols, and 3) meticulous and strategic organization of didactical items, e.g., single use of material or individual bins.

Teaching

In addition to modalities of functioning, teachers needed to change, adapt and develop new ways of teaching as the pandemic unfolded. They explain the importance of being creative by offering material adapted to teaching aims (recreation, revision, consolidation, new material…) to stimulate students’ interest. They have an ongoing
concern with students’ academic development, which, in a time of pandemic, became inevitably as important as socialization and management of needs and emotions. One teacher said that in her experience: “It made me realize that school is super important for [students]. For their academic development, of course, but especially for their social life, for their psychological life, and that’s what I had really underestimated. Completely underestimated” (T23FS.AL43). Another teacher, furthermore, added that: “school, uh, it’s not just learning. It’s not just about learning your subject, it’s also learning about living together, it’s working together, it’s socialization” (T12MS.AL1). Additionally, teachers describe considering various teaching modalities in regard of pandemic phases as well as learning needs. One teacher used the example of a video clip which was initially used to establish contact and implement game-based learning and was later used to review content and teach new material. The context obviously forced numerous teachers to develop their digital competence, as this primary school teacher attests: “I learned a whole lot about [digital technologies]. I was already kind of familiar with them, but video editing, filming, those things, I wasn’t at all comfortable with them before. (…) This wasn’t something I used before in my work, but now it’s one more asset!” (T2MP.AL14).

In the face of an ongoing pandemic, teachers observed a drop in motivation and grew concerned about the sharp increase in screen time resulting from online teaching. They reacted by varying types of intervention. Some alternated synchronous with asynchronous courses and activities to do at home or outdoors, while others organized asynchronous prerequisite work (of information, comprehension) and combined it with a subsequent synchronous meeting which would focus on more complex explanations (manipulations, demonstrations or collective reflection) in order to divide up material taught and simplify learning. A few teachers say they recorded synchronous courses so they could be sent to absentees and be available to all students at all times; others, however, refrained from using this method to encourage attendance. In all cases, teachers implemented innovative strategies in response to the constant variations in the teaching context (in-person, online, hybrid). They exercised creativity to propose stimulating conditions time and again, regardless of the situation. Upon returning to school, one physical education teacher explained that she “had to be creative to come up with new ideas, new games. We weren’t permitted to play basketball the same way, to play soccer. So, I got creative, we adapted” (T2MP.TL14).

Co-teaching approach

Interesting to note that teachers also updated the usual co-teaching approach. Indeed, three types of co-teaching became increasingly widespread during the pandemic. The first was split teaching, which involved splitting the week into three (3) days for one teacher and two (2) days for the other. This approach quickly proved inadequate to cope with students’ multiple demands and ensure cohesion throughout the lessons. The second was complementary co-teaching. This was characterized by task division: planning tasks for one teacher and teaching tasks for the other, whether for in-presence or synchronous teaching or individual follow-up. The third type, finally, was team co-teaching. A result of student redistribution where, owing to the explosion of group-classes in a same grade, teachers united to co-teach and divide tasks between four (4) to five (5) teachers (planning, at-home-student follow-up, in class teaching, online teaching). Teachers indicated that this option called for significant team cohesion. One teacher responsible for online follow-ups reported that: “I had to consider the in-class teacher’s content for the students at home. That was an important adjustment since I now had to work in students’ files I don’t usually handle, in order to access emails, phone numbers, follow-ups, because we had to record details in a shared document with the telework workforce: Who contacted who? At what time? And tracking content [for] student follow-ups” (T7FP.TL18).

Evaluation modalities

Despite the continuing reflection on what-how-when to implement material to support student learning, teachers acknowledge the fact that learning differs for all students and, in turn, effects assessment veracity. As mentioned by teachers after an unexpected directive was given in the last month of the school year by the Minister of Education instructing to produce a report card for the third and last trimester of the year, it was upsetting to be told to evaluate and it created stress regarding the reconfiguration, value, and aim of assessment: About what? How? Which students? When? In retrospect, however, teachers note the diversity of all assessment modalities used. For those conducted with students, methods used were 1) printed feedback, 2) photographs taken and posted online, 3) ordinary corrections, 4) student communication reports, and finally, 5) self-correcting online assessments, as well as anonymous corrections. One teacher illustrates this process as follows:

I discovered the joys of online evaluation. It was with our portal, I used formative evaluations that were self-correcting. The time spent correcting quizzes is over. Often, we have to verify learning with quizzes, but this always involves correcting. We never have enough time and they end up piling up. Then I
Regarding evaluation, although teachers obviously employed several modalities, they strongly objected to the Minister’s requirement. First, teachers criticized this “compensation evaluation” containing no explicit criteria. The only available and justifiable criteria they evoked include, in a nutshell: 1) presence, 2) effort, 3) attendance, 4) assigned work completed even if not of uniform quality, 5) assigned work submitted even if up to two weeks late and 6) submission of original work versus work that has been duplicated. These criteria don’t assess learning! Even if they did, how to assess learning? How does one manage the unmanageable? Second, they describe problems related to the nature of evaluation, that is, the difficulty of 1) finding meaning in the evaluations, 2) establishing objectives within a perspective of pedagogical continuity, notably when distance/in-person/hybrid teaching modalities differ significantly from one student to another, and 3) switching from an essentially observable “face-to-face” evaluation to a distance evaluation, notably for teachers in physical education and health. One teacher commented that: “I had no results, and the school administration was incapable of telling me how to evaluate” (T16HS.CL66). Finally, the formally imposed evaluation added stress on teachers who felt helpless to deal with children in difficulty, who needed to be supported, accompanied and evaluated in a context where this was not always possible. In addition, the Minister’s injunction that “all students pass” caused teachers’ indignation which comes as no surprise.

4. Discussion

This study conducted with 20 teachers offered a unique and detailed understanding of their professional practice and personal experience during the pandemic. Needless to say, the complexity of the situation confronting them forced a radical change in their usual way of doing things. Along with Lacroix and Potvin (2009), and Brunon and Cau-Bareille (2020), our study shows that, during COVID-19, teachers abandoned their usual routines and adopted an ongoing, deliberate, voluntary and well-thought-out process to transform their teaching and innovated. Accordingly, our findings support the idea that the resulting pedagogical innovations were rooted in a sequential and cyclical process of continuous change and renewal comprised of three phases.

The invention phase was clearly reactive and creative in that it occurred over an exceptionally short period of time and called for the mobilization of a variety of effective resources, both internal and external. Faced with the urgency of the situation and given little time to adapt (Stoloff et al., 2022; Amado et al., 2017; Lollia & Issaeva, 2020; Stordeur & Colognesi, 2020), teachers managed nevertheless to create, adapt and adjust their practice. The unusual circumstances prompted an innovative approach that was valid in their eyes and supported by collaboration, as other researchers have shown (Perret & Plantard, 2020). Undeterred by adversity (COVID-19 and related guidelines), the teachers drew on internal and external resources, demonstrated solidarity and reinvented their pedagogical practices to respond to the needs of the moment.

The practical application phase was contextualized and differentiated. Our findings highlight a first period structured around the revision and consolidation of learning, during which teachers formatted content in keeping with the new requirements of the digital environment. The next and second period consisted of developing new content and was characterized by the diversified use of pedagogical tools adapted to digital supports available. In line with Stordeur and Colognesi (2020), pedagogical innovations implemented in this time of pandemic should inevitably be reinvested in future practice. Coulombe et al. (2020), on the other hand, underscore the few advances made in terms of training objects since only the essential elements of the program were taught, hence, there was very little enrichment within the didactical material developed and used.

The institutionalization phase was interactive and collective insofar as modes of functioning were shared first among colleagues in the same school and next with the teaching community, which was responsible for practices appropriation. Professional and scientific dissemination is seen as an integral part of institutionalization, because it enables the identification of the specific features of hybrid teaching, before being generalized and normalized. This practice will gradually become a new normal, an integral part of the repertoire teachers drew upon to make their pedagogical choices.

