

EUROPEAN SCHOOL
KARLSRUHE

Primary & Secondary

Challenge
Programme



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And
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1. Framework

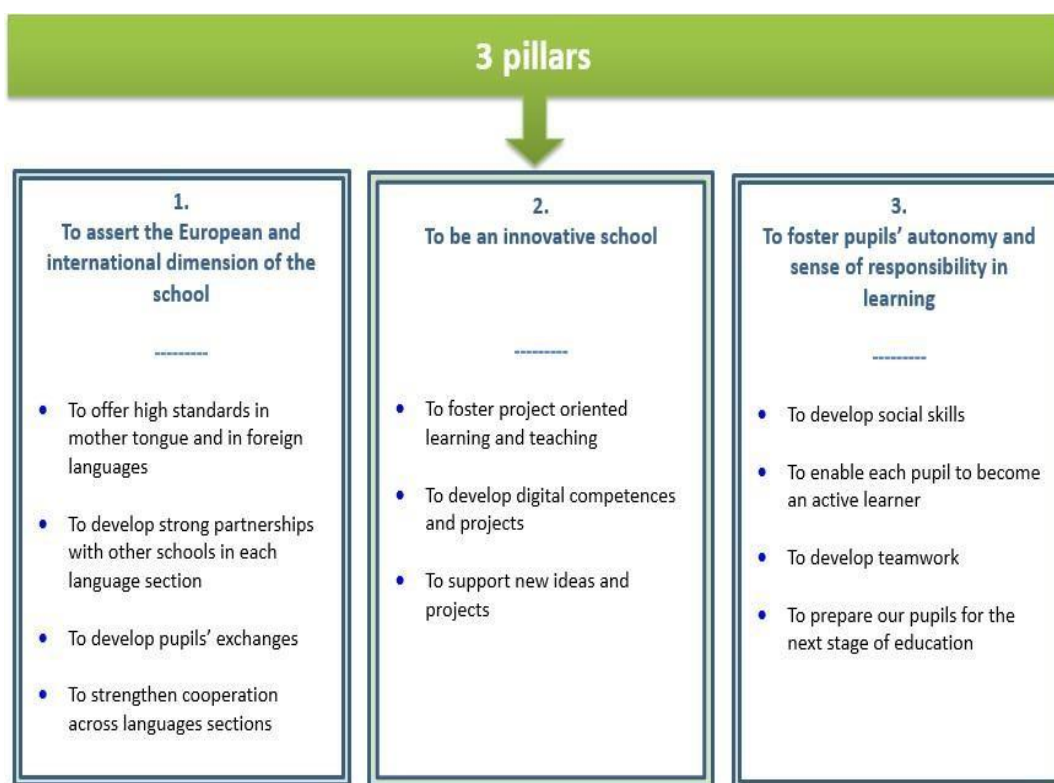
1.1. Context

1.1.1. Mission of the European School

The mission of the European School Karlsruhe is to provide, in a safe environment, a high-quality multilingual and multicultural education for Nursery, Primary and Secondary level pupils and to give each pupil the best possibilities to develop her/his individual personalities and potential based on key competences. Furthermore, the mission is to let the JRC-Karlsruhe, the Technology Region Karlsruhe and the Land Baden- Württemberg benefit from the presence of ESK.

1.1.2. Vision in teaching and learning of the European School Karlsruhe

A common vision in teaching and learning is developed in the School, based on 3 specific pillars (Ref. *Multi-Annual School Development Plan 2019-2021*):



1.1.3. Educational Support in the European School

In the European Schools, "different forms and levels of support are provided, designed to ensure appropriate help for pupils experiencing difficulties and having special educational needs at any point in their school career, to allow them to develop and progress according to their potential and to be successfully integrated" (*Policy on the Provision of Educational Support in the European Schools, Ref.: 2012-05-D-14-en-9*).

1.2. General aims of the Challenge Programme

Normal daily classroom differentiation should cater for all children, including those of higher ability. The challenge programme is an extension to what is already being provided by the class and subject teachers in our school.

The Challenge Programme is an opportunity for gifted but also talented and motivated pupils to develop their potential, through extra activities and projects. At the European School Karlsruhe, the *Challenge Programme* is a part of and funded by the Educational Support budget.

