

Grade 4 Curriculum Handbook

BBS Vision and Mission

Our vision: A community of ‘vibrant and global thinkers’.

Our mission is to serve the educational needs of the different communities in Berlin within a caring, challenging and inclusive culture. We aim for students to acquire the knowledge, understanding, skills and dispositions that will enable them to grow as life-long learners in a changing world. In addition to their intellectual development we aim for students to be self-confident, respectful, take responsibility for their choices and take action to make our world a better place.

The PYP Framework and Berliner Rahmenlehrplan

The PYP programme offers an international curriculum, which addresses the whole child, catering for children’s academic, social and emotional growth through an inquiry-based approach. The programme at BBS is aligned with the Berliner Rahmenlehrplan (local Berlin state curriculum.) The PYP framework is transdisciplinary and connections are made across curriculum areas in both English and German, where authentic and meaningful.

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Language

In Grade 4, we use the Daily 5 curriculum approach to teach the routines and strategies required for the five pillars of Language Development: Work on Writing, Word Work (spelling), Read to Someone, Listen to Reading, and Read to Self. We incorporate the use of Information Technology into our language learning.

Reading

In Grade 4, we focus on the development of skills to independently select appropriate and varied reading material. We use the Readers' Cafe strategies to develop fluency, accuracy, comprehension and vocabulary. Children should be reading at home regularly and we encourage parents to read and take time to share stories with their children. Children take part in book studies and 'literature circles' throughout the year. They have a Library session each week, and also access to hundreds of online books via the GetEpic website.

Writing

Children have opportunities to write in a range of styles, often in the context of the unit of inquiry. Writing styles explored in Grade 4 include:

- Narrative fiction
- Letter writing
- Script writing and storyboards
- Explanation texts
- Procedural writing
- Persuasive writing
- Poetry

Speaking and Listening

Children have many opportunities to enhance and extend their speaking and listening skills, through discussions, conversations, debates and group and individual presentations.

Viewing and Presenting

Children explore and use a range of tools and techniques to interpret presentations and create their own visual work that is attractively and effectively presented.

Children with English as an Additional Language (EAL) receive support either in class or in small group sessions.

For a fuller breakdown of language learning objectives, please refer to the curriculum documents on the school website.

Digital Literacy

We integrate ICT skills into several facets of language development using platforms such as Seesaw and Google Drive. ICT skills developed in Grade 4 include: scanning for appropriate information online from safe platforms, analyzing and synthesizing the information found and preparing presentations linked to the units of inquiry.

German A

In Anknüpfung an die Bildungsstandards der Kultusministerkonferenz für den Deutschunterricht werden fünf Kompetenzbereiche ausgewiesen, die in vielfältiger Weise miteinander verzahnt sind. In den prozessbezogenen Kompetenzbereichen Sprechen und Zuhören, Schreiben und Lesen werden dabei sowohl produktive als auch rezeptive Kompetenzen ausgewiesen, die – als sprachliche Handlungen und Routinen – sowohl fachbezogen als auch überfachlich bedeutsam sind.

Die fachspezifischen Kompetenzbereiche “Mit Texten und Medien umgehen” und “Sprachwissen und Sprachbewusstheit entwickeln” weisen die Teilgebiete des Faches aus, in denen die prozessbezogenen Kompetenzen im Unterricht erworben werden. Das Curriculum der BBS basiert auf den Vorgaben des Berliner Rahmenlehrplans (ein Link dazu finden Sie auf der schulinternen Website).

Einige der Kompetenzbereiche sind folgende:

Produktion von Texten

In diesem Lernbereich soll sowohl die mündliche als auch die schriftliche Produktion von Texten geübt werden. Handlungs- und produktionsorientierte Verfahren vermitteln hier Einsicht in grundlegende Erzählstrukturen. Die gewonnenen Erkenntnisse und Fertigkeiten fördern eigene Erzähl- und Schreibversuche und helfen bei der Texterschließung, dem Schwerpunkt des Lernbereichs Umgang mit Texten.

