

Improving Opportunities For Young People In Chile: A Case From A Vocational School

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Institutions

Luksic Foundation

- Family foundation, dedicated to improve quality of education in disadvantaged schools, mainly vocational high schools.
- It provides both financial and strategic support for improvement projects along Chile, promoting the use of Improvement Science and Impact Evaluation in order to contribute to policy and decision making.



Mayor General Óscar Bonilla High School

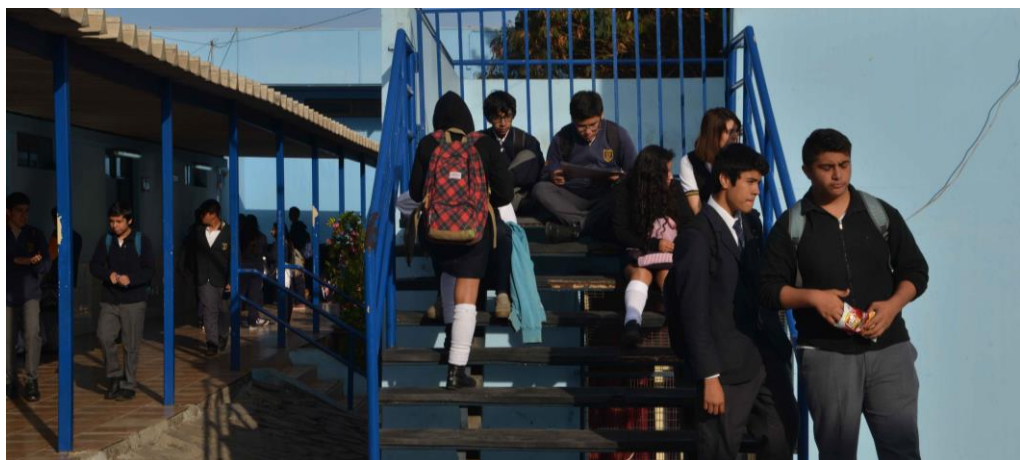
- Located in Antofagasta, Chile, this public vocational high school attends an average of 900 students, 88.93% of which are classified as vulnerable.
- The school is categorized as “Insufficient” by the national Quality of Education Agency, due to its results in standardized tests being below expectations while comparing with similar schools.

Introduction

In 2011, Luksic Foundation and the city government signed a collaboration agreement for the improvement of school management and teamwork skills of the leading team and learning outcomes of students of Mayor General Óscar Bonilla High School. A 6 year-long program was designed with external content advisors, consisting of biweekly meetings to update the educational project and ensure basic conditions for improvement.

The problem

By 2015, although some improvement in student retention and attendance indicators had been achieved, the learning results obtained in National Literacy and Math tests continued to worsen, reaching historical lows of 82% and 100% of students at insufficient levels. At that time, the decision of including an Improvement Science approach to the project was made.

