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SUMMA's Dialogic Classrooms:

Transforming teaching and learning through collaboration

IDB

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About SUMMA

SUMMA is the Laboratory for Educational Research and Innovation for Latin America and the Caribbean. We were created in 2016 by the Inter-American Development Bank (IDB) with the support of Ministries in the region. Our mission is to promote the right to education, supporting the improvement in quality, equity and inclusion of education systems in the region. We seek to accelerate educational transformations that have a positive impact on the most disadvantaged and excluded groups. To this end, we draw on global evidence and experiences, contextualizing and enriching them from local experience. We work in collaboration with key actors to share learning and enhance impact: Ministries, Faculties of Education and Research Centers. In particular, we collaborate closely with the Education Endowment Foundation (UK), the International Development Research Centre (Canada), the Global Partnership for Education (several countries), the OECD, OECS, UNESCO and the Inter-American Development Bank.

Among the principles that guide our actions, two are key: the conception of education as a fundamental human right and the firm conviction that all students can learn if they receive an adequate education (UNESCO, 2020). Education research provides the basis for enabling education systems to have teachers who are better prepared (and supported) to deliver the education their students need.

However, there is a gap between educational research and decision making at the level of educational policies and programs (OECD, 2023b). This gap is explained mainly because research is often disconnected from the needs of the school system and also because research results are communicated in a language that is unclear and impractical for decision makers at the system and school level (OECD, 2023b).

SUMMA is working hard to close this gap, by doing the following:

- Identification of the needs and strengths of educational systems and programs;
- Synthesis and “translation” of evidence to make it clear and accessible to decision-makers at the system and school levels;
- The development of spaces where the transformation of evidence into concrete practices is modeled;
- Working in collaborative networks (ministries of education and other institutions) that allow SUMMA’s work to be expanded;
- Studies that allow us to continue to deepen in the identification of the factors that allow us to transform education.

Summary

Latin America and the Caribbean are several years behind the learning results of the OECD countries evaluated by PISA. A closer look at educational processes shows an long road ahead towards a pedagogy that better connects with the needs and feelings of students, as well as to respond to the new challenges posed by society. There is a great opportunity offered by an unprecedented body of research evidence suggesting ways to guide and accelerate educational improvement. The existence of meta-analyses of large volumes of research in education makes it possible to identify pedagogical practices with high impact in contexts of socio-educational vulnerability, and low requirements on infrastructure or technology.

SUMMA developed the Dialogic Classrooms Program based on the articulation of some of the most effective strategies for improving learning: collaborative dialogue, metacognition and formative feedback. The program was developed and piloted between 2020 and 2023 in a group of schools in northern Chile. This paper reviews the main rationale, components and preliminary results of this program. It analyzes the program's potential to synergistically address student learning, professional development and collaborative relationships between teachers and pedagogical leaders, and the promotion of interaction within classrooms and schools. It does so by taking into account the urgent need to build societies capable of dialogue and collaboration, considering and valuing the diversity of their members.

1. Introduction

Today's society is facing unprecedented challenges: the climate crisis, social instability and political polarization, among others. We are also facing a labor market with accelerated technological transformations, shaken by the irruption of artificial intelligence. All of this poses a huge challenge to the way our education systems prepare the new generations.

In the case of Latin America, the challenge is even greater. Although the region has shown significant progress in access to education in recent years, challenges persist in terms of school completion and also in the level of learning achievement and the relevance of what students learn (IDB, 2023). The educational outcomes of our students reveal years of lagging behind compared to their peers in developed countries (OECD, 2019). The region also faces learning gaps that affect the most vulnerable students (UNESCO, 2020). This situation prevents our societies from reaching their full potential and jeopardizes our ability to face the challenges of the future. This is a complex educational challenge that requires responses in different areas. One of them is the development of the capacities of our teachers and principals so that they can support the new generations to better face the future.

Research evidence from the past decades highlights the role of teachers and school leaders as the most important factors in driving learning improvement (Douglass, 2019; OECD, 2018). In addition, evidence from the last decade indicates that learning gaps could be reversed through a pedagogical transformation of our schools that emphasizes active pedagogies based on metacognition, collaboration, dialogue, and social-emotional development, among others (Education Endowment Foundation, EEF 2024).

However, having evidence about effective practices is not enough to implement effective changes. The demands faced by teachers and school principals are very high: the challenges are complex and situations constantly arise to which they must respond (Ruffinelly-Vargas, 2016). They cannot be left alone in the task of change, especially since most of the time they do not have sufficient support or adequate tools. We need a more systemic, collaborative and supportive approach to transforming school practices.

In response to these challenges, SUMMA developed the Dialogic Classrooms Program, which aims to strengthen the quality of teaching and learning processes in schools with high socioeconomic vulnerability. The Dialogic Classrooms Program promotes pedagogical innovation through the implementation of teaching practices that have a high impact on learning: metacognition, formative feedback and collaborative dialogue (EEF, n.d.). By combining these practices, the Dialogic Classrooms draw on an approach to learning centered on "collaborative autonomy": we can guide our own learning and, at the same time, enrich it through collaboration and dialogue with others. This perspective guides both student and teacher learning through the promotion of systematic spaces for mentoring, reflection on practice and collaborative professional learning.

The program builds capacity in schools through a professional development plan for teachers and school leaders structured in short improvement cycles that combine theory, practice and pedagogical mentoring. Each cycle focuses on a highly effective pedagogical strategy, and is deployed through a sequence that includes a training workshop, class design, classroom implementation, observation and feedback on implementation based on specific criteria previously agreed upon, and collaborative reflection for professional learning. Key to this is pedagogical mentoring and community learning.

The role played by pedagogical leaders is fundamental to promote change. They must ensure the conditions for transformations, lead a shared vision of change and promote the institutionalization of changes to make them sustainable over time. Thus, the training of pedagogical leaders is key for innovations to be sustainable and scalable at the territorial level.

This document provides further information regarding the Dialogical Classroom Program. Section 2 describes more precisely the problem addressed by the Dialogical Program and section 3 presents the proposed solution through the pedagogical transformation model of the program. Section 4 explains the model in detail and Section 5 presents some of the preliminary results obtained by the program´s first implementation. Finally, section 6 describes the lessons learned from the latter, remaining challenges and public policy directions that can be derived from the experience.

2. Definition of the problem, opportunities and challenges

This section describes what we consider to be one of the main educational problems in Latin America, which the Dialogical Classroom program intends to respond to. It also describes the opportunity provided by the systematization of the last decades of worldwide research on educational improvement programs and the challenges of transferring this evidence to school practice to promote local improvement.

2.1 **The problem:** social delays and gaps in learning that jeopardize the region's individual and collective capacity to meet the challenges of the coming society.

International assessments reveal that Latin American and Caribbean countries are several years behind in terms of learning, when comparing students with their peers in developed countries (OECD, 2019). Figure 1 shows how the academic performance of Latin American students, in the case of the latest PISA assessment1 2022 in mathematics, is between 3 and 7 years behind the performance of students in developed OECD countries (IDB, 2023).

1. *PISA is the OECD's Program for International Student Assessment. It conducts assessments in reading, mathematics and science for 15-year-old students every three years.*

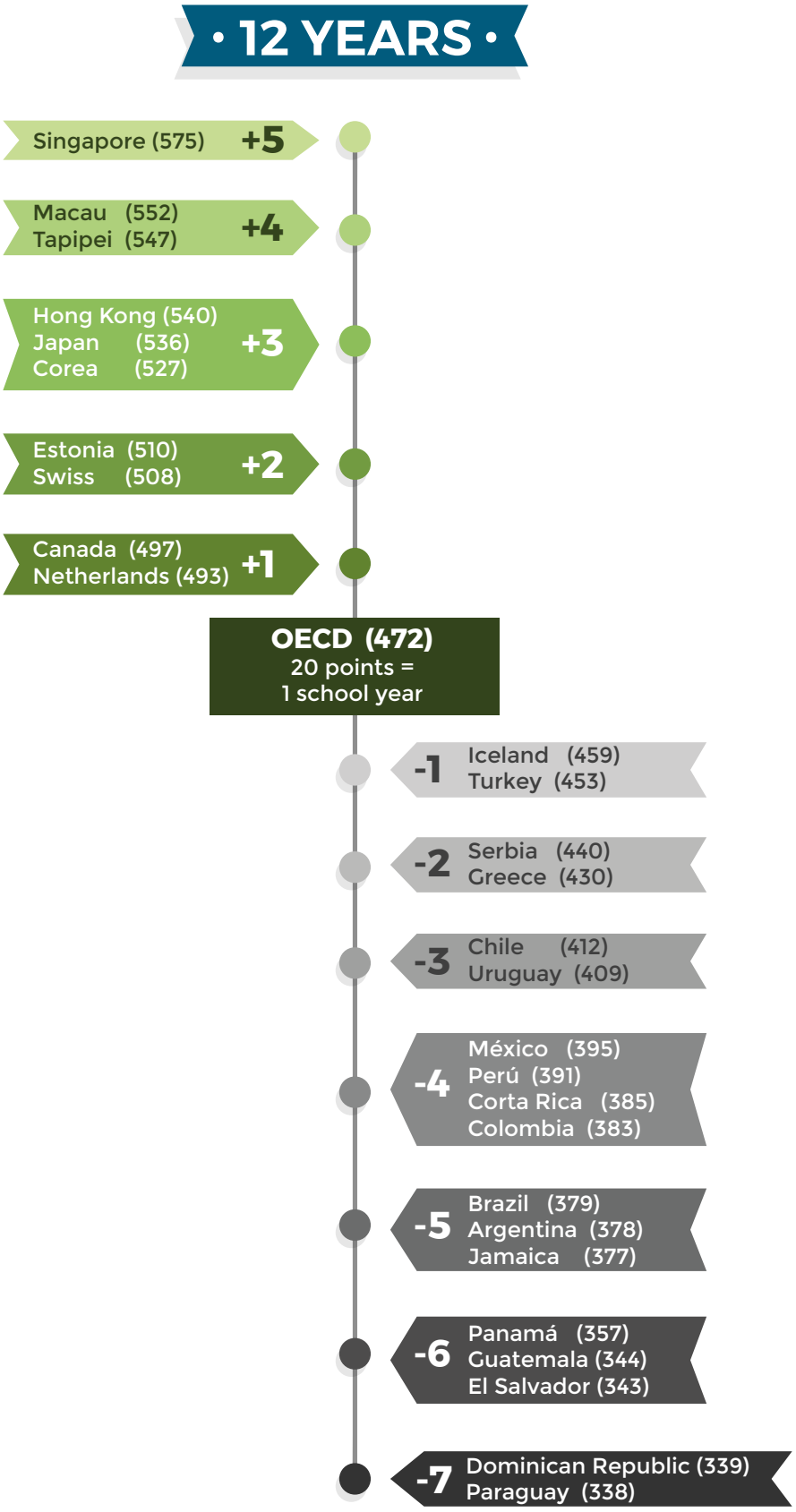

Figure 1: Results of different countries in the PISA test, compared to the average of OECD countries in years of progress in learning. The data show that Chile, despite being the best performing country in the region, is three years behind the average of the countries evaluated.

Source: *Adapted from Arias Ortiz et al. (2023).*

Latin America also faces problems of socio-educational inequality. Within our countries, there are significant gaps in learning performance associated with the socioeconomic situation of students: those who come from more vulnerable contexts are several years behind students from more advantaged contexts (OECD, 2019; OECD, 2023b; UNESCO, 2020). Such lags are observed as early as initial education, and increase over the years throughout the students' trajectory. In addition, the most socially disadvantaged students are more likely to repeat grades and to show worse results in applications for access to tertiary education. They also tend to not complete their tertiary studies, and have worse employment outcomes compared to more advantaged peers (UNESCO, 2021).

Against this backdrop (the lags in learning and the social inequalities that also impact what students learn) our societies run the risk of not reaching their full potential and of seeing their capacity to adequately face the challenges of the coming decades diminished.

2.2 **The opportunity:** advances in educational science to address these gaps, promoting the development of key capabilities for autonomy and collaboration.

For just over a decade, education science has accumulated an unprecedented body of evidence identifying the impact of various educational improvement strategies (EEF, 2021a; Darling-Hammond et al., 2020; Mujis & Bokhove, 2020; Wigelsworth et al., 2019). This evidence shows that the greatest potential for improvement lies in the development of the pedagogical core[2], moving it towards more active and participatory methodologies (EEF, 2021a; Darling-Hammond et al., 2020; Mujis & Bokhove, 2020; Wigelsworth,et al., 2019).

The Education Endowment Foundation of the United Kingdom (2024) conducted a meta-analysis of thousands of programs evaluated worldwide, which has made it possible to identify and compare more than 30 categories of educational strategies in terms of their impact on learning (see Figure 2). The findings indicate that among the strategies with the greatest impact are those focused on developing: (a) students' capacity for autonomous learning through metacognition and formative feedback; and (b) social learning through collaboration and dialogue. In short, a more effective pedagogy is one based on the understanding of learning as an active and participatory process.

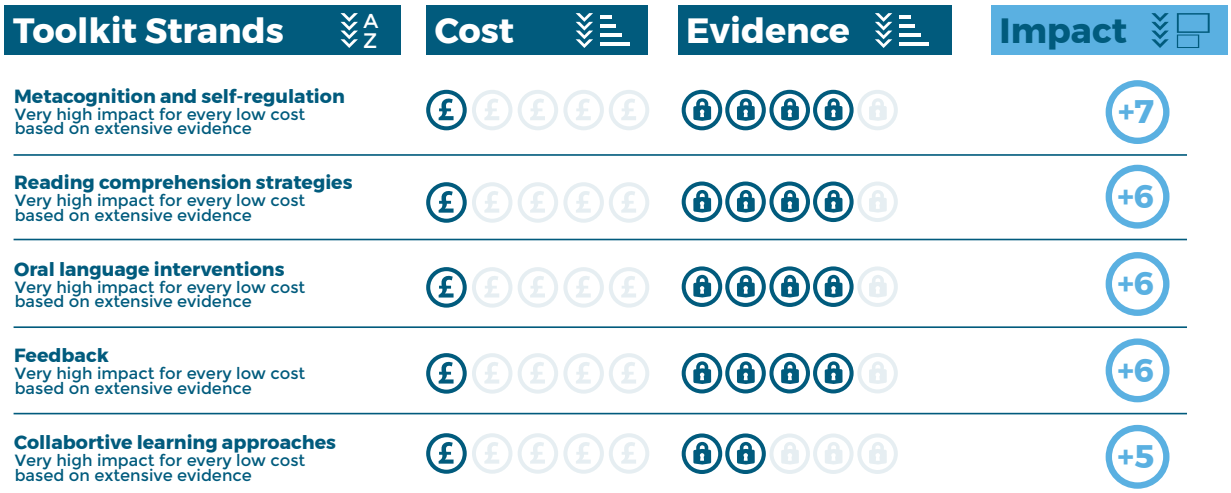

Figure 2: Image of a section of the Education Endowment Foundation's Effective Practices Platform, which summarizes data from around the world on the effectiveness of key pedagogical strategies. This section shows the highest impact strategies in the classroom based on international evidence. It ranks the strategies according to their cost of implementation (in pounds), the strength of the scientific evidence supporting them, and the impact of their implementation in the classroom, translated into additional months of teaching and learning for students.

2. *Richard Elmore defines the pedagogical core as the relationship between the teacher, the student and the content, through a learning task (Elmore, 2010).*

Strategies with the highest impact are not only more efficient than other practices on promoting learning. They also seek to develop the capacity to function in an uncertain world in an autonomous but also collaborative manner. Moreover, these strategies tend to be low-cost innovations in terms of infrastructure and technology and focus primarily on the professional empowerment of teachers and school leaders.

The potential impact of such practices on learning is enormous. In fact, high impact practices tend to generate the equivalent of additional months of learning per year compared to other strategies. It is worth noting that one or two additional months per year can translate into the equivalent of one or two additional years of school education in the lives of students, without them having to spend more time in school.

2.3 **The challenge:** to reinforce the preparation of teachers and school leaders in high-impact pedagogical practices

The literature highlights the role of teachers and school leaders as the most important factors in driving improvement in their students' learning outcomes (OECD, 2018). However, the task of transferring global research advances to local educational practice is complex (Bold et al. 2017; Getenet, 2019; Montgomery & Smith, 2015; OECD, 2023a). In addition, professional development processes face several difficulties in mobilizing effective transformation of teaching practices, due to the lack of adequate material and time conditions, work overload, high teacher attrition rates, discontinuity of training processes, lack of accompaniment to implementation, and the gap between training content and research findings on effective pedagogical practices (Jomuad et al., 2019; Manuel et al., 2018; Popova et al. 2020).

Moving towards more participatory and active classrooms is a major challenge. Until this happens, it will not be possible to unleash the potential shown by the latest evidence. Therefore, training models are required that articulate the development of conceptual knowledge of pedagogical innovations with the systematic transfer to practice, strategies to guide and support implementation, and instances that allow collaborative reflection for professional learning.

3. Our proposal: SUMMA Dialogic Classrooms

In response to these challenges, SUMMA developed the pedagogical innovation program *Dialogic Classrooms*, which seeks to transform teaching in contexts of high socioeconomic vulnerability through the implementation of pedagogical practices that have the greatest impact on learning, according to international evidence. The program encourages school teams to incorporate metacognitive strategies, formative feedback and collaborative dialogue into their usual practices in a synergistic manner, also considering the socioemotional dimension of learning. The use of these strategies is associated with the strengthening of transversal skills in students, which are key to the development of their autonomy and the ability to collaborate to enhance learning.

3.1 Why "Dialogic Classrooms"?

The name of the model is due to the centrality of dialogue as a tool for transforming teaching. We understand dialogue as a planned and interactive communication process that allows students and teachers to address issues of common interest, consider different points of view and collectively resolve different situations (Alexander, 2020; SUMMA, 2024).

School dialogue contributes significantly to students' engagement and motivation, the development of their reasoning and creativity, and understanding of different subjects (Alexander, 2020; Hennessy, et al., 2023; Howe et al., 2019; Jay et al. 2017; Mercer and Littleton, 2007; Resnick, et al., 2017; Rojas-Drummond, 2020). It fosters the development of social and emotional skills such as communication, teamwork and resilience (Gorard et al., 2017).

Dialogue is not only relevant in the classroom. It is also an essential mode of interaction for the school as a whole. It strengthens teamwork and facilitates the resolution of dilemmas or complex problems (Swaffield, 2008). Finally, promoting dialogue in schools sets the basis for the formation of citizens who actively participate in building democratic societies (Alexander, 2020).

During the implementation of the Program, the strengthening of dialogic skills in students allowed building the basis to work synergistically with other highly effective strategies, such as metacognition and formative feedback (SUMMA, 2024). In sum, dialogue is a privileged tool for the development of "collaborative autonomy" in students.

3.2 The model design

For the design of the Dialogic Classrooms, SUMMA took as a reference the experience of research centers that have studied the implementation of similar strategies in schools. The collaboration process between SUMMA and Bar-Ilan University experts Zemira Mevarech and Ornit Spektor-Levi stands out. Mevarech and Spektor-Levi developed the pedagogical innovation programs IMPROVE[3] and MuFha[4] , which emphasize the introduction of metacognition, collaboration and socioemotional development, as well as a multimodal approach to learning. Dialogic Classrooms also drew on the findings of the CEDIR group[5] of the University of Cambridge on the use of dialogue as a teaching and learning tool.

The Dialogic Classrooms Program also incorporates key principles of teacher training identified by international evidence and systematized by the EEF (2021). Two key training principles derive from these principles: (a) to introduce new pedagogical knowledge in a way that promotes understanding and appropriation, and (b) to motivate and support teachers to test new knowledge in practice, through modeling, feedback and other classroom mentoring techniques.

The Dialogic Classrooms program was implemented collaboratively with five schools in the commune of Arica, in the extreme north of Chile, all of them with a high socioeconomic vulnerability index (IVE)[6]. The development of the program was based on an action-research approach[7], which allowed for a process of continuous adjustment and improvement with the support of a monitoring and follow-up system.

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3. *IMPROVE: Introduction of new concepts, Metacognitive questioning, Practice, Review and reduction of difficulties, Gaining mastery, Verification,and Enrichment (Mevarech & Kramarski, 2014).*

4. *MuFhA: Multifaceted Holistic Approach (Saban, 2020).*

5. *CEDiR: Cambridge Educational Dialogue Research. More information at: https://www.educ.cam.ac.uk/research/groups/cedir/*

6. *A high IVE rate implies that almost all of the high school students are at risk of dropping out of school and are a priority for state support for their education.*

7. *An action-research process combines intervention on real problems of practice with inquiry into the factors involved in the processes and results of this intervention, promoting professional learning and the systematization of good practices (CPEIP, n.d.).*

The result of this process is a program that seeks to build capacities in school teams through a professional development plan for teachers and pedagogical leaders. In addition, the Dialogical Classrooms Program generates knowledge to transform these schools into centers for teacher development and innovation that promote sustainable and scalable pedagogical change at the territorial level. This way of conceiving teacher training seeks to foster collaboration between schools and teachers, and to nurture educational improvement policies on a larger scale.

4. The Dialogic Classrooms implementation model

4.1 Three models of action for the sustainable transformation of practices

The program combines three models that help transform teaching: (a) a pedagogical model, (b) a professional development and school transformation model, and (c) a sustainability and scaling model.

a. Pedagogical model

Deep learning is placed at the center of the pedagogical model of Dialogic Classroom. The student is conceived as an active learner (Paniagua & Istance, 2018) based on a solid socioemotional development (Gueldner et al. 2020). To this end, the program promotes that students develop deep understandings at the base of curricular learning, or Big Ideas, according to the concept used by Wiggins and McTighe (2005) (see Figure 3).

At the same time, Dialogic Classrooms aims to form human beings capable of self-regulating their learning and collaborating with others in the effort to achieve common goals. In order to do so, the program seeks to articulate the high-impact pedagogical strategies (collaborative dialogue, metacognition and formative feedback) in such a way that they synergically enhance each other.

Collaborative Dialogue is at the center of the pedagogical model of Dialogic Classrooms. It favors the development of skills in students to recognize, express, exchange and reflexively deepen their ideas, in collaboration with the rest of the class. On this basis, the program strengthens dialogue spaces that facilitate the development of metacognitive reflection, which allows students to reflect on their learning process (Perry et al. 2019; SUMMA, 2024). At the same time, such dialogic spaces facilitate the delivery of formative feedback. The latter, in turn, allows guiding students' efforts and helping them to progress in learning through spaces for collaborative reflection on their progress and challenges (Irons & Elkington, 2021; Ministry of Education of Panama & SUMMA, 2022).

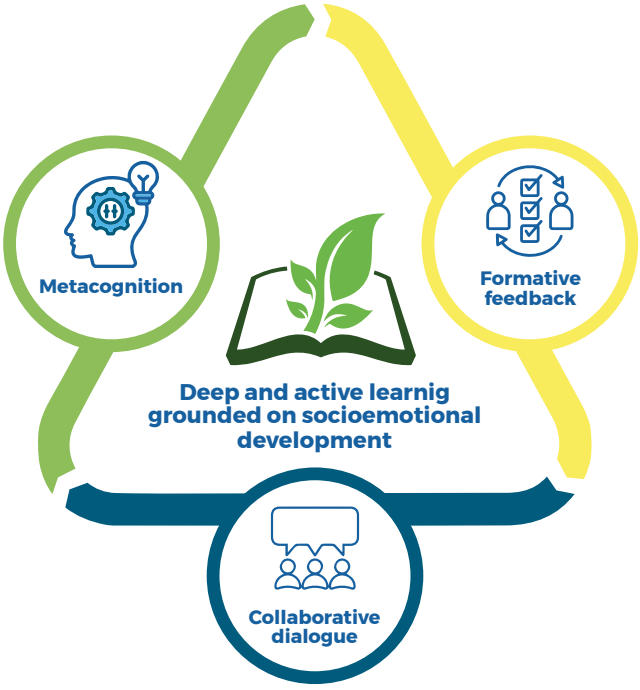

Figure 3: Pedagogical model of the Dialogic Classrooms.

b. School transformation model based on collaborative dialogue

The transformations that the program promotes lies in the action of teachers and pedagogical leaders. Aiming to achieve the desired actions, the design of the program organized teachers´and pedagogical leaders´ training around a school transformation model, based on an approach that we have called collaborative autonomy, which is also at the basis of the pedagogical model. Whereas the pedagogical model seeks to develop collaborative autonomy within students, the school transformation model seeks to develop it within the professional teams of the schools.

The training strategies are based on the same practices highlighted in the pedagogical model, which this time are promoted at the level of the teaching community: collaborative dialogue among teachers, metacognitive reflection on pedagogical practice and formative feedback that guides the improvement of teaching. This model assumes as a central premise that professional learning is developed through active processes of exchange and joint reflection throughout the different stages of professional life. This is promoted through the implementation of improvement cycles, described in the following section.

This model promotes a progressive process of practice transformation and capacity development. To this end, instruments such as classroom practice observation guides, progress maps and exit profiles help teachers and pedagogical leaders to reflect on the progress and challenges in their professional development process.

c. Sustainability and expansion model

Dialogic Classrooms aims for the sustainability of the program and the autonomy of schools and territories, as the basis for its projection and expansion. The sustainability and scaling model considers three logical stages (Colbert & Arboleda, 2016; Korten, 1980).

1. **Effectiveness:** This stage aims to ensure that the model responds to the needs of the beneficiaries and generates learning in the local educational system regarding how to effectively implement the program's components. To this end, the implementation of Dialogic Classrooms begins by working with a small group of teachers and pedagogical leaders per school in order to strengthen the effective implementation of the pedagogical innovations, before expanding its coverage.

2. Efficiency: The efficiency stage aims to reduce investment levels per unit of production, and to realistically adjust program requirements to organizational capacities. In this stage, the innovation radiates to the rest of the teachers in each participating school through training workshops, systematic implementation, pedagogical support and communities of practice. The teachers trained in the initial group assume a leadership role, supporting their colleagues in the implementation.

3. Expansion: Finally, the expansion phase prioritizes the achievement of a gradual and orderly expansion of the program. The intervention is extended to new school networks, in a process led by the local technical team and guided by SUMMA.

This transfer and scaling-up mechanism is under development, based on the pilot implementation process in northern Chile. In this implementation, the effectiveness stage was addressed and work began on the efficiency stage. Both stages are supported by a monitoring and evaluation system that seeks to collect and systematize evidence on four aspects: 1) the implementation of the program according to its planning, 2) the perceptions of the program's direct participants on the relevance and usefulness of the actions, 3) classroom practices and 4) the performance and progress of the direct participants: teachers and managers. Instruments such as surveys, interview guides, classroom observation guides, progress maps and graduation profiles are used for this purpose.

In the future, the program seeks to replicate the logic of the transformations in new territories (deepening of the effectiveness and efficiency dimensions and development of the expansion stage), channeling the learning developed during the previous phases and transferring the complete cycle to new networks of schools and territories.

4.2 The implementation model in detail

This section describes more precisely the implementation model of Aulas Dialógicas. First, we describe how the program is concretely implemented in schools. Then, we detail its structure, which articulates three models in action.

The training process is structured in cycles that respond to the logic of short improvement cycles (Berkowitz & Aravena, 2022) carried out by groups or "communities of practice". These cycles combine the development of conceptual knowledge of pedagogical strategies with immediate transfer to practice and collaborative reflection for professional learning. The improvement cycles include the following phases (Figure 4):

1. **Contents and proposals:** The program displays training spaces in which teachers and school leaders collaborate. They consist of workshops in which the contents and proposals of the pedagogical model are presented and analyzed in person and online.

2. **Classroom design and implementation:** Teachers design classes based on the program's pedagogical model and using the reverse planning strategy[8] (Wiggins and McTighe, 2005). This design is then implemented in one or more classes.

3. **Observation and pedagogical feedback:** Teachers implement the innovations in their practices, which are observed by a tutor or pedagogical leader. The latter provides the teacher feedback based on the observations, emphasizing the teacher's progress and achievements. This activity is supported by observation guides.

4. **Shared reflection:** The last workshop of the cycle consists of a reflective meeting in which teachers share application experiences and collectively consolidate learning.

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8. *Inverted planning instead of starting by planning teaching activities, it does so by first identifying the core knowledge (or Big Ideas) at the base of the curricular learning objectives to be addressed. Then, it involves defining the assessment evidence through which students will demonstrate their learning. After these two stages teachers finally design the teaching activities to be implemented.*

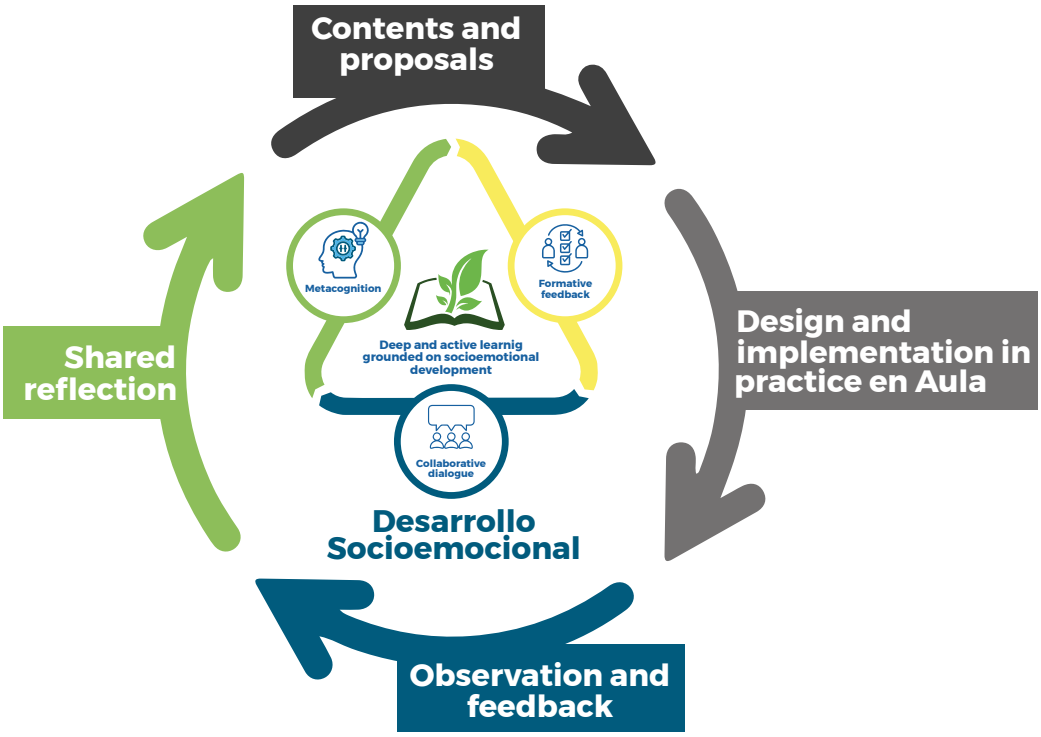

Figure 4: Visual representation of a four-stage cycle.

For example, a cycle on Collaborative Dialogue can be structured as follows:

- In phase 1 (contents and proposals), the theoretical contents related to Collaborative dialogue are presented, in addition to strategies to promote it in the classroom. In addition, the guide for practice observation with focus on Collaborative Dialogue is presented with indicators that allow the teacher and the pedagogical tutor to analyze the implementation of the strategies in the classroom.

- In phase 2 (design and classroom implementation), teachers apply the contents in the design of a lesson aimed at promoting Collaborative Dialogue. The lesson design is carried out with the support of the pedagogical tutor, and then implemented in one or more classes.

- Phase 3 (observation and feedback), is based on the implementation of the designed lesson in practice. A pedagogical tutor observes the implementation. The tutor offers formative feedback to the teacher who implemented the practice, which is the basis for analyzing teacher progress and challenges in the implementation. Feedback is based on the technical criteria contained in the observation guide. For example, it can be related to the development of an adequate climate for dialogue,

strategies for opening dialogue, work modalities in pairs, groups or with the entire class, and the alignment of activities with curricular objectives, among other issues, are analyzed.

- In phase 4 (shared reflection) teachers and pedagogical tutors meet to jointly analyze the progress, difficulties and lessons learned from the implementation cycle, and agreements are reached on how to improve for the following cycles. Meetings aim to apply the principles that guide the practice of collaborative dialogue, this time, in a context of professional dialogue.

This four-phase cycle is repeated successively, incorporating new topics or strategies to work on, as shown in Figure 5.

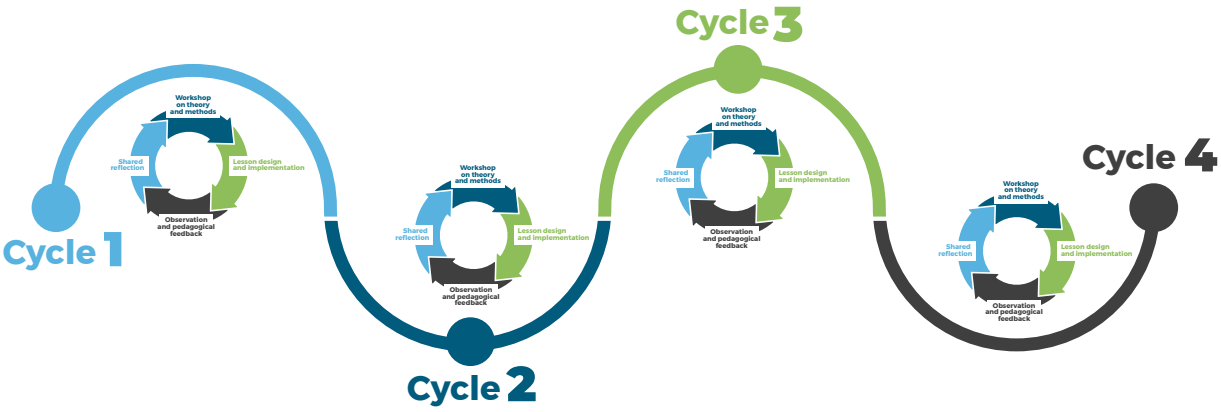

Figure 5. *Visual representation of a sequence of cycles.*

The program not only promotes training of teachers, but also of school pedagogical leaders. In the first place, it develops the leaders' capacities to mentor the implementation and management of the program in each school. To this end, pedagogical leaders participate in the improvement cycles previously presented. In this way, pedagogical leaders learn about the pedagogical strategies to be implemented in the classroom. Their specific training aims to develop in them the capacity to support teachers in the implementation of innovations in the classroom. This makes it possible for the school to autonomously replicate the training in new groups of teachers and, in this way, the expansion of the innovations to all classrooms and students.

Secondly, the program trains pedagogical leaders in the development of management skills related to information management for decision-making for improvement. This includes the monitoring and follow-up of educational practices, which is supported by instruments such as classroom practice observation guides, progress maps of teaching skills to implement these pedagogical strategies, and exit profiles so that pedagogical leaders can self-evaluate the development of their own skills.

The program follows a curricular grid which includes four to five formative cycles per year. The first three cycles focus on Collaborative Dialogue, Metacognition and Formative Feedback, and the fourth cycle addresses the integration of these three key strategies in the classroom. The first year is a general and operational introduction to the three key strategies, and in the following years, elements of inverted planning or social-emotional development are included. In the future, the program may include modalities of shorter duration (one year, or even one semester).

The curricular grid also includes an introductory seminar and a closing seminar for the academic year. The introductory seminar provides the conceptual elements of the three key pedagogical strategies in an integrated manner, and also seeks to motivate and engage the participants. The closing seminar aims to synthesize the core learnings of the year and to project the sustainability of the changes.

5. Preliminary results

Progress maps and exit profiles

The **progress maps** are instruments focused on teachers´ learning. There is one progress map per pedagogical strategy of the Program. This allows evaluating the performance of teachers by pedagogical strategy, considering progressive development levels that specifically describe what is achieved at each level. Progress maps highlight progress and explains the challenges that need to be addressed to move to the next level.

The exit profiles are instruments focused on teachers´ learning. They define the behavioral criteria required for a leader to be able to autonomously implement the program.

The program has set a "before and after" precedent for this school.
School Director

The progtram installed practices that the school did not have, for example, evaluating class observation is something that was definitely installed, especially at the specialty level.
Pedagogical leader

[The dialogic classroom]... is a classroom in which the teacher should not be the protagonist, the students are the protagonists of their own learning.
Teacher

The program Dialogic Classrooms was first implemented in a pilot version between 2020 and 2023 in five high schools in northern Chile. According to the results of this stage, Dialogic Classrooms is an innovation with potential to mobilize change in teaching practices and foster students' agency in their own learning. In addition, promising results were observed in student learning achievement[9].

5.1 Participants' perceptions[10]

The vast majority (more than 90%) of the participating team of teachers and pedagogical leaders: (1) consider that Dialogic Classrooms is a worthwhile program, including the effort it means; (2) state that the pedagogical strategies are relevant to the needs of their schools; (3) consider that the program helped to set a shared view among teachers and principals on pedagogical challenges and how to address them; (4) indicate that the program improves the dynamics of pedagogical mentoring; (5) feel able to apply what they have learned in their professional work; and (6) manifest a positive change in the role they play in the school.

9. *The information presented here comes from an evaluation of the implementation process of the program's monitoring and evaluation system. This includes dimensions of feasibility, relevance and promising results of the program. Impact evaluations are planned for future implementations of the program.*

10. *Information extracted from the closing survey administered by the program in August 2023 to 20 teachers and 13 pedagogical leaders from the schools participating in the program.*

5.2 Promising results in learning tests[11]

During the year 2022, students from the schools participating in the program took the Learning Progress Evaluation System (SEPA) tests of the Pontificia Universidad Católica de Chile. The SEPA tests measure learning progress in the subjects of Language (Spanish) and Mathematics during the course of the school year. Among others, SEPA offers information regarding the evolution of students' learning throughout a school year (SEPA-UC, n.d.) and in comparison with their peers from other schools.

SEPA Language and Mathematics tests were implemented in the schools participating in the pilot of Dialogic Classrooms. The tests were administered at the beginning and end of the year 2022, and the progress of the participating schools was compared with that of schools of different sources of financing[12].

In the case of Mathematics, the average progress of students in the participating schools was similar to that of the comparison groups[13]. In the Language test, the progress of the participating schools was higher than the average of all comparison groups. Such result is promising shows in terms of the ability of participating schools to recover learning after the pandemic (Figure 6).

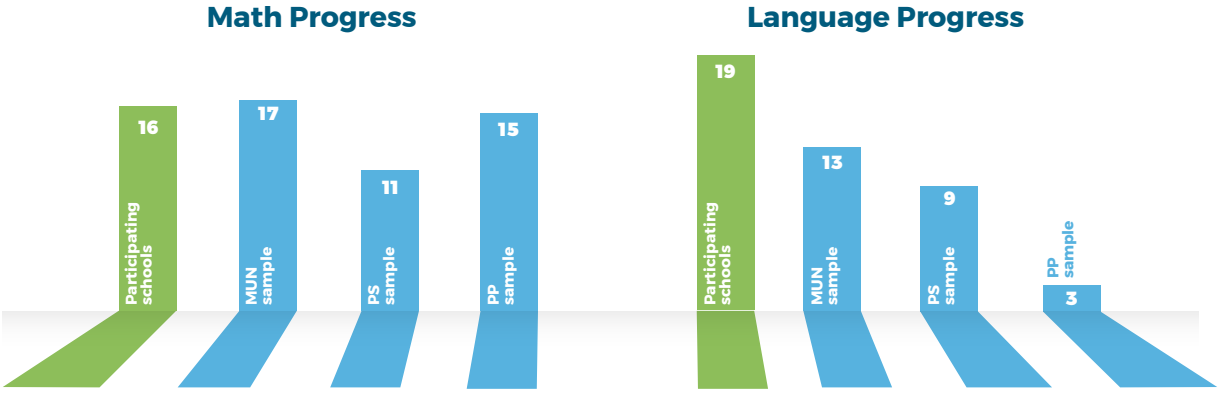

Figure 6. *Visual representation of a sequence of cycles.*

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11. *Progress calculated based on the results of 177 grade 8 students who took the Learning Progress Assessment System (SEPA) tests of the Pontificia Universidad Católica de Chile in March and November 2022. These results do not constitute an impact evaluation of the program.*

12. *In Chile there are three main types of schools, according to their sources of financing: public schools, private schools that receive state subsidies, and private schools financed by students' families. Each of these groups of schools are associated with the socioeconomic background of the students and their academic results.*

13. *The results were compared with three groups of schools, according to the type of administration: public schools (MUN), state-funded private schools (PS) and private fee-paying schools (PP).*

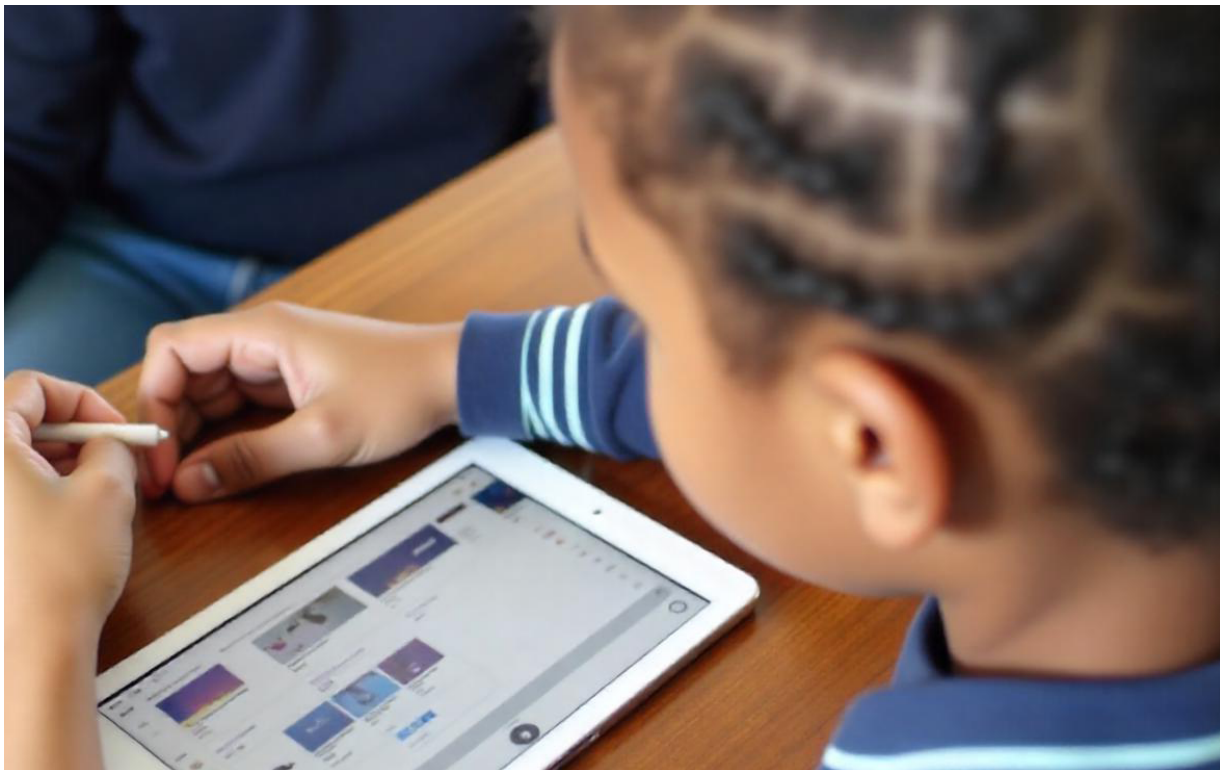
5.3 The case of the Chinchorro School[14]: An example to reflect on the potential impact and sustainability of the Dialogical Classrooms.

