

# The Akelius App and Blended Learning: Strategies for Teaching Italian as a Second Language at School



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# Summary

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# Main results

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# Main results

The four regions (Emilia-Romagna, Lazio, Lombardy, and Piedmont) primarily involved in the *Akelius* program host just under 60% of students with non-Italian citizenship. This confirms that the programme has been implemented where the need for support in learning **Italian as a second language (L2)** for students with a **migratory background**—particularly **NAI (Newly Arrived in Italy)**—is greatest.

## IMPLEMENTATION IN SCHOOLS



- **47 Comprehensive Institutes**<sup>1</sup> were involved (71 primary schools and 43 lower secondary schools);
- Schools received technical and pedagogical support through a *Help Desk*, monitoring visits, and teacher training;
- **UNICEF–Akelius Guidelines** adapted to the Italian context were shared to guide and support the use of the app in three key areas: digital infrastructure, device management, and pedagogical approach.

## TEACHER TRAINING



- In the 2024/2025 school year, **239 teachers** were involved, of whom **187 were trained** (139 new teachers from the current year and 48 teachers from previous years);
- Training included **synchronous and asynchronous pathways**, accredited on the **S.O.F.I.A.**<sup>2</sup> platform, focusing on *Blended learning*, critical analysis of the *Akelius* platform, lesson design, and lesson planning. Teachers particularly appreciated experimenting with new activities and collaborating in small groups. In the asynchronous pathway, they valued the flexibility of the online format, the practical nature of the materials, the opportunity to explore new methodologies, and the chance to deepen their understanding of how to use the *Akelius* platform.

<sup>1</sup> For further details or definitions, please refer to the Glossary

<sup>2</sup> For further details or definitions, please refer to the Glossary

## COMMUNITIES OF PRACTICE (COP)



- The CoP involved lead teachers from **24 selected Comprehensive Institutes** to promote mutual learning, collective improvement, and strategies to engage other colleagues;
- **Emerging proposals and outcomes:** presentation of the *Akelius* App at teachers' meetings as a training opportunity; creation of shared digital and paper archives for all teachers; establishment of a documentation and exchange routine among teachers.

## CLASSROOM OBSERVATIONS



- Conducted in 21 Schools (13 primary, 10 lower secondary) with **23 lessons observed**;
- The implementation rate of the UNICEF–*Akelius* Guidelines for pedagogical and didactic sections **exceeded 80%** in over half of the schools;
- **Blended learning lessons** were well planned in 10 out of 14 cases;
- Both teachers and students demonstrated a good level of **digital competence**;
- **Good practices identified:** organizational skills, attempts at differentiation, teacher feedback to students on learning outcomes, and collaborative or peer-to-peer use of *Akelius*;
- **Challenges identified:** lack of lesson planning and non-blended use of the platform (e.g., using only *Akelius*).

## STUDENTS INVOLVED



- In the 2024/2025 school year, **697 students** aged 6–16 participated in the *Akelius* program (65% in primary, 35% in lower secondary schools);
- **Main nationalities:** Egyptian (133), Pakistani (73), Peruvian (56), Bangladeshi (45), Chinese (43).

## ACTIVITIES USING THE AKELIUS APP



- **321 learning activities** were conducted by **125 teachers** (average: 2.57 activities per teacher);
- **Types of activities:** 35.5% group work; 28.3% individual; 36.1% structured classroom activities;
- **Average activity duration per student:** 16.53 hours (median: 10).

## LEARNING OUTCOMES



- **385 students were assessed:**
- **Achieved the expected level: 29.9%;**
- **Exceeded the expected level: 48.3%;**
- **Remained at Pre-A1/A0 level: 10.6%;**
- **Did not reach the expected level: 11.2%.**

These results confirm a **positive trend**, with over 78% of students achieving or exceeding the expected learning goals. Moreover, teachers report that the *Akelius* app is a motivating and engaging tool, superior to traditional paper-based materials.

## SUSTAINABILITY AND CHALLENGES



- The *Akelius* app is still perceived as a “**project**” rather than fully integrated into school curricula;
- The **Help Desk** remains the main reference point for both new and experienced teachers and schools using the *Akelius* App;
- **Challenges:** teacher turnover, lack of widespread training, and organizational difficulties;
- The **Communities of Practice** propose strategies to consolidate app usage and promote the sharing of materials and good practices.

# Recommendations

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# Recommendations

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## Recommendations for schools to ensure optimal use of the *Akelius* app

- Ensure a reliable Wi-Fi connection that allows the download and installation of *Akelius* App updates;
- Plan app updates in advance, also identifying the person responsible for managing the process.
- If the school plans to purchase charging stations, it is advisable to select models equipped with wheels to facilitate transportation;
- Guarantee an efficient system for storing digital devices in safe locations, ensuring regular maintenance and clear responsibility for charging and moving devices to and from classrooms.

## Recommendations for teachers for optimal use of the *Akelius* app and for implementing a *Blended learning* pathway for teaching Italian as a second language (L2)

- Always use the teacher profile and have students use their student profiles (also accessible via QR code) to allow teachers to track student progress;
- Involve students in the start-up and wrap-up procedures (distribution and collection of tablets, explanation of the activity, etc.);
- **Set future goals**—in terms of linguistic and communicative competence—**aligned with each student's progress and observed developments**;
- **Share learning objectives** with students to increase their awareness and ownership of their learning process;
- **Promote collaborative use of the platform** through group or whole-class work, for example by projecting activities on the interactive whiteboard and fostering interaction between students at the board and those in the classroom;
- **Provide opportunities to assess** whether learners have achieved the objectives set for the lesson or the school term, also using specific tools for assessing language skills (e.g., placement or proficiency tests);

- **Plan additional activities in advance, suitable to each student's level**, drawn from the *Akelius* App or other materials (e.g., AIPI Workbooks), to avoid downtime during lessons (flexible, independent activities are recommended);
- Structure lesson plans or teaching periods in a **coherent and varied sequence of content** (a *syllabus*);
- **Balance and diversify activities** to cover a range of skills and competencies, creating equilibrium between traditional and digital learning;
- Design activities **to ensure interdependence and balance** between comprehension (listening and reading), production (speaking and writing), and interaction (spoken and written);
- **Vary input types and working methods** to account for learners' characteristics and **diverse learning styles**;
- **Alternate and balance** activities to sustain learners' motivation and engagement;
- Integrate the use of *Akelius* into an **overall teaching plan**, clearly defining learning objectives and the most appropriate teaching methodologies to achieve them.

## General recommendations

It is desirable to promote greater continuity among teachers within schools, reducing turnover to ensure the consistency and sustainability of teaching activities that support Italian L2 learning and the inclusion of students with linguistic difficulties.

Furthermore, schools should be provided with adequate resources to meet the teaching and personalized learning needs of their students –not only economic or technological resources, but especially qualified teaching staff, through the expansion of permanent positions for the A23 subject area (Italian as a Second Language).

# Glossary

## BICS

**Basic Interpersonal Communication Skills:** refer to linguistic skills needed in everyday, social face-to-face interactions

## CALP

**Cognitive Academic Language Proficiency:** focuses on proficiency in academic language or language used in the classroom in the various content areas.

## IEP

**Individualized Education Plan:** this is a document that outlines the educational interventions tailored for students with disabilities or special educational needs.

## IC

**Comprehensive Institute:** in Italy, this is a single educational complex that hosts the pre-primary school (if present and when it is public), primary school and lower secondary school under the guidance of a single principal.

## MEM

**Ministry of Education and Merit**

## NAI

**Newly Arrived in Italy:** These are students who come from other countries and are enrolled into the Italian school system. They have been in the country for no more than two years.

## NIC

### Non-Italian Citizenship

## PNRR

**Piano Nazionale di Ripresa e Resilienza:** the National Recovery and Resilience Plan is the program with which the government manages Next Generation EU funds. That is, the economic recovery and revival tool introduced by the European Union to face the losses caused by the pandemic.

## School autonomy

The Italian education system is organized according to the principles of subsidiarity and of autonomy of institutions. Schools have a high degree of autonomy: they define curricula, widen the educational offer, organize teaching (school time and groups of pupils). Every three years, schools draw up their own Three-year educational offer plan.

## SEN

**Special Educational Needs:** SEN encompasses a wide range of learning difficulties and disadvantages that require individualized support. This includes students with disabilities, specific learning disorders like dyslexia and dysgraphia, and those experiencing socio-economic, linguistic, or behavioral challenges.

## S.O.F.I.A.

**Operating System for Training and Professional Development Initiatives:** is an online platform managed by the Italian Ministry of Education and Merit. It provides a national catalogue of accredited training opportunities for teachers at all school levels. Through the platform, teachers can register for courses, track their participation, and document their professional development. Launched in 2017, S.O.F.I.A. supports the recognition and monitoring of teachers' lifelong learning within the Italian education system.



# 1



## Introduction

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# 1. Introduction

During the 2023/2024 and 2024/2025 school years, UNICEF<sup>3</sup>—working in collaboration with the *Akelius* Foundation, in partnership with Fondazione ISMU ETS<sup>4</sup> nationally and with AIPI Cooperativa locally<sup>5</sup>—continued its initiative to promote the ***Akelius Digital Language Learning Courses***, a digital application designed to improve second- and foreign-language learning outcomes across 12 different languages, including Italian. Tested in 15 countries globally, the initiative was launched in Italy to support the learning of Italian as a second language (ITA L2) of students with a migrant background in primary and lower secondary schools.

As highlighted in the implementation report for the 2022/2023 school year, the initiative began with a pilot phase in September 2021, followed by a scale-up phase integrated into UNICEF's response to the Ukrainian refugee crisis. The goal was to support Italian language acquisition and foster the inclusion of newly arrived children, including Ukrainian refugee children in Italian schools.

In 2023/2024 and 2024/2025 school years, the program was implemented in 48 schools and 3 Ukrainian accredited schools already participating, spread across 9 provinces (Bologna, Cuneo, Frosinone, Milan, Reggio Calabria, Rieti, Rome, Trieste, Venice) within 7 regions (Calabria, Emilia-Romagna, Friuli-Venezia Giulia, Lazio, Lombardy, Piedmont, Veneto). The implementation model emphasized Italian language learning and encouraged schools to adopt the *Akelius* app through a ***Blended learning approach***. Activities were aimed at newly arrived minors in Italy (NAI) and other students with migrant backgrounds. To support a program of this scale, the *Akelius* Foundation pro-

<sup>3</sup> UNICEF is the United Nations Children's Fund, which has among its aims the application of the fundamental principles established by the United Nations Convention on the Rights of Children and Adolescents of 20.11.1989, ratified by the Italian State with Law no. 176 of 27.5.1991. UNICEF is operational in Italy with an outposted office from the Europe and Central Asia Regional Office (ECARO, based in Geneva), with the mandate of collaboration with the Italian Government on the protection, education and social inclusion of children and young people, with particular attention to those with a migration background - in accordance with the recommendations and concluding observations of the UN Committee on the Rights of Children and Adolescents.

<sup>4</sup> Fondazione ISMU ETS is a non-profit organization based in Milan (Italy) that conducts scientific research, training and projects aimed at transforming societies through migration and social inclusion

<sup>5</sup> The Social Cooperative AIPI, based in Bologna, is composed by educators and teachers of ITA L2 who intervene in schools and local centres for the rollout of intercultural educational paths as well as for the reception and schooling of non-Italian-speaking children with a migrant background.

vided internationally defined **guidelines, known** as *Standard Operating Procedures (SOPs)*, structured around three main areas:

- **SOP1: Digital environment and IT infrastructure**, with guidance on IT infrastructure, device specifications, and tablet initialization;
- **SOP2: Device and resource management**, with recommendations for tablet management, designated usage and storage spaces, and staff allocation;
- **SOP3: Pedagogical and didactic implementation**, with references to teacher training, the promotion of inclusive *Blended learning* environments, classroom management, and monitoring.

The ISMU team adapted the SOPs to the Italian context by conducting a critical review of the original documents to ensure consistency with the characteristics of the national school system, while also building on experiences gained during the program's expansion phase. To ensure coherence, the three documents were consolidated into a single text in English, shared with the *Akelius* Foundation, and subsequently translated and formatted in Italian. The first version was distributed to schools in April 2024, followed by an updated version between December 2024 and January 2025, with the aim of strengthening the use of the *Akelius* App in line with the SOP guidelines.

In light of these premises, this report aims to provide, at the end of the 2024/2025 school year, an overview of how the *Akelius* application has been used in participating schools, with particular reference to the work carried out by participating teachers. Specifically, **Chapter 1** outlines the structure of the Italian school system and provides an overview of students with non-Italian citizenship, offering a framework to contextualize the program's results. **Chapter 2** describes the support activities provided to schools, focusing on technical and organizational aspects and on the outcomes achieved in applying SOPs 1 and 2. **Chapter 3** examines teacher training and mentoring activities aimed at promoting the use of the app and a blended approach to teaching Italian as a second language (L2), presenting also the students' learning outcomes.

## 1.2 Methodological note

Monitoring was carried out using a **mixed-methods approach**, integrating **quantitative and qualitative** tools in complementary ways to provide a comprehensive and nuanced picture of the implementation of the *Akelius* platform in schools.