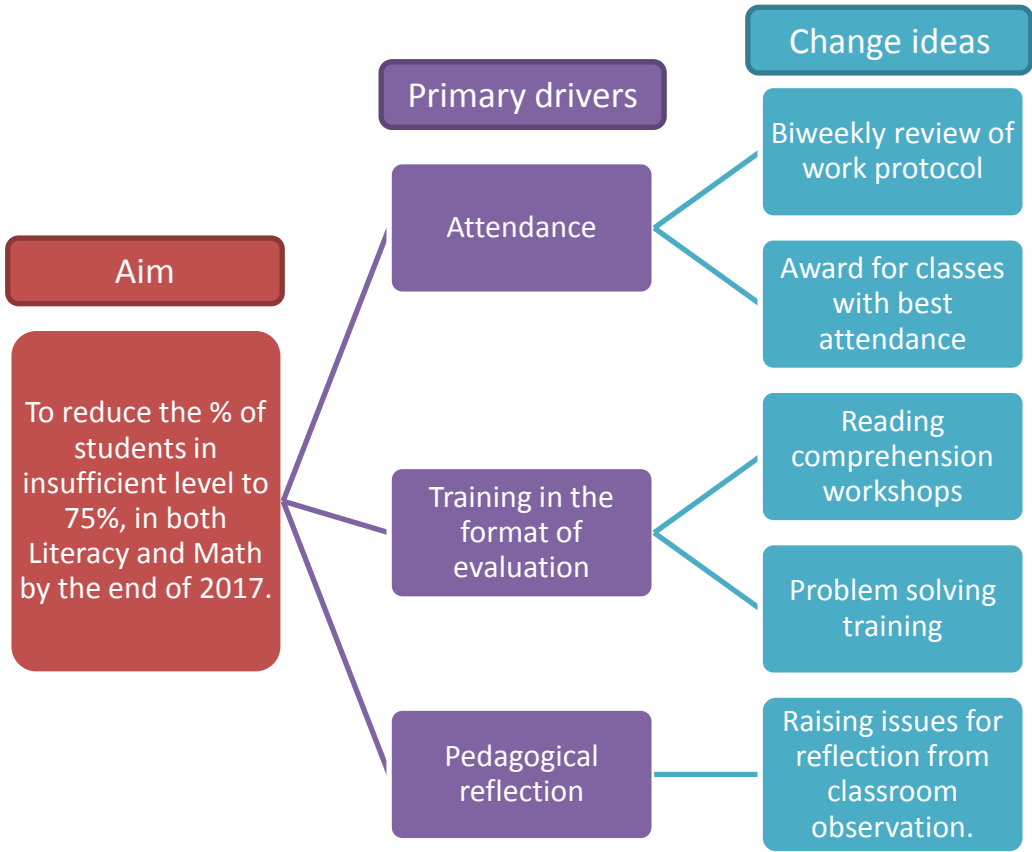


Methods

To introduce the methodology to the team, the decision was to make an open invitation for volunteer teachers to test it in some key issue for the organization; teachers later decided the issue would be reading comprehension in Freshman year. This worked in an early stage, helping them to reflect on their usual practices based on individualized data per student, but as time went on, the project development highlighted the need to add the management team and to put together a strategy at institutional level. So by the end of 2016, a process of incremental participation in the design of strategies for improvement was developed.



Driver diagram



Measurements

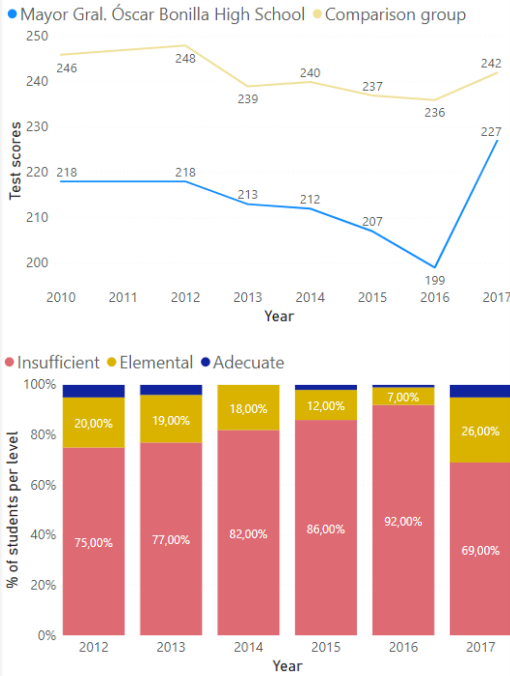
- % of students in insufficient learning level
- % of students with more than 20% of monthly absence
- % of completed practice sessions
- % of attendance at practices
- % of pedagogical reflection sessions
- % of teachers who made pedagogical reflection.