The Chinchorro School was one of the five schools that participated in the development and implementation of the first version of Dialogic Classrooms, between 2020 and 2023. Among the five schools, it was the only supported by public sources. Since SUMMA´s interest is that Dialogic Classrooms contributes to educational public policies, we put a special focus on the monitoring of the program implementation in Chinchorro School. This school provides education from Pre-K through grade 12 and has more than 800 students enrolled, classes of 30 students on average and a faculty of 61 teachers. It has a significant percentage of students from indigenous peoples of the locality. Like the other high schools in the program, it offers students technical-vocational education and has a high school vulnerability index (93-95% of its students).

The professional team at Escuela Chinchorro showed promising progress in transforming teaching practices and pedagogical leadership, with collaborative mentoring and professional development practices systematically applied to support participating teachers. In early 2023, the high school began an expansion of the program to other subjects and grade levels, reaching as far as 1st grade. After the Dialogic Classrooms pilot officially ended in August 2023, Chinchorro school not only maintained the transformations during that year, but extended them to all educational areas. This contrasts with the focus of Dialogic Classrooms, which was to work only with teachers of Language (Spanish) and Mathematics, and Grades 9 to 12. The following year (2024), the school continued its implementation in all classrooms, focusing on Collaborative Dialogue and Metacognition. This means the school autonomously expanded the implementation of the pedagogical innovations to more than 45 teachers.

14. *We have replaced the original name of the school with a fictitious name for confidentiality reasons.*

According to the results of the SIMCE national learning test[15] 2023, the Chinchorro School significantly increased its 10th Grade students performance for both Reading and Mathematics. The school raised its scores by 27 and 24 points respectively, in each subject[16], which represents a significant and substantial increase in both tests between the 2022 and 2023 measurements. Although these results do not correspond to an impact evaluation (which would allow us to isolate the effect of Aulas Dialógicas from other conditioning factors), the fact that the school has shown these advances in the systemic implementation of the program for the majority of teachers, grades and subjects is promising. This result show research opportunities to delve deeper into the factors that make Aulas Dialógicas a program that can transform the learning opportunities of the most vulnerable students.



15. *The SIMCE is a census test of various subjects, which is applied annually throughout the country. The tests correspond to 4th and 10th grade.*

16. *The SIMCE scale is anchored with a mean of 250 and a standard deviation of 50 (Agencia de la Calidad de la Educación, 2018). On this basis, both the increase in Reading and Mathematics performance of students at Colegio Chinchorro corresponds to approximately 0.5 standard deviations. As a reference, this is approximately equivalent to half of one school year's learning....*

6. Looking ahead: Implications

6.1 Learning and Achievements

Several lessons can be drawn from the implementation of the Dialogic Classrooms program:

a. Dialogue is key to articulate the application of the main components of the model. During the implementation of the program, it was possible to verify in reality one of its main assumptions: that dialogue allows articulating the pedagogical strategies that are part of the program, generating the basis for collaborative reflection required for the development of metacognition and formative feedback. Together with this, the dialogic approach made it possible to make feasible and enhance the professional development of teachers and managers.

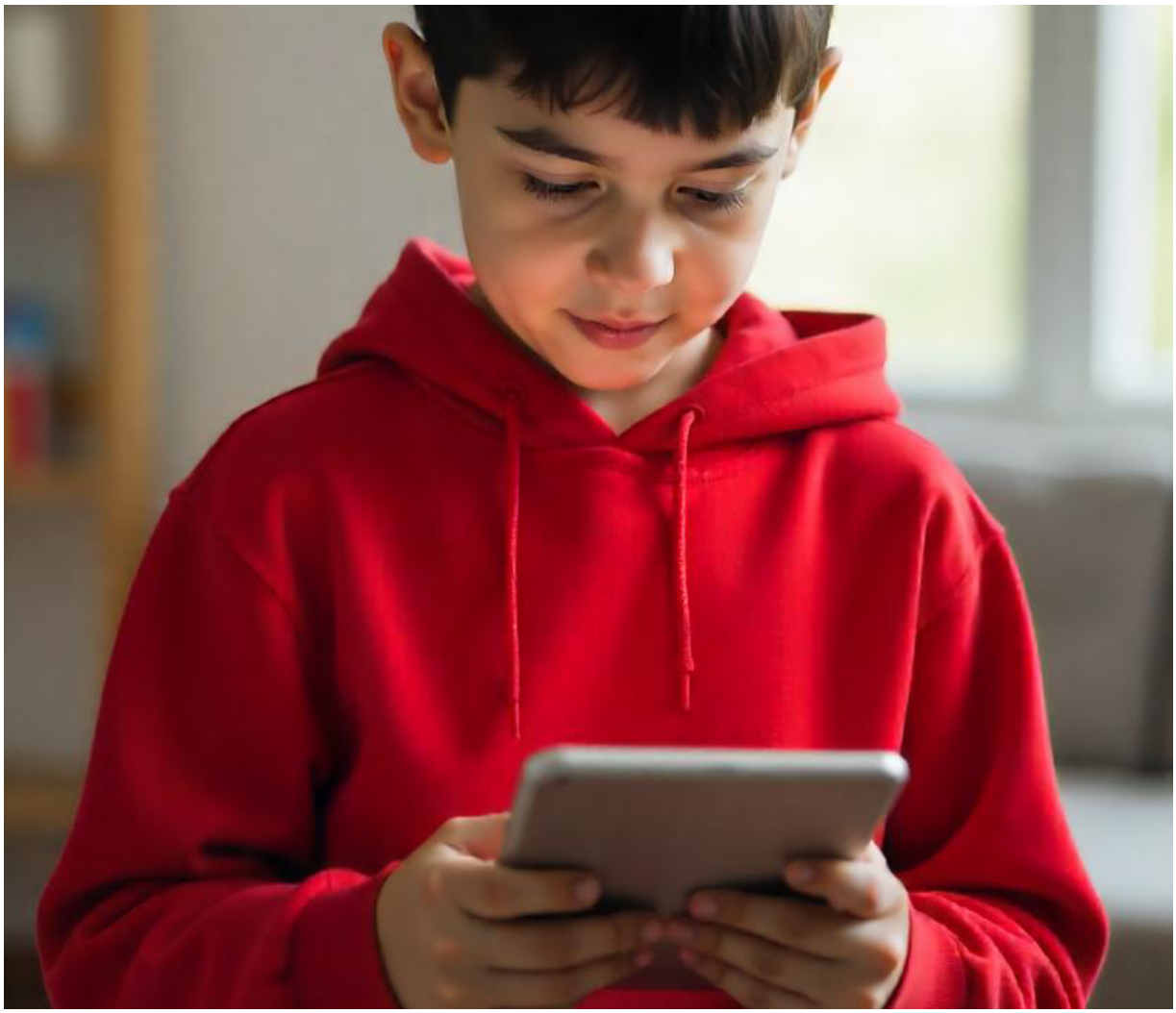
In this way, the collaborative dialogue functions as a transversal axis that provides coherence to the intervention proposal as a whole, favoring the deepening of each of the components from a common perspective.

b. Professional development is most effective when it is structured in short learning cycles (two months maximum). This modality of professional development facilitates teachers' learning to focus on specific content while participating in collaborative spaces for reflection.

In addition, the short cycles allow for intensive transfer to practice, reflection and lifelong learning based on systematic analysis of the application. The emphasis on collaboration, reflective dialogue and mentored practice reflects the same learning strategies that are promoted among students. This gives greater coherence to the formative proposal: what is expected to happen in the classroom also happens in the staff room.

c. The gradual and explicit progression of improvement is key. The implementation of the teacher training process is supported by progress maps, which are used to monitor and evaluate how the teachers' appropriation of pedagogical strategies is progressing. The progress maps made it possible to visualize an image of the teachers' learning trajectory. This in turn favored teachers´ awareness of their progress and support needs, both for them and for the pedagogical leaders and the program implementation team. In this way, progress maps contribute with a dynamic vision of practice improvement and capacity building.

In any case, there are still pending tasks. Although there is great potential for cost-effectiveness in the implementation of Aulas Dialógicas, it is necessary to incorporate the lessons learned from the first phase of implementation to ensure its efficiency and scalability. To this end, the program now faces the need to expand its network of schools and build alliances with new partners to enable the consolidation of the model for its transfer and progressive scaling up.



6.2 Challenges for future phases of implementation

The lessons that the SUMMA team learned from the implementation of the Dialogic Classrooms program in its initial phase also allow the institution to consider the following challenges when implementing this program in new networks of schools and territories.

a. Aiming for sustainability: to count on account voluntary participation and promote autonomy

It is important to ensure the voluntary participation of schools, and in each school it is important to begin implementation with a group of teachers motivated to participate. Starting the work with teachers willing to innovate and collaborate could favor the development of short-term wins (Kotter, 1995). Early wins make it easier to mobilize change in the rest of the school's professional team, as well as in other schools in the network.

It is also essential to promote school autonomy in the implementation of innovations from the beginning. The early involvement of pedagogical leaders and school administrators in monitoring and decision making for the progress of the program in each school would favor the sustainability of the changes once external support is withdrawn. To this end, the professional training modality should advance from modeling to guided practice, to finally reach accompanied autonomous practice.

b. Early consideration of the complexities of cultural change

The pilot implementation reaffirmed the idea that changes in educational practices are not only technical, but carry the additional complexity of challenging school and professional culture. During the process of training and implementation of innovations, both teachers and leaders find their professional habits and the way they understand their respective roles challenged, which puts school tradition under tension. Probably, the collaborative and reflective principles of the program facilitated the approach to this challenge.

c. Extending the logic of progress maps as a tool for improvement orientation

The application of progress maps of teachers' capacities proved to be useful and revealed positive results for the implementation of the program. This calls for extending the logic of progress maps to the various instruments used by the implementation of Dialogic Classrooms for monitoring, evaluating and providing feedback to teachers, managers and students regarding their progress. Above all, it seems crucial to develop progress maps for students to dialogue and reflect collaboratively on their learning, and to increase their autonomy in recognizing their progress and gaps, as well as in the use of strategies to continue advancing in their performance.

6.3 Main conclusions for the region and policy makers

The experience of implementing Aulas Dialógicas reaffirms the importance of connecting school improvement and teacher training initiatives with evidence, demonstrating what schools and teachers can do to obtain the best results. Specifically, the program illustrates the opportunity for education policy design to promote pedagogical practices that have a high impact on learning, such as Collaborarive Dialogue, Metacognition and Formative feedback. Likewise, the program illustrates how to consider the existing evidence regarding the most effective modalities of teacher training that privilege, among other aspects, teacher motivation and effective transfer to classroom practice (EEF, 2021b). Based on the above, the Dialogical Classrooms Program points out a possible way for Latin America to reduce its learning gap and inequalities. This is particularly necessary in a context in which all countries in the region are implementing policies that favor recovery from the effects of the Covid-19 pandemic.

The logic of collaborative professional learning through cycles of training, practice and reflection offers a perspective of educational improvement that challenges the top-down logic. It strengthens the role of the school and school networks as spaces where knowledge about effective school innovation is produced and deepened. In such a process, teachers and pedagogical leaders can reaffirm their complementarity and build value from the synergy of their respective roles. This focus on school improvement and professional development is an opportunity to alleviate the burden on teachers as unequivocally responsible for educational outcomes. It does so by focusing on the support processes implemented by educational administrations, and by promoting the protagonism and co-responsibility of local actors in the production of educational improvement processes.

Finally, the pedagogical model of Dialogical Classrooms offers a way to strengthen the agency, engagement and collaborative autonomy of students throughout their learning process and in different areas of the curriculum. This provides an opportunity to address an area of permanent challenge for education systems in the region, which maintains high dropout rates, low graduation levels and deficiencies in the quality of learning (IDB, 2023). Additionally, strategies based on collaboration, dialogue, self-regulation and reflection could better prepare our students to face the challenges of a changing world and a future that offers few certainties.

7. Conclusions

The implementation of the first version of Aulas Dialógicas allowed SUMMA to reaffirm the convictions that inspired the design of the program: it shows collaboration and dialogue as drivers of change in the way students, teachers and school leaders relate to promote learning. At the same time, the program chose to promote change from the pedagogical core, entering into the heart of the teaching and learning process in the classroom, through professional development strategies and pedagogical accompaniment. Outside the classroom, the work strategies between teachers and principals were also built from a collaborative and dialogic approach, which allowed school professionals to live first-hand the experiences they would later promote among their students.

Thus, Aulas Dialógicas was developed from the dual purpose of promoting more solid and deeper curricular learning in students, together with promoting the construction of relationships based on trust, respect, active listening, and the shared definition of common purposes and meanings in all members of the educational community. The promotion of this type of relationship positions dialogue and collaboration as the path and, at the same time, as the goal to be achieved. This is an ambitious bet, since it aims at the transformation of practices governed by traditions firmly installed in the school habitus, both in the classroom and in the professional teams.

The piloting of the program for three and a half years demonstrates that these transformations are not only possible, but essential. Students, teachers and pedagogical leaders were able to progressively transform the way they conceived their own role in the educational process, showing real changes in their daily practices and relationships. In this way, Aulas Dialógicas emerges as a possible way to promote some of the most important transformations required by schools in the region.

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