1.3. Organisational Principles

Pupil profile to attend the Challenge Programme:

- Gifted or talented pupils/students
- High achievers
- Highly motivated pupils/students

The Challenge Programme consists of 3 Parts:

- 1) Differentiated activities for these pupils in the classroom during the normal lessons
- 2) The general aims of the programme is to enhance the learning of gifted or talented pupils by developing some of their areas of talent/interest at the same time acknowledging and providing support for the specific areas children may have difficulties with. (social skills/ empathy, life skills/ autonomous learning and the need for ongoing pastoral care)
- 3) Extra lessons in specific areas are provided for the target pupils

Procedure:

- Class teachers recommend pupils for the Challenge Programme extra lessons.
- An advisory group including the support coordinators decides upon the availability and participation. There are a limited number of places available. Available courses may change over time.
- The Director approves the proposal of the advisory group
- When the advisory group have finalised the pupil list, the parents of those children are informed about the opportunity (This is not an afterschool activity like those offered by the Parent's Association where parents register their child themselves)

2. Organisation and offer for 2024-2025

Differentiation:

Differentiation forms the basis of effective teaching. It is essential for all pupils, including those pupils requiring support. Differentiated teaching aimed at meeting all the pupils' needs is the responsibility of every teacher working in the European Schools and must be common classroom practice. Differentiated teaching ensures that in planning and delivering lessons,

teachers are aware of and take into consideration the different learning styles and individual needs of all pupils.

(Ref.: 2012-05-D-14-en-9)

Differentiation is therefore the first and common response to stimulate and nurture talented and motivated pupils in both the primary and the secondary school.

2.1. PRIMARY SCHOOL

Existing Provision:

- **Visual arts:** Volksbank art competition, art gallery trips, art and drama EU hours groups
- **Music and dance:** High ability children in music and art are recommended to take extra outside lessons. Choir and EU dance groups during EU hours, various performances throughout school year, Christmas, Sommerfest, choir festival, harmonic tower performances
- **Sports:** Kinder marathon, athletics, swimming and basketball competitions
- **Creative and productive thinking/entrepreneurship/leadership:** Film club, newspaper, choir, class representatives
- **Mechanical Ingenuity/Logical Thinking/Maths/Scientific/ICT:** Robotics, film club
- **Kangaroo maths, Matific** for ICT and maths

Challenge Programme Provision 2024/2025:

1. FUN WITH SCIENCE:

In this course, the children carry out a set of experiments which are simple, fun and which teach them not only about science, but also how to learn from the results of experiments.

The emphasis is on encouraging discussion and new ideas. The course is based on the successful lab project that for 15 years formed part of the “Discovery of the World” activities in the ESK Grundschule, however, the longer time frame of the Challenge programme makes it possible to work on more ambitious projects.

We make a series of experiments that explore for example the colours in leaves and flowers, how seeds grow, the microbes that surround us, how cells work as well as extracting and understanding DNA.

We learn to work with microscopes and other equipment from the laboratory.

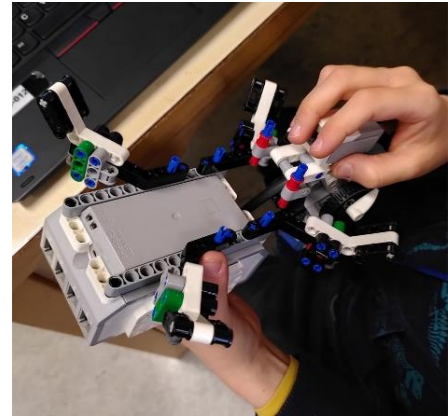
Project leaders: Nicholas Simon Foulkes, Daniela Vallone



2. LEGO ROBOTICS:

Students develop spatial, fine motor and basic programming skills through building robots using Lego and programming with a block based programming software. The building time is often more challenging than the children expect as they must follow the instructions closely in order to have a functioning robot. In the programming stage, students first learn how to move the robot and then move into using sensors.

Project leader: Peta Finden



3. CREATIVE SOUND STUDIO:

Creative Sound Studio encourages students to explore their musical creativity through hands-on improvisation, songwriting, and recording.

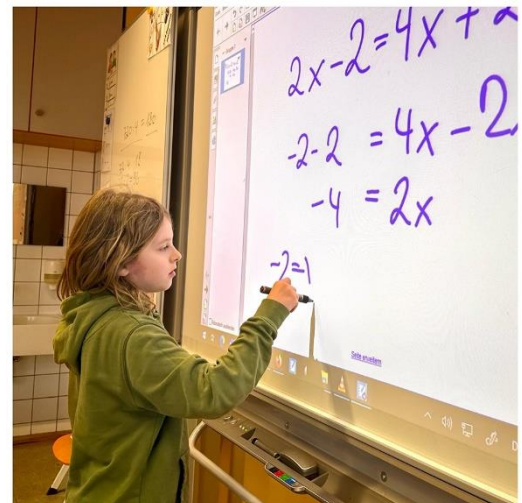
Participants will experiment with sounds, create original compositions, and record their own music. The program fosters creativity, collaboration, and self-expression in a fun, supportive environment.

Project leader: Chrystalla Paleshi

4. Math Explorers:

In the 'Math Explorers' challenge programme, particularly interested children from P3 to P5 are given the opportunity to deal with mathematical tasks and problems that go far beyond normal maths lessons. The children deal with additional maths problems that are not directly related to the current learning content of the learning group. In a small group (8 children), they work on brainteasers and puzzles, deal with mathematical phenomena and play challenging games on the subject.

