

FINAL REPORT MOTOROLA EXECUTION 2022



Organization Legal Name

ORGANIZACION NO GUBERNAMENTAL DE
DESARROLLO TECNOLOGIA CON NOMBRE DE
MUJER

Title of the Program

Impulsando vocaciones STEM en niñas de
colegios técnico-profesionales

Primary focus of the program

Technology & Engineering Education

Number of Primary Participants

500

Secondary participants

60

EVALUATION RESULTS

Adjustment in Program Outcomes

We understand factors and challenges arise which can impact intended outcomes (ex. participation hours, number of primary participants, genders served, etc.). If your final program outcomes differed from your original intended outcomes, please provide the rationale. What challenges or factors led to the change?

During the year 2022, the NGO was faced with the return to post-pandemic school presence in all the establishments in which the project is carried out, recovering classes in person and opening the opportunity to attend the establishments as accompaniment to teachers in classrooms throughout the year. Given the low level of progress that students had in the pandemic, the subjects considered priority (mathematics, language, science) returned with the pre-pandemic hours or even more hours, to the detriment of subjects such as English, technology, history, which they came back with fewer hours. In the technology subject, in pre-pandemic there were 90 minutes a week, now post-pandemic there were only 45 minutes.

On the other hand, according to figures from the Ministry of Education, 50,000 students nationwide have dropped out of school during the year 2022. We could see this reflected in the high schools where we are present with our program, as is the case of the Liceo Comercial del Desarrollo Temuco, where 23.2% of the students enrolled in 1st and 2nd grade did not complete the program, because they did not attend classes during the year or they withdrew from the establishment.

According to a study carried out by the University of Chile and the Catholic University, it was found that 9.4% of classroom teachers are on medical leave, have reduced their working hours or have resigned, due to various factors, such as the return to face-to-face, the

increase in violence presented in establishments and the deterioration in the mental health of students and teachers. This was reflected in the high schools that we impacted with the program, where unfortunately we had to experience the suicide of a student from the Vate Vicente Huidobro High School during this 2022 school year, in addition to other situations such as suicide attempts, fights, etc.

Regarding the medical licenses of teachers, we have the case that occurred at the Instituto Superior de Comercio de Valparaíso, where the teacher who performs the program presented 4 medical licenses during this 2022 school term, meaning a delay in the delivery of content.

Thanks to our relationship with our partner WOM Chile, we were able to renew the donation of mobile broadband connectivity, in the high schools where the NGO program is developed. This made it possible to maintain good connectivity that facilitated constancy at work.

On the other hand, it is worth mentioning that the Puente Ñuble Technical High School was robbed in July 2022, where the computer equipment (PCs, notebooks and tablets) was stolen, losing all the equipment used to carry out the program. This meant carrying out a restructuring of the contents of the program, being able to resume classes with computers in September 2022.



SUCCESS STORIES

Share the personal stories of program participants and how your program touched their lives.

Undoubtedly, what we could highlight as the program's success has been the resilience of high school teachers, students, and managers, executing action plans that could reverse or minimize the challenges we had in mental health and violence issues; In addition to supporting us with the rescheduling of hours, adding hours and / or restructuring schedules. All this so that we could meet the goals of the program, the deliverables and complete the program. All of the above shows the level of commitment and adherence to the program that the management team and teachers of the different high schools have acquired.

Another area where the success of the program was reflected is that taking into

account that technical-professional high schools serve 80% of the most vulnerable children in the country, it was possible for all high schools to present between 3 and 15 teams in different student competitions. entrepreneurship, innovation and technology, such as: INACAP Go Innova (12 semifinalist teams and 2 finalists), Los creadores (16 semifinalist teams and 2 finalists), SAMSUNG Challenge (2 semifinalist teams), ENAC Innovation (1 semifinalist team and 1 finalist and winner). Also of the total number of projects submitted by the students, 125 projects were submitted to the Technovation Girls international contest, the results of which will be held in August next year.