Results (1/2)

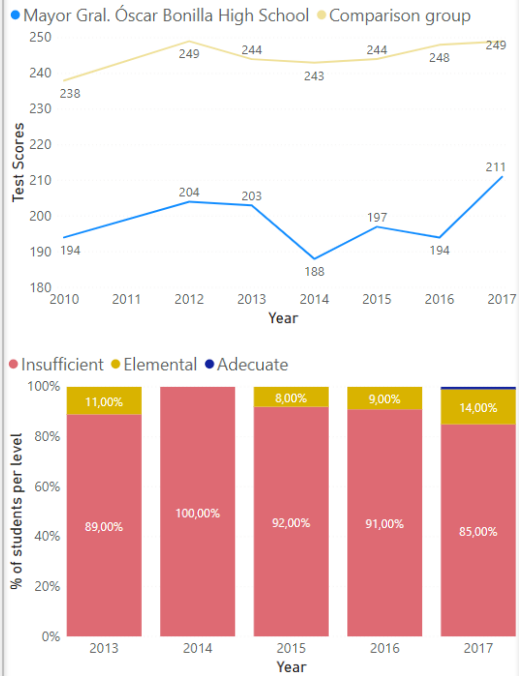
By the end of 2017, the average percentage of student in insufficient level was reduced to 69% in Language and 85% in Math, reaching the minimum throughout the project.



Literacy Outcomes



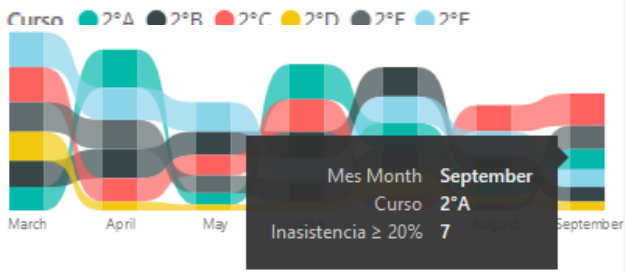
Math Outcomes



The number of students with absenteeism above 20% was reduced by 35%. The data analysis tool used allowed to detect cases of students presenting up to 60% of absence during the school year.



Attendance

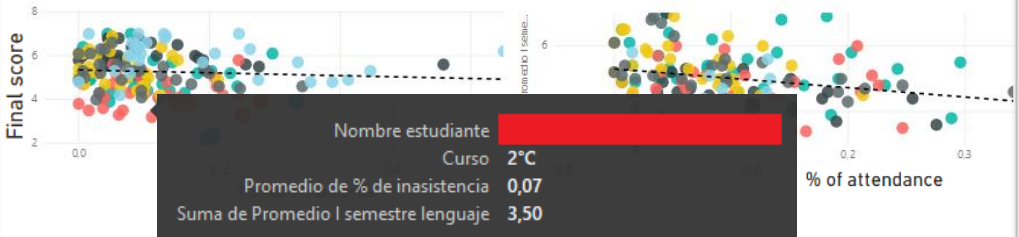


Results (2/2)

By using different sources of data, such as attendance, grades and overall school performance, the team was able to detect cases in which students were most likely to fail or quit school. Early detection was key to focus the efforts of the leaders, teachers and psychosocial teams, and to design and apply differentiated protocols for each case.

Literacy scores vs attendance

Math scores vs attendance



Other drivers:

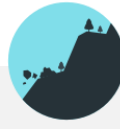
- Number of monthly practice sessions was doubled.
- No significant changes in both practice attendance (74% average), and pedagogical reflection data (98% average).





Conclusions and key findings

- Improvement science, with focus on student learning, allowed to obtain better results in context of high vulnerability, not achieved after years of working with content advisors focused on the development of leadership and teamwork skills.
- The shared theory of improvement motivated the participation of new actors and induced action. This strategy is now included as a must on every project Luksic Foundation supports.
- The systematic analysis of data and visual display tools made decision-making and action-taking easier and quicker.
- The modification of indicators from a perspective of compliance to improvement, mobilized reflection towards the effectiveness of the work.



Challenges

- Although the use of business intelligence platforms made data analysis easier, technical skills for data recording, creation of graphs and data analysis should be strengthened in educational communities.
- Current national professional development programs for teachers (in the workplace or on campus) do not include improvement approaches.