### Quantitative data collection and analysis

For the quantitative component, different data sources were used. On the one hand, available databases allowed for a reconstruction of the contextual framework, with particular attention to the presence of students with non-Italian citizenship. On the other, ISMU developed a dedicated data collection platform for teachers, where they could input information about their students and the activities carried out with the *Akelius* App.

The data collected concerned both **student characteristics** (age, nationality, class level, learning path) and **teaching activities** (duration, type – individual, group, or class-based – and mode of use

of the platform). Quantitative analyses based on these data produced **monthly dashboards**, used to monitor the progress of activities during the school year and to provide real-time updates on the advancement of the project.

### Qualitative data collection and analysis

Alongside the quantitative component, a qualitative data collection system was developed to capture the perspectives of those involved and the experiential dimension of platform use. School principals and program lead teachers were interviewed by UNICEF and ISMU experts through structured meetings and open discussion sessions. The information gathered was complemented by **classroom observations**, which allowed direct analysis of how the *Akelius* App was used during lessons, as well as its impact on teaching practices and on the inclusion processes of students with migrant backgrounds.

**Monitoring visits** played a key role, as they made it possible to document the technical and organizational infrastructure supporting the platform's use, identify emerging strengths, and detect any critical issues or areas for improvement. The visits were organized in several stages: preliminary agreements with school contacts, interviews with principals and teachers, on-site inspections of the participating school buildings, and observation of ongoing teaching activities.

### Data collection tools

The data collection process was based on the structure of the **Standard Operating Procedures (SOPs)** described in the introduction. Information was gathered using a set of structured questions, both closed and open-ended, allowing for the collection of comparable data while also integrating qualitative insights useful for interpreting results.

This design made it possible to build a coherent, multilayered framework: on one side, **quantitative analyses**, systematized through monthly dashboards, provided precise and measurable indicators; on the other, **qualitative findings** offered more in-depth and contextualized perspectives, revealing the processes underlying numerical results. The integration of both approaches thus enabled a systematic and comprehensive observation of the various levels of implementation of the *Akelius* platform, balancing technical–organizational aspects with pedagogical–didactic dimensions..



## Overview of the **Italian School System** and the presence of students with non-Italian citizenship

## 2. Overview of the Italian School System and the presence of students with non-Italian citizenship

### 2.1 The Structure of the Educational and Training System

In the Italian education system, Comprehensive Institutes (Istituti Comprensivi – IC) form the cornerstone of school organization and management, particularly within the first cycle of education. These institutes typically consist of a single educational entity that brings together pre-primary (when available and publicly provided), primary, and lower secondary schools under the leadership of a single principal. They serve as a cohesive structure that bridges the different stages of early student development.



Compulsory education in Italy spans 10 years, from age 6 to 16. This period includes the eight years of the first cycle of education and the initial two years of the second cycle, which may be completed either in public upper secondary schools or through regional vocational education and training programs, as established by Law 296/2006.

In addition, under Law No. 53/2003, all minors are subject to the right and obligation to education and training for a minimum of 12 years, or until they obtain a three-year vocational qualification by the age of 18.

To have an overall comprehension, the Italian education and training system is structured as outlined in the following table:

**Table 1 - The Italian education system**

| SCHOOL LEVEL                            | PERIOD           | AGE                | CHARACTERISTICS  | JURISDICTION  |
|---|------------------|--------------------|--|---|
| Integrated System 0-6 Years             | 6 years          | 0-6 years          | Not compulsory education   | Italian government, local authorities, public or private entities |
| Early Childhood Education Services      | 1-3 years        | 3-36 months        | Younger children   | Local authorities, public or private entities                     |
| Pre-Primary School                      | 3 years          | 3-6 years          | Preschool-aged children  | Italian government, local authorities, public or private entities |
| <b>First Cycle of Education</b>         | <b>8 years</b>   | <b>6-14 years</b>  | <b>Compulsory education</b>  | <b>Italian government, private entities</b>                       |
| Primary School                          | 5 years          | 6-11 years         | First phase of compulsory education  | Italian government, private entities                              |
| Lower Secondary School                  | 3 years          | 11-14 years        | Second phase of compulsory education   | Italian government, private entities                              |
| <b>Second Cycle of Education</b>        | <b>3-5 years</b> | <b>14-19 years</b> | <b>Compulsory until the age of 16, two types of pathways</b>   | <b>Italian government, private entities, regional authorities</b> |
| Upper Secondary School                  | 5 years          | 14-19 years        | High schools, technical institutes and vocational institutes   | Italian government, private entities, regional authorities        |
| Vocational Education and Training (VET) | 3 o 4 years      | 14-17/18 years     | Pathways under regional jurisdiction, aimed at students who have successfully completed the first cycle of education | Private entities, regional authorities                            |

## 2.2 The Regulatory Framework for the reception and inclusion

The inclusion of newly arrived students represents a crucial challenge for the national educational system. The reception of all children with a migrant background and the assessment and certification of the skills of students who have already had a schooling path must ensure not only an adequate recognition of their previous educational background but also promote effective integration into the Italian school system.



The right to education for Non-Italian Citizenship students (NIC students) is enshrined in Article 34 of the Italian Constitution, which guarantees that schools are open to everyone, and in Article 38 of the Consolidated Immigration Act (Legislative Decree 286/1998), which establishes measures to support the integration of NIC students into the school system. Also, article 38 states that foreign minors living in the country are subject to compulsory schooling and that all provisions in force regarding the right to education, access to educational services, and participation in the life of the school community apply to all students regardless of their citizenship.

The application of the right to education must be ensured through:

- The activation of specific courses and initiatives for learning the Italian language.
- The acceptance of linguistic and cultural differences as a fundamental value.
- The promotion of initiatives protecting the cultures and languages of origin.
- The implementation of common intercultural activities.

Article 387 of the Consolidated Education Act provides that; the recognition of educational and professional qualifications shall be regulated in accordance with EU legislation. The regulatory framework is therefore defined, in part, by Presidential Decree 394/1999, but this regulation, while providing general principles and criteria, leaves considerable discretion to individual schools in assessing the skills and integrating NIC students.

The legislation also provides that, according to Article 115 of the Consolidated Education Act, educational programming must include specific support or integration activities to adapt the teaching of the Italian language and other subjects to specific needs and promote the teaching of the languages and cultures of the countries of origin.

In the guidelines and directives of the Ministry of Education and Merit (MEM), many terms have been used over the years in an attempt to find a more effective and appropriate definition for students who are not of Italian origin. In its most recent publication from March 2022, "**Intercultural Guidelines: Ideas and Proposals for the Integration of Students from Migratory Contexts**"<sup>6</sup>, the National Observatory for the Integration of Foreign Students and Intercultural Education adopts the term "students from migrant background", as introduced in the 2019 Eurydice Report for European countries. This definition refers to children either born in Italy to immigrant parents or born abroad and subsequently integrated into the Italian education system. The MEM's directive of December 27, 2012, "Intervention Tools for Students with Special Educational Needs and Territorial Organization for School Inclusion," expands and completes the provisions of Law 170/2010. It includes **Newly Arrived Students in Italy (NAI)** among those with Special Educational Needs (SEN), thereby granting them the right to an Individualized Education Plan (IEP). A student is classified as NAI if they have recently arrived in Italy, or even if they have been present for less than two years and have not yet developed sufficient Italian language skills to communicate effectively.

<sup>6</sup> <https://www.mim.gov.it/documents/20182/0/Orientamenti+Interculturali.pdf>

The **IEP** is a **personalized educational plan** designed for students with SEN. It provides a comprehensive profile of the student and outlines targeted educational strategies to support their learning. The plan includes detailed information such as the student's background, language proficiency, prior educational experience, any compensatory or dispensatory measures, specific teaching methods, and any required support or remedial activities. The IEP is developed by the class coordinator in collaboration with the teaching team and may involve external professionals, such as linguistic and cultural mediators, especially in the case of students with a migratory background.

Additionally, each school may adopt a **Reception Protocol**—a formal document approved by the teaching staff and incorporated into the institution's Three-Year Educational Offer Plan (Piano Triennale dell'Offerta Formativa, PTOF). This protocol outlines the procedures for enrolling and integrating NAI students, drawing on the legislative framework set by Presidential Decree No. 394/1999. It serves as a practical guide for managing the reception process, defining approaches to Italian language teaching, and identifying strategies and resources necessary to support inclusion effectively.

## 2.3 Teaching and learning Italian as a second language (L2)

The 2022 document prepared by the MEM National Observatory for the Integration of Foreign Students and Intercultural Education, *Intercultural Guidelines: Ideas and Proposals for the Integration of Students from Migratory Backgrounds*, defines Italian language learning as a central and priority element in the positive inclusion pathways of students with a migrant background. It is structured around two complementary and interconnected pathways: Italian for Basic Interpersonal Communication (ITABASE) and Italian for Academic Purposes (ITASTUDIO).

The document therefore focuses both on the teaching and learning of Italian for newly arrived students and on the development and strengthening of academic Italian, which serves as the language of instruction for learning of the school subjects and is both a prerequisite and a means for educational success.

Therefore, the reality of the Italian school system regarding language support interventions for the inclusion of students with migrant background is far from uniform. The organization of such support varies widely from school to school, depending on the available resources and the degree of school autonomy. In some contexts, support is systematic and well-structured; in others, it is more ad hoc, still managed with an emergency-response mindset. There are also situations where, despite significant migrants' presence, no adequate language learning pathways are offered due to a lack of resources.

As for those responsible for teaching Italian as a second language (L2), the burden falls mainly on Italian language and foreign language teachers. Within school staff, there is still a very limited number of professionals specifically trained in L2 teaching and inclusive education. Some schools, therefore, rely on external experts—educators and professionals trained and experienced in teaching Italian as L2 and in intercultural education.

L2 Italian workshops and specific courses may be funded through internal school resources (including those related to migration), by local government funding, or through targeted public or private grant programs. As a result, the overall **situation is extremely heterogeneous**, with a fragmented and non-structural offering—even though what is truly needed is sustained linguistic support that becomes an integral part of the school's educational offer.

In 2016, Ministerial Decree No. 259 of May 9, 2017 (a revision of Presidential Decree 19/2016), officially introduced the *teaching subject category (classe di concorso, CdC)* “A23 – Italian Language for Students of Foreign Origin”. However, several critical issues have emerged in both the organization and implementation of this provision.

To date, nine years after its introduction, all A23 teachers have been appointed exclusively in CPIAs (*Provincial Centers for Adult Education*) as teachers of Italian for foreign learners, serving in support positions within the *first-level education pathways* (equivalent to lower secondary school and the first two years of upper secondary education).

Since the creation of CdC A23, several actions have been taken to highlight its shortcomings and to call for the application of existing regulations. In addition to advocating for a review of the access requirements for A23 teachers—considered overly restrictive and misaligned with the profiles of professionals working in L2 Italian teaching—A23 teachers, Italian L2 educators, and practitioners in language education and migration have made several requests.

These include:

- extending A23 appointments to lower and upper secondary schools with students subject to compulsory education and training,
- including A23 in the contingent of teaching staff assigned abroad,
- ensuring more than two A23 positions per CPIA institution, and
- clearly defining the roles and responsibilities of in-service A23 teachers

For the 2025/26 school year, there appears to be a significant development regarding permanent appointments for A23 teachers. Candidates on the A23 ranking list will be eligible to apply for positions in upper secondary schools. This provision is based on Article 11 of Decree-Law No. 71 of 2024, which authorizes the inclusion of an A23 position in the official staffing plan for schools where newly enrolled NIC students make up more than 20% of the class population. In this context, the school system will face new organizational and educational challenges related to reception and inclusion.

## 2.4 Students with non-Italian citizenship in schools: general and geographical overview

According to the latest available data from the MEM, there were **914,860** students with non-Italian citizenship in the national school system during the 2022/2023 school year. Although more recent

figures are not yet available, this represents the highest number ever recorded in Italy—an increase of **4.9%** compared to the previous school year, marking the largest year-over-year growth in the past decade. This notable rise in the number of students with non-Italian citizenship—partly driven by the influx of refugee students from Ukraine—has occurred alongside the most significant decrease to date in the number of Italian-citizen students. As a result, non-Italian citizens now represent **11.2%** of the total student population nationwide.

Despite the consistently high rate of citizenship acquisition in Italy, including among children, the proportion of students with non-Italian citizenship has never decreased. On the contrary, their presence continues to grow. Particularly striking are the record-high percentages reached across all educational levels: **12.5%** in pre-primary schools, **13.3%** in primary schools, **11.7%** in lower secondary schools, and **8.4%** in upper secondary schools.

Among students with a non-Italian citizenship, **316,115 students (34.6% of the total)** were born abroad, while the majority belong to the so-called “second” or “new” generations – children born in Italy to migrant parents. Over the past five school years, an average of around **22 thousand newly arrived** migrant students have entered the Italian school system each year for the first time. In the 2022/2023 school year alone, more than **29 thousand** newly arrived students began their education in Italian public schools – a sharp increase of 10 thousand compared to the previous year. This trend highlights the growing diversity of the student population and the urgent need to ensure inclusive policies and adequate support measures that can foster learning opportunities for all children.

