Learning follows a teaching method that shows students how to search for and process information so that they can hypothesise, test their ideas, and then draw conclusions. Learning is both active and constructive, and students are encouraged to give explanations and apply reasoning. The aim of these activities is to develop their competences or experiments. They are implemented throughout Secondary, from the first to fourth year of Secondary Education, taking into account the key competences and the interests and learning capacities of every age group.

Activities involving learning standards are adapted to the new school curriculum and ensure that all the proposed learning about the relationship between science and society, analysing and giving opinions.

Activities revise classification of content, competences and learning standards.

Priority given to the cognitive processes required: conceptual understanding of what they have learnt in various distinct contexts – they make students reflect on their answers while studying.

In the 3Dclass Biology & Geology project available in three formats (online and offline versions). It allows fast access to the content studied. These include:

- EduBook PDI
- Additional activities.
- Assessment criteria
- Content, competences and learning standards
- Curricular proposals, Attention to Diversity and Tests.
- Descriptors
- Learning standards – Key competences
- NAL ASSESSMENT (photocopiable)
- Paper
- Presentation activities: summaries, projects, graphics, problem analysis, etc.
- Reinforcement activities, discovering new areas, studying the environment, presenting scientific work, etc.
- Students acquire knowledge from ICT Activities
- Student’s book (interactive or experiments)
- Surfaces for students to work in pairs
-Aims: reinforcement activities, discovering new areas, studying the environment, presenting scientific work, etc.

EduBook PDI can be adapted to suit the needs of any educational environment. It offers teachers a complete package of educational resource materials for specific use on an Interactive Whiteboard, along with all curricular course material, all of which can be used offline.

Designed for use on a digital whiteboard, it allows fast access to the textbook in digital format, the animations and interactive activities, all of which are user friendly.

EduBook PDI PROVIDES:

- Educational resources for the teacher: Teacher’s book, Curricular proposals, Attention to Diversity and Tests
- Interactive activities: Activities in Interactive Whiteboard format and offline.
- Multimedia gallery: All the images and animations in Interactive Whiteboard format and offline.
- EduBook 3D: Any part of the book can be projected offline.

Key competences

- Information handling and digital competence
- Social and civic competences
- Cognitive competences
- Cultural awareness and expression
- Learning to learn
- Mathematical competence and basic competences in science and technology
- Linguistic communication
- Sense of initiative and enterprising spirit
- Critical thinking and reasoning
- Fundamental competences
Learning follows a smooth transition from the first to fourth year of Secondary Education, taking into account the key competences and the interests and learning capacities of every age group.

B&G shows students how to search for and process information so that they can hypothesise, put forward their opinions and draw conclusions. Learning is both active and constructive.

**Activities involving learning standards**

- **Activities** with the symbol ✔ are designed to evaluate the level of achievement of given learning standards.

**ICT Activities**

- **Expand on the Web**. Multimedia resources are available to round off the topic studied or to provide additional activities.
- Most of the activities can be carried out using the online EduBook3D.

**Project available in three formats**

- **Paper** and EduBook3D (online and offline versions).
Learning follows a smooth transition from the first to fourth year of Secondary Education, taking into account the key competences, and the interests and learning capacities of every age group. 

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Project available in three formats
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SECONDARY EDUCATION

FIRST YEAR

- How do scientists work?

THE EARTH IN THE UNIVERSE
1. The Universe and the Solar System
2. The Earth and the Moon
3. The geosphere: minerals and rocks
4. The atmosphere
5. The hydrosphere

ICT project

THE DIVERSITY OF LIVING THINGS
6. Living things
7. Biodiversity
8. Plants
9. The animal kingdom: invertebrates
10. The animal kingdom: vertebrates

THE STRUCTURE AND PROCESSES OF LIVING THINGS
11. Plant nutrition
12. Animal nutrition
13. Living things interact with their environment
14. Plant reproduction
15. Animal reproduction

THIRD YEAR

PEOPLE AND HEALTH
1. The human body
2. Nutrition and the digestive system
3. The circulatory, respiratory and excretory systems
4. Perception and coordination
5. Perception and movement
6. Human sexual reproduction
7. Health and illness

THE EARTH’S RELIEF AND ITS EVOLUTION
8. Energy inside the Earth
9. External geological agents
10. Ecosystems

RESEARCH PROJECT
Using the scientific method

FOURTH YEAR

EVOLUTION
1. Cells
2. Cells reproduce
3. Heritable traits of biological populations
4. DNA and biotechnology

ECOLOGY AND THE ENVIRONMENT
5. Ecosystems
6. Ecosystem dynamics
7. The impact of human activity on ecosystems

THE EARTH’S STRUCTURE
8. The Earth: a planet that is constantly changing
9. Tectonic plates

RESEARCH PROJECT
Using the scientific method

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EduBook3D. Vicens Vives digital book

With EduBook3D the implementation of ICT in the classroom improves and optimises both teaching and learning processes. EduBook3D allows the natural incorporation of ICT in the classroom thanks to its design:

1. Simple: designed to be user friendly.
2. Versatile: all the contents can be accessed offline.
3. Innovative: automatic synchronisation between online and offline apps
4. Connection: allows access to Tishing and the most used LMS.
5. Traceability studies: allows personalised feedback on the activities carried out by the students.
6. Established: used by more than 762 schools and over 40 000 teachers and students on a daily basis.
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Learning follows a 3Dclass approach. 3Dclass, which is in line with the school curriculum of the new educational materials for Biology & Geology, and the interests and learning capacities of every age group. It shows students how to search for and process information so that they can hypothesise, apply, and ensure that all the proposed activities involving learning standards are implemented throughout Secondary. 

Key competences are indicated: 

- Critical thinking and creativity
- Problem solving
- Communication in different contexts
- Information handling and digital competence
- Social and civic competences
- Sense of initiative and enterprising spirit
- Cultural awareness and expression
- Learning to learn
- Mathematical competence and basic competences in science and technology
-ICT

Activities can incorporate Constructivist activities: summaries, projects, graphics, problem analysis, etc. and Presentation activities: reinforcement activities, discovering new areas, studying the environment, etc. 

Activities revise students’ previous knowledge, while studying, students can give explanations and apply reasoning. ICT Activities can be adapted to suit the needs of any educational environment. It offers teachers a complete package of educational resource materials for specific use on an Interactive Whiteboard, along with all curricular course material, all of which can be used offline.

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