According to the participants in our study, hybrid teaching is to be circumscribed by a skillful combination of classroom and distance teaching-learning modalities. To be effective, this combination must be well planned and organized, and should take into account issues of distance, including the need for presence and proximity to encourage socialization (Ayer, 2020) and students’ motivation and learning (Lollia & Issaeva, 2020). Hybrid teaching in schools focuses on students and aims for educational success which can be achieved through an
ecological combination of learning, socialization and emotion management. This upcoming approach is characterized by a renewed 2.0 planning as well as synchronous and asynchronous teaching. This particular feature redefines the current 4th professional competency expected from teachers, “Implementing teaching and learning situations” (Government of Québec, 2020). This is that synchronous teaching with distance interaction and asynchronous work with no direct teacher-student interaction are both added to the single “classroom interaction” aspect of in-person teaching. Thus, digital practices are inseparable from hybrid teaching. Unlike Filippi et al. (2020), who presented a profile of more experienced teachers with less knowledge about digital technologies, our study shows that the required switch to digital pedagogical practices during the pandemic substituted exploration, use of technology and creativity for many teachers, even those with the most experience (Stoloff et al., 2022). Regarding teaching in the digital era, Ayer (2020) emphasizes that it is the quality of digital tools used which ensures an effective teaching-learning process, not its use alone.

To reach pedagogical innovation, teachers’ ability to innovate appears to depend on both self and others. Abilities related to self encompass 1) initiative, 2) commitment to educational success, 3) mastery of subject and 4) creativity. Abilities related to others involve significant bonds and productive collaboration with colleagues. This collaborative experience fostered mutual support and exchanges; it was no doubt responsible for reducing the feelings of isolation and loneliness evoked by many authors (Moreau et al., 2020; Filippi et al., 2020). The pedagogical innovation described here will no doubt impact teachers’ future practices, even after the pandemic has subsided. Indeed, from now on, teachers can target promising “hybrid” practices entailing essential digital interfaces, preferred pedagogical approaches, developed tools, simplified evaluation modalities, facilitative forms of co-teaching, and collaboration with various members of the school staff. These encouraging practices have proved helpful and were experienced positively, which should motivate teachers to pursue them in the future.

Thanks to the pandemic, teachers have had to redefine themselves, discover new meaning in their profession, adapt and/or abandon their usual practices and meet the new requirements of a profession in constant evolution. This context, at first glance, risked to negatively affect their professional well-being. In our study, the main problems they faced were inconsistency, unfairness and a sense of helplessness. First and foremost was the inconsistency of guidelines for a constantly changing situation because of the lack of coherence between levels of governance (government departments, school boards, school administrations). These confusing directives, which were often issued in parallel with announcements to the general public, represented the main source of frustration, since teachers were afforded little time to effectively manage the situation. Second, the unfairness caused by teachers’ varying degrees of commitment affected morale, since some teachers worked to the point of exhaustion, and were under the impression that others openly took advantage of the disruption to reduce their efforts and use the extra time for personal activities. This type of comparison between each other appears to be voluntary and customary, yet informal. Third, a sense of helplessness to cope with students experiencing social, academic, emotional or family problems was a major source of stress. Direct access to specialized services is therefore essential for fostering teachers’ well-being in the workplace.

Our study also highlights the presence of individual strengths that allowed teachers to experience relative well-being in a time of crisis, notably 1) resilience, thanks to an ability to recognize the stakes involved and use their resources to cope, 2) competent action characterized by pedagogical creativity, and 3) sense of accomplishment after capably meeting challenges. Indeed, the participants’ accounts attest to their resilience in a complex situation where directives were unclear, incoherent and issued from various sources; where hygiene measures were implemented to control the impact of a worldwide pandemic; and where the in-person teaching-learning process was upended by a hybrid teaching approach. In this crisis, teachers remained centered on professional expectations to offer optimal conditions for educational success. Their focus on educational success, rather than just academic achievement, may itself have been a key ingredient in their resilience. Indeed, the findings show that teachers appeared to be less concerned with learning per se (Aye, 2020; Lollia & Issaeva, 2020), preoccupied by socialization and emotion management to maintain students’ well-being.

In addition to resilience, teachers demonstrated a pedagogical flexibility in their actions, revealing a capacity to revisit their planning process and transform their usual teaching modalities. An essential condition of this flexibility was mastery of their subject matter and related knowledge (Le Boterf, 2011), and space-time required for creativity (Brunon & Cau-Bareille, 2020). For support, teachers cultivated collaborations with colleagues, online training programs and expert advice. Resourcefulness and creativity are what lay behind their competent action. These findings complement those of Papi (2020) and Pelissier (2020) indicating that, in an emergency situation, the training and support offered can be successfully reinvested as long as the information conveyed responds to an immediate need. Finally, a strength related to professional well-being is the sense of
accomplishment teachers experienced in terms of successes, challenges met, collaborations developed and new awareness of the extent of their potential. This positive view of these accomplishments strengthened their sense of well-being.

