

EUROPEAN SCHOOL KARLSRUHE

Primary & Secondary

Challenge Programme



Presented to the
Education Council
June 2019

And
to the
Administration Board

Sept. 2019

Updated version

October 2025

Content:

1. Framework

- 1.1. Context
- 1.2. General aims
- 1.3. Organisational principles

2. Organisation and offer for 2025-2026

- 2.1. In the Primary Cycle
- 2.2. In the Secondary Cycle

1. Framework

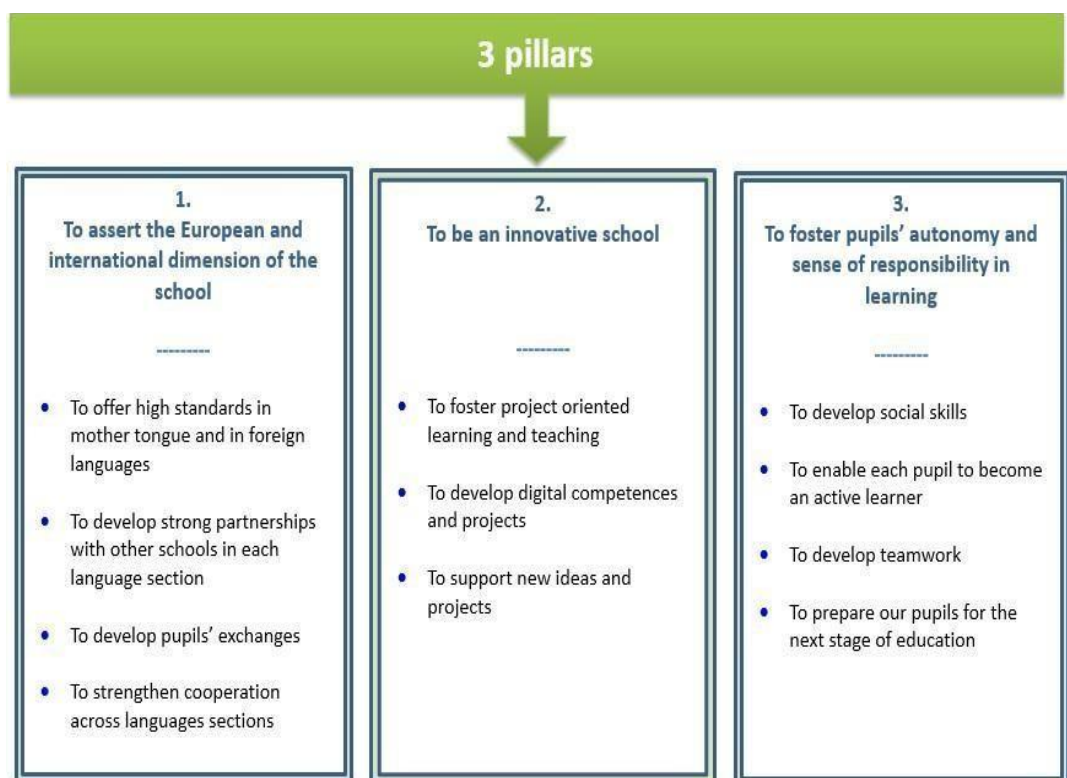
1.1. Context

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-10).

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 2025-2026

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-10)

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 2025/2026:

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.

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 and Rima Siauciunaite

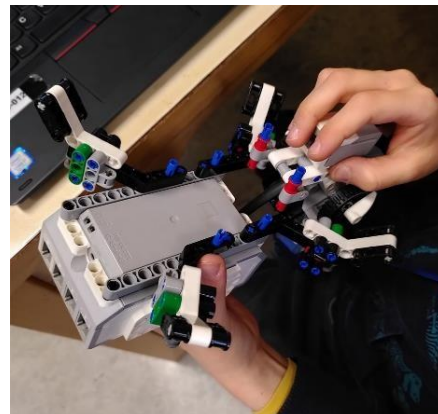


2 .LEGO ROBOTICS/FIRST LEGO LEAGUE:

Students develop spatial, fine motor and basic programming skills through building robots using Lego and programming with a block- based programming software.

Since 2024, the students have been using the Lego Spike sets and in 2025 for the first time worked towards a group presentation in front of a panel of judges as part of the First Lego League. The group was also sponsored by John Deere and supported by a parent who had previously coached a group.

The students learn how to work in a team, developing patience as they wait for their turn to build and test programs and develop presentation skills.



Project leader: Peta Finden

3. STUDENT NEWS BULLETIN

ESK News is an exciting afterschool challenge programme for students that brings together creativity, teamwork, and multilingual learning.

Each week, participants will plan, produce, and present a short 5-8 minute video news bulletin in English, French, and German, sharing updates and celebrations from across the school community. Through reporting, interviews, and event coverage, students will promote the school's Golden Rules, strengthen cross-section connections, and develop valuable skills in communication and collaboration. The programme offers a fun and authentic way for students to express their voices while celebrating the school's diverse, multilingual identity.

Project leader: Eoin Smithers

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

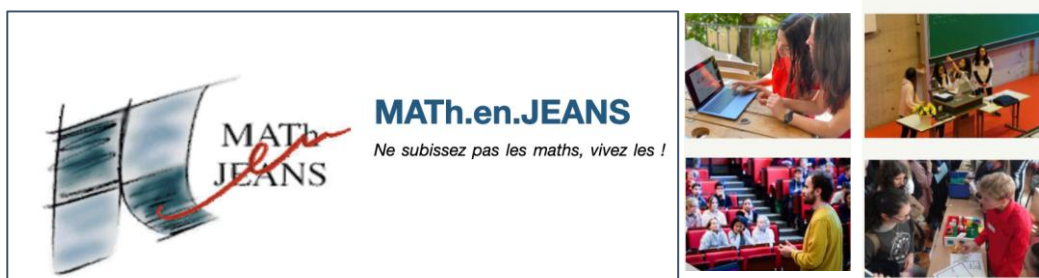
- **Cross-sectional, cross-disciplinary and age-related**
- **In the secondary school, pupils with special skills or those who are highly motivated can be supported by participating in the Challenge programme.**
- Beside the regular projects offered in the secondary school, such as the [European School Science Symposium](#), [Model European Council](#), [FAME](#), [EUROSPORT](#), [Model of European Council](#), 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.

Challenge Programme Provision 2025/2026:

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 de l'Université de Stuttgart, 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 Leader: Mme Brasset



2. Philharmonic 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.

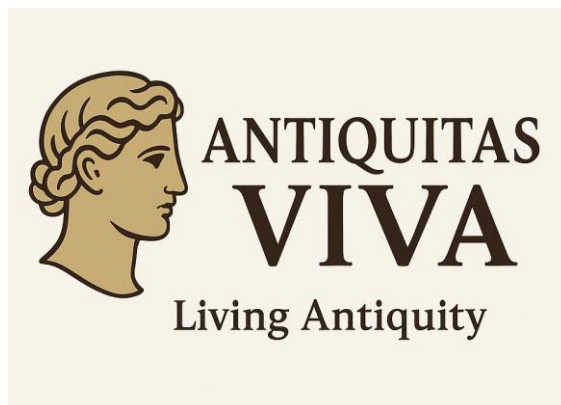
Project Leader: Mr. Braun



3. Antiquitas Viva

Living antiquity via activities promoting latin language and greco-roman culture in a fun and practical way; exploring ancient culture, archeology and theater to develop multiple skills (literacy, multilingual approach, science and technology perspective, cultural awareness and more). Preparing for the Ancient Cultures Festival in May 2025.

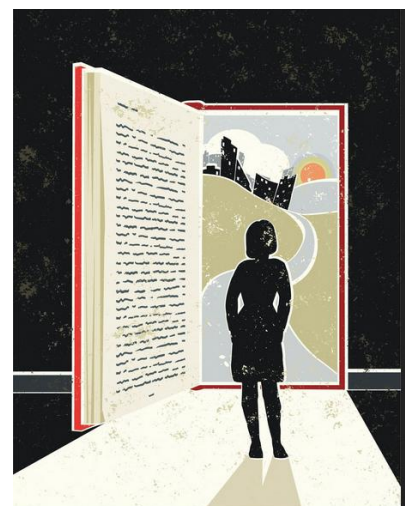
Project leader: Mme Le Gall



4. Viaggio : tra pensieri e parole- Voyage : entre pensée et paroles

The project uses communicative and interactive procedures centred on student participation with discussions and brainstorming on the concept of travel. By reading and analyzing Italian and European travel literature, writing personal reflections and imaginary travel diaries, composing letters and short stories about real or fictional journeys, the students prepare for a four-day educational trip to Milan. They engage in advanced creative writing tasks such as adventure stories and imaginary travel guides and participate in a travel diary competition in collaboration with the European School of Varese.

Project leader : Mrs Raucci (coordinator), Mrs LeGall, Mr Houam



5. Fahrradwerkstatt/Bike Workshop

The project is for students to learn how to make a diagnosis and repair bikes, maintain the school bikes and produce a multilanguage handbook about bike maintenance and repair. To foster mentorship and ensure continuity, they will tutor other pupils once they have acquired the competences.

Project Leader: Mr. Viehmann



6. Fostering sport excellence

Team building, development of new motor skills and extraordinary technical skills in some sports (basketball, frisbee, pickleball, touch rugby, obstacle run), aiming at an overall improved athleticism.

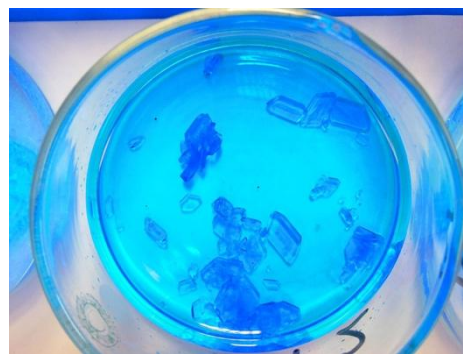
Project leaders : Mr Fastner, Mr Salm, Mr Viehmann



7. **Concours cristallographie du Jardin des sciences de Strasbourg :**

Projet scientifique incluant la chimie, les mathématiques, l'informatique. Les élèves mettent en œuvre une expérience pour faire croître en classe le plus gros et le plus beau cristal à partir d'un sel choisi et en suivant un protocole expérimental.

Project leader: Mme Bach



8. **Olympiades nationales de la chimie :**

Les Olympiades nationales de la chimie incluent un concours scientifique et un concours de communication, ouverts aux élèves de première et de terminale. L'édition 2025-2026 a pour thème la « Chimie Verte ». Elles sont co-organisées par le ministère de l'Éducation nationale français, France Chimie, la Société chimique de France et l'Union des professeurs de physique et de chimie de France. Il s'agit d'un concours expérimental par équipe (deux à six lycéens) qui mènent un projet scientifique, éventuellement en collaboration avec des laboratoires ou entreprises. Participer aux Olympiades nationales de physique représente une plus-value pour un dossier Parcoursup, et les élèves peuvent profiter de stages pratiques offerts par les universités après les présélections.

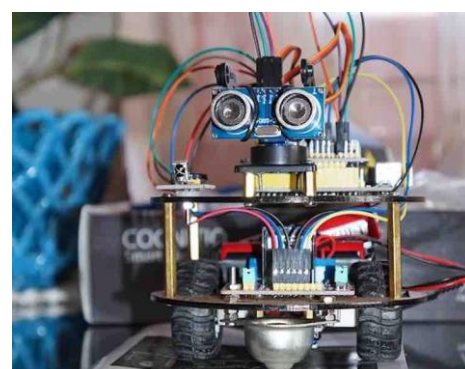
Project leader : Mme Bach



9. **Build a robotic game**

Promoting science and technology education, this project trains pupils to develop an interdisciplinary scientific project approach. In collaboration with a secondary school in Treviso, Italy, pupils invent a game on an innovative topical theme such as global warming or European institutions.

Project leaders : Mr. Möller (coordinator), Mme Bach



10. C génial collège :

Projet scientifique innovant en partenariat avec des entreprises et chercheurs, incluant physique, chimie, technologie, biologie, mathématiques, informatique.

Project leader : Mme Bach



11. 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 and others.

Project Leaders: science teachers in turn.



12. School Band:

Play an instrument, learn practice, record and perform songs in various repertoires. Learn about instrumental advanced techniques, vocals, sound techniques and the organization and production of professional recording and shows. Represent the school at various events/live concerts, strengthen the school community social climate.

Project Leader: Mr. Muller