MÉTRICAS

Within the grant application, your organization outlined how it would measure the effectiveness of the program. We asked you to describe how you would track the success of the program, areas that can be evolved to better serve participants, and the quantifiable metrics that would be collected. *

Below, please describe: 1) How each metric was tracked; 2) The outcomes achieved for each metric; 3) What the outcomes indicate to your organization. If your organization did not ultimately track a metric originally included in the grant application, please explain why. Please note: The Motorola Solutions Foundation asks partners to be transparent about the outcomes of their evaluation, both positive and negative. Intended goal(s)/outcome(s) that are not met can be opportunities to evolve the program to better serve participants in the future .

During the 2022 academic year, various strategies were implemented in order to monitor the committed metrics and take early actions to comply with the corresponding KPIs. This has meant a significant effort on the part of the team, considering the return to normality in educational establishments in Chile.

In the first place, initial teacher training was carried out, since during this year, in some of the high schools involved, we worked with teachers who were confronted with the program for the first time, such as the high schools: Liceo Bicentenario de Excelencia Técnico Puente Ñuble, Vate Vicente Huidobro Commercial High School. On the other hand, weekly follow-up meetings were held, in physical and online format, with the teachers involved in teaching the program, in order to resolve doubts and accompany them during the process. Added to this, face-to-face visits were made to the high schools involved with a frequency of every 15 days, which consisted of accompaniment in the classroom, with the aim of resolving doubts from the students, learning about the projects they were carrying out and monitoring. of each work team. The visit instances also allowed the possibility of meeting with the teachers and also with directors of the educational establishments.

The return to face-to-face classes in a post-pandemic context and leaving behind

the online format with which classes have been taught since 2020, meant the visibility of the digital and technological gap that still exists in Chile's own high schools; connectivity problems, low speed internet, lack of equipment (PC, notebooks, tablets, etc.). As an NGO, we support the high schools involved in this project in strengthening their connectivity and improving internet access, for which reason negotiations were made with our partners to obtain donations of Mobile Broadband (BAM), which allowed classes to be held. of the program in a calmer and more comfortable way, ensuring the connection of all the students involved.

The results indicate that the program benefited from the return to face-to-face classes in Chile, since this allowed an increase in class attendance compared to the previous year (2021), thus, a greater number of students participated in the program and completed it. It is worth mentioning that the digital and technological gap still affects vulnerable and rural communities, where the high schools where we develop the project are located. However, as a team we were able to find solutions so that the program could be delivered without problems and reduce existing connectivity problems, which can be seen reflected in the increase in completed projects compared to 2021.

Progress status individualized by establishment
Taking the data provided in the first report as a reference, the following is obtained:



1) Puente Ñuble de Ñuble Bicentennial Technical High School of Excellence

Of the students, 64% completely finished the program and 26% partially finished the program, 52% presented a beta deliverable and 93% attended classes.

In relation to the perception, interest, and logical and computational thinking test, 78% of the total was obtained at the entrance and at the exit, 62% of the total.



2) Commercial Development High School of Temuco

Of the students, 37% completely finished the program and 64% partially finished the program, 22% presented a beta deliverable and 85% attended classes.

In relation to the perception, interest and logical and computational thinking test, 61% were obtained in the input intake and 12% of the total in the output intake.



LICEO BICENTENARIO PROVINCIAL
SANTA TERESA DE LOS ANDES
COLINA - LANPA - TILTIL

3) Santa Teresa de Los Andes de Colina Bicentennial High School

Of the students, 60% completely finished the program and 39% partially finished the program, 49% presented a beta deliverable and 90% attended classes.

In relation to the perception, interest, and logical and computational thinking test, 83% of the total was obtained at the entrance and at the exit, 72% of the total.



4) Francisco Araya Bennet Superior Institute of Commerce of Valparaíso

Of the students, 39% completely finished the program and 42% partially finished the program, 25% presented a beta deliverable and 85% attended classes.

In relation to the perception, interest, and logical and computational thinking test, 31% were obtained at the entrance and 8% of the total at the exit.



5) Vate Vicente Huidobro Commercial High School of Santiago

Of the students, 43% completely finished the program and 56% partially finished the program, 28% presented a beta deliverable and 84% attended classes.

In relation to the perception, interest, and logical and computational thinking test, 49% were obtained in the input intake and 58% of the total in the output intake.

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