5. Conclusion
In a difficult time characterized by vague, contradictory and unrealistic directives, complicated pandemic measures and multiple adaptations for hybrid teaching in schools, teachers successfully fulfilled their mandate. Bolstered by an outpouring of professional solidarity, they demonstrated adaptation, innovation and creativity in the face of adversity. Despite a precarious sense of professional well-being, they lived up to the challenges of a pandemic using a combination of resilience, resourcefulness and determination. Considering their ability to show so much strength in action and hope for the future, it seems essential to build on teachers’ individual strengths of character. In summary, and consistent with Seligman and Peterson (2004), teacher training or professional development activities can help individuals identify and maintain their strengths and psychological competencies. In this way, teachers can rely on their psychological capital to cope successfully with adversity and difficulties encountered in their profession.

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References
Amado, G., Bouilloud, J.-P., Lhuilier, D., & Ulmann, A.-L. (2017). La créativité au travail. Toulouse: Erès.
Aye, M. (2020). Avantages et contraintes de la formation à distance des acteurs de la gouvernance scolaire régionale en Côte d’Ivoire. Formation et Profession, 28(4), 1–16. https://doi.org/10.18162/fp.2020.700
Brunon, C., & Cau-Bareille, D. (2020). « Crée-moi un oiseau »: Innover dans un cadre temporel inédit. Formation et Profession, 28(4), 1–13. https://doi.org/10.18162/fp.2020.679
Carignan, I., Beaudry, M.-C., & Cohene, K. (2020). L’enseignement-apprentissage à la maison en période de pandémie en mettant sa casquette de maman-enseignante-chercheure: Un défi de taille. Formation et Profession, 28(4), 111. https://doi.org/10.18162/fp.2020.689
Carrillo, C., & Assunção Flores, M. (2020). COVID-19 and teacher education: A literature review of online teaching and learning practices. European Journal of Teacher Education, 43(4), 466–487. https://doi.org/10.1080/02619768.2020.1821184
Coulombe, S., Gagnon, C., Bisson, J., Gagné, A., Dupuis, S., Larouche, M., … Beaucher, C. (2020). Transformations des pratiques enseignantes en formation professionnelle au Québec avec l’arrivée de la COVID-19. Formation et Profession, 28(4), 1–13. https://doi.org/10.18162/fp.2020.682
Detroz, P., Malay, L., & Crahay, V. (2020). Une démarche structurée pour définir quelques conseils en vue de limiter l’impact de la pandémie sur l’évaluation de nos étudiants. Journal International de Recherche en Éducation et Formation, 1(Hors-série), 97–110.
Filippi, P.-A., Félix, C., Martin, P., & Gebeil, S. (2020). L’externalisation du travail scolaire à la maison: un scénario d’avenir possible pour l’École de demain? Formation et Profession, 28(4), 1–15. https://doi.org/10.18162/fp.2020.701
Gable, S. L., & Haidt, J. (2005). What (and Why) Is Positive Psychology? Review of General Psychology, 9, 103–110. https://doi.org/10.1037/1089-2680.9.2.103
Gaucher, R. (2010). La psychologie positive ou l’étude scientifique du meilleur de nous-mêmes. Paris, France: L’Harmattan.
Gouvernement du Québec. (2020). La formation à l’enseignement. Les orientations. Les compétences professionnelles. Québec: ministère de l’Éducation.
Goyette, N. (2016). Développer le sens du métier pour favoriser le bien-être en formation initiale à l’enseignement. Canadian Journal of Education, 39(4), 2-29.
Lacroix, M.-È., & Potvin, P. (2009). Les pratiques innovantes en éducation. Réseau d’information pour la réussite éducative (RIRE). Retrieved from http://rire.ctreq.qc.ca/les-pratiques-innovantes-en-education-version-integrale/
Le Boterf, G. (2011). Apprendre à agir et à interagir en professionnel compétent et responsable. *Education Permanente*, 188(3), 97–112.