Project leader: Denis Weiss



Considerations:

- To avoid pupils not following the required subjects and lessons laid down in the general rules for the European schools, **the 3 extra lessons are scheduled on Wednesday afternoons**. (Outside of the regular timetabled lessons)
- **The target group are pupils in P3-P5**, but in rare and exceptional cases, pupils from P2 can be recommended by class teachers. The focus of the groups may change and/or additional groups created depending on our findings. A record of pupils participating in the extra lessons on Wednesday will be kept by the support coordinators.

2.2. SECONDARY SCHOOL

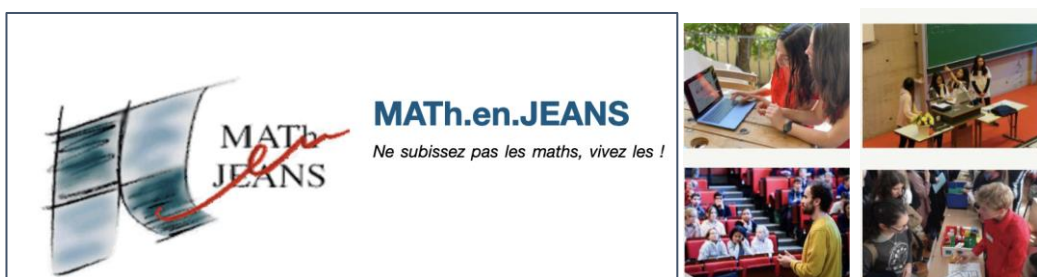
- **Cross-sectional, cross-disciplinary and age-related**
- **In the secondary school, pupils with special skills or those who are highly motivated can be supported by participating in the Challenge programme.**
- Beside the regular projects offered in the secondary school, such as the [European School Science Symposium](#), [Model European Council](#), [FAME](#), [EUROSPORT](#), [Model of United Nations](#), pupils will be able to participate in specific projects every semester for the Challenge programme. Important people in public life (journalists, artists, politicians, scientists ...) will be invited to our school for this purpose.

Provision 2024/2025:

1. **MATH.en.JEANS** :

MATH.en.JEANS est une activité ouverte à tous les élèves de la S2 à la S6, avec un travail d'équipe, sur de véritables sujets de recherche, présentés et suivis par un chercheur du Département de Mathématiques du KIT (Karlsruhe Institute of Technology), une expérience de communication orale lors du congrès annuel qui se déroule en français ainsi qu'une formation à la communication écrite lors de la rédaction d'articles qui sont publiés.

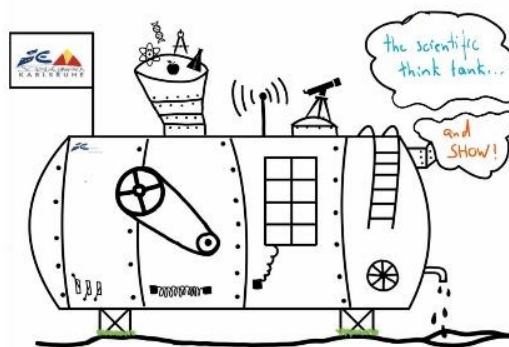
Project Leaders: Mrs. Brassat, Mr Frey



2. **SCIENTIFIC THINK TANK AND SHOW:**

A catalyst for all kinds of scientific interests and skills, with the desire to really dive in and explore a scientific question as starting point. A platform for opportunities such as meeting experts, the study of a topic outside the syllabus and the use of new skills.

Project Leader: Mr. Muller



3. **PHILARMONIC ORCHESTRA :**

The programme offers further development of the wind classes at the European School Karlsruhe into a philharmonic orchestra, with various instrument groups rehearsals, further development of techniques, building of an orchestral community. The participants engage in preparation of demanding orchestral works by European composers from the baroque, classical, romantic, modern, jazz, musical and pop/rock periods in symphonic orchestration. The programme will culminate in artistic participation in the organisation of receptions and events at the European School Karlsruhe and music exchange with other European Schools.

Project Leader: Mr. Braun



4. **SCIENCE CLUB:**

Talented and motivated young scientists design, plan and execute scientific projects in small groups. They train in the scientific and multidisciplinary project approach. Encouraged to get closer to professionals (scientists, engineers, technicians), the students possibly take a first step towards the world of business. They prepare posters and oral presentations as in the real world and can apply for scientific competitions such as Jugend Forsch, Cgénial France and others.

Project Leaders (in turn): Mrs Bach, Mr Beaufils, Mrs Dreusch, Mrs Kuznik, Mr Muller.



5. **SCHOOL BAND:**

Play, practice, record and perform songs in various repertoires. Learn about instrumental advanced techniques, sound techniques and the organization and production of professional recording and shows.
Project Leader: Mr. Muller