**Table 2 - Students with non-Italian citizenship in different regions, s.y. 2022/2023**

| REGION         | AREA                 | N. STUDENTS WITH NON-ITALIAN CITIZENSHIP | % OF STUDENTS WITH NON-ITALIAN CITIZENSHIP IN THE REGION OUT OF THE TOTAL STUDENTS WITH NON-ITALIAN CITIZENSHIP IN ITALY | % OF STUDENTS WITH NON-ITALIAN CITIZENSHIP IN THE REGION OUT OF THE TOTAL STUDENTS IN THE REGION |
|----------------|----------------------|--|--|--|
| Lombardy       | North                | 231,819                                  | 25.3 %   | 17.1   |
| Emilia-Romagna | North                | 111,811                                  | 12.2 %   | 18.4   |
| Veneto         | North                | 99,604                                   | 10.9 %   | 15.2   |
| Lazio          | Centre-South         | 83,716                                   | 9.2 %  | 10.7   |
| Piedmont       | North                | 81,762                                   | 8.9 %  | 14.8   |
| Other regions  | North / Centre-South | 306,148                                  | 33.5 %   | 7.8  |
| <b>TOTAL</b>   |                      | <b>914,860</b>                           | <b>100.0</b>   | <b>11.2</b>  |

ISMU elaborations based on data from the Ministry of Education and Merit

As shown in Table 2, the four regions currently involved in the *Akelius* programme—**Lombardy, Emilia-Romagna, Lazio, and Piedmont**—host the majority of NIC students in Italy. The remaining 16 regions together account for just 44.3% of the total.

- **Emilia-Romagna** and **Lombardy** rank in the top two positions, in addition to within the ranking by absolute values, also for the proportion of students with non-Italian citizenship within their school populations, with rates of 18.4% and 17.1%;
- **Piedmont** also reports a high rate (14.8%). Lazio, at 10.7%, is the only region among the four slightly below the national average.

At the provincial level, the six main areas with the highest concentrations of students with NIC are all located in the four *Akelius* programme regions: **Milan** (Lombardy) alone accounts for 9.0% of all NIC students in Italy, followed by **Brescia** (3.6%) and **Bergamo** (3.0%), **Rome** (Lazio) with 7.3%, **Turin** (Piedmont) with 4.4%, and **Bologna** (Emilia-Romagna) with 2.5%.

Nationally, the most represented foreign nationalities among students are **Romanian, Albanian, Moroccan, Chinese, Ukrainian, Egyptian, Indian, Bangladeshi, Moldovan, and Pakistani**. Within the four *Akelius* regions, Romanian students maintain the top position only in:

- **Lazio** and **Piedmont**, where they also make up the **highest share of the non-Italian student population**. A closer look at the distribution of nationalities across regions reveals striking concentrations;
- In **Lombardy**, **72.0% of all Egyptian students** in Italy are enrolled in this region, with 44.9% located in the province of Milan alone. Lombardy also hosts significant shares of **Pakistani (37.5%)** and **Indian (36.1%)** students, particularly in Brescia, which alone accounts for 11.8% and 10.9%, respectively making it the top province for both groups;
- In **Lazio**, the largest NIC student group is **Bangladeshi, comprising 21.9% of the national total**, followed by **Romanians (16.6%)**. Both populations are heavily concentrated in the province of Rome, which alone hosts 20.9% of Bangladeshi and 13.1% of Romanian students nationwide.
- In **Emilia-Romagna**, as in Lombardy, there is a notable presence of **Pakistani students (22.8%)** and **Moldovan students (21.6%)**;
- Finally, in **Piedmont**, the most represented nationalities are **Romanian (14.1%)**, followed by **Moroccan (12.9%)** and **Albanian (9.2%)**.



# 3



## Organizational context of schools: technology and L2 teaching

### 3. Organizational context of schools: technology and L2 teaching

Before delving into the analysis of the results of the *Akelius* app implementation, it is useful to first provide a brief overview of the schools' technological capacity and L2 teaching activities. In most of the schools participating in the *Akelius* programme and where monitoring has been carried out, the use of the *Akelius* App is left to the *discretion of the individual teacher* (19 out of 24). This means that it is part of a series of digital instruments and learning tools that teachers autonomously chose to use to organize their own lesson chosen according to the learning objectives. In other (fewer) cases, the use of the *Akelius* App as L2 teaching tool has become part of the *whole school teaching program* (4 out of 24). As part of the school teaching program means that *Akelius* App is among the teaching materials indicated in the school's Three-Year Plan of the Educational Offer (PTOF – *Piano Triennale dell'Offerta Formativa*).

Concerning the selection of students needing to participate in L2 teaching class, there are no standard procedures. For this reason, the schools organize the L2 teaching class based on:

- their teacher's skills available;
- the funds at their disposal for each year;
- the creativity and previous experience of the individual teachers accordingly.

Indeed, depending on the school, the L2 teaching hours take place during curricular hours or extra-curricular hours, with the support of internal (paid) or external (paid or volunteer) teachers.

Once the NAI students begin the enrollment procedures in a specific school, in case of primary school they will be placed in the class group referring to their own age. Otherwise, in case of the enrollment in a low secondary school, it will be identified their level of knowledge in Italian, Mathematics, and English in order to place them in the specific class.

After being placed in the appropriate class group, NAI students' knowledge of the Italian language is usually assessed by a teacher, with support from the whole teaching staff. In the monitored schools, this assessment is very useful to create tailor-made needs and teaching objectives on the *Akelius* App. Moreover, the use of the *Akelius* App is also proposed to students with an older migration

background (who are no longer considered NAI), who still need to consolidate their knowledge of the Italian language. Students are, of course, divided into groups according to their language needs: some focus on learning Italian for everyday communication, while others concentrate on acquiring Italian as a tool for studying school subjects.

As shown, given the lack of a structured L2 assessment tool and the overall need for one, ISMU developed a placement test designed to determine students' language level and link them to the corresponding activities on the *Akelius* app.

Such evaluation activities are generally managed by teachers specifically in charge of supporting the school with inclusion and interculture activities, who then share their choices with the Class Councils, which group together the teachers of the same class. In other cases, the assessment of the level of literacy is carried out by external bodies, hired at municipal level on these activities (for example, AIPI<sup>7</sup>, in the municipality of Bologna). In other cases, the assessment of the level of literacy is carried out by external bodies, hired at municipal level on these activities (for example, AIPI<sup>7</sup>, in the municipality of Bologna).

### 3.1 Digital environment and IT SOPs concerning the *Akelius* App and digital devices

In addition, from the perspective of tablet and digital technology management, schools have shown different organizational approaches and ways of involving internal staff. Generally, schools have two professional roles dedicated to the technological area: the **digital facilitator** and the **IT technician**, who, with different skills and responsibilities, can both support the teaching staff in the use of technology.

- The **digital innovation** coordinator, in general, is a teacher who supports colleagues where there are basic needs concerning the use of ICT. The digital innovation coordinator oversees the coordination and promotion of technological innovation and digitalization in schools. Its main functions also include teacher training, the adoption of innovative technological and methodological solutions for teaching, and the development of a shared digital culture within the school community.
- The **IT technician**, on the other hand, is an external specialist with specific expertise in the IT and digital field, providing support mainly for infrastructure-related activities (such as installing and updating PCs and tablets, or configuring systems for activities that require computer labs, including INVALSI/PISA tests). The IT technician can operate across the entire Comprehensive Institute and, in some cases, even across multiple institutes.

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<sup>7</sup> The Social Cooperative AIPI, based in Bologna, is composed by educators and teachers of ITA L2 who intervene in schools and local centres for the rollout of intercultural educational paths as well as for the reception and schooling of non-Italian-speaking children with a migrant background.

The monitoring visits also investigated the schools' availability and use of funds/resources for the teaching of Italian L2. The vast majority of ICs (18 out of 24) received such funds, particularly through the submission of project proposals to public tenders (e.g. PON funds, PNRR...). Therefore, the ICs were able to consolidate some projects funded in previous years, or to put in place new projects, for the activation of literacy support activities in curricular or extra-curricular hours.

Italian L2 teaching is mainly provided by internal teachers, either during regular hours or as extra-curricular activities, often using the 10 minutes per lesson not covered in the standard 50-minute classroom hour. In some cases, teachers are paid through specific projects, while voluntary work is rare. In other situations, literacy courses are run directly by external organizations, such as AIPI or other private social entities.

Faced with this organization that focuses heavily on the autonomy of individual ICs, to the question posed to the professionals involved in monitoring visits, "Would you define yours as an IC capable of incorporating technologies into teaching?", 16 out of 24 ICs answer "completely"; the others "partially". This reflects an increasingly consolidated introduction of technologies in teaching, alongside a variability due to the seniority of the individual and the training and technical resources available.

The Digital environment and IT SOPs provide technological and IT-related information. They focus on guidelines regarding the characteristics of digital devices and supporting tools (e.g., headsets and covers), as well as the most effective usage methods to exploit the *Akelius* digital App's full potential (e.g., the preferability of the app version versus the browser, the use of teacher and student accounts, etc.).

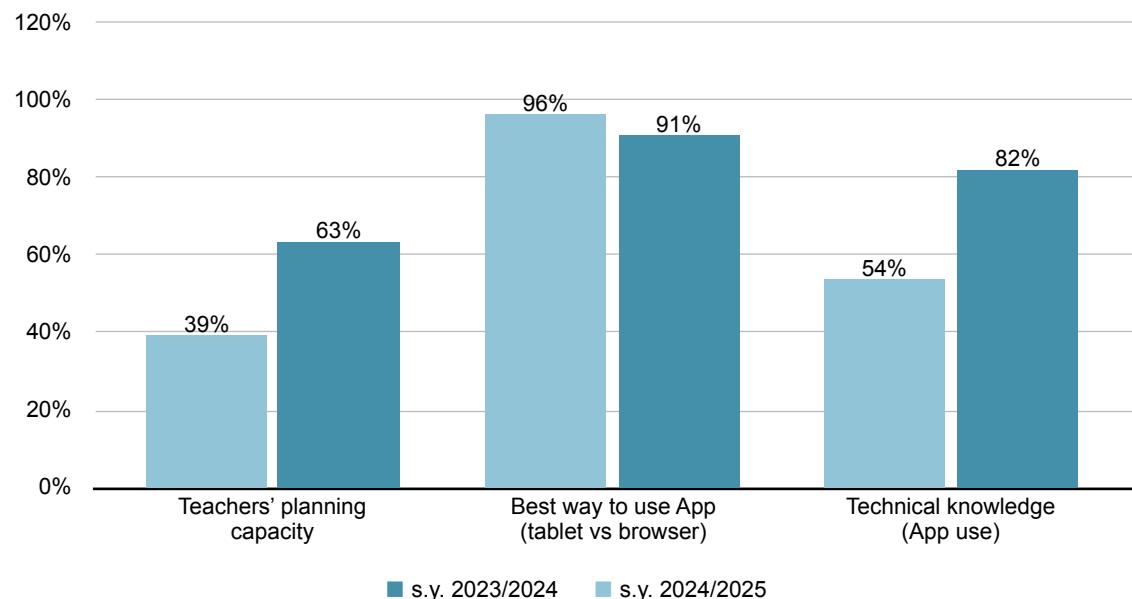
The monitoring visits and interviews were also designed to assess indicators related to the effective use of the *Akelius* App. In particular, they examine the ICs' capacity to plan for the correct use of digital devices, the choice of the most suitable access mode (preferably via tablet rather than browser), and the level of technical knowledge required to ensure smooth and effective use of the *Akelius* App. They also consider the ability to use the teacher profile effectively, to support students in accessing the *Akelius* App via QR code, and to monitor their progress through the student profile.

**Table 3 - Levels of Implementation SOP1 – Digital Environment and IT Infrastructure**

|   | INDEX  | %   |
|---|--|-----|
| 1 | Capacity to plan for the correct use of digital devices                    | 63% |
| 2 | Optimal mode of accessing the digital App (via tablet rather than browser) | 91% |
| 3 | Technical knowledge required for effective use of the digital App          | 82% |

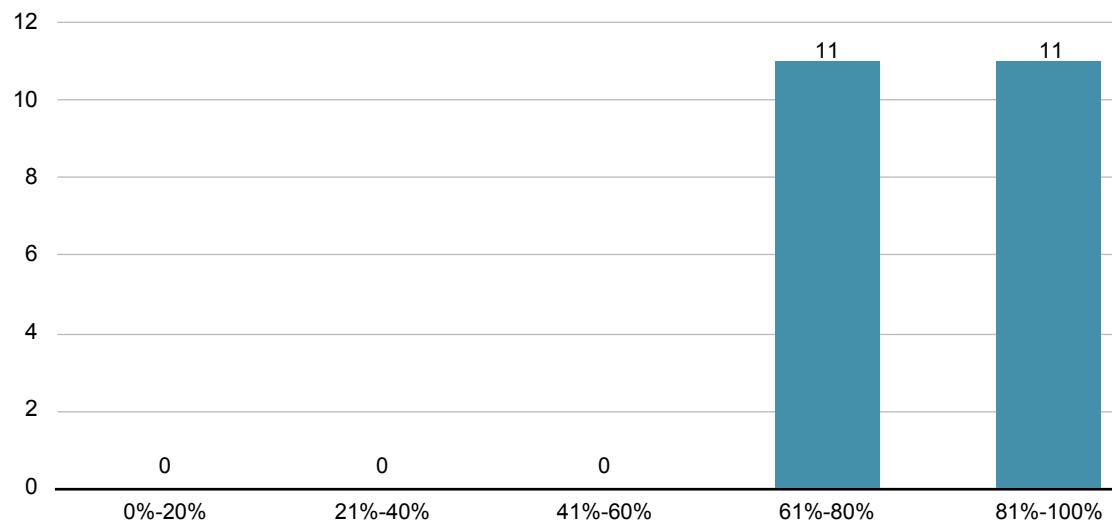
Compared to the 2023/2024 school year, as shown in Figure 1, there has been a significant improvement in the technical knowledge required for effective use of the app (+28%, from 54% to 82%) and in teachers' ability to plan the proper use of digital devices (+24%, from 39% to 63%). Conversely, there

was a slight decrease in the indicator related to optimal access methods (−5%, from 96% to 91%). Overall, the implementation index of the guidelines concerning the digital and IT environment in the 24 primary and lower secondary schools is largely positive.



