

## Evaluation of a Literacy Camp to Counteract Summer Learning Loss

### Évaluation d'un camp de littératie pour contrer la perte d'apprentissage estivale

### Avaliação de um acampamento de literacia para combater a perda de aprendizagem no verão

Cathia Papi, Guillaume Desjardins et Tigawendé Prosper Kaboré

Volume 46, numéro spécial, 2023

Translation Issue

URI : <https://id.erudit.org/iderudit/1118376ar>

DOI : <https://doi.org/10.7202/1118376ar>

[Aller au sommaire du numéro](#)

Éditeur(s)

ADMEE-Canada

ISSN

0823-3993 (imprimé)

2368-2000 (numérique)

[Découvrir la revue](#)

Citer cet article

Papi, C., Desjardins, G. & Kaboré, T. P. (2023). Evaluation of a Literacy Camp to Counteract Summer Learning Loss. *Mesure et évaluation en éducation*, 46(spécial), 55–80. <https://doi.org/10.7202/1118376ar>

Résumé de l'article

*Lors de la pandémie de COVID-19, le gouvernement du Québec a instauré une mesure pour lutter contre la perte d'apprentissage estivale appelée « glissade de l'été ». À partir de 2021, il a encouragé financièrement la création de programmes ou de dispositifs d'été pour soutenir les élèves et leurs apprentissages durant les vacances scolaires. Cet article porte sur l'évaluation d'un camp nommé Littératie en s'amusant ! proposé dans un centre de services scolaire. L'objectif est de déterminer dans quelle mesure un tel dispositif est susceptible d'endiguer la perte d'apprentissage estivale, autrement dit, de favoriser le maintien des acquis pendant l'été. Une méthodologie mixte a été employée. L'approche qualitative repose sur des entretiens semi-directifs et l'approche quantitative, sur des prétests et des post-tests. Les résultats de l'étude de ce camp de littératie sont positifs et significatifs : ils montrent que la participation au camp permet aux enfants de maintenir, voire d'améliorer leurs compétences en littératie pendant l'été.*



## **Evaluation of a Literacy Camp to Counteract Summer Learning Loss<sup>1</sup>**

### **Évaluation d'un camp de littératie pour contrer la perte d'apprentissage estivale**

### **Avaliação de um acampamento de literacia para combater a perda de aprendizagem no verão**

**Cathia Papi**

*Université TÉLUQ (Canada), CURAPP-ESS (France)*

**Guillaume Desjardins**

*Université du Québec en Outaouais*

**Tigawendé Prosper Kaboré**

*École nationale d'administration publique du Québec*

**KEY WORDS:** literacy camp, pandemic, summer learning loss, summer school, summer slide

*During the COVID-19 pandemic, the government of Quebec introduced a measure to fight summer learning loss referred to as the “summer slide”. As a result, since 2021, funding has been provided for organizing summer programs to support pupils’ learning during school vacations. This article focuses on the evaluation of a camp called Literacy Through Fun offered at a school service center. The aim of this article is to measure how likely such a program stems summer learning loss and promotes learning retention during the summer. A mixed methodology was used, combining a qualitative approach based on semi-structured interviews and a quantitative approach based on pre- and post-tests. The results of the study of this literacy camp are positive and significant, showing that participation in the camp enables pupils to maintain and even improve their literacy skills over the summer.*

1 The French version was published in issue 46(3) 2023: <https://doi.org/10.7202/1113332ar>



**MOTS CLÉS :** camp de littératie, cours d'été, glissade de l'été, pandémie, perte d'apprentissage estivale

*Lors de la pandémie de COVID-19, le gouvernement du Québec a instauré une mesure pour lutter contre la perte d'apprentissage estivale appelée « glissade de l'été ». À partir de 2021, il a encouragé financièrement la création de programmes ou de dispositifs d'été pour soutenir les élèves et leurs apprentissages durant les vacances scolaires. Cet article porte sur l'évaluation d'un camp nommé Littératie en s'amusant! proposé dans un centre de services scolaire. L'objectif est de déterminer dans quelle mesure un tel dispositif est susceptible d'endiguer la perte d'apprentissage estivale, autrement dit, de favoriser le maintien des acquis pendant l'été. Une méthodologie mixte a été employée. L'approche qualitative repose sur des entretiens semi-directifs et l'approche quantitative, sur des prétests et des post-tests. Les résultats de l'étude de ce camp de littératie sont positifs et significatifs : ils montrent que la participation au camp permet aux enfants de maintenir, voire d'améliorer leurs compétences en littératie pendant l'été.*

**PALAVRAS-CHAVE:** campo de literacia, curso de verão, deslizamento do verão, pandemia, perda de aprendizagem de verão

*Durante a pandemia de COVID-19, o governo do Quebec implementou uma medida para combater a perda de aprendizagem de verão, denominada “deslizamento do verão”. A partir de 2021, incentivou financeiramente a criação de programas ou dispositivos de verão para apoiar os alunos e as suas aprendizagens durante as férias escolares. Este artigo aborda avaliação de um campo, denominado “Literacia em Diversão!”, proposto por um centro de serviços escolares. O objetivo é determinar em que medida tal dispositivo é capaz de conter a perda de aprendizagem de verão, ou seja, favorecer a manutenção das competências durante o verão. Foi implementada uma metodologia mista. A abordagem qualitativa baseou-se em entrevistas semiestruturadas e a abordagem quantitativa, em pré-testes e pós-testes. Os resultados do estudo deste campo de literacia são positivos e significativos: mostram que a participação no campo permite que as crianças mantenham ou até melhorem suas competências em literacia durante o verão.*

## Introduction

Researchers interested in pupils' learning tend to study observable phenomena at school. However, this is not the only context that contributes to the educational success of pupils and adolescents (Bernatchez, 2018). As early as the 1970s, research showed that pupils entered kindergarten with large disparities concerning the number of words they heard depending on their socioeconomic background (Downey et al., 2004). While these disparities diminish during the school year, they rebound during the summer, known as “summer learning loss”, an expression used to describe how pupils forget knowledge or skills acquired throughout the school year during vacations (Downey et al., 2004).

An early study in the 1990s conducted a meta-analysis and measured summer learning loss to be the equivalent of around one month of learning (Cooper et al., 1996). More recently, the results of major surveys conducted in the United States have revealed that, although learning gains during the school year diminish over the course of schooling, there is always a loss during the summer ranging from 17% to 28% of the year's learning in language and art for the average pupil (Atteberry & McEachin, 2021). Furthermore, Kuhfeld (2019) reports that 62% to 73% of elementary pupils experience a decline in reading proficiency during the summer. However, this loss is not generalized, since 22% to 38% of pupils acquire new knowledge during the summer, suggesting that summer learning loss is not inevitable, as observed by Atteberry and McEachin (2021).

