MAPPING OF THE TREATMENT OF 4 GLOBAL CHALLENGES (CLIMATE CHANGE, GENDER INEQUALITIES, GLOBAL INEQUALITIES AND MIGRATION) IN COMPULSORY SECONDARY EDUCATION TEXTBOOKS

CASE STUDY ANDALUSIA (SPAIN)

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Global Education Time

From school curricula to youth actions for sustainable development

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SECTION 1

1.1 Brief description of education textbooks in Andalusia

In Andalusia, compulsory secondary education (ESO) textbooks are not merely "manuals for following a syllabus"; they are regulated as curricular materials within a defined framework. Their use is linked to the LOMLOE curriculum for this stage, developed in Andalusia by Decree 102/2023 and the Order of 30 May 2023, as well as to the specific regulations on the registration, selection, supervision, and free provision of textbooks. In publicly funded schools, they are also part of a public lending system, not an ordinary private purchase.

According to the current definition in Andalusia, a textbook is considered to be curricular material intended for students that fully develops the curriculum of a subject, area, or module. It may be printed or digital. In the case of printed format, it must not include spaces for writing or drawing, because it must be reusable. In digital format, it must be compatible with the equipment used in Andalusian schools and must not depend on third-party licences to access its contents. In addition, it must incorporate support features that allow it to be used without always depending on an external connection.

In Andalusian ESO, the textbook is conceived as reusable material, complete in curricular terms, and technically compatible with the school environment. In Andalusia, no ESO subject is required to use a textbook; schools may replace them with their own curricular materials or shared-use materials, provided that these fully develop the curriculum and are consistent with the school's Educational Project.

Characteristics the contents must have

Andalusian regulations require textbooks to be adapted to a level of scientific rigour appropriate to the students' age and to the curriculum approved by the educational authorities. They must also reflect and promote respect for rights, constitutional and statutory values, equality between women and men, and Andalusian regulations on equality and the prevention of gender-based violence. In addition, they must include content related to values education and, specifically, Andalusian culture. The preamble to Decree 227/2011 expressly states that materials must eliminate cultural prejudice and sexist or discriminatory stereotypes.

Publishing houses are private commercial entities, and they choose the authors of the content, illustrators, and so on. The Regional Ministry does not intervene in the selection of authors or in the preparation of the content, as long as the textbook complies with curricular and legal regulations.

Textbooks are subject to supervision as part of ordinary inspection procedures. They do not require prior authorisation from the Regional Ministry in order to exist or be published, but they must be entered in the Andalusian Textbook Register in order to be used in publicly funded schools. If it is found that a textbook entered in the Register does not meet these criteria, the Regional Government may initiate its removal from the Register. In addition, if it is later found to contain inappropriate or criminal content, it may inform schools that they should avoid using it while the procedure is being resolved.

Selection of textbooks by schools

The textbooks used in Andalusia must be entered in the Andalusian Textbook Register, and for the Free Textbook Programme only those that also appear in the Free Textbook Catalogue may be selected. In public schools, the proposal comes from the subject coordination bodies (departments) and is approved by the School Council.

Current instructions require the teaching staff to define pedagogical criteria beforehand in order to support that proposal, and the Andalusian curriculum order makes it clear that each school specifies the curriculum in

its Educational Project and that the subject teaching programmes form part of that project. Therefore, the textbook must fit the school's pedagogical approach, not the other way around.

Approval must take place before 31 May of the previous school year, and the list of textbooks must be displayed in June. The minimum period of validity of the selected printed textbook is four academic years.

How they must be used in the classroom

The ESO curriculum is not legally organised as a simple sequence of chapters, but rather around specific competences, assessment criteria, basic knowledge, and learning situations. The Andalusian Order requires teaching programmes to specify these elements and to include learning situations that address diversity, effective equality between women and men, and the characteristics of the students. At the national level, ESO also focuses on meaningful learning, autonomy, collaborative work, and education for sustainability, responsible consumption, and critical thinking.

In Andalusia, the textbook is a support tool that helps to structure content, readings, exercises, or resources, but teaching and assessment must be organised on the basis of the department's teaching programme, learning situations, and measures for addressing diversity.

Andalusian regulations require inclusion to be prioritised and envisage collaborative methodologies, projects, and reinforcement and extension measures, which are not necessarily included in textbooks but are instead developed by teachers according to the characteristics of their students or the context. In addition, all schools must guarantee a planned daily reading time of at least 30 minutes throughout the entire stage.

Free Textbook Programme in Andalusia

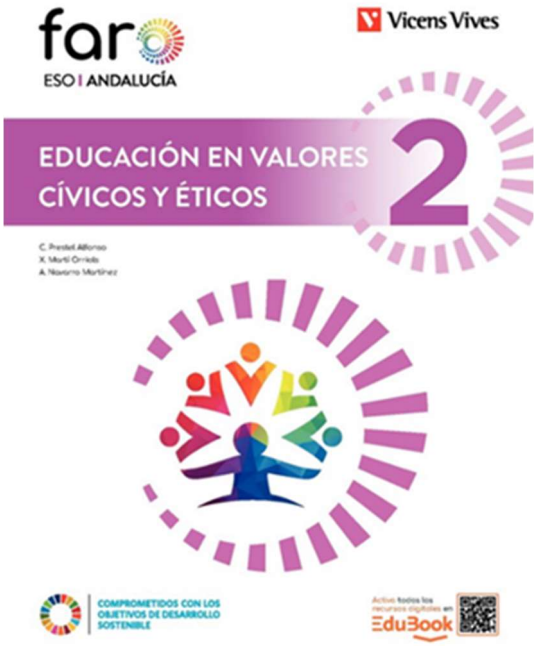
In Andalusia, the Free Textbook Programme covers ESO students enrolled in publicly funded schools, that is, public and state-subsidised private schools. The textbooks are the property of the educational authorities, are lent to students, and remain in the school at the end of the year so that they can be reused for four school years. Students and families must take care of them, return them at the end of the school year or when transferring to another school, and replace copies that are lost or wilfully damaged. By contrast, complementary or consumable materials that cannot be reused are not included and must be paid for by families. In the years when renewal takes place, families receive a textbook voucher that may only be used to obtain the books designated by the school.

Andalusian secondary schools may create specific optional subjects tailored to the interests of their pupils or to their educational programme (for example, Social and Emotional Learning, School Garden and Sustainability, Radio Workshop, etc.), and the teaching materials produced by the school are subject to the same requirement that they be provided free of charge to pupils.

This lending policy also applies, where the school so decides, to any other additional teaching materials produced in-house or for shared use: if they are acquired under the free provision scheme, they become the property of the education authorities and must be reused. The 2025/2026 instructions add that schools should seek to take into account, in their selection, materials transcribed into the Braille system.

SECTION 2

2.1 EDUCATION IN CIVIC AND ETHICAL VALUES.



2.1.1 General description

Textbook audience: Subject: Values, Citizenship and Ethics (Andalusia), 2nd year of Compulsory Secondary Education

Textbook author(s): César Prestel, X Martí, A. Navarro

Title (original and in English): "Educación en valores cívicos y éticos 2. Andalucía (Faro)" / *Education in Civic and Ethical Values 2. Andalusia (Faro)*

Publisher: Vicens Vives

Brief description of the textbook: An educational project designed exclusively for Compulsory Secondary Education (ESO) in Andalusia, aligned with the LOMLOE, which promotes meaningful learning connected to the challenges of today's world. Based on the development of real learning situations, it incorporates Universal Design for Learning (UDL) and a comprehensive, competency-based assessment approach.

Recommended retail price: €23

Brief description of any additional elements: Includes videos, 3D content, maps, and interactive resources on the commercial Edubook platform, which allows use both in the classroom and outside it, with or without an internet connection.

Hyperlink (if available):

https://vicensvives.com/preshop/product/9788411933476/educacion-en-valores-civicos-y-eticos-2-andalucia-faro

2.1.2 Rationale for inclusion

We selected this textbook because the Proyecto Faro textbook series is a benchmark for materials aligned with the Universal Design for Learning (UDL) methodology, which focuses on inclusion by making teaching accessible to all students, personalising learning, and addressing diversity in the classroom. In addition, these textbooks are highly regarded by teachers for their Real Learning Situations, as they use active methodologies that connect ethical and civic values with real-world challenges, fostering critical thinking.

2.1.3 Audit methodology

The audit follows a qualitative, coding-style content analysis, guided by the structure and criteria outlined in the WP3 textbook audit draft template. The methodology applied across the three textbooks comprised three phases:

1. Structural Analysis: This phase involved an examination of the textbook's Table of Contents to map its thematic coverage against the mandated content of the Andalusian curriculum and the four global challenges of the GET project (Climate Change, Gender Inequality, Global Inequalities, and Migration). This mapping enabled the identification of explicit elements, thematic gaps, and potential opportunities for integrating Global Citizenship Education (GCE) concepts within the instructional sequence.
2. Content Analysis: A detailed qualitative review was conducted regarding the depth, complexity, and criticality of the content. Particular attention was given to the ways in which the textbook represented key GCE themes and whether these were framed within broader discourses of justice, learner agency, and systemic analysis.
3. Pedagogical Analysis: The third analytical strand focused on the recommended pedagogical methodologies, assessing the extent to which the proposed activities fostered inquiry-based learning, collaborative engagement, participatory pedagogies, and critical thinking

2.1.4 Alignment - curriculum, GCE pedagogy and GET project big ideas:

2.1.4.1 Alignment with curriculum document(s)

The analysis of the *Foro de Educación en Valores Cívicos* textbook for the 2nd year of Compulsory Secondary Education shows that its structure, content, and methodological approach are fully aligned with the official curriculum established by the Regional Government of Andalusia through the Order of 30 May 2023, which develops the curriculum for Compulsory Secondary Education within the framework of the LOMLOE. The thematic organisation of the book directly matches the blocks of basic knowledge defined for the subject *Education in Civic and Ethical Values*, as well as the specific competences established by the regulations for this stage.

The textbook organises its content around six areas: emotional education, ethical reflection, life in society, human rights, social justice, and an ecosocial perspective. Each of these areas corresponds to the official curriculum blocks. The section devoted to emotional education addresses self-knowledge, emotional management, empathy, and social skills, all of which form part of the block “The person and moral identity.” The chapter focused on ethics develops content relating to values, moral dilemmas, and ethical theories, corresponding to the block “Ethical reflection.” The section devoted to politics addresses democracy, civic participation, and the functioning of institutions, in line with the block “Citizenship and life in society.” Likewise, the treatment of human rights, dignity, equality, and the culture of peace corresponds to the block “Human rights and a culture of peace.” The content relating to social justice is aligned with the

knowledge areas concerning equity, solidarity, and social cohesion, while the final block, focused on the ecosocial perspective, matches the knowledge linked to sustainability, the climate crisis, and environmental responsibility.

From a methodological point of view, the textbook adopts an approach that is fully consistent with the pedagogical principles established by current regulations. The presence of contextualised learning situations, the use of cooperative dynamics, the incorporation of audiovisual resources, the application of thinking routines, and the inclusion of critical analysis activities all respond to the competency-based model that the Regional Government of Andalusia requires for this subject. Likewise, the diversity of proposals — including projects, debates, case analysis, guided reading, and research activities — facilitates formative and continuous assessment, another of the central elements of the current curricular approach.

From a competency-based perspective, the textbook contributes to the development of the five specific competences established by the Andalusian curriculum. Activities on emotional education and social skills promote competence related to personal and moral development. Ethics workshops, debates, and the analysis of dilemmas contribute to ethical reasoning and informed decision-making. The proposals related to democracy and civic participation make it possible to work on the competence linked to democratic coexistence. Activities focused on human rights, equality, and social justice foster civic commitment and the defence of human dignity. Finally, projects related to sustainability and ecological footprint develop ecosocial competence, which is essential within the framework of the LOMLOE.

Taken as a whole, it can be concluded that the *Foro de Educación en Valores Cívicos* textbook is a fully suitable teaching resource for delivering this subject in the 2nd year of ESO in accordance with the Andalusian curriculum. Its thematic coherence, competency-based orientation, and active methodology make it a tool aligned with the educational objectives and pedagogical principles established by the Order of 30 May 2023.

2.1.4.2 GCE pedagogical practice

The textbook analysed supports the pedagogical practices recommended for Global Citizenship Education (GCE) by structuring its teaching approach around learning situations. This approach allows students not only to receive information, but also to act as agents of their own learning by solving challenges linked to real and meaningful contexts. Each unit sets out a practical “challenge,” such as organising a day for peace or drafting digital safety guides, thereby fostering a methodology oriented towards action and engagement with the community.

Likewise, the textbook promotes critical thinking and inquiry, which are key elements of GCE, through regular sections such as “Thinking Routines” and “Ethics Workshops.” These tools encourage reasoned dialogue and in-depth reflection on current dilemmas, such as the ethical challenges of technology, the future of transhumanism, or the quality of democracy. In addition, the Andalusian regulations governing this material explicitly require that its contents promote respect for human rights and the elimination of any cultural prejudice or sexist stereotype.

A “glocal” perspective and sustainability are also fundamental pillars of the book, with units devoted entirely to social justice and global citizenship. The content explicitly incorporates the Sustainable Development Goals (SDGs), linking them to core knowledge on ecosocial interdependence, responsible consumption, and the analysis of ecological footprints. This approach helps students understand the intrinsic connection between local ways of life and their impact on the global environment.

Finally, the resource encourages collaborative work and inclusion, which are essential capacities for active participation in a diverse society. The proposed activities require respectful interaction and collective

decision-making, in line with the guidelines of the Regional Government of Andalusia, which prioritise attention to diversity and the use of cooperative methodologies. Taken as a whole, the material stands as a support tool that places the official curriculum at the service of educating critical, responsible citizens committed to the common good.

2.1.4.3 GET project: 4 global challenges

Climate Change

The analysis of the book *Faro: Education in Civic and Ethical Values 2* shows substantial alignment with the GET project document *Big Ideas Climate Change*, integrating scientific and ethical climate literacy into its section on the ecosocial perspective. The textbook addresses these concepts through a values-based framework that responds to the competences required by educational regulations.

With regard to the study of the causes and processes of the phenomenon, the book develops specific content on exceeding planetary boundaries and the ecosocial perspective. These topics enable students to understand the significance of the climate threat and the human role in the current rise in global temperature. The textbook directly links lifestyles and patterns of consumption to the production of greenhouse gases and industrial development, thus fulfilling the objective of helping students identify the activities responsible for climate change.

As for impacts and climate justice, the book explicitly addresses inequality in a global world and the notion of the Earth as a common good. This approach is key to analysing how climate change disproportionately affects the most vulnerable communities, especially in the Global South. In addition, the textbook's treatment of animal protection is aligned with the need to understand the consequences of global warming for biodiversity and the risk of species extinction. The structure of the content also makes it possible to introduce, in a simple way, the connection between environmental degradation and the phenomenon of climate migration.

Finally, the book covers the area of action and solutions extensively through its "Ethics Workshops" and its links to the Sustainable Development Goals (SDGs). By proposing debates on anthropocentric and biocentric perspectives, the textbook helps students understand the importance of the precautionary principle and the need to adopt mitigation and adaptation measures. Likewise, the book's focus on the active role of the individual and participation in collective action reinforces learning about the personal and community responsibility needed to shape a sustainable future for life on Earth.

Big Ideas: Gender Inequalities

The book *Faro: Education in Civic and Ethical Values 2* shows strong consistency with the the GET project document *Big Ideas Gender Inequalities*, integrating the concepts of identity, roles, and social justice across its units. The textbook enables students to work on the distinction between sex, gender, and gender identity, addressing individual experience and the social construction of femininity and masculinity, as proposed by the reference framework. This approach is especially visible in the book's first unit, devoted to emotional education and self-knowledge, where the foundations are laid for understanding diversity and equality.

With regard to gender roles and norms, the textbook is aligned with the need to explain how these constructions influence people's lives and how they change over time. Through its content on ethics and society, the book helps students identify stereotypes and prejudices, meeting the regulatory requirement to eliminate discriminatory views and promote respect for human dignity. In addition, the fourth unit of the textbