

# EARLY

Distance Learning Model Reinforced with Robotics for 3-7 Year Old Children



#### Au revoir

The Erasmus+ EARLY project has ended and this is our final newsletter. However, neither the project website - <a href="https://www.earlyeu.org">https://www.earlyeu.org</a> - nor the Moodle platform - <a href="https://lms.earlyeu.org/">https://lms.earlyeu.org/</a> - will close, as they will continue to remain open for consultation in the coming years.

The project produced multiple rich materials: the initial Survey administered to different stakeholders in all the Partner countries to establish a needs analysis and preferences; the Curriculum with lesson plans and videos, suitable for prospective teachers, practicing teachers and families; the Manual for Early Education Labs for a Distance Learning Model Reinforced with Robotics for 3 to 7 Years Old Children, in two versions, for students or families.

Several dozen prospective teachers and practicing teachers participated in the LTTA, the Learning and Teacher Training course organized online by Scuola di Robotica.











You will find these work products on the EARLY Moodle and you can download them freely.

Also, all information about the EARLY project will remain online, on the site, and on the platform.

The partners worked together on the project's topics, which covered a methodology, dedicated to future preschool teachers, for teaching educational robotics and coding to support STEM development. The particularity of EARLY lies in the development of a Manual and Curriculum for teaching remotely, as well as in presence.

The EARLY results were presented in all partner countries to prospective teachers, practicing teachers, school managers, and stakeholders.

You will find in this newsletter the reports of these Multiplier Event conferences, which were popular and very well attended.

Ours is only an *Au revoir*, as we suggest that you continue to follow the sites of the various EARLY partners (all partner information is in this newsletter), and above all, that you apply our methodology in the classroom, at home with children and families, and in the university.





## **EARLY Multiplier Events (ME)**

Multiplier Events - conferences presenting the results of Erasmus + projects - of the EARLY project took place in Turkey, which is the Coordinator's country, in Germany, Ireland, Italy, Latvia, and Portugal. In total, several hundred students, teachers, and family members were reached directly or indirectly by the Partners' dissemination activities.

Each multiplier event also offered some hands-on activities with various digital and/or robotics devices suitable for the project. Participants received an evaluation survey with several questions to assess the quality of and interest in the project. We are very pleased to report that the scores received from all the surveys were very positive.

The Multiplier Events were held in a lively and highly participative atmosphere. They were advertised on social media and the partners' websites, and attendance was high, with more than 40 participants at each conference.

We present brief reports of the various conferences.

# **Multiplier Event in Turkey**

The Early Project Coordinator, the University of Kocaeli (KOU https://www.kocaeli.edu.tr/en) held the multiplier event, in collaboration with the Turkish Partner MELLIS (https://mellis.com.tr/), at the Kocaeli University Faculty of Education Servettin Bilir Conference Hall on June 06, 2024.

After the opening speech of the Faculty Dean Prof.Dr. Elif Çelebi Öncü and Project Coordinator Assoc. Prof. Dr. Tuğba Konaklı, LTTA and pilot participant Ms. Gülay made a presentation sharing her experiences.

Assoc. Prof. Dr. Funda Dağ gave information about computational thinking for early ages and Assoc. Prof. Dr. Levent Durdu did "I'm a robot" and a short ScratchJr activity with the participants. Finally, Research Assist. Duygu Demirtaş carried out activities related to step sequencing, a component of algorithmic thinking in preschool.





After the closing speech, a quality assessment questionnaire was sent to the participants and certificates of participation were presented.

Primary school teachers, school principals and preschool teachers working in various districts of Kocaeli attended the meeting: fifty-two participants attended the multiplier event.

As a result of the event, Assoc. Tuğba Konaklı presented a certificate of participation to all participants."





## **kEARLY Multiplier Event in Germany**

The multiplier meeting in Mannheim, organized by the University of Mannheim, the Department of Economic and Business Education, Learning, Design and Technology (https://www.uni-mannheim.de/en/) was a great success. Kindergartens and preschools in the greater Mannheim area want to profit from the project results of the EARLY project. Digitalisation, distance education and especially robotics for early childhood education are interesting topics for educators, caregivers and children. There is a high demand for activities and workshops which align with the prerequisites and the demands of the specific institutions. One on one meetings have been scheduled with different ECE (Early Childhood Education) stakeholders and institutions to satisfy the diverse characteristics of the institutions in Mannheim, such as size, child-staff-ratio or provider (public, private, church-based).