A few studies have shown that programs designed to curb forgetting or fill gaps during summer vacations can have positive effects on learning retention and even promote new learning (Kim & Quinn, 2013; Xie et al., 2020). This explains why organizing such programs is envisaged as an effective tool for curbing summer learning loss, also referred to as the “summer slide”. More specifically, such programs were used to remedy shortcomings caused by the sanitary measures during the COVID-19 pandemic (Kuhfeld et al., 2020). The shortfall in learning compared to achievements in a normal year, i.e. a year with no break in school or change

in training mode, is also presented as a learning loss (Gage et al., 2023). In the United States, for example, the American Rescue Plan Act of 2021 allocated \$29 billion to the implementation of summer learning programs (Lynch et al., 2021). Similarly, in Quebec since 2021, regional consultation bodies (IRCs) have been offered new funding to offer summer activities for pupils and teenagers, aiming to mitigate learning losses caused by both the pandemic and school vacations.

However, impact studies into the measures implemented in Quebec are rare (Papi, 2024). To remedy this, this article presents a program set up three years ago and evaluates its effects. After a summary of the literature on the subject, we describe the literacy camp deployed by one of the 72 school boards and explain the methodology used to evaluate its effects. We will then present the results, leading to a discussion of the relevance of such programs.

### ***What the Research says About Summer Programs***

Summer programs have often focused on language skills, particularly reading. Participation is generally offered to pupils with gaps in their learning compared to their peers, as revealed by school results. This approach is particularly typical in low-income environments (Augustine et al., 2016). Indeed, studies have shown that summer learning loss is greater in these environments (Schacter & Jo, 2005), where books and time spent discussing reading are rarer than in families with higher incomes (Kim & Guryan, 2010). To encourage the participation of pupils from low-income families, several authors recommend reducing the cost of participation as much as possible and offering recreational and playful activities in addition to learning activities (McLaughlin & Pitcock, 2009; Quinn & Polikoff, 2017).

Hattie (2023) showed that summer programs have an effect size of 0.17 for summer programs, a positive but small impact. Other studies confirm that, in most cases, the effect is positive, as achievement is maintained or even increased (Johnston et al., 2015) and most pupils who attend these programs achieve better results than pupils in control groups (McCombs et al., 2019). Furthermore, the results of a study of the National Summer Learning Project launched in 2011 in the United States reveal that the benefits increase the more a pupil participates, in both time spent in the program during the summer and the number of successive summers (Augustine et al., 2016).

A literature review observes that simply reading regularly during the summer can compensate for certain learning losses (Bielinski et al., 2020). Furthermore, a meta-analysis points out that pupils benefiting from targeted literacy interventions, in the classroom or at home, improve their reading skills more than pupils without the same support (Kim & Quinn, 2013). On the other hand, a U.S. study of low-income pupils from Latin America shows that programs encouraging pupils and families to read more do not necessarily lead to improved comprehension or vocabulary (Kim & Guryan, 2010). There are two main reasons for this: (a) reading is voluntary and takes place over the summer without a session with a facilitator, and (b) the level of the reading content is often not adapted to the level of pupils who are not native English speakers (Kim & Guryan, 2010).

More generally, Lenhoff et al. (2020) report that the following factors appear to influence the effectiveness of summer reading programs: structured teaching, strictness of interventions, simplicity of implementation, length and frequency of interventions, and group size. A meta-analysis shows that the effects of summer reading programs vary greatly depending on whether they are school-based or simply reading in the library or at home (Xie et al., 2020). The impact of the programs is also observed to be particularly linked to the skills of the facilitators and the teaching techniques used (Quinn & Polikoff, 2017).

For example, programs involving qualified teachers and links with schools are more effective than those that depend on the goodwill of pupils and their parents, especially when they feature intensive (Xie et al., 2020) tutoring in small groups. Indeed, intensive tutoring over a short period of time appears to prevent summer learning loss among pupils with low academic achievement from socioeconomically disadvantaged backgrounds (Lenhoff et al., 2020). According to Johnston et al. (2015), three-week reading programs for small groups using a proven pedagogical method avoid learning loss.

Analyses conducted by Slavin (2021) show that summer schools tend to be ineffective, partly because the activities are too similar to school activities throughout the year which bores pupils. However, he also highlights the value of summer tutoring, citing two articles presenting effective programs. On the one hand, he mentions the article by Schacter and Jo (2005) where activities in groups of 15 pupils are followed by tutoring in small groups,

two hours a day for seven weeks and, on the other, that of Zvoch and Stevens (2013) where teaching is also followed by tutoring in small groups of three to five pupils for three and a half hours a day, for five weeks.

The criteria for the effectiveness of summer programs therefore tend to match those for intensive tutoring, the effectiveness of which is proven. In terms of pedagogy, tutoring must be provided by an education professional or a trained person. They must maintain a quality relationship with the tutored pupil, use proven teaching methods and quality materials adapted to the pupil's level, and have tools to monitor the pupil's progress. Tutoring individually or in small groups is recommended, at least three times a week for several consecutive weeks, ideally during the school term (Nickow et al., 2020; Papi, 2023; Robinson et al., 2021).

Although like the criteria for tutoring during the school year, the criteria for the effectiveness of summer programs differs in spatiotemporal dimensions, as they take place during the summer vacations. In fact, a summer program cannot stretch over a high number of weeks, unlike tutoring during the school year<sup>2</sup>. On the other hand, the absence of a school timetable gives more freedom in the organization, which may explain why tutoring tends to be daily, lasting several hours a day in the two cases cited by Slavin (2021).

While parental involvement is not enough to make a program effective, it does improve the results of remedial or accelerated summer learning programs (Cooper et al., 2000). The human dimension plays a significant role in the development of pupils' learning. Research conducted as part of the Ontario Summer Learning Program (2010-2015) highlights the importance of pupil-parent-teacher bonds (Davies et al., 2022). Furthermore, in addition to the sometimes very modest effects on learning and retention, these programs develop pupils' non-cognitive skills such as motivation and school attendance, thanks to the inclusion of social activities (Lynch et al., 2021).

Ten key criteria for the effectiveness of summer programs are summarized in the following table, with two references cited in this section for each criterion. There are many more available.

---

2. The literature on tutoring includes many cases of tutoring programs lasting from 15 to 20 weeks. Furthermore, the duration of a tutoring session varies depending on the student's age but does not generally exceed one hour. For more information on tutoring programs in Quebec, see Papi (2024).

The bulk of research on summer learning losses is carried out in English-speaking contexts, particularly the United States, but it seems appropriate to address such activity in a French-speaking region, in this case, Quebec.

Table 1  
*Criteria for a successful program for the prevention of summer learning loss*

Criteria	References
Targeted intervention and use of follow-up tools	(Kim & Quinn, 2013; Robinson et al., 2021)
Proven teaching methods	(Johnston et al., 2015; Quinn & Polikoff, 2017)
Adapted teaching materials	(Kim & Guryan, 2010; Robinson et al., 2021)
Qualified or trained instructors	(Quinn & Polikoff, 2017; Nickow et al., 2020)
Small-group learning	(Xie et al., 2020; Nickow et al., 2020)
Frequency of at least three days a week	(Robinson et al., 2021; Lenhoff et al., 2020)
Duration of at least three consecutive weeks	(Johnston et al., 2015; McLaughlin & Pitcock, 2009)
Importance of relationships with pupils, parents and schools	(Xie et al., 2020; Davies et al., 2022)
Inclusion of recreational activities	(McLaughlin & Pitcock, 2009; Quinn & Polikoff, 2017)
Affordability for low-income families	(McLaughlin & Pitcock, 2009; Quinn & Polikoff, 2017)

How effective would a system meeting these criteria be in the Quebec context? In view of the brief review of the literature presented, it seems possible to hypothesize that, despite linguistic, and more broadly, cultural differences, a summer program meeting the ten criteria we have identified should help to counteract summer learning loss. We conducted a study to analyze whether these criteria are met and evaluate the effects of the program

### ***Program Description***

The Literacy Through Fun! (*Littératie en s’amusant!*) summer camp is organized by a schoolboard (SB) in collaboration with a regional consultative body<sup>3</sup> and family centers. The aim is to combat summer learning loss by

3. IRC (*Instances régionales de concertation*), translated here as regional consultative bodies, are the organizations invited to propose summer programs under the government initiative to combat the “summer slide.” They work year-round with numerous local organizations to promote perseverance and educational success.



enabling pupils to develop their literacy skills through a variety of activities focusing on oral and written comprehension. In the following paragraphs, we define the term literacy and describe the measurement tool used. We drew from the ongoing Ontario experience and some examples in French-speaking environments. We then present the selection process of participants for the literacy camp, as well as the camp's activities and program.

### ***Literacy***

The term “literacy” is used less widely in Quebec than in English-speaking provinces. According to Hébert and Lépine, whose literature review analyzed 110 texts published between 1985 and 2011, “Literacy involves, on the one hand, a set of attitudes, knowledge, skills and competencies that are, on the other hand, to be measured or situated in a space/time dynamic and in an emancipatory aim of personal development” (2013, p. 25).

The authors specify that this notion refers to “the various components of language teaching and learning (reading, writing and speaking). It also encourages the study of different types of communication in the classroom, using a variety of media and in the context of cultural practices that are as authentic as possible” (Hébert & Lépine, 2013, p. 26). Therefore, literacy goes beyond reading and writing and involves a variety of activities and learning situations. In the context of this research, literacy refers primarily to the attitudes, knowledge, skills and competencies used in various situations and activities centered on reading.

### ***The measuring tool***

The GB+ reading assessment kit, published by Groupe Beauchemin<sup>4</sup> (and by Chenelière Éducation for the French edition) is used to measure pupils' literacy levels. The kit comprises three levels: from 1 to 14 for beginner readers, from 15 to 20 for intermediate readers, and from 21 to 30 for proficient readers. At the end of the first year of primary school, the school board considers that pupils with a level equal to or higher than 13 demonstrate advanced competence; between 9 and 12 demonstrate secure competence; 7 or 8 demonstrate acceptable competence, between 3 and 6 demonstrate limited competence, and finally, pupils with a level of 1 or 2 demonstrate very limited competence.

---

4. 2003 and 2019 editions.

The GB+ assessment process is as follows: The assessor, who is an education professional, gives the pupil a booklet to read silently. The pupil then recounts the content of the book, with the assessor asking a few general questions to guide them if necessary. The pupil then reads the same booklet aloud. The assessor then asks specific questions to check the pupil's understanding of the text.

As the reading progresses, the assessor fills in a form containing the text and questions, as well as the various elements to be evaluated. For example, the criteria for Level 3 are the following<sup>5</sup>:

- a) Observed reading behaviors which include “knowledge and skills” (e.g., the reader holds the booklet upright, reads from left to right, quickly recognizes frequent words, etc.); “observed reading strategies”, i.e., pausing, repeating, rereading, using visual information, self-correcting; “fluency”, (e.g., the reader reads the whole text with a natural flow and intonation that reflect excellent comprehension; the reader reads the text word by word in a way that shows limited or no comprehension, etc.);
- b) “Text recall”, which asks whether the reader “relates the facts without assistance and without the help of the booklet, “relates the main facts in order”, “interprets the visual information”, “relates the story coherently using appropriate vocabulary”;
- c) “Comprehension check questions” which include “literal comprehension” (e.g., in the story, who owns such-and-such an object?) and “deductive comprehension” (e.g., in the story, why does such-and-such a character do such-and-such a thing?).

This worksheet indicates whether the reader is at this level, or whether they should be provided booklets at a lower or higher reading level. In some cases, a second assessment may be necessary, involving the reading of a booklet at a different level, to ascertain the pupil's reading level.

### ***The participants***

Pupils are assessed using the GB+ reading assessment kit in schools in June. Pupils identified as having difficulties in reading and with text comprehension are offered participation in the literacy camp free of charge. The pupils selected to take part in the literacy camp by the school principals are

---

5. Example taken from the GB+ performance evaluation sheet for a level 3 text entitled *L'auto de Singe*. The text in quotation marks is from the sheet.

primarily first-graders, i.e. pre-readers or emerging readers at GB+ levels 1 to 3. However, first-graders with a GB+ level above 3, as well as second and third graders with significant difficulties, or who have already attended the camp the previous year, may also be enrolled, space permitting.

Thus, in 2023, 74 pupils (40 girls and 34 boys) divided into seven groups and spread over five sites were registered for the literacy camp. Prior to the camp, the pupils' parents attended a one-hour presentation. They also received a 12-page written explanation of summer learning loss, how the camp is organized, the type of activities, the GB+ assessment, and the materials they must provide.

### ***The activities***

The varied activities proposed were developed by two educational consultants and a teacher. They are based both on principles emanating from Response to Intervention (RAI) (Desrochers et al., 2016) and motivated by the desire to differentiate summer activities from school activities by organizing playful activities, and outdoors weather permitting. Literary routines, also known as The Daily 5 (Boushey & Moser, 2015), for fostering independent skill development are also organized. The five components are: reading to oneself, reading to another person, listening to reading, writing assignments and word study. For example, at the literacy camp, some pupils read alone, while others listened to a story on an iPad, and others wrote words using a variety of tools, such as stamps. Reading is therefore individual (reading to oneself), with a peer (paired reading), or with the whole group (morning message, interactive reading). For self-reading, pupils can choose from a range of books at their own level. Playful activities aim to increase speed of reading common words, for example, using a fly swatter to swat the label with the word matching the word read aloud by the teacher.

### ***The program***

In 2023, the Literacy Through Fun! camp took place during the first three weeks of July, from Monday to Thursday, from 8:30 a.m. to 12:00 p.m., i.e., 12 mornings. Activities took place in schools or family homes located on the SB territory. Each group was led by two facilitators: a teacher and a specialized educator who had been trained for a day in the standard activity program. Pupils can arrive between 8:00 and 8:30 a.m. to play. From 8:30 to 8:50, the morning message is presented. This is a short text, read as a group, and is an

opportunity to work on elements such as letter and sound recognition. From 8.50 a.m. to 9.30 a.m., while one part of the group performs the literary routines, the other takes part in a playful learning activity. From 9:30 a.m. to 9:50 a.m., the pupils have a snack, then from 9:50 a.m. to 10:30 a.m., the groups switch activities. From 11:00 a.m. to 12:00 p.m., the two groups reassemble, and the pupils share what they have learned, then one of the two teachers reads to them. During the reading, or at the end, the teachers ask the pupils questions to help them summarize the story and check their understanding. Depending on the location and the family, the pupils then either go home or are taken in by other municipal facilities, such as day camps.

## **Methodology**

In order to gain a clearer understanding of the activities and their effects on the pupils, a number of actions were taken. From 2022 onwards, we exchanged with the management of the school board involved and the project manager. We also took part in a meeting between a school principal and parents, and in teacher training. We observed the activities taking place at some of the camps. This contributed to the description of the camp given above and helped to prepare the study conducted in 2023, using mixed methodology. The qualitative and quantitative approaches used will be described in turn.

### ***The Qualitative Approach***

Semi-structured interviews, inspired by the comprehensive interview method (Kaufmann, 2016), were conducted at the end of the camp with nine practitioners: seven teachers, one remedial teacher, and one special educator. The primary objective was to observe the effects of the literacy camp on the participating pupils. The secondary objective was to understand why they wanted to take part in this summer program, and to assess how they appreciated the training received, the activities program, the teaching resources provided, and the work done in pairs.

Each interview lasted around an hour and was conducted via video-conference recorded on Teams with the transcription tool activated. Each transcription was then corrected by listening to the recording again. We then conducted a thematic analysis (Blanchet & Gotman, 2001) according to five predefined themes: (a) pupils' motivations for taking part in the camp (in the past and the future); (b) their appreciation of the program as

planned (training received, program, activities, materials, etc.); (c) changes made to compared with what was planned (modification of activities or resources, etc.) ; (d) perceived effects on children (literacy skills, interest in reading, behavior, etc.); and (e) assessments reported by the pupils or their parents (pleasure, motivation, progress, disappointment, etc.).

For each of these themes, the researcher then grouped the comments according to their meaning, leading to the emergence of sub-themes or sub-categories. The researcher followed the recommendations of Bhattacharjee (2012) and Silverman (2013) to ensure the necessary distance between the construction of sub-themes and the verbatim, notably through the use of inter-judge agreements for the creation of sub-themes.

The main ideas were then summarized, and the clearest or best-structured comments were selected to illustrate and complete the summaries. To preserve anonymity while distinguishing between respondents, verbatim quotes are followed by a randomly assigned letter from A to I.

### *The Quantitative Approach*

As indicated in the description of the literacy camp, the GB+ assessment kit is the measurement tool used to determine participants' reading levels at the end of the school year (June 2023), at the end of the literacy camp, (July 2023) and at the start of the following school year (September 2023). It was therefore possible to conduct an analysis based on this measure at two of the three evaluation times, i.e. in June and September. The measure taken in July was not of interest as it only concerned pupils who had taken part in the camp and not those in the control group. To limit evaluator tracking bias, we ensured that the same person evaluated pupils at different times.

A total of 110 pupils were solicited for this research. However, to avoid bias, pupils in the process of Francization were removed from our sample, as interviews revealed that their progress could not be assessed by the GB+ kit. In addition, pupils who had moved and were unable to take part in the September assessments were also removed from the analysis. Thus, the quantitative analyses are based on a sample of 92 pupils. The sample is evenly distributed between the sexes, with 46 boys (50%) and 46 girls (50%). The average age of the pupils was 8 years ( $M = 2,015.61$ ). More than half of them, 52 pupils (56.5%), came from three schools<sup>6</sup>: 22 from School A (23.9%); 19 from School B (20.6%) and 11 from School C (12%). Of the sample, 59 pupils (64%) participated in the literacy camp.

---

6. The schools are anonymized to protect the confidentiality of the participants.

To assess the effect of the camp on pupils' literacy skills, we carried out two sets of analyses. First, we ran multiple regression models to assess the effect of the number of days attending the literacy camp on the GB+ level. To do this, the dependent variable of the regression models was the variation in the level obtained with the GB+ assessment kit at the start of the new school year versus the level assessed at the end of the last school year. To clearly determine the portions of variance relative to each group of variables, we entered them into the different regression models in a precise order. First, gender was entered into the regression model (Block 1), then age (Block 2), then the learner's school (Block 3), then the number of days spent at summer camp (Block 4), to account for its incremental contribution.

Next, a double-difference propensity score analysis was used to measure the causal effect of the summer program. This technique involves combining the propensity score with the double-difference analysis. To use the double-difference method, we observed people over two measurement periods, i.e. the GB+ assessments in June and September 2023, and divided them into two groups: treated and control. Beyond this two-point observation, the double difference is based on "the fundamental assumption of a common temporal trend between the two groups, according to which, in the absence of treatment, the changes observed in the groups would have been identical. The remaining difference is then attributable to the impact of the treatment on the variable of interest" (Lecocq et al., 2014, p. 85). This method was chosen due to non-representativeness of the participants and our small sample size. Indeed, Lecocq et al. (2014, p. 86) consider that:

Estimating the effects of a treatment using double differences is an interesting alternative to using the propensity score, particularly when the latter is not appropriate (small sample, unbalanced propensity score, restricted area of common support or matching that does not allow initial differences to be reduced).

Combining the propensity score with double-difference analysis reduces potential biases associated with the use of a single method, thus increasing the robustness of the estimated counterfactual (Gertler et al, 2016).

## Results

This section is devoted to both qualitative and quantitative results. We present a synthesis of the main elements emerging from the interviews to explain how the groups functioned, as well as the perceived effects of

participating in the literacy camp. The results of the statistical analyses then illustrate to what extent the camp did or did not have a significant effect in counteracting summer learning loss.

### ***Appreciation of the System and Changes in Literacy Levels***

This sub-section presents the results of the thematic analysis of the interviews, starting with the practitioners' and pupils' views of the literacy camp, followed by the literacy progress observed.

#### ***About the system***

This section presents the way the system is perceived and experienced by the teachers, and their perceptions of the pupils' experience.

#### ***The stakeholders' point of view***

All the facilitators we spoke to appreciate the camp's program, and the materials provided. They considered it to be 'turnkey' (A) and proposed almost no adaptations. Their only suggestions were to switch activities according to the pupils' concentration levels, the weather or the location, and to adjust the level of difficulty according to the pupils' abilities. A young teacher working at the camp for the second year explained: "Once again, I really enjoyed this activity, it gives me experience as a teacher" (D). Several teachers even mentioned that they plan to use an activity or books discovered at camp with their pupils during the year. Hence, the camp also seems potentially profitable for the practitioners.

Furthermore, even if they had not worked together before, the facilitators all reported having formed an effective pair with their peers. The fact that one of the two facilitators knew the area and, most importantly, the pupils, was appreciated, as the following comments underline: "I was lucky enough to work with someone who was familiar with the area. That really helped a lot in terms of relationships, motivation and pupil interest" (C). The complementary nature of the various activities conducted with the pupils was also appreciated.

On the other hand, some teachers regretted that some pupils were often absent, noting that this is because some parents consider the camp as a day-care service rather than an educational program. As one participant put it: "Those who made the most progress were the ones who were always there. But some parents thought it was optional: 'I'm not paying for it, so if my child doesn't go it doesn't matter'" (H). The camp is free to favor access, but this can be detrimental to attendance.



*Pupils' appreciation as perceived by teachers*

As the pupils were from different schools, some knew each other and others did not. Ice-breaker games on the first day were therefore appreciated as a way of fostering bonds. One practitioner reported that even the pupils who were initially the least cooperative made an effort and enjoyed the literacy camp. The teachers all observed that “the vast majority of pupils really enjoy it” (F). One of them reported that two pupils told her they “liked coming to our literacy camp better than going to the playground or hockey field” (D). They received similar comments from parents: “I’ve had parents tell me, “My child doesn’t like coming to school, it’s always a battle, but here, even though it’s in a school, he can’t wait to come” (E). At the end of camp: “They told us they were surprised to see that their child had enjoyed it. Then they thanked us” (I).

The pupils’ appreciation of the camp can be partially explained by the activities offered. Indeed, to accentuate the difference with school activities and to energize their group, the facilitators suggested the pupils sing a song proclaiming they are super readers to the tune of We Will Rock You. They also organized outdoor activities such as relay races and word treasure hunts. As one teacher told: “We played a lot more outside than inside” (H). Despite their difficulties, the pupils seem to enjoy the activities: “Most of the time, when it’s fun, they don’t even realize they’re working, they’re so absorbed by the game” (E). The teachers also encouraged the pupils, adding challenges during the various activities or on daily and weekly check-ups. Many brought treats to reward their efforts on certain occasions, as well as extra books or games.

*Developments in Literacy*

Pupils’ progress in literacy is first presented in terms of self-confidence and interest in reading, before addressing levels.

*Improving self-confidence and interest in reading*

In individual interviews, most of the teachers emphasized that the camp helps to build self-confidence, as the pupils are with other peers experiencing difficulties. “This year, I placed them with pupils of their own level, so in the sub-groups they felt more at ease, they tried harder” (I). Unlike in the classroom throughout the year, “they’re less compared with the best, they’re compared with their group” (E). As a result, they



weren't afraid of being teased, "they dared to read the morning message, and sometimes, they really got it wrong. But they made the effort, everyone wanted to take part in the message this morning" (G).

This stimulating context seems all the more beneficial for the pupils given that, according to some teachers, gaps caused by lockdowns during the pandemic are still notable. The literacy camp helps to fill these gaps, giving more time for individual support than is possible in the classroom during the year. One practitioner explained that the pupils made progress thanks to "the fact that we took the time to listen to them, to value them, to reinforce what they were doing" (C). Several teachers reported that the pupils enjoyed reading with an adult or with another pupil, and gradually developed a pleasure in reading, or a "greater interest in reading" (F): "Some of them said: 'Oh well, before I didn't like reading, now I like it!'" (I).

However, the pupils were not all positive about the GB+ evaluation carried out at the end of camp. In fact, according to the teachers, some were afraid they had not improved, while others were enthusiastic about having special time with an adult and showing their progress. For others, it was less of a novelty and thrill given that GB+ assessment is commonplace in their school. The results of the assessment carried out at the end of the camp also generated contrasting emotions: "I have five who have increased their level, and they were proud [...] Some were disappointed to see they hadn't improved" (I). Maintaining the level is a positive result compared with summer learning loss, but some were disappointed they had not improved like others. However, it is not clear whether this disappointment is likely to jeopardize the self-confidence developed over the three weeks.

### *Improving skills and literacy levels*

Several teachers reported significant improvements between the beginning and end of the camp. One of them explained: There was a lot of guessing by the pupils at the beginning, but as things progressed, there were more and more common words that they were able to name without having to deconstruct [...] by writing them down and reading them, they were able to unblock a lot" (I). Similarly, another commented: "Whether it's speed, fluency or recognition of phonetic blends, they've all made progress" (H). Some teachers also pointed out that the pupils' ability to reconstruct a story read by themselves or by others had improved, particularly for respecting chronological order. At the final assessment, the pupils

expressed their satisfaction. “We could feel they were proud of themselves, that they found that they read better, that they made fewer mistakes, and that they were reading more quickly” (F), explained one practitioner.

Overall, the teachers felt that the GB+ level assigned to the pupil in the pre- and post-camp assessments matched their observations. However, they pointed out that some progress cannot be detected by the measurement tool used, particularly when the pupil has not yet reached the reading stage. For example, two teachers mention the case of foreign pupils for whom the camp was an opportunity to learn the French alphabet: “It’s a shame for my pupil who didn’t know her letters, because on paper with her GB +, she hasn’t improved, yet for me, she was my biggest improvement” (G). Similarly, another teacher presents the case of a French-speaking pupil whose GB+ level didn’t change between the beginning and the end of the camp even though she saw progress: “[He] was still at 0, yet he progressed. He recognizes more syllables and is more fluid with reading common words too.” (H). This suggests that not all the improvements can be measured<sup>7</sup>.

An analysis of the interviews reveals that the program is appreciated by both teachers and pupils, according to the teachers themselves. In fact, they reported that the pupils enjoyed taking part, and that they maintained their level of progress over the twelve mornings. To sustain the pleasure and progress, the practitioners encouraged the pupils to continue reading at the end of the literacy camp. Knowing they do not all have books or reading support at home, they encouraged them to “go to the public library over the summer to continue these fine efforts” (F) and gave them links to reading material available on the Internet. The GB+ assessment tool does not identify all improvements but is described as reliable for identifying a level. In the next section, we look at the observed changes in reading levels according to the measurements.

### *The Evolution of Literacy in a Few Figures*

This section highlights quantitative data through multiple regression models and propensity score double-difference analysis.

---

7. As indicated in the methodology, these remarks led us to exclude these students from the quantitative analyses, as their progress cannot be measured using the GB+ assessment toolkit.

### *Preliminary analyses*

The results show that pupils who participated in the literacy camp experienced a greater average increase in GB+ level than pupils in the control group (between the June and September assessments). Indeed, the average GB+ level of the treatment group rose from 5.1 in June to 6.2 in September, for a difference in GB+ level of 1.1 ( $p < 0.01$ ). As for the control group, the mean GB+ level rose from 4.8 in June to 5.0 in September, with a difference in GB+ level of 0.2, a statistically insignificant difference according to the paired-samples t-test. However, this mean comparison alone cannot determine the effects of the literacy camp, as the treatment was experienced unevenly across the sample (e.g., some pupils were absent for several sessions). Thus, it would be statistically incorrect to use a differential analysis of scores between the two groups to verify the effect of the literacy camp. The number of days spent at the camp was therefore the variable studied (discriminant). In this case, multivariate analyses of variance were necessary to adjust the estimates (e.g., non-attendance by pupil gave a score of 0).

Considering the exploratory nature of this study, preliminary analyses were carried out before testing hypotheses. First, as shown in Table 2, correlation calculations between the different variables under study revealed correlational patterns similar to those found in the studies presented in Part 1, both for the direction and strength of the relationships observed.

Table 2  
*Means, standard deviations and correlations between study variables*

Variables	Mean	St deviation	Sex	Date of birth	School	No. of days
Sex	0.5	0.50	1			
Date of birth	2015.61	0.573	-0.046	1		
School	5.39	4.87	-0.138	0.012	1	
No. of days	6.77	5.28	0.025	-0.197	-0.291**	1
Diff level GB+	0.81	1.41	-0.189	-0.5	-0.079	0.319**

Notes: N = 92. Sex: 0 = Female, 1 = Male. Years of birth: 2014, 2015, 2016. \*\*  $p < 0.01$ ;

\*  $p < 0.05$ .

Considering the (cross-sectional) research design favored in this study, Harman's one-factor test (Podsakoff & Organ, 1986; Fuller, et al., 2016) was performed to check the influence of common variance bias on the data

collected. The results of this test revealed a solution comprising multiple factors, and the share of variance explained by the first factor is equivalent to 38.53%. According to this test, a strong influence of common variance bias can be considered when a single factor emerges from this analysis and/or when the variance explained by the first factor of the solution is greater than 50% (Bozionelos & Simmering, 2022; Fuller, et al., 2016). Finally, evaluation of the variance inflation factors, calculated from the multiple regression models, showed low amplitude of between 1.00 and 1.14, therefore well below the 4.0 threshold suggested by Hair et al. (2010).

***Confirmatory analyses***

The research questions formulated for the present study concerned the impact of the number of days spent at literacy camp. Overall, the results presented in Table 3 support the research hypothesis that time spent at camp contributes in isolation to the prediction of GB+ level improvement at the beginning of the following year ( $\Delta R^2 = 10.1\%$ ), regardless of the effect of the learner’s gender, year of birth and school of origin.

Table 3  
*Results of multiple regression analysis predicting difference in GB+ level*

GB+ level difference				
Variables	B1	B2	B3	B4
Sex	-0.528	-0.536	-0.577	0.085*
Age		-0.144	-0.142	0.01
School			-0.31	-0.04
No. of days				0.085**
<i>R</i> <sup>2</sup>	0.036	0.039	0.05	0.14
$\Delta R^2$		0.017	0.018	0.101

Notes: N = 92. \*\*  $p < 0.01$ ; \*  $p < 0.05$ .

Table 4 shows the average treatment effect estimates for the literacy camp. It shows a positive and significant effect, with a learning gain of 0.89. This means that pupils who participated in the literacy camp achieved a significantly higher coefficient than their counterparts in the control group. However, the coefficient (0.89) is low, which may be explained by the pupils’ academic difficulties and the limited number of days spent at the literacy camp.

Table 4  
*Average treatment effect of the literacy camp*

Combining the propensity score with a double-difference analysis	Sample		Estimator
	Treatment group	Control group	ATT (SE)
	59	33	0.89 (0.26) **

Notes:  $N = 92$ . ATT (Average Treatment on the Treated-) on the sample of camp participants and the control group. SE = Standard Error. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

## Discussion

This study of the Learning Through Fun! summer camp began by verifying that the program met the ten criteria identified in English-speaking literature for the effectiveness of programs designed to combat summer learning loss (See Table 5).

This literacy camp does not include tutoring as such, but combines the criteria presented as favorable for observing the positive effects of summer programs.

Furthermore, both qualitative and quantitative analyses show that this literacy camp has positive effects: less pupils lose skills, and more pupils learn during the summer. Participation in the camp effectively enables most pupils to maintain or even improve their literacy skills over the summer. The improvement is significantly greater than for pupils who do not attend the camp. The effect size is 0.89 with the causal model. The hypothesis that a program combining the effectiveness criteria described in the literature for programs created in English-speaking contexts would be effective in French-speaking contexts is therefore verified. In view of the literature, which highlights the importance of the intensity of interventions and the tutorial relationship (Slavin, 2021), we can assume that adding one morning per week and one tutor per group would increase the effectiveness of the system.

For the sake of accuracy, we repeat that we excluded Francization pupils from the quantitative analyses. These pupils are therefore only mentioned in the qualitative analyses. As the tool is not adapted to their situation, their level remains at 0. This is reminiscent of the study by Kim and Guryan (2010), which points out that the material offered is sometimes inadequate for pupils learning to read in a language other than their

Table 5  
*Characteristics of a camp meeting efficiency criteria*

Criteria identified in the literature	Literacy camp features
Targeted intervention and use of monitoring tools (Kim & Quinn, 2013; Robinson et al., 2021)	Focus on literacy. GB+ reading assessment kit to measure progress.
Proven teaching methods (Johnston et al., 2015; Quinn & Polikoff, 2017)	Literary routines inspired by the “Everyday 5” and level sub-group work inspired by “Response to Intervention”.
Adapted teaching materials (Kim & Guryan, 2010; Robinson et al., 2021)	Books adapted to all reading levels, rich and varied material selected by education professionals.
Qualified or trained service providers (Quinn & Polikoff, 2017; Nickow et al., 2020)	Designed by two educational consultants and a teacher. Education professionals (usually one teacher and one specialized educator per camp).
Small-group learning (Xie et al., 2020; Nickow et al., 2020)	No more than 12 pupils per camp, play activities in half-groups, reading activities in pairs with a peer or facilitator.
Frequency of at least three days a week (Robinson et al., 2021; Lenhoff et al., 2020)	Four days a week, 3 hours 30 a day.
Duration of at least three consecutive weeks (Johnston et al., 2015; McLaughlin & Pitcock, 2009)	Three consecutive weeks.
Importance of relationships with pupils, parents and schools (Xie et al., 2020; Davies, 2022)	Activities to encourage bonding between pupils and with teachers from the first day of camp. Communication with parents in advance of camp, then during the camp with those who are available before or after the camp. Set up within a CSS, so communication with schools is guaranteed.
Inclusion of recreational or play activities (McLaughlin & Pitcock, 2009; Quinn & Polikoff, 2017)	Numerous educational games. Most activities take place outdoors. Take advantage of the wealth of facilities on offer (gymnasium, sports field, nearby forest, etc.).
Affordability for modest families (McLaughlin & Pitcock, 2009; Quinn & Polikoff, 2017)	Free registration, materials provided.

mother tongue. However, unlike the system studied by these researchers, which was based on voluntary reading, in this case the pupils are cared for in a structured system by professional educators who adapt to their particular needs. According to their observations, this approach favored progress in literacy. Nevertheless, it would seem appropriate to offer different programs aimed at developing Francization.

This study also confirms the importance of parental involvement (Cooper et al., 2000; Davies et al., 2022), particularly for ensuring pupils attend camp as attendance promotes improvement, observed both in the literature (Augustine et al., 2016) and demonstrated by the quantitative and qualitative data presented in this article. Ways must therefore be found to encourage parental involvement.

Finally, in terms of methodology and results, it is interesting to see that the analysis of GB+ evaluation results and the comments of the practitioners tend to concur and highlight the fact that the majority of pupils participating in the camp make progress. The GB+ evaluation is useful, as it enables us to adapt the books to the pupils' level, and to compare the pupils' level before and after their participation in the camp, as well as with that of pupils not attending the camp. However, if we limit ourselves to this measure, certain effects are likely to go unnoticed. In addition to a few improvements of insufficient magnitude to indicate a change in GB+ level, the practitioners noted certain positive effects, such as the development of self-confidence and increased reading pleasure, which are likely to have long-term repercussions in areas other than literacy.

## Conclusion

In 2021, the Quebec government decided to encourage the creation of summer programs to support pupils and counteract learning delays (Betthäuser et al., 2023) caused by the health measures put in place to combat the COVID-19 pandemic. It was in this context that a literacy camp was set up in a CSS. Given the literature largely focuses on programs in other countries, and mostly in the United States, we decided to evaluate the effects of the Literacy Through Fun! summer camp. Using a mixed methodology, we found that the impacts of this literacy camp were positive and significant. Indeed, they highlight the fact that participation in the camp enables the majority of pupils to maintain or even improve their literacy skills over the summer. Furthermore, according to facilitators'

perceptions, camp participation also fosters pupils' enjoyment of reading, social connections and self-confidence. This literacy camp could therefore serve as a source of inspiration for other summer programs in Quebec and elsewhere.

While this research tends to confirm the relevance of the criteria identified in the literature, it should be pointed out that the literature review carried out on summer learning loss is not exhaustive. For this reason, it was also based on criteria derived from meta-analyses of tutoring during the school year. A meta-analysis or, at the very least, a systematic review of the literature on summer learning loss is recommended to ensure no criteria are overlooked. Furthermore, the sample is relatively modest, and the literacy camp is only present in one of Quebec's 72 school service centers. It would therefore be appropriate to replicate this research over several years and, if possible, in several locations, to guarantee the effectiveness of the program beyond this case study. It would also be interesting to ask the pupils in the camp and in the control group to describe their reading habits outside the camp and their other summer activities, to gain clarity about the observed changes. Finally, given research tends to show that summer learning loss is worse in mathematics than in literacy (Atteberry & McEachin, 2021; Kuhfeld, 2019), testing pilot projects focusing on this discipline would be useful, plus research comparing the effectiveness criteria for literacy and mathematics summer programs.

Proofreading: Caroline Lefour

Formatting: Emmanuel Gagnon

Portugue abstract: Eusébio André Machado

### **Original version (in French)**

Received: November 02, 2023

Final version: April 03, 2024

Accepted: May 06, 2024



## LIST OF REFERENCES

- Atteberry, A. & McEachin, A. (2021). School's Out: The Role of Summers in Understanding Achievement Disparities. *American Educational Research Journal*, 58(2), 239-282. <https://doi.org/10.3102/0002831220937285>
- Augustine, C. H., McCombs, J. S., Pane, J. F., Schwartz, H. L., Schweig, J., McEachin, A., Siler-Evans, K. (2016). *Learning from Summer: Effects of Voluntary Summer Learning Programs on Low-Income Urban Youth*, RAND Corporation, [https://www.rand.org/pubs/research\\_reports/RR1557.html](https://www.rand.org/pubs/research_reports/RR1557.html)
- Bernatchez, J. (2018). Les instances régionales de concertation (IRC) sur la persévérance scolaire et la réussite éducative. *Revue hybride de l'éducation*, 2(2), 24-47. <https://doi.org/10.1522/rhe.v2i2.505>
- Betthäuser, B. A., Bach-Mortensen, A. M. & Engzell, P. (2023). A systematic review and meta-analysis of the evidence on learning during the COVID-19 pandemic. *Nature Human Behaviour*, 1-11. <https://doi.org/10.1038/s41562-022-01506-4>
- Bhattacharjee, A. (2012). *Social science research: Principles, methods, and practices*. Global Text Project Publisher.
- Bielinski, J., Brown, R. & Wagner, K. (2020). *COVID Slide: Research on Learning Loss et Recommendations to Close the Gap* (p. 22). Illuminate Education, Inc.
- Blanchet, A. & Gotman, A. (2001). *L'enquête et ses méthodes: l'entretien*. Nathan.
- Bozionelos, N. & Simmering, M. J. (2022). Methodological threat or myth? Evaluating the current state of evidence on common method variance in human resource management research. *Human Resource Management Journal*, 32(1), 194-215. <https://doi.org/10.1111/1748-8583.12398>
- Boushey, G. & Moser, J. (2015). *Les 5 au quotidien. Favoriser le développement de l'autonomie en littérature au primaire* (2<sup>e</sup> édition). Chenelière Éducation.
- Cooper, H., Charlton, K., Valentine, J. C., Muhlenbruck, L. & Borman, G. D. (2000). Making the Most of Summer School: A Meta-Analytic and Narrative Review. *Monographs of the Society for Research in Pupil Development*, 65(1), i-127.
- Cooper, H., Nye, B., Charlton, K., Lindsay, J. & Greathouse, S. (1996). The Effects of Summer Vacation on Achievement Test Scores: A Narrative and Meta-Analytic Review. *Review of Educational Research*, 66, 227-268.
- Davies, S., Aurini, J. & Hillier, C. (2022). Reproducing or Reducing Inequality? The Case of Summer Learning Programs. *Canadian Journal of Education/Revue Canadienne de l'éducation*, 45(4), Article 4. <https://doi.org/10.53967/cje-rce.5311>
- Desrochers, A., Laplante, L. & Brodeur, M. (2016). Le modèle de réponse à l'intervention et la prévention des difficultés d'apprentissage de la lecture au préscolaire et au primaire. Dans M.-F. Morin, D. Alamargot & C. Gonçalves (dir.), *Symposium international sur la littéracie à l'école/International Symposium for Educational Literacy (SILE/ISEL)*. (pp. 290-314). Les Éditions de l'Université de Sherbrooke (ÉDUS).
- Downey, D. B., von Hippel, P. T. & Broh, B. (2004). Are Schools the Great Equalizer? Cognitive Inequality during the Summer Months and the School Year. *American Sociological Review*, 69(5), 613-635. <https://doi.org/10.1177/000312240406900501>