Umgang mit Texten

Hier werden verschiedene Textsorten präsentiert und deren Strukturmerkmale untersucht. Es soll die besondere „Machart“ des jeweiligen Textes deutlich werden.

Reflexion über Sprache

Ziel ist es, Einsichten in den Aufbau und das Funktionieren der Sprache zu vermitteln. Abhängig von der Zusammensetzung der Gruppe (Muttersprachler/Nicht-Muttersprachler) werden relevante Probleme der Grammatik/Rechtschreibung in regelmäßig sich wiederholenden Fehleranalysen thematisiert.

Andere Schwerpunkte werden Satz- und Wortlehre sein.

Auszug aus dem Berliner Rahmenplan:

Kompetenzen:

Sprachwissen und Sprachbewusstheit entwickeln - Sprache nutzen und Sprachgebrauch untersuchen - sprachbewusst handeln	Sprechen und Zuhören - zu anderen sprechen - mit anderen sprechen - verstehend zuhören	Mit Texten und Medien umgehen - literarische Texte erschließen - Sach- und Gebrauchstexte erschließen - Texte in anderer medialer Form erschließen
	Schreiben - Schreibfertigkeiten nutzen - richtig schreiben - Schreibstrategien nutzen	
	Lesen - Lesefertigkeiten nutzen - Lesestrategien nutzen - Textverständnis sichern	

Die Themen, anhand derer die Schülerinnen und Schüler diese Inhalte lernen sollen, sind frei wählbar und werden von den Lehrkräften festgelegt. Zum Beispiel ist einer der literarischen Texte, welche von den Deutschlehrern der BBS ausgewählt wurde, "Fritzi war dabei". Dieser passt thematisch in die PYP Unit Government der Klasse 4.

Im Unterricht wird das Lehrmaterial Piri 4 (Klett Verlag) und „Lies mal“ Hefte (Jahndorf Verlag) verwendet.

German B

In Grade 4 the students practise all four of the language skills. They read very short texts with familiar vocabulary. With preparation they answer questions and provide information orally, based on the topic and can write their own short sentences when provided with a model. They acquire and practise the language with the help of key unit vocabulary, short reading texts, videos related to the unit and in group work and role plays.

Unit 1: Wer bin ich, worauf lege ich Wert?

Unit 2: Die Schule und die Freizeit.

Unit 3: die Verkehrsschule, meine Gegend, mein Bezirk und meine Stadt

Unit 4: Mein alltägliches Leben

Unit 5: Meine Gesundheit. beim Arzt und die Notdienste

Unit 6: Deutschland: Ein Projekt über ein Bundesland

Maths


Grade 4 children learn about the following Mathematics topics:

- Place value with numbers up to 100,000
- Addition and subtraction with whole numbers up to five digits
- Recall of multiplication tables up to 10
- Multiplication and division of whole numbers
- Modelling, adding and subtracting fractions with like denominators
- Comparing, modelling, ordering, adding and subtracting decimals
- Interpreting and representing data in tables, graphs, charts and diagrams
- Mean, median and mode averages
- Probability
- 2D and 3D shape
- Measurement
- Time
- Angles
- Coordinates
- Area and perimeter of quadrilaterals
- Capacity
- Pattern and function

Children have access to Mathletics and Espresso (monolingual), or Matific and Anton (bilingual) to practice and consolidate their learning in Maths digitally.

Unit of Inquiry

Children inquire into six transdisciplinary units. Each unit is explored in a block of approximately 6 weeks.