The city of Mannheim has made an important step to support ECE institutions in their attempt to implement robots into their teaching and learning: The public children's library has been funded to purchase a variety of learning robots, such as the famous Bee-Bot. These robots can be borrowed by all institutions, which tackles the important question of equipment and financing.

Beginning in autumn 2024 UMA will partner up with multiple ECE institutions to further implement learning robots into kindergartens and preschools, by offering workshops and activities for children ages 3-7, using the learning robots offered by the public library.





## **EARLY Multiplier Event in Ireland**

The Irish Multiplier Event took place on 3 May 2024 at the South West College in Dungannon, organized by Partner Early Years (https://www.early-years.org/). 53 participants participated in the multiplier event: 6 of them were Primary School teachers, 14 were teacher candidates, 12 Leaders in ECE settings, 12 Lecturers in Higher Education and 9 Managers of ECD settings.

For each outcome of the Early project, the Irish partner, Early Years, organized a presentation with theoretical and practical discussion groups and workshop activities.

There were plenty of opportunities for participants to mingle and discuss and share their own experiences with others. Hard copies of the product results, the Curriculum and the Manual, were shared among the participants as well as infographics related to the project. The event participants were directed to EARLY social media accounts where they could keep updated on the project and the link to the EARLY website was shared so that they could access their own copies of the Project Results.





Each output was described fully and time given for questions and comments. Groups were invited to discuss the Outputs during discussion times. Refreshments were served mid way by the staff and participants enjoyed this very well. This provided a relaxing atmosphere where people were prepared to open up in conversation and share their own experiences with others. Participants expressed interest in further training opportunities for the development of robotics and distance education in Early Childhood Education.









#### **EARLY Multiplier event in Italy**

The seminar was organized on 21 June 2024 by the partner Scuola di Robotica (www.scuoladirobotca.it/en) in Genoa, in their premises in Genoa. About 80 teachers from various public and para-public schools of the Municipality and Province of Genoa, of the Liguria region and of the Municipality's kindergartens attended the Multiplier Event.

The preschools and Istituti Comprensivi represented: IC

- Sampierdarena, Genoa
- IC San Francesco da Paola, Genoa IC
- Bolzaneto, Genoa
- IC Centro Storico, Genoa
- Lower School Foce, Genoa
- Lower School Quarto, Genoa
- Immacolatine Infant School
- Girotondo Nursery School, Bogliasco, Genoa IC
- Serra Riccò, Genoa Province
- IC Terralba, Genoa IC
- Barabino, Genoa
- IC Guido Rossa, Genoa
- IC Santa Margherita Ligure, Genoa Province IC
- Borzoli
- Infant School Istituto Suore dell'Immacolata IC
- Rivarolo, Genoa
- IC Albisola, Genoa Province IC
- Sturla, Genoa
- IC Molassana and Prato, Genoa

Most of the teachers were present on behalf of their Headmaster and the Teaching Board.

The event took place with the collaboration of the National Network of Educational Robotics and was opened by the Headmistress of the IC Sampierdarena and Referent of the National Network of Educational Robotics, Prof. Sara Bandini, lecturer at the Department of Education Sciences of the University of Genoa. Sara Bandini stressed the importance of the EARLY Manuals and Lesson Plans for distance education, as well as in-presence education, especially for those emergencies in which children cannot come to school and especially as a support to continuous education at home.

Emanuele Micheli, President of Scuola di Robotica, and Fiorella Operto, Contact Person for Scuola di Robotica for the EARLY project, presented the EARLY Curriculum, Manual and the MOOC.

The objectives of the event were to disseminate the results of the project and above all to promote the adoption of the Handbook and Lesson Plans at the participants' schools so as to effectively integrate distance learning into preschool teaching.

The face-to-face presentation was followed by hands-on workshops in which the participants, divided into groups, worked with different robotic educational devices including Bee Bot and mTiny.