- Fuller, C. M., Simmering, M. J., Atinc, G., Atinc, Y. & Babin, B. J. (2016). Common methods variance detection in business research. *Journal of Business Research*, 69(8), 3192-3198. <https://doi.org/10.1016/j.jbusres.2015.12.008>
- Gage, N., MacSuga-Gage, A., Crawley, W. & Morse, T. E. (2023). Defining learning loss in relation to the COVID-19 pandemic. *Preventing School Failure: Alternative Education for Pupils and Youth*, 67(3), 121-126. <https://doi.org/10.1080/1045988X.2023.2204826>
- Gertler P. J., Martinez S., Premand P., Rawlings, L., & Vermeersch, C. (2016). *Impact Evaluation in Practice*, The World Bank. <http://www.worldbank.org/ieinpractice>
- Hair, J., Black, W. C., Babin, B. J. & Anderson, R. E. (2010). *Multivariate data analysis* (7<sup>e</sup> éd.). Pearson Education International.
- Hattie, J. (2023). *Visible learning: The sequel: A synthesis of over 2,100 meta-analyses relating to achievement*. Taylor & Francis.
- Hébert, M. & Lépine, M. (2013). De l'intérêt de la notion de littératie en francophonie : un état des lieux en sciences de l'éducation. *Globe, Revue internationale d'études québécoises*, 16(1), 25-43. doi: 10.7202/1018176ar
- Johnston, J., Riley, J., Ryan, C. & Kelly-Vance, L. (2015). Evaluation of a Summer Reading Program to Reduce Summer Setback. *Reading et Writing Quarterly*, 31(4), 334-350. <https://doi.org/10.1080/10573569.2013.857978>
- Kaufmann, J.-C. (2016). *L'entretien compréhensif* (4<sup>e</sup> éd.). Armand Colin.
- Kim, J. S. & Guryan, J. (2010). The efficacy of a voluntary summer book reading intervention for low-income Latino pupils from language minority families. *Journal of Educational Psychology*, 102, 20-31. <https://doi.org/10.1037/a0017270>
- Kim, J. S. & Quinn, D. M. (2013). The Effects of Summer Reading on Low-Income Pupils's Literacy Achievement From Kindergarten to Grade 8: A Meta-Analysis of Classroom and Home Interventions. *Review of Educational Research*, 83(3), 386-431. <https://doi.org/10.3102/0034654313483906>
- Kuhfeld, M. (2019). Surprising new evidence on summer learning loss. *Phi Delta Kappan*, 101(1), 25-29. <https://doi.org/10.1177/0031721719871560>
- Kuhfeld, M., Soland, J., Tarasawa, B., Johnson, A., Ruzek, E. & Liu, J. (2020). Projecting the Potential Impact of COVID-19 School Closures on Academic Achievement. *Educational Researcher*, 49(8), 549-565. <https://doi.org/10.3102/0013189X20965918>
- Lecocq, A., Ammi, M. & Bellarbre, É. (2014). Le score de propension : un guide méthodologique pour les recherches expérimentales et quasi expérimentales en éducation. *Mesure et évaluation en éducation*, 37(2), 69-100. <https://doi.org/10.7202/1035914ar>
- Lenhoff, S. W., Somers, C., Tenelshof, B. & Bender, T. (2020). The potential for multisite literacy interventions to reduce summer slide among low-performing pupils. *Pupils et Youth Services Review*, 110, N.PAG-N.PAG. <https://www.sciencedirect.com/science/article/abs/pii/S019074091931309X?via%3Dihub>
- Lynch, K., An, L. & Mancenido, Z. (2021). *The Impact of Summer Learning Programs on Low-Income Pupils's Mathematics Achievement: A Meta-Analysis*. <https://doi.org/10.26300/DA7R-4Z83>
- McCombs, J. S., Augustine, C. H., Unlu, F., Ziol-Guest, K. M., Naftel, S., Gomez, C. J., Marsh, T., Akinniranye, G., Todd, I. (2019). *Investing in Successful Summer Programs: A Review of Evidence under the Every Pupil Succeeds Act*. RAND Corporation, 2019. [https://www.rand.org/pubs/research\\_reports/RR2836.html](https://www.rand.org/pubs/research_reports/RR2836.html)

- McLaughlin, B. & Pitcock, S. (2009). *Building quality in summer learning programs: Approaches and recommendations*. Wallace Foundation.
- Nickow, A. J., Oreopoulos, P. & Quan, V. (2020). *The Impressive Effects of Tutoring on PreK-12 Learning: A Systematic Review and Meta-analysis of the Experimental Evidence*. EdWorkingPaper, 20267.
- Papi, C. (2014). *Formation à distance: dispositifs et interactions*. ISTE.
- Papi, C. (2023). Le tutorat pour soutenir les élèves: une bonne idée? *La Conversation*, <https://theconversation.com/le-tutorat-pour-soutenir-les-eleves-une-bonneidee-196268>
- Papi, C. (2024). *Favoriser l'apprentissage et le bien-être. Tutorat et autres dispositifs d'accompagnement*. Presses de l'Université du Québec.
- Podsakoff, P. M. & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12(4), 531-544. <https://doi.org/10.1177/014920638601200408>
- Quinn, D. M. & Polikoff, M. (2017, septembre). *Summer learning loss: What is it, and what can we do about it?* Brookings. <https://www.brookings.edu/research/summer-learningloss-what-is-it-and-what-can-we-do-about-it/>
- Robinson, C., Kraft, M., Loeb, S. & Schueler, B. (2021). *Design principles for accelerating pupil learning with high-impact tutoring*, Annenberg, *Ed Research for Action*. [https://annenberg.brown.edu/sites/default/files/EdResearch\\_for\\_Recovery\\_Design\\_Principles](https://annenberg.brown.edu/sites/default/files/EdResearch_for_Recovery_Design_Principles)
- Schacter, J. & Jo, B. (2005). Learning when school is not in session: A reading summer day-camp intervention to improve the achievement of exiting first-grade pupils who are economically disadvantaged. *Journal of Research in Reading*, 28, 158-169.
- Silverman, D. (2013). *A very short, fairly interesting and reasonably cheap book about qualitative research*. SAGE Publications, <https://doi.org/10.4135/9781526402264>
- Slavin, R. (2021) Summer 2021 *Re-Imagined: A Grand Opening to a Successful Year*, Robert Slavin's Blog, <https://robertslavinsblog.wordpress.com/category/summer-school/>
- Xie, C., Neitzel, A., Cheung, A. & Slavin, R. E. (2020). *The effects of summer programs on K-12 pupils' reading and mathematics achievement: A meta-analysis. The Abell Report*. <https://bestevidence.org/wp-content/uploads/2021/02/xie-cheung-2020-effsof-summer-for-bee.pdf>
- Zvoch, K. & Stevens, J. J. (2013). Summer school effects in a randomized field trial. *Early Pupilhood Research Quarterly*, 28(1), 24-32