**Figure 1 - Comparison of Digital App & IT SOP indicators 2023/2024 vs 2024/2025**

Finally, Figure 2 below shows the clusters based on the percentage of implementation of the guidelines on the Digital and IT Environment and the number of schools in each cluster, highlighting that most Comprehensive Institutes (ICs) have reached an implementation level between 61% and 80% (11 ICs) or between 81% and 100% (11 ICs).



**Figure 2 - Distribution of Comprehensive Institutes (ICs) by level of implementation of the SOPs on the digital environment and IT aspects**

### 3.2 School management of digital devices and other resources for the *Akelius* implementation

The School Management SOPs provide logistical and organizational guidelines. They focus on the proper use of digital devices (e.g., tablets), including aspects such as charging, storage, transport, maintenance, adequate spaces, and personnel responsible for the overall management.

The monitoring visits and interviews were designed to assess a range of key indicators related to the implementation of the *Akelius* App. Specifically, they explore whether the IC has established adequate infrastructure for securely storing tablets, whether there is a clear plan in place to ensure tablets are regularly and effectively charged, and whether there are defined procedures for managing the movement of devices between classrooms. They also examine the ICs' ability to carry out regular maintenance of the tablets and assess whether the learning environment is optimized – for example, by using a dedicated classroom rather than temporary or less suitable spaces.

Together, these indicators provide valuable insight into the level of competence ICs have developed across various operational areas, including technical, organizational, and pedagogical domains.

**Table 4 - Level of implementation of SOP2 indicators – Management of devices and resources.**

|   | INDEX   | %   |
|---|---|-----|
| 1 | Updating of application content   | 81% |
| 2 | Adequate infrastructure (tablet storage)                                  | 83% |
| 3 | Ability to plan effective use of tablets (charging)                       | 47% |
| 4 | Ability to plan the management of tablets (transportation across classes) | 78% |
| 5 | Capacity for tablet maintenance   | 43% |

The data highlights several positive outcomes in the implementation of the *Akelius* App. Notably, 81% of ICs report regular updating of the application's content, ensuring learners have access to current and relevant materials. Similarly, 83% have established adequate infrastructure for tablet storage, indicating that most ICs have prioritized creating a secure and functional digital environment. Encouragingly, 78% have also developed effective systems for managing the movement of tablets, which reflects strong organizational planning. While the figures for charging management (47%) and device maintenance (43%) are lower, they still represent important initial steps and show that nearly half of the ICs are actively working to structure these processes. These results suggest a solid foundation has been built, with clear potential for continued growth in operational planning and maintenance practices.

For the 5th indicator *Capacity for tablet maintenance*, the relatively low score can be attributed to the fact that the devices are still in good condition, as they are relatively new. As a result, maintenance needs have been minimal, and ICs have not yet had to establish structured routines for regular upkeep.

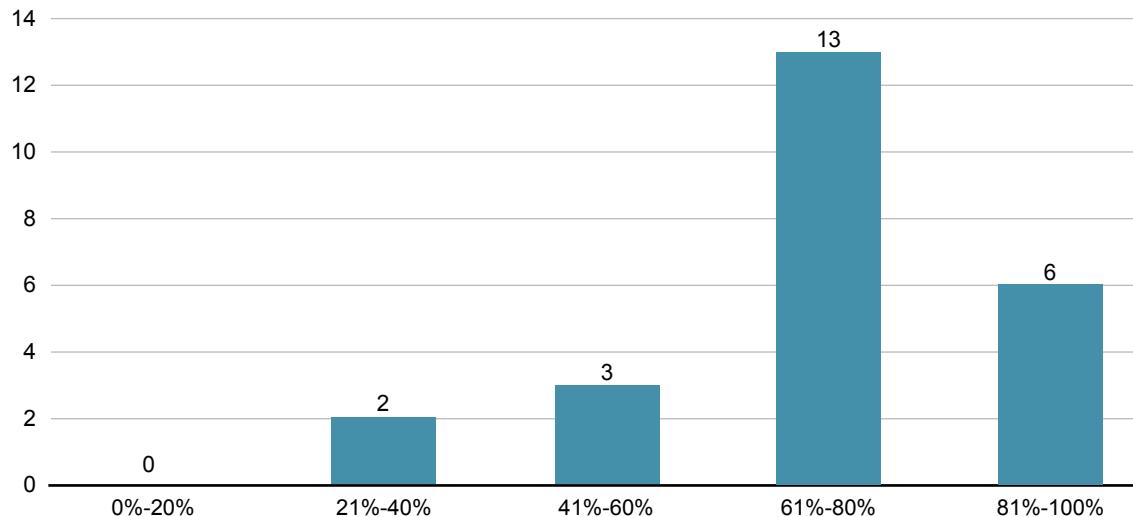


Figure 3 - No of ICs implementing at least the 10% the School Management SOPs

The Figure 3 shows the clusters by percentage of implementation of School Management SOPs on the x-axis, and the number of schools in each cluster on the y-axis. The comparison between the data from 2024/2025 school year and the previous one on School Management SOP implementation shows notable progress and overall improvement across the 245 participating ICs. In the previous year, most ICs were concentrated in the mid-lower implementation ranges, with 15 schools (63%) falling between 21–60%, and only 1 IC (4%) reaching the highest range (81–100%). In contrast, this year's data shows a clear upward shift, with the majority of ICs (13 ICs, or 54%) now in the 61–80% range, and 6 ICs (25%) achieving 81–100% implementation – a sixfold increase compared to the previous year.

Furthermore, the number of ICs in the 21–40% range has dropped from 5 to 2, and those in the 41–60% range from 10 to 3, indicating that most ICs have moved beyond the early stages of SOP integration. Importantly, no IC remains in the 0–20% bracket in either year, showing a baseline level of engagement has been maintained throughout.

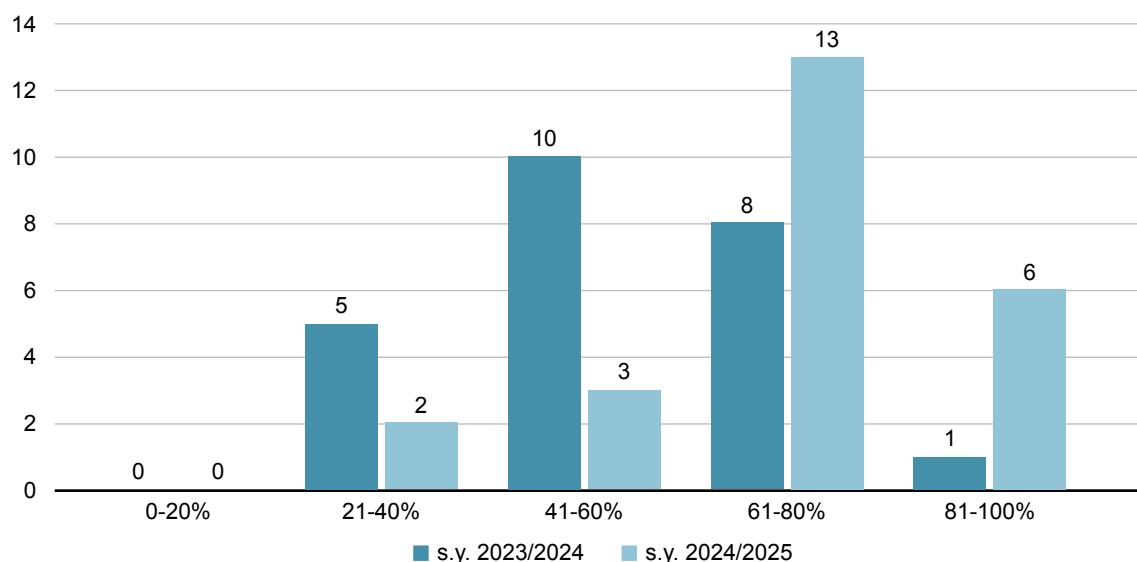


Figure 4 - Comparison of School Management SOP Implementation 2023/2024 vs 2024/2025



# 4



**Teachers:** professional  
growth in the  
**Akelius programme**

## 4. Teachers: professional growth in the Akelius programme

In the 2024/2025 school year, **239 teachers** joined the *Akelius* programme, including **17 men**. Among these 239 participants, **139 took part in at least one training activity**, while 100 did not attend any training during the school year; however, based on recent experience, it is likely that they will do so in the coming years.

A noteworthy feature of the 2024/2025 school year was the **participation of teachers who had enrolled in previous years**: 19 from 2023/2024 and as many as 39 from 2022/2023. In this way, the total number of trained teachers rose to **187**, despite 239 new registrations in the most recent year. In other words, considering all the teachers involved in 2024/2025, the total reaches **287**: 187 trained (139 new and 48 from previous years) plus 100 newly enrolled teachers not yet trained.

The development of training over the three-year period shows a structured path involving teachers in different ways:

- **2022/2023**: launch of training activities with **23 editions of an introductory 8-hour course**, organized between October and May;
- **2023/2024**: in the same schools already participating, **shorter and more intensive sessions** were offered for new participants, while a **Community of Practice** was established as a space for discussion and exchange among teachers already implementing the use of the *Akelius* App (see §3.3);
- **2024/2025**: resumption of large-scale training, with **two 20-hour and two 10-hour courses**, all delivered synchronously (see §3.2). At the same time, the **Community of Practice** continued with a selected group of school reference teachers, and a **new asynchronous training path** was also launched (see §3.2).

For the 2024/2025 school year, the training activities – which will be detailed in the following sections – involved teachers as shown in the table below:

- **Synchronous training**: 86 teachers participated (52 successfully completed), including 55 newly enrolled, 12 from 2023/2024, and 19 from 2022/2023;

- **Asynchronous training:** **94 teachers** participated (78 successfully completed). Nine out of ten were enrolled in 2024/2025 (83), while the remaining participants came from 2023/2024 (3) and 2022/2023 (8);
- **Community of Practice:** **27 teachers** took part, mostly those enrolled in 2022/2023 (16), with 4 from 2023/2024 and 7 newly enrolled in 2024/2025.

**Table 5 - Teachers trained during the s.y. 2024/2025 by type of training and school year of involvement in the Akelius program**

| N. OF TEACHERS TRAINED IN (MULTIPLE TRAINING COURSES POSSIBLE) | SYNCHRONOUS TRAINING IN S.Y. 2024/25 | ASYNCHRONOUS TRAINING IN S.Y. 2024/25 | COMMUNITY OF PRACTICE IN S.Y. 2024/25 |
|--|--------------------------------------|---------------------------------------|---------------------------------------|
| In s.y. 2024/25  | 139                                  | 55                                    | 83                                    |
| In s.y. 2023/24  | 19                                   | 12                                    | 3                                     |
| In s.y. 2022/23  | 29                                   | 19                                    | 8                                     |
| <b>TOTAL</b>   | <b>187</b>                           | <b>86</b>                             | <b>94</b>                             |
|  |                                      |                                       | <b>27</b>                             |

As for the implementation of activities with students, this took place for a total of **120 of the 287 overall teachers who were enrolled or trained during the 2024/2025 school year**, but to be precise, only:

- **94 out of 239** of those enrolled in the same current school year (including the 100 teachers who did not take part in any training);
- **9 over 19** enrolled in the previous year 2023/2024 ;
- **17 over 29** enrolled in 2022/2023, confirming the continuity of a small but significant group that continues to use *Akelius* in the third year of implementation.

In light of the above, while teachers who did not enrol this school year but have decided to take a training (or refresher) course may be more motivated to implement with students right away, on the other hand, it can also be expected that, for reasons of time and implementation within their own teaching course, a significant proportion of those who enrolled this year and have not yet implemented will do so during the next school year.

## 4.1 Teachers training

**Two live training courses** were delivered in two editions from October to December 2024. The first course, "**Teaching Italian L2 with Akelius ... in the Laboratory**", was divided into 6 two-hour online meetings for a total of 12 hours of classroom, plus 8 hours of *Project work*, for a total of 20 hours. The second course, "**Teaching Italian L2 with Akelius ... in class**", was structured in 3 online meetings of two hours for a total of 6 hours of classroom, plus four hours of *Project work*, for a total of 10 hours. In both cases, the *Project work* consisted of uploading the monitoring data of the activities

carried out with *Akelius* or drafting a *lesson plan* in *Blended learning*. The two training courses **have been accredited on the S.O.F.I.A. platform**, i.e. the Operating System for Training and Updating Initiatives for School Staff of the MEM.