Lhuilier, D. (2015). Puissance normative et créative de la vulnérabilité. *Éducation Permanente*, 188(3), 97–112. https://hal-cnam.archives-ouvertes.fr/hal-02290567/document

Lollia, M., & Issaieva, E. (2020). Comment les enseignants assurent la continuité pédagogique et évaluent en contexte de pandémie? Une étude en Guadeloupe. *Journal International de Recherche en Éducation et Formation*, 1(Hors-série), 181–192. https://doi.org/10.18162/fp.2020.702

Magyar-Moe, J. L. (2015). Positive Psychology in Classroom. In J. C. Wade, L. I. Marks & R. D. Hetzel (Eds.), *Positive psychology on the college campus* (pp. 133–166). Oxford: University Press. https://doi.org/10.1037/e564232014-001

Mongeau, P., & Tremblay, J. (2002). *Survivre: La dynamique de l'inconfort*. Québec: Presses de l’Université de Québec. https://doi.org/10.2307/j.ctv18phc9k

Moreau, D., Smith, J., Larose, F., & Chamberland-Black, Z. (2020). La formation à l’enseignement en contexte de pandémie: De nouveaux défis. *Apprendre et Enseigner Aujourd’hui*, 10(1), 26–33. https://doi.org/10.18162/fp.2020.687

Paillé, P., & Mucchielli, A. (2012). L’analyse à l’aide des catégories conceptualisantes. In P. Pierre & M. Alex (Eds.), *L’analyse qualitative en sciences humaines et sociales* (3rd ed., Chapitre 12, pp. 315–375). Paris: Armand Colin. https://doi.org/10.3917/arco.pail1.2012.01

Papi, C. (2020). Supporting teachers in the transition towards distance education: Challenges and means. *Journal of Learning for Development*, 7(3), 467–472.

Pelissier, C. (2020). Développement de l’accompagnement des enseignants universitaires à l’ère du Web 2.0: retours d’expériences des référents numériques. *Formation et Profession*, 28(4), 1–12. https://doi.org/10.18162/fp.2020.699

Perret, D., & Plantard, P. (2020). Pratiques numériques des enseignants en Bretagne pendant le confinement. Analyse anthropologique des premières données qualitatives et quantitatives. *Formation et Profession*, 28(4), 1–12. https://doi.org/10.18162/fp.2020.686

Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. Oxford: Oxford University Press.

Seligman, S. (2004). *Martin Seligman: The new era of psychology*. TedTalk, Retrieved from https://www.ted.com/talks/martin_seligman_the_new_era_of_positive_psychology

Stake, R. (1995). *The art of case study research*. London: Sage.

Stoloff, S., Boulanger, M., Lavallée, É., & Glaude-Roy, J. (2020). Teacher’s professional well-being: indicators and strategies. *Journal of education and learning*, 9(1), 16-29.

Stoloff, S., Goyette, N, De Guise, A-A., & Girard, S. (2022 accepté). Enseigner en temps de pandémie au Québec : étude de cas d’un enseignant du secondaire. *Revue Canadienne de l’éducation*, 45(3).
Stordeur, M.-F., & Colognesi, S. (2020). Transformer l’exposé oral classique en exposé oral enregistré au primaire: quelles modalités de travail de l’enseignant et quels effets pour les élèves ? *Formation et Profession, 28*(4), 1–12. https://doi.org/10.18162/fp.2020.683

Van Nuland, S., Mandzuk, D., Tucker Petrick, K., & Cooper, T. (2020). COVID-19 and its effects on teacher education in Ontario: a complex adaptive systems perspective. *Journal of Education for Teaching, 46*(4), 442–451. https://doi.org/10.1080/02607476.2020.1803050

**Notes**

Note 1. Regarding the coding of items, T1 stands for Teacher interviewed number 1; F or M stand for Female or Male; P or S stand for Primary or Secondary; followed by C, G, T or A that respectively stand for Context, Guidelines, Task or Affect; and finally, L13 stands for lign number 13. An example of code would be T1FP.TL13. Each item is presented using the same coding principle.

Note 2. Names have been changed to preserve anonymity.

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