From the expressions of interest that were sent by participants through the Quality Evaluation Form and from the emails that Scuola di Robotica received, we can say that the results of EARLY will be adopted in many schools in Genoa and Province. Many participants have asked us for EARLY courses in the next school year, dedicated to teachers of pre-school and first two years of primary school.





#### **EARLY Multiplier event in Latvia**

The EARLY multiplier event in Latvia was organized at the University of Latvia, Faculty of Education Sciences and Psychology (https://www.lu.lv/en/), on 21st August 2024. Ketlīna Tumase; Teacher and Researcher, Dean Linda Daniela and Arta Rūdolfa, UL Volunteer presented the results of the project to 41 participants - 18 of them teachers, 23 of them were heads or deputy heads of schools and preschools. The materials in Latvian were also offered in printed format and the participants were eager to get to know them, saying that they would be happy to try them out and would certainly recommend them to colleagues.

Overall, the feedback from the participants was very positive, both verbally and in the form of feedback, expressing that integrating educational robotics into their teaching is still a challenge for them. After attending the hands-on workshops, participants wanted to know whether such hands-on training would be available in the future and to tell their colleagues about it.

Although several preschools already have educational robot kits, not all of them are actively using them, so they greatly appreciated the materials developed and the opportunity to get hands-on experience.

Most attendees reported that distance learning was explained sufficiently during the presentations and they understood the benefits of using distance learning in the right circumstances in preschool education, but some did not feel confident and secure in this area yet. Most participants expressed the hope that distance learning will not return to their daily teaching. Most respondents appreciated the possibility to access the materials developed (curriculum, teacher's handbook, parent's handbook) during the project and were also interested in using the MOOC platform.





Participants were interested in the materials developed and willing to use them in their daily work, adapting them as necessary. Most of the participants felt inspired and confident about the versatile potential of these tools directly after the hands-on activities with the educational robots and wanted to use them not only in their educational work, but also to introduce them to their colleagues.





## **EARLY Multiplier event in Portugal**

The Portuguese multiplier event took place on 11th July 2024, at the School of Education in Viseu (https://ipv.pt/en/). It was organized as part of the 3rd edition of the SETA - Seminar on Education, Technologies and Learning, which has gathered a good reputation and draws the participation of more than 100 teachers every year since 2022. This edition had more than 80 participants in-person and over 60 participants online.

There was wide dissemination of the event, through email lists to all previous participants, partner schools and clusters of schools of the School of Education. The announcement was also posted on social media, including in the Ministry of Education, at the profile regarding the digital transition in schools (ERTE/DGE - Team for Digital Resources and Technologies of the General Division for Education).

As part of the programme, in the morning, Maria Figueiredo presented "Projeto EARLY: Desafios da Educação a Distância com recursos digitais tangíveis na Educação Pré-Escolar na ESEV", integrated in a plenary panel on Programming and Robotics in teaching and learning. In the afternoon, participants opted for one of the four workshops on "Computational thinking and robotics: starting in Early Childhood Education", "environmental education and robotics in the early years", "drawing robot in classroom tasks", and "Lego education at the service of the curriculum".





SETA was a very successful event. It managed to bring together teachers from different levels of education and regions in the country. It also pulled some participants from the city that are not directly involved in teaching but that, as parents, were interested in the topics. There was a good articulation and balance between national-wide discussions about the digital transition of schools and the particular challenges faced by Early Childhood Education, namely in terms of computational thinking and robotics. This offered a good context for the EARLY project and made the online course and other resources very appealing. Directors from School Clusters from some neighbouring regions of Viseu asked to welcome training for Early Childhood Teachers based on the project's results as distance education and robotics are seen as relevant for their communities.

The participants in the SETA were directed to EARLY social media presence. Besides that, all 150+ participants in SETA received information about the website and the social media accounts for EARLY in their email, and also in the sessions. Participants in the workshop expressed interest in further training opportunities for the development of robotics and distance education in Early Childhood Education. This will be followed up in the next school year..





#### **EARLY platform**

The EARLY platform (https://lms.earlyeu.org) contains all project results, and the Survey data. The results are in English and the Partner languages (Latvian, Portuguese, English, Italian). It also contains a lot of useful documentation material and many photographs and videos.

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