The two courses provided teachers with both **general theoretical references** on the teaching of Italian L2 to non-Italian-speaking learners and **methodological coordinates** on how to realize, respectively in the workshop and in the classroom, an effective *Blended learning*, in which digital activities are perfectly integrated with face-to-face teaching.

In the first meetings, the attending teachers worked in particular on the **strengths** and **limitations** of the *Akelius* platform: they were guided in an analysis of some lessons, within different chapters and levels of the platform, in order to trace its recurring structure and operationally evaluate which linguistic objective is achieved through each individual activity. In this way, the teachers could verify on the one hand the opportunities offered by *Akelius*, including the **interception of numerous learning styles**, the **playful approach**, the **differentiation** of the task on several levels starting from the same topic; on the other hand, they were able to see its limitations, relating in particular to the poor development of the productive and interactional side of the language, both for the written and oral channels. The teachers were then guided to reflect on the range of skills and competences outlined by the Common European Framework of Reference for Languages and on how, through small *tricks* or targeted *Face-to-face activities*, it is possible to **expand the potential of *Akelius***, in order to **stimulate even the most communicative aspects of the language**.

| LIVE ONLINE COURSES   | TOPICS EXPLORED  |
|---|--|
| Teaching Italian L2 with <i>Akelius</i> ... in the laboratory | <ul style="list-style-type: none"><li>• How to integrate a face-to-face lesson with a flexible use of <i>Akelius</i>' activities in the different phases of the Work Unit to achieve an effective <i>Blended learning</i>;</li><li>• how to structure a <i>lesson plan</i> in <i>Blended learning</i>;</li><li>• how to construct a <i>syllabus</i>, according to a coherent and varied sequence of contents;</li><li>• which paths on textual types and disciplinary topics can be devised starting from <i>Akelius</i>' contents;</li><li>• how to expand the potential of <i>Akelius</i> by building <i>information gap</i> and <i>role play</i> activities for the development of oral interaction and written production</li></ul>  |
| Teaching Italian L2 with <i>Akelius</i> ... in class          | <ul style="list-style-type: none"><li>• What <i>Blended learning</i> is, advantages and disadvantages for learners and teachers;</li><li>• how to build differentiated paths on several levels, for small groups of newly arrived learners, starting from the <i>Akelius</i> index;</li><li>• what learning styles are and how to exploit <i>Akelius</i> to intercept them;</li><li>• how to identify learning objectives and how to construct a <i>syllabus</i>;</li><li>• what the phases and teaching operations of the Work Unit are and how to integrate <i>Akelius</i>' activities with <i>Face-to-face activities</i> in each phase;</li><li>• how to build a <i>lesson plan</i> in <i>Blended learning</i>;</li><li>• how to manage the classroom while using <i>Akelius</i> (individually, in pairs, in small groups)</li></ul> |

As regards the two courses just described, the results of the satisfaction questionnaires show that participants mostly appreciated the operational contents, aiming at discovering the *Akelius* platform, experimenting with new activities while discussing in small groups. Critical elements include the lack of familiarity with the platform for some teachers who are not completely confident with the platform itself. In both courses, distance learning and evening hours are indicated as critical issues.

In the *Akelius in the classroom path*, given the lack of language teaching competence of the participants, many teachers appreciated more theoretical topics (e.g. skills and competencies according to the Common European Framework of Reference for Languages, learning styles, and heterogeneity of the class with differentiated abilities, etc.). Finally, some teachers complained about the excessively compressed training times.

Given the high turnover of teachers within the schools, together with the success and participation in the two synchronous courses, the project staff has designed two courses, on the same topics, to be delivered in asynchronous mode, in order to offer a flexible and repeatable proposal. The first course, intended for those who use *Akelius* in the Workshop, was delivered from March to May 2025; the second one, for those who use the platform in the classroom, will be activated in the next school year.

The asynchronous training course piloted at the end of the 2024/25 school year, dedicated to Italian L2 teachers/language facilitators, provided both theoretical knowledge and operational suggestions on the use of the *Akelius* platform in *Blended learning*.

Taking part in this e-learning modality presupposed good *digital skills* for the enrolled teachers. A challenge that has been taken up, as emerges from the responses to the satisfaction questionnaires: the training path is particularly appreciated exactly because of the flexibility of the online asynchronous mode of use. The course was also positively evaluated for its operational character, for the clarity and organization of the contents, for the possibility of learning new methodologies and to deepen the way of using the *Akelius* platform, considered by many teachers as a valid tool for learning Italian L2.

As for the critical issues, some participants pointed out the lack of interaction, typical of the asynchronous mode, the limited inputs received for NAI students, as well as the difficulty in applying within their classes what they learned in the course, mainly due to some technical and functional problems of their digital devices.

## 4.2 The Community of Practice

As part of the project, the Community of Practice (hereafter CoP) was introduced in the 2023/2024 school year as a dedicated space for a subgroup of schools. The aim of the *Akelius-CoP* is to bring together individuals interested in pursuing a shared goal of **mutual learning** (at the level of each participating teacher/professional) and **collective improvement** (at the level of the schools involved in the project). This is particularly relevant for the experimental use of the *Akelius* App for Italian as a second language (L2) support, which requires a certain **degree of preparation** and practice before being implemented in the classroom – with the goal of enhancing second language acquisition within the broader school context.

The CoP is based on the idea that **learning is an experiential and social process**, involving the negotiation of new meanings within a community characterized by strong interaction. The main and specific objective of the *Akelius-CoP* is therefore the co-construction of a shared understanding of

the key challenges, obstacles, and opportunities related to the teaching and organizational practices connected to the use and dissemination of *Akelius* within their respective school environments.

A CoP typically consists of individuals who self-identify as a group, sharing a common identity and language. This latter dimension can be seen as a long-term goal, the outcome of a community that gradually takes shape “spontaneously around shared work practices, developing solidarity around problems, sharing goals, practical knowledge, meanings, and language” (Wenger, 2006). This is why the decision was made to continue the CoP journey into the 2024/2025 school year, at the end of which the methodological foundations described above seem to resonate with the reflections shared by the participating school teachers and coordinators. Among the words chosen by the participants: *interconnection, exchange, socialization, support, journey, useful* (fig. 5) and, again: *exchange, journey, compass, mountain, breath, interconnection, stimulating, thankfulness, constructive* (fig. 6).

interconnection  
exchange  
socialization  
support  
journey  
useful

exchange  
compass  
journey  
constructive  
thankfulness  
breath  
interconnection

Figure 5 - Teachers' Feedback on the CoP

Figure 6 - Teachers' Feedback on the CoP

In the **2023/2024** school year, the CoP involved 46 teachers from 24 *Akelius* schools, who participated in two groups working together in parallel pathways. Teachers sometimes alternated in representing their school, which occasionally affected continuity but enriched the group with diverse perspectives and skills. During the four CoP meetings held between March and May 2024, teachers and *Akelius* school coordinators discussed the **benefits** of using *Akelius* for both students and teachers. They then focused on the **challenges** and key needs at both individual and school levels, which were translated into work **objectives** and key issues to be addressed throughout the following CoP sessions.

Based on the outcomes of the first meeting, the two subsequent CoPs meetings (for each parallel group) were dedicated to the topic of **teaching materials** to support Italian L2 learning through *Blended learning* with *Akelius*. These sessions included the presentation, analysis, and trial use of the workbooks developed by AIPI, followed by feedback sharing during the final CoP.

The group also addressed the need **to expand the number of teachers involved** in the *Akelius* program, enhancing the role of the school coordinators, and improving communication of the initiative to the families of students with a migrant background.

Among the proposals shared within the CoP, on the teacher side: present *Akelius* during staff me-

etings; conduct small classroom simulations with colleagues; recognize and certify *Akelius* training (as actually happened); include the platform in the school's educational plan (PTOF); organize short training sessions led by the *Akelius* school coordinator (highlighting their expertise); create opportunities for sharing and exchange among all teachers using the platform within the same school. On the family side: organize a project presentation day led by the children themselves, addressed to the families, underlining their active role (also in Italian).

While in the following **2024/2025** school year, some of the previously discussed "good intentions" began to take shape in several participating schools. The CoPs continued to support the project's implementation, although this year they involved only the school coordinators and were held quarterly (October, January, April). The focus shifted from strictly didactic aspects to broader themes of **organization** and promotion of activities, while still remaining closely tied to the **pedagogical vision and purpose** of the initiative.

The **assessment** shared during the first CoP of 2024/25 highlighted several elements to be further promoted and **sustained**: using *Akelius* in class with newly arrived students (NAI), while managing activities with the whole class; proposing *Blended learning* activities, which proved more effective than using the platform alone; adapting pre-designed learning paths to the needs of often heterogeneous groups; using the platform also with students with special educational needs (SEN) or for foreign language learning (eg. English, French, Spanish); recognizing the *Help Desk* as a key resource for supporting schools and teachers during the project implementation.

### LET'S TAKE STOCK!

Based on my experience with the *Akelius* platform so far:



WHAT  
I keep/take with me into the new year? (positive experiences, useful practices, effective strategies)



WHAT  
do I "throw away"? (mistakes and risks to avoid)



WHAT  
solutions, remedies, and resources can I use? (tools and approaches to improve outcomes)



WHAT  
goals can I set to improve or expand the use of *Akelius* in my school? (concrete objectives for implementation and development)

**Figure 7 - Reflections from the Teachers Who Participated in the Community of Practice During the s.y. 2024/25**

These are the areas where Fondazione ISMU precisely focused its support on, for schools and teachers, throughout the 2024/25 school year.

Despite the progress, the CoP also identified challenges and risks, such as: difficulty in finding motivated and available teachers (some perceive the project as too demanding); the burden of tra-



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ning, planning, implementing, and reporting activities; high teacher *turnover*, which leads to loss of knowledge and continuity; tight deadlines at the beginning of the school year for confirming school participation.

Among the **solutions** and **resources** proposed, the role of the *Akelius* coordinator stands out. This figure can: reassure colleagues about the monitoring procedures (which are simpler than perceived, supported by the *Help Desk* and video tutorials); support classroom implementation by sharing knowledge and materials; motivate colleagues by highlighting the benefits already observed. To broaden access to training, the CoP also recommended developing asynchronous learning paths, which were indeed launched in spring 2025 and will continue with new modules in the next school year.

During the second CoP meeting in January 2025, the following guiding question was proposed: What **strategies** can be implemented to establish a **routine of sharing and collaboration** among teachers, based on experiences with the *Akelius* platform and any materials produced?

Here are some valuable insights that emerged from the exchange of **practices** among schools:

- organize a training-focused staff meeting involving all colleagues dedicated to *Akelius*; alternatively, create dedicated spaces for exploring *Akelius* within regular staff meetings;
- share ready-to-use L2 learning paths with *Akelius* among schools, coordinators, and colleagues, especially the new ones (IC Borgoncini Duca – Rome);
- promote joint meetings for all teachers involved in *Akelius* (and more broadly in L2 teaching at school), to optimize communication and resources and foster shared planning (e.g., three periodic meetings per year, ongoing monitoring via teacher group chat);

- create and share online thematic folders (a digital archive), curated by the Intercultural Commission, containing *Akelius* materials (index, teaching manual and teacher guide, training slides, lesson plans created by teachers) and other Italian L2 teaching resources – both digital and non-digital – to complement the platform (worksheets, texts, oral and written production tasks, etc.), as well as materials for general student reception. This “drive” is available to all teachers (IC Regina Elena, Solaro – Milan) – implemented);
- create and share a physical archive of training materials (for teachers) and teaching materials (for use with students);
- maintain a shared online diary tracking each learner’s progress (where each teacher records the activities carried out), accompanied by a folder collecting the teaching materials used (IC 13, Bologna – implemented);
- develop and complete a standardized documentation sheet for each teacher’s Italian L2 pathway (objectives, activities, etc.), lesson by lesson (IC Duca D’Aosta, Ossona – Milan – implemented).
- create a restricted area on the school website for teachers to share and store institutional materials – e.g., Inclusion Area: SEN and Intercultural Education (IC Regina Elena, Solaro – Milan – implemented);
- develop a dedicated section of the school website for families of migrant background, to help them navigate the school and local services, also in multilingual formats (IC Montalcini, Rome – proposed).

Teachers emphasized the importance of these practices with these reflections:



*“... it’s really important to share and not to remain isolated.”*

(IC 13, Bologna)



*“... it’s essential to document and preserve the school’s institutional memory.”*

(IC Montalcini, Roma)

In three words: a DRIVE that resembles a TREE (ALBERO in Italian), capable of generating real ENCOUNTERS (INCONTRI in Italian) between teachers and students, even in Italian L2! (See the acrostics created by the CoP on this theme.)

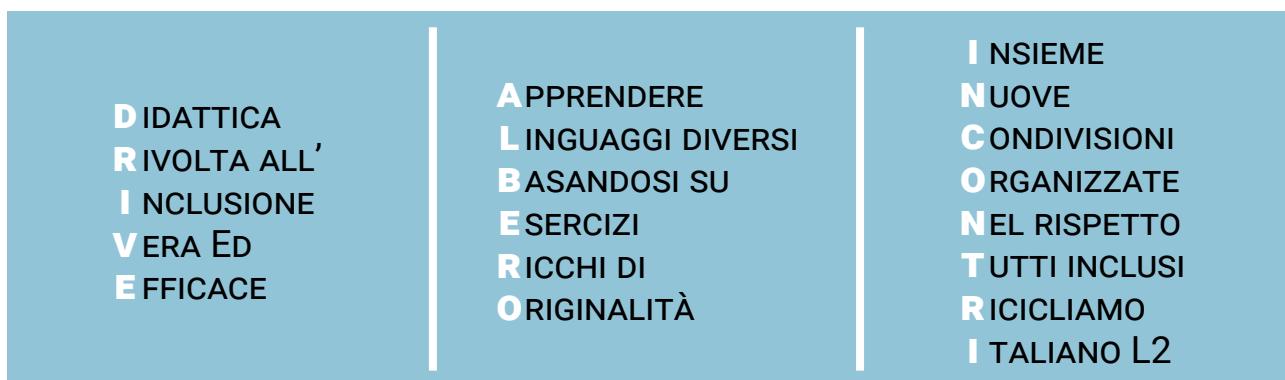


Figure 8 - Acrostics by the Teachers Who Participated in the Community of Practice During the s.y. 2024/25

DRIVE: Teaching Aimed at True and Effective Inclusion – ALBERO: Acquiring Different Languages Starting from Exercises, Rich in Originality – INSIEME: Together, New Exchanges Organized Respectfully, All included Recycling Italian L2.

Finally, during the last Community of Practice (CoP) meeting (April 2025), the two groups reflected on the **future sustainability** of the project's activities, identifying both challenges and enabling factors to integrate ***Akelius* systematically into regular teaching plans**. The resulting picture is still evolving: in most school contexts, *Akelius* is currently perceived as an additional activity – a “project,” in fact – that teachers voluntarily choose to join (or not), rather than a stable component of the school's standard curriculum. It is thus mainly seen as a localized initiative within specific school sites, classes, and/or groups of teachers.

A few schools reported that *Akelius* has already become an integral part of their curriculum planning, but overall, it does not yet appear to be fully embedded in ordinary programming, for several reasons:

- limited availability of teachers, even when they are aware of the resources offered by the platform;
- a small number of trained teachers available to use *Akelius* when needed;
- the need for flexible planning, as newly arrived students (NAI) often join unexpectedly;
- the (perceived) complexity of managing platform access (as shown by the ongoing need for email support and instructions);
- lack of formal recognition for teachers' planning work.

When discussing the future sustainability of *Akelius*-related activities, teachers emphasized that the potential loss of the constant support provided by the **Help Desk** would have a major impact – only partially offset by the “protocols” and the guidance contained in the project's **Guidelines**, both technical-organizational and pedagogical-didactic.

Preserving and sharing available **training and teaching materials** among colleagues, as well as the dissemination of already tested *Akelius* learning paths (through ISMU's reserved website area and the schools' own repositories and collaboration tools), are additional factors that can help sustain the project over time.

It also clearly emerged that teacher training is a crucial issue: it “must become a key strength to build upon”; it is necessary to “invest in trained teachers to increase demand”; and “in the short term, it is essential to train as many colleagues as possible,” especially considering the frequent turnover of teaching staff. This can be achieved by expanding training opportunities both internally (through peer learning and mentoring by more experienced colleagues or school coordinators) and externally (through training initiatives organized by the ISMU Foundation).

In conclusion, the CoPs expressed their hope that the UNICEF–*Akelius* programme will continue, allowing current practices to be further strengthened and, in the long term, to become fully institutionalized as part of the schools' shared teaching framework.

### 4.3 Classroom observations

The classroom observations in schools are in continuity with the training activities (paragraph 3.2) and with the pedagogical support provided within the Communities of Practice (paragraph 3.3). The objectives of the classroom observations were to observe and document how *Blended learning* was implemented using the *Akelius* App (proposed activities, classroom management, use of ICT by teachers and students, etc.), identify strengths (to document, share, disseminate, and replicate), and identify weaknesses and areas for improvement.

Classroom observation visits were conducted across 21 ICs - 8 during the s.y. 2023/2024 and 13 during the s.y. 2024/2025 - encompassing a total of 23 lessons observed (9 in 2023/2024 and 14 in 2024/2025). Specifically, visits were carried out in 13 primary school complexes, involving students aged 6 to 11, and in 10 lower secondary school complexes, engaging students aged 12 to 14. In over 70% of observed cases, students' proficiency in Italian ranged from pre-A1 to A2 levels. A total of 184 students participated in the observed activities, with 102 male (55.4%) and 82 female (44.6%) students.

The sessions were generally held either in standard classrooms (10 instances) or in Italian as a second language (L2) workshops (10 instances) and were conducted by internal schoolteachers (22 instances). The *Akelius* digital App was primarily used on an individual basis (65%), followed by whole-class use (17%), small-group (9%), and paired activities (9%). In contrast, the Face-to-Face part of the lesson was most frequently delivered to the whole class (43%), followed by small groups (19%), paired activities (19%), and individual sessions (3%).

To assess the implementation of *Blended Learning* and Pedagogical SOPs, an index was developed based on five equally weighted indicators. The five indicators, along with their corresponding average results, are presented in the following table:

Table 6 - Teachers skills and competencies

|   | INDEX                                 | %   |
|---|---------------------------------------|-----|
| 1 | Blended learning                      | 67% |
| 2 | Ability to manage tablets             | 79% |
| 3 | Teachers' digital skills              | 89% |
| 4 | Ability to use ICT in the classroom   | 75% |
| 5 | Students' ability to use (technology) | 78% |

The index registered an implementation level of *Blended Learning* and Pedagogical SOPs in the 21 primary and lower secondary schools aligned with the project's objective, i.e., above 10%. As shown in the table below, 20 ICs recorded a *Blended Learning* and Pedagogical SOP implementation index between 81% and 100% (12 ICs) and between 61% and 80% (8 ICs).

The Figure 5 below shows the clusters by percentage of implementation of the *Blended learning* and Pedagogical SOPs on the x-axis, and the number of schools in each cluster on the y-axis.

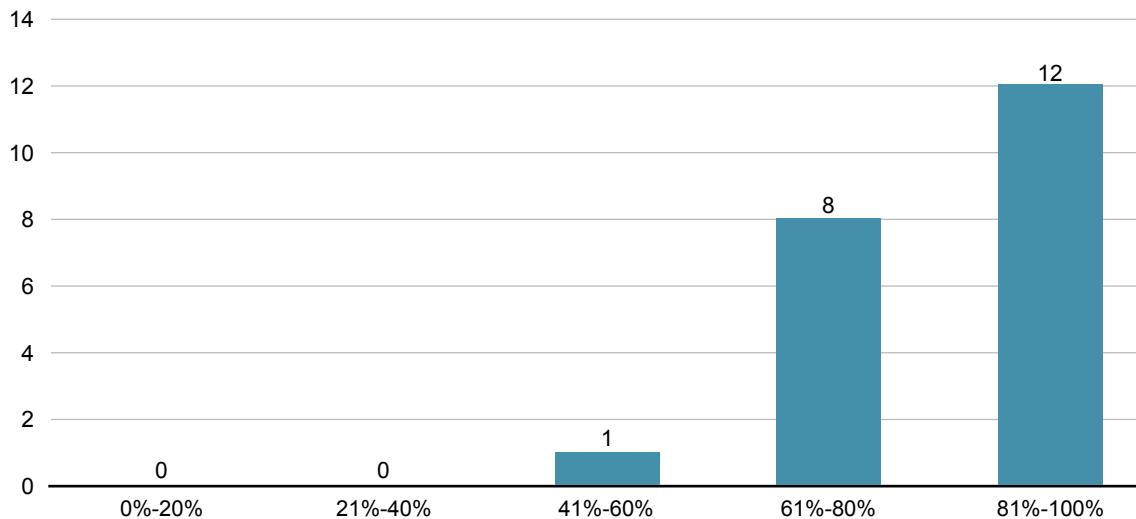


Figure 9 - No of ICs implementing at least the 10% the Blended learning and Pedagogical SOPs

#### 4.3.1 An in-depth analysis of *Blended Learning*

This section provides an account of what has been observed during the moments of use of *Akelius*, with particular attention to how the platform is integrated into lessons that involve ***Blended learning***. Regarding the classroom observations of the 2024/25 school year, which concerned 13 IC for a total of 14 observations, particular attention was paid to context data; the organization of *Blended learning*; digital skills of teachers and students.

Regarding the planning of *Blended learning* lessons, the results for the item: "Does the teacher follow a logical flow during the lesson that appears to be organized and planned in advance?" were distributed as follows:

- Completely: 7 out of 14
- Extensively: 3 out of 14
- Partially: 1 out of 14
- Not at all: 3 out of 14

These findings indicate that, in most observed cases, lessons appeared to be largely planned and structured. In several instances, teachers demonstrated clear command of the overall structure of the Work Unit, made thoughtful selections of *Akelius* activities aligned with the lesson<sup>8</sup>, and concluded an assessment of student learning.

In other cases, the teacher's intention to follow a logical teaching path was evident—for example, by linking the current lesson with previous ones or integrating *Akelius* and analog resources in a

<sup>8</sup> In this regard, item 3 of Section B "The teacher chooses an *Akelius* activity directly related to the objectives of the lesson (vocabulary, grammar, oral/written language structures, sentences)" reports these results: completely (8/14); extensively (4/14); not at all (2/14); partially (0/14).

coherent manner. However, there were also instances where lessons lacked comprehensive planning and overall structure.

### AN EXAMPLE OF EFFECTIVE LESSON PLANNING

The teacher plans the lesson "The earth asks for help" starting from a text chosen with an ecological theme. He then identified some activities of the platform to integrate the Face to Face (F2F) part. The teacher uses a self-produced Work Unit, providing each student with a paper copy in colour (the cards will then be pasted into the notebook). He follows the different phases and didactic operations of the work unit, sequencing the activities in a manner consistent with the set objectives. For the first part of the meeting, F2F activities are proposed for motivation (observation of the cover image and title > hypothesis), reading and global comprehension of the text (multiple choice questions), analysis-induction of the rule (searching for the verb "to be" in the text). Then follow the two activities with *Akelius* for fixation - A1.1, chap. 27 - verb "to be" exercise - and guided reuse - A2, chap. 36 - angry-scream lesson -. The meeting ends with a *FtoF* activity of free reuse (expressing one's emotions/telling how I am/is to someone).

### AN EXAMPLE OF WEAK LESSON PLANNING

The observed lesson is not planned with a particular focus (no lexical area or common theme), if not following the objective of *reinforcing spelling, orthoepic and phonological* competence and *reading and writing* (as a review of what has already been addressed), exercising more skills (reading, listening, writing syllables or single words) in a playful way. In fact, several *Akelius* games are proposed, without a particular common thread. *Blended learning* is not carried out: no *Face-to-face activities* are proposed but only individual *Akelius* activities for the entire time of the meeting.

#### 4.3.2 Balancing *Akelius* digital content and *Face-to-Face Activities*

As previously noted, a key aspect of effective *Blended learning* is the balanced integration of *Akelius*-based and Face to Face activities. Observations from the 2024/25 school year show a varied distribution in how much of the lesson time was dedicated to using the *Akelius* platform. In 5 out of 14 lessons, *Akelius* activities occupied between 25% and 50% of the total lesson time. In four cases, use of the platform exceeded 75% of the time, while another four lessons dedicated between 50% and 75% of the time to *Akelius*. Only one lesson used the platform for less than 25% of the session.

**Classroom grouping** formats also varied depending on whether digital or *Face to Face* activities were in use. When working with *Akelius*, the most common approach was individual work, observed in 8 out of 14 cases. Whole-class activities were used in 3 lessons, while small group and pair work were each observed in 2 and 1 lessons, respectively. In contrast, *Face to Face* teaching was most

frequently conducted with the whole class (6 out of 14 observations), followed by individual work (3 lessons), and both pair work and small group work, each observed in 2 lessons.

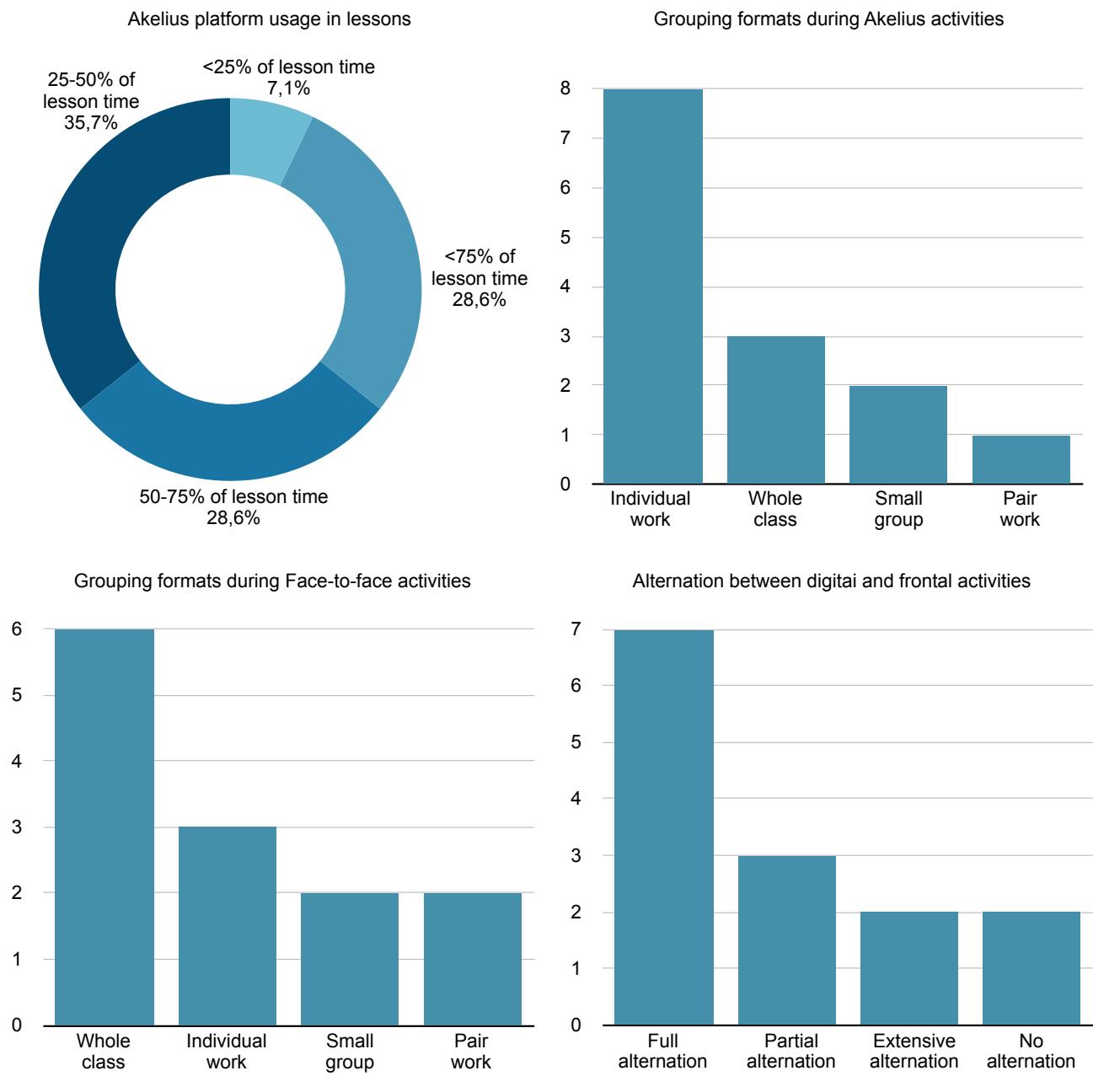


Figure 10 - Akelius platform usage in lessons

With regard to how teachers alternated between *Akelius* and Face to Face activities, responses to Item 10 ("The teacher **alternates frontal activities and Akelius-based** activities in line with the lesson plan") highlight differing levels of integration. In 7 out of 14 lessons, teachers were found to alternate activities completely in line with the plan. 3 lessons showed only partial alternation, while in 2 lessons the alternation was extensive, and in another 2 it was absent altogether.

These findings suggest that teachers' ability to manage and integrate *Blended learning* activities is steadily improving.



### SOME EXAMPLES OF EFFECTIVE *BLENDED LEARNING*

- The teacher uses *Akelius* in a language laboratory activity, with a Georgian student who has been in Italy for a year and a half and has reached the A1 level. The lesson is very well organized with a good balance between activities with *Akelius* and *FtoF* activities starting from self-produced cards by the teacher. *Akelius* activities are proposed during the *development phase* of the lesson.
- The teacher uses *Akelius* within the class with a good balance between *Akelius* activities and *FtoF* activities, using self-produced cards. *Akelius* is used during the *development phase* to fix the linguistic-communicative elements; in the case of a pre-A1 level student, also in the *introduction* phase to establish the elements that constitute the focus of the lesson. This student has the task of learning the names of the parts of the body to be able to carry out an art assignment and therefore be evaluated in that subject.
- The use of *Akelius* activities is observed as a basis to which the teacher adds new tasks and *FtoF* assignments with the aim of exercising some skills less foreseen by the *Akelius* platform (e.g. speaking and interacting orally). *Akelius*, for example, is used to orally produce a descriptive text: using mirrors you try to orally describe yourself/your partner, then you carry out the activity composition taken from *Akelius*, followed by photographs of the faces composed with *Akelius* in a final plenary activity, playing at “recognizing the partner”.

As can be seen, in part, from the examples reported, the prevailing **materials to supplement the use of *Akelius*** are the following: Notebooks; worksheets; manuals for learning Italian L2; flashcards; *role play* activities; exercises at the IWB;

#### 4.3.3 Feedback and differentiation

An interesting aspect that emerged from the classroom observations concerned the different ways teachers introduced strategies to **differentiate learning**. In this context, the responses to the item “The teacher is able to differentiate learning activities with *Akelius* for students who have different levels of competence or different styles/ages, etc. showed the following distribution: 5 out of 14 teachers were reported to implement this extensively, 3 partially, 3 marked the item as not applicable, 2 completely, and 1 not at all.

These results indicate that a significant portion of the observed teachers –more than half– demonstrated an ability to adopt strategies that support differentiated teaching. This reflects an understanding of how to structure lessons in a way that aligns with the varying learning objectives and needs of students, providing specific and diversified activities. Differentiation, in this sense, involves pedagogical and didactic attention to designing flexible teaching proposals that can adapt to different levels of student competence. For instance, it includes facilitating tasks for students who may complete them quickly, while also supporting those who require more time to reach understanding.

In this regard, it is particularly important for teachers to be well-acquainted with the structure of the *Akelius* chapters. Familiarity with the material enables them to recommend, when appropriate,

additional digital or analog activities that students can complete independently. Moreover, for learners with higher levels of metalinguistic awareness, it may be beneficial to ask them to analyze their mistakes as a reflective learning tool, fostering deeper understanding through error analysis.



### AN EXAMPLE OF SUCCESSFUL DIFFERENTIATION

The idea of the mix between L2 and mother tongue is good, using *Akelius* also to do grammar with the whole class, assigning different tasks to NAI and Italian speakers: while the NAI classmate carries out *Akelius'* activities at the whiteboard the teacher asks his classmates to do the grammatical analysis of some words present in *Akelius'* activities. The objectives are differentiated: L1 grammar for the class; lexical and morphosyntactic competence for the NAI (L2). Although the attempt at differentiation has been successful, some critical issues remain with respect to methods, timing and involvement of students, who risk getting bored or distracted.



### AN EXAMPLE OF A NOT WELL-PLANNED DIFFERENTIATION

In the classroom, an activity takes place, using only the web version of *Akelius*, for the whole class: all the students are called to the whiteboard, individually or in pairs, to carry out one or more parts of the playful activities proposed by *Akelius* (crossword, guessing, bingo, password, dolphin/crab, memory). All the classmates, from their desks, are called to follow the whiteboard. NAI students are often solicited but all classmates go to the blackboard the same number of times. The class follows the proposals that are held at a good pace, but there are also moments of boredom or distraction for those who are not directly involved in the blackboard task. Sometimes those who are at the whiteboard cover the screen blocking the view of those sitting at the desk. Finally, it is observed that only one student received a tablet at the beginning of the lesson (without headphones) but never received specific instructions. He tried several times to use it, disturbing the class, but called back by the teachers he desisted. Sometimes the teacher complies with the requests of the children at the whiteboard: there is no planning and differentiation of activities.

In the observed lessons, moreover, there was crosswise attention on the part of the teachers with respect to **giving positive confirmations to the students**, motivating them to continue their work and reinforcing them where they achieve the expected result. The outcomes related to the item "The teacher often provides individual feedback to students", in fact, are structured as follows:

- Completely (7/14);
- Largely (5/14);
- Partially (1/14);
- Not at all (1/14).

#### 4.3.4 Teachers' digital skills

The classroom observations made it possible to evaluate the **teachers' digital skills**, regarding the use of the *Akelius* platform. This was intended to investigate what the methods of preparation and distribution of tablets are, the ways in which teachers have managed students' difficulties in using technology, the ways in which guidance has been provided on the use of the platform, the attention to verifying that students are working on the assigned activities.

In this regard, in 11 out of 14 cases, teachers demonstrate that they are completely familiar with the use and operation of tablets and with the navigation of the contents of the application.

Therefore, there is a good preparation of the observed teachers with respect to the use of the platform and more generally with respect to the mastery of the technologies available.

#### AN EXAMPLE OF SUPPORTING TEACHERS' DIGITAL SKILLS

The AIPI cooperative has been active at the IC13 of Bologna since 2006. In 2024/25, at the request of teachers and with PNRR (National Recovery and Resilience Plan) funding, has organized a training course on the learning/teaching of Italian L2 with a specific focus on *Akelius* and other digital materials/tools. The course had a very operational style and involved 25 teachers from all complexes. During the training course, all teachers learned to navigate the platform, and the operation of the tablets was also explained.

#### 4.3.5 Students' digital skills

As regards the **students' digital skills**, the observations highlighted adequate ability in the use of the platform. This means that students follow the instructions given by the teachers, do not use other Apps or websites, demonstrate familiarity with the use of the tablet and in the autonomous use of the *Akelius* Application (opening, searching for the correct content, dragging and dropping the selected element...). In most cases, it was observed that students were completely/extensively familiar with the use of the tablet (9 cases out of 14), showing also a high level of autonomy in the use of *Akelius* application (10 out of 14).



# Students involved in **Akelius activities**: characteristics and outcomes

# 5



## 5. Students involved in Akelius activities: characteristics and outcomes

### 5.1 Students' citizenship, age and gender

During the 2024/2025 school year, **643 students** aged between 6 and 16 took part in the *Akelius* program, with the addition of another **54 students** who attended remedial courses before the start of school, held by AIPI in some schools in Bologna. These children and adolescents were enrolled in primary schools (**416 students, representing nearly two-thirds of the total**) and lower secondary schools (**227 students, just over one-third**). Among primary school students, 55.8% were male, while in lower secondary schools the percentage rose to 61.2%, resulting in an overall total referring to school students of **371 boys** and **272 girls**.

The average age across all students was **9.92 years for males** and **9.83 for females**, with a median age of 10 years for both groups. Among primary school students, the average age was **8.43** years for both genders. In lower secondary schools, the average age was **12.55 years**, with a median of 12. Although the average age of boys was higher than that of girls overall, this was due to a compositional effect, as a higher number of boys attended lower secondary schools, where average ages are naturally higher. In lower secondary schools, the most common ages were between 11 and 13 years. However, the incidence of "delayed" students (those older than the typical age for their grade level) was more significant than in primary schools: **37 students were aged 14** (16.3% of lower secondary students), **9 were aged 15** (4.0%), and **3 were aged 16** (1.3%).



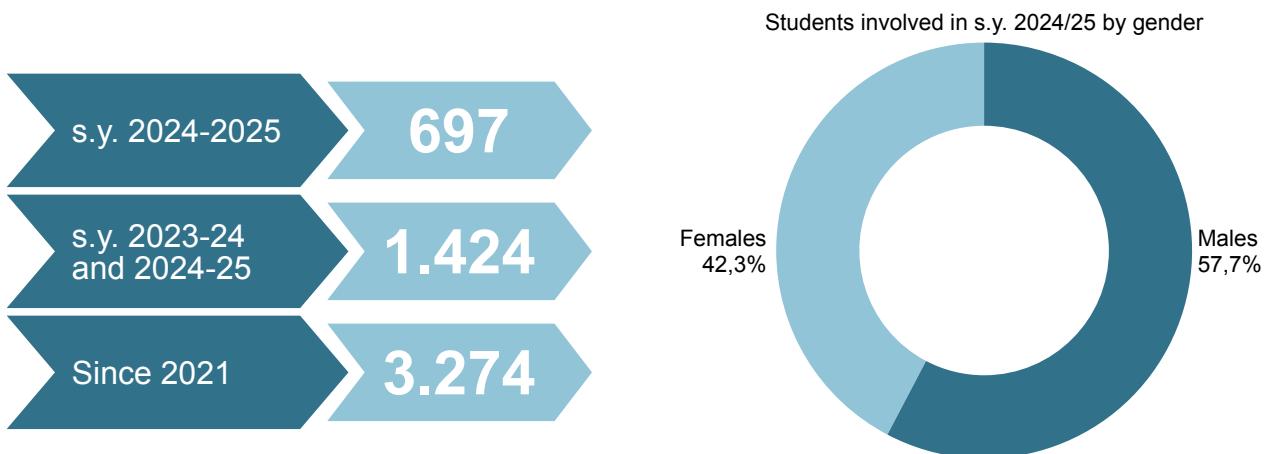


Figure 11 - Students Who Participated in the *Akelius* Project Program During the s.y. 2024/25

When analyzing students by citizenship, the youngest on average were those from the **Philippines** and **Bangladesh**. In contrast, the oldest were **Chinese students (average age 10.72)** and **Sri Lankan students (10.53)**, followed by **Salvadoran (10.44)** and **Ukrainian students (10.29)**.

In absolute numbers, the largest group of participants in the *Akelius* program during the 2024/2025 school year were **Egyptians (133 students)**, accounting for over one-fifth of the total. They were followed by **73 Pakistani**, **56 Peruvian**, **45 Bangladeshi**, **43 Chinese**, **37 Moroccan**, **30 Albanian**, **26 Filipino**, and **24 Ukrainian students**. An **additional 176 students** came from various other national backgrounds.

Among the main nationality groups, **Ukrainian** students had the highest proportion of females (13 girls compared to 11 boys, or 54.2%) and, together with the **Peruvian** group, were the only ones where girls represented the majority. In contrast, all other groups were male-dominated, with the percentage of boys ranging from 53.3% among Bangladeshi students to a maximum of 66.7%.



Figure 12 - Students participating in the *Akelius* program during the s.y. 2024/2025 by citizenship

## 5.2 Students' Activities with the Akelius app

During the 2024/2025 academic year, a total of **321 learning activities were implemented through the Akelius app by 125 teachers**, resulting in an average of 2.57 activities per teacher. Nevertheless, most teachers (more than half) activated only a single course. Among the remaining, 28 implemented two courses, 6 initiated three, and 9 activated four. Notably, one teacher delivered as many as 18 individual courses, highlighting a case of exceptionally high engagement.

Regarding the types of activities, the distribution was fairly balanced:

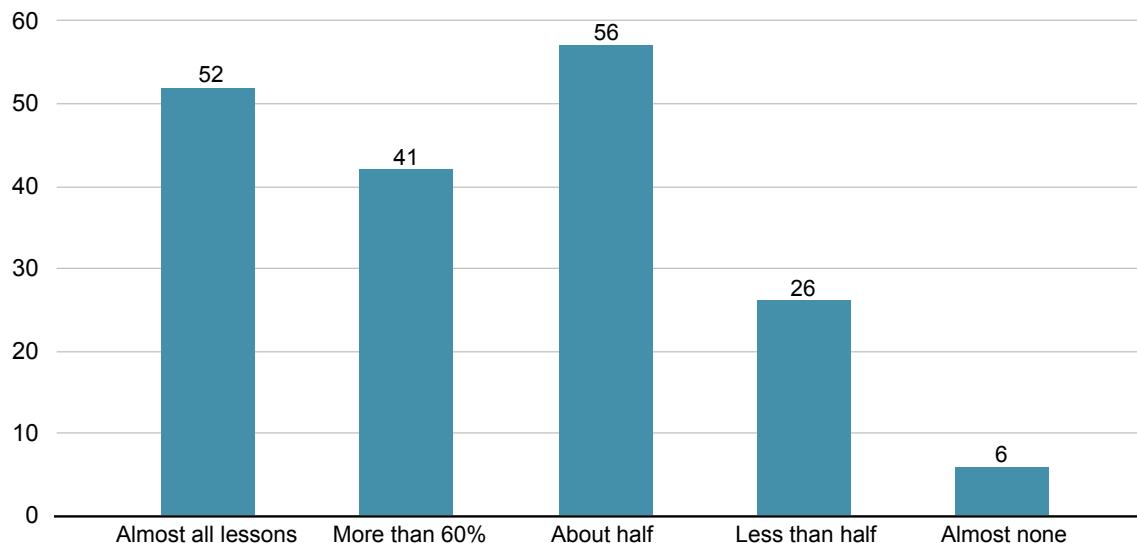
- **group-based courses accounted for 35.5%** (114 activities)
- **individual courses represented 28.3%** (91 activities),
- **the remaining 36.1%** (116 activities) were designed and structured directly **by the classroom teacher**.

Among the completed activities, a considerable number showed **high levels of integration of the Akelius platform**. Specifically, 52 activities made use of the platform in nearly all lessons, while 41 activities employed it in more than 60% of their lessons. Another 56 activities used it in appro-



ximately half of the lessons. Conversely, 26 activities used the platform in fewer than half of their sessions, and only 6 activities integrated it rarely or not at all.

These findings indicate that nearly one in three activities made consistent use of *Akelius* across nearly all teaching time, and in **five out of six cases**, the platform was employed in more than 40% of teaching activities.



**Figure 13 - Frequency of Akelius Platform Usage per Activity**

On average, each course involved approximately **three students (3.01)**, though with some variation depending on the type of activity:

- **Individual activities:** 1 student
- **Classroom activities** structured by the teacher: 1.88 students
- **Group activities:** 5.75 students (median: 5)

The average duration per student was **16.53 hours** (median: 10), with some longer courses raising the mean. For example, one group course at PreA1–A0 level reached 96 hours (6 students); four classroom-based activities lasted 60 hours, and one individual course 56 hours.

Average duration by type of activity:

- **Group activities:** 19.37 hours (median: 12)
- **Teacher-structured classroom activities:** 10.74 hours (median: 8)
- **Individual activities:** 9.87 hours (median: 10)

Average duration by language level:

- **PreA1–A0:** 16.06 hours (median: 10)
- **A1:** 12.72 hours (median: 8)
- **A2:** 10.23 hours (median: 10)
- **B1:** 9.02 hours (median: 10)

Overall, a trend consistent with expectations for Italian L2 courses emerges: **as the language level increases, the average course duration decreases.**

Table 7 - Average Course Duration (in hours) by Type and Language Proficiency Level, 2024/2025

| ACTIVITY TYPE                                      | LEVEL | MEAN         | MEDIAN       | MIN      | MAX       |
|--|-------|--------------|--------------|----------|-----------|
| Group (L2 instruction outside the classroom)       | A0    | 15.40        | 10.00        | 1        | 96        |
|  | A1    | 12.85        | 8.00         | 2        | 78        |
|  | A2    | 14.83        | 10.00        | 1        | 50        |
|  | B1    | 11.57        | 10.00        | 9        | 20        |
| <b>TOTAL</b>                                       |       | <b>15.40</b> | <b>10.00</b> | <b>1</b> | <b>96</b> |
| Individual (L2 instruction outside the classroom)  | A0    | 10.66        | 5.00         | 1        | 56        |
|  | A1    | 14.57        | 10.00        | 1        | 45        |
|  | A2    | 9.67         | 10.00        | 1        | 20        |
|  | B1    | 7.78         | 10.00        | 1        | 10        |
| <b>TOTAL</b>                                       |       | <b>10.85</b> | <b>10.00</b> | <b>1</b> | <b>56</b> |
| Structured by classroom teacher (within the class) | A0    | 16.35        | 10.00        | 1        | 60        |
|  | A1    | 11.55        | 10.00        | 1        | 60        |
|  | A2    | 7.76         | 2.00         | 1        | 50        |
|  | B1    | 9.26         | 6.00         | 1        | 55        |
| <b>TOTAL</b>                                       |       | <b>10.64</b> | <b>8.00</b>  | <b>1</b> | <b>60</b> |
| Overall Total                                      | A0    | 16.06        | 10.00        | 1        | 96        |
|  | A1    | 12.72        | 8.00         | 1        | 78        |
|  | A2    | 10.23        | 10.00        | 1        | 50        |
|  | B1    | 9.02         | 10.00        | 1        | 55        |
| <b>TOTAL</b>                                       |       | <b>12.39</b> | <b>10.00</b> | <b>1</b> | <b>96</b> |

### 5.3 Student Learning Outcomes

At the end of the activities, teachers assessed the results achieved by each student using a simplified scale aligned with the CEFR (from PreA1–A0 to B1, including intermediate stages). This system made it possible to transform individual assessments into a comparable framework, while still allowing for the detection of individual progress.

Final data are available for **385 students**, as several contextual factors limited complete data collection – particularly the difficulties faced by teachers in conducting an effective evaluation of students' progress and achievements, due both to time constraints and the lack of suitable assessment tools.

The analysis shows an **overall positive trend**. Excluding the 41 cases in which no progress was recorded (initial and final level both PreA1–A0), the following results emerge:

- **115 students** reached the expected level;
- **186 students** exceeded it, with an average improvement of almost one full level (0.97).

Conversely, in **43 cases (11.2% of the total, or 12.5% excluding students who remained at PreA1–A0)**, students did not reach the expected level, with an average gap of just over half a level (0.65).

**Table 8 - Students by Course Level and Final Italian Proficiency Level (s.y. 2024/2025)**

| The result at the end of the course | THE COURSE LEVEL |            |           |           |            | Total |
|-------------------------------------|------------------|------------|-----------|-----------|------------|-------|
|                                     | A0               | A1         | A2        | B1        |            |       |
| PreA1-A0                            | 41               | 6          | 0         | 0         | 47         |       |
| Between A0 and A1                   | 37               | 11         | 1         | 0         | 49         |       |
| A1                                  | 14               | 64         | 3         | 0         | 81         |       |
| Between A1 and A2                   | 16               | 34         | 16        | 1         | 67         |       |
| A2                                  | 7                | 24         | 35        | 0         | 66         |       |
| Between A2 and B1                   | 6                | 8          | 20        | 5         | 39         |       |
| B1                                  | 4                | 3          | 13        | 16        | 36         |       |
| <b>TOTAL</b>                        | <b>125</b>       | <b>150</b> | <b>88</b> | <b>22</b> | <b>385</b> |       |

The analysis of results by level:

- **PreA1–A0:** Over two-thirds of students exceeded the course level; in some cases (+13.6%) showing very significant progress;
- **A1:** 42.6% reached the expected level, 11.3% remained below (almost always by half a level), while 46% exceeded expectations;
- **A2:** 39.8% reached the expected level, 22.7% remained below, and 37.5% surpassed the course level;
- **B1:** Data are available for only 22 students, but results are very positive: 72.7% reached the expected level, 22.7% were slightly below (–0.5 level), and only one student (4.5%) did not meet the target.

Overall, the teaching activities carried out with the support of the *Akelius* App achieved good results, despite certain limitations mainly related to the course duration, which depends on school-level organizational factors discussed in previous chapters rather than on the specific needs of the students. Moreover, teachers reported positive feedback regarding the engagement potential of the *Akelius* App for students – a significant motivational factor that traditional paper-based materials cannot offer.

From this perspective, it could be useful for teachers using the *Akelius* App in the coming years to make use of the progress data available in the teacher profile of the App, not only to check the learning outcomes of the assigned activities but also to monitor the students' engagement levels, which can be observed through the management and customization of their avatar's gadgets.



# Conclusions

The implementation of the *Akelius* program has shown how, in just a few years, the participating schools have developed an effective pathway to support the teaching of Italian as a second language (L2). The introduction of the UNICEF–*Akelius* Guidelines and their adaptation to the Italian context have made it possible to provide schools not merely with abstract recommendations but with concrete tools for principals and teachers.

From a technical and organizational perspective, schools are generally well equipped, although some challenges remain—particularly those related to teacher turnover and the uneven distribution of resources among schools, which risk undermining the stability and continuity of training activities. The ongoing support role of the *Help Desk* has been recognized by both teachers and school leaders as invaluable for managing everyday issues and, as such, instrumental in mitigating these challenges.

Teacher engagement has proven to be both complex and intense, making educators key actors in a process of professional growth that has combined training, experimentation, and reflection. The training paths, delivered both synchronously and asynchronously, have provided essential linguistic and digital teaching tools for the informed use of the platform. Teachers have learned to make the most of *Akelius*'s strengths—from its ability to address different learning styles to its playful, engaging approach—while also recognizing its limitations, especially in the area of language production. This has enabled a critical and creative use of the tool, transforming it from a mere technological aid into a driver of methodological innovation.

Another key strength lies in the Communities of Practice, which have offered spaces for dialogue and co-construction of meaning. These moments allowed teachers to share strategies, materials, and solutions, strengthening their sense of belonging and motivation. The collaborative dimension has also helped to reduce professional isolation, creating favorable conditions for the wider dissemination of good practices.

Nevertheless, some challenges remain, as the program is still often perceived as an additional activity rather than one fully integrated into school planning, and continuity is threatened by frequent

teacher turnover. Classroom observations, however, paint an encouraging picture. In many contexts, the blended approach has become an established practice, with an increasingly balanced integration of digital and *Face-to-face activities*. Teachers are showing growing ability to differentiate learning paths, provide targeted feedback, and make full use of digital tools.

Students, for their part, have shown remarkable progress in their *digital skills*, using the app more and more independently. These signs confirm that investment in teacher training and pedagogical support is the cornerstone of the project's success. The goal and hope for the future are that the *Akelius* platform will continue to be used through inclusive and participatory teaching methods—such as cooperative learning and peer tutoring—capable of accommodating diverse learning styles.

As for the students, the results are equally significant. The 643 pupils involved in the 2024/2025 school year demonstrated substantial progress, especially at the lower levels of the Common European Framework of Reference (CEFR). More than two-thirds of the students who started at pre-A1 or A1 levels achieved higher proficiency, particularly in comprehension and vocabulary. This is a highly valuable result, confirming the effectiveness of the blended approach as a tool for school inclusion and for accelerating language learning pathways. However, there is still room for improvement: oral and written production remain critical areas that require further pedagogical strategies for full development.

Overall, the implementation of the *Akelius* program has highlighted a series of strengths demonstrating its potential—both in terms of schools' capacity building and teachers' professional growth, as well as students' learning progress. At the same time, the challenges that have emerged—staff turnover, the perception of the program as an extra activity, and limits in language production—underscore the need for structural measures to integrate these practices more stably into regular school planning, consolidating what is now a program into a widespread institutional practice.



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