Theme	Who we are	Where we are in place and time	How we express ourselves	How the world works	How we organise ourselves	Sharing the Planet
Unit title	Values and Beliefs	Inventions and Innovations	Visual Arts	Energy	Government	Ecosystems
Central idea	People's values and beliefs can inform the way they lead their lives	Inventions and innovations have changed the way we live today and have implications for the future	The visual arts offer a variety of ways to explore and express ideas and feelings.	Transforming energy from one form to another allows us to use it in different ways	National and local governments have responsibilities to organize and develop their communities. s	Human interaction with the environment can affect the balance of ecosystems.
Lines of inquiry	<p>What we value and believe</p>  <p>How beliefs and values influence how we behave</p> <p>Features of major belief systems</p>	<p>Important inventions through time</p> <p>How inventions impact our lives</p> <p>How human needs lead to a process of invention and innovation</p>	<p>Different forms of art that are used to express ideas and values</p> <p>The design process in creating a piece of art</p> <p>How artists can change how people feel or think</p>	<p>Forms of energy</p> <p>How energy is transferred and transformed</p> <p>The role of energy in everyday life</p>	<p>Different types and forms of government</p> <p>How national and local governments function</p> <p>Government responsibilities</p>	<p>The components of an ecosystem</p> <p>Interdependence and adaptations in ecosystems</p> <p>Factors that affect the balance of an ecosystem</p>
Key concepts	Perspective Connection	Change Function Causation	Form Function Perspective	Form Change Function	Form Function Responsibility	Responsibility Connection Causation
Learner Profile	Open Minded Reflective	Knowledgeable Inquirer	Communicator Reflective	Thinker Inquirer	Principled Open-minded	Caring Principled

Science

Science learning takes place within the context of the units of inquiry. The science strands are:

- Living things
- Earth and space
- Forces and energy
- Materials and matter

In the 'living things' strand, children learn about: the features of and interactions of living things within various ecosystems; food webs; how human activities can have positive or adverse effects on local and other environments; how living things adapt to their environments.

In the 'materials and matter' strand, children investigate which materials are conductors, insulators or resistors

In the 'forces and energy' strand, children learn about different forms of energy; how solar energy sustains ecosystems; how energy can be stored and transformed from one form to another; role of living things in recycling energy and matter; application of scientific understanding through inventions and machines.

In the 'earth in space' strand, children learn about how human use of the earth's resources affects ecosystems.

The science skills developed throughout the PYP science curriculum are:

- Observe carefully in order to gather data
- Use a variety of instruments and tools to measure data accurately
- Use scientific vocabulary to explain their observations and experiences
- Identify or generate a question or problem to be explored
- Plan and carry out systematic investigations, manipulating variables as necessary
- Make and test predictions
- Interpret and evaluate data gathered in order to draw conclusions

Social Studies

Social Studies learning takes place within the context of the units of inquiry. The Social Studies strands are:

- Human systems and economic activities
- Social organization and culture
- Continuity and change through time
- Human and natural environments
- Resources and the environment

In the 'human systems and economic activities' strand, children learn about the elements of major government systems; the process of societal decision making in different systems; responsibilities of governments.

In the 'social organization and culture' strand, children explore their personal beliefs and learn about the similarities and differences between major belief systems.

In the 'continuity and change through time' strand, children learn about past technological advances; the impact of past civilisations on the present day; the impact of present day technology on everyday life; why innovations have changed over time.

In the 'human and natural environments' strand, children learn about how human activities can have positive or negative effects on local and other environments.

In the 'resources and the environment' strand, children learn about the use of our energy use in our everyday lives and threats to different ecosystems from human activity.

The Social Studies skills developed throughout the PYP social studies curriculum are:

- Formulate and ask questions about the past, the future, places and society
- Use and analyse evidence from a variety of historical, geographical and societal sources

- Orientate in relation to place and time
- Identify roles, rights and responsibilities in society
- Assess the accuracy, validity and possible bias of sources

Visual Arts

When creating works of art, children in Grade 4 explore different media and begin to innovate in the visual arts. They consider the feedback from others in improving their work. They recognize that creating in arts provides a sense of accomplishment, not only in the process, but also in providing them with a way to understand the world.

When responding to works of art, learners show an understanding that throughout different cultures, places and times, people have innovated and created new modes in arts. They can analyse different art forms and identify common or recurring themes or issues. They recognize that there are many ways to enjoy and interpret arts. They accept feedback from others.

Children in Grade 4 will further develop their awareness of line, shape, form, colour and tone, texture, pattern and rhythm and space. They do so through a variety of media such as drawing, painting, pastels, clay and construction.

Physical Education

Grade 4 children will reflect and act upon their preferences for physical activities in leisure time. They will understand the interdependence of factors that can affect health and well-being. They will identify realistic goals and strategies to improve personal fitness. They will exhibit effective decision-making processes in the application of skills during physical activity. They will introduce greater complexity and refine movements to improve the quality of a movement sequence. Learners will recognize the importance of moderation in relation to safe personal behaviour.

Grade 4 children cooperate in group and team activities and can take on different roles and responsibilities. They engage in group problem solving and are able to communicate with others in constructive ways. They will further develop and apply the skills needed to play a variety of team games. They will utilize a variety of strategies in team games.

The Physical Education strands are:

- Individual pursuits (athletics, pedometer challenge)
- Movement composition (gymnastics, dance)
- Games
- Adventure challenges (team building)
- Health-related fitness (pedometer challenge)

Music

Grade 4 children will develop musical ideas in composition. They will gain an awareness and appreciation of music in all its forms from a range of times, places and cultures. They will create their own music and perform it to others using increasingly sophisticated instruments. They will arrange other people's music in interesting ways. They will develop ensemble skills. They will continue to develop their understanding of music from different sources and cultures.

The Music strands are:

- Plays from and uses simple notation
- Uses musical language
- Music Theory Knowledge
- Singing in time and tune
- Following the pulse
- Responds to the group when playing in an ensemble
- Playing instruments/ Transfers existing musical knowledge to new instruments
- Fitting different rhythms and melodies together
- Manipulating sound to fit with mood or feeling
- Composes or arranges music according to instructions

Unit	Description
Music of China part 1	Students learn a Chinese style melody using the pentatonic scale and learn to play this on a variety of instruments.
Ukulele covers	Students learn to sing and play a pop song on the ukulele in groups.

Reading Rhythms	Students study note values and work out how to play rhythms. They then learn how to write their own rhythm patterns and combine these with different note positions on the stave, creating melodies.
Music of China part 2	Students work in groups to create their own Chinese style songs. In these songs each student creates lead melodies which are played over cord patterns created by multiple instruments.
Production	Students create their own scripts for their production in Grade 5. They take part in many different drama activities to help them do this.

Personal Social and Health Education

PSHE is the responsibility of all teachers and is interwoven throughout the different curriculum areas as well as being taught in discreet PSHE lessons when appropriate. Our PSHE framework also encompasses the Zones of Regulation programme, which teaches self-regulation, and the Positive Discipline framework which supports the development of essential social skills. There are three PSHE strands:

- **Myself**
Strand units: self-identify; taking care of my body; growing and changing, safety and protection
- **Myself and others**
Strand units: myself and my family; my friends and other people; relating to others; resolving conflict
- **Myself and the wider world**
Strand units: developing citizenship; media education

Information and Communications Technology (ICT)

ICT is not taught as a discrete subject but rather is integrated into the units of inquiry as well as other curriculum areas. With technology, we aim to provide opportunities for students to develop skills identified in the PYP ICT strands: investigating, creating, communicating, collaborating and organising, whilst becoming responsible digital citizens.

Grade 4 students are coached to develop confidence and literacy in the following ICT skill areas: computer science, digital literacy and information technology. This involves understanding and using a variety of technological tools competently and safely, utilizing digital tools to make their learning visible and beginning to sort and solve information related problems using the skills of coding and databases. When creating with ICT, children may make digital storyboards, take photographs and edit them to create video animation, and use Sketchup to design 3D structures and buildings.

Digital Citizenship topics explored through the Common Sense website include:

- Potential online dangers and safety
- Making healthy media choices
- Data protection and privacy
- Playing safely online

Digital tools and platforms used in Grade 4 may include (but are not limited to):

- Language platforms such as GetEpic and Discovery Education
- Maths platforms such as Mathletics, Anton, Matific
- Google Drive, Google Docs, Google Drawings and Google Slides
- Seesaw
- Coding and Robotics (for example using the Lego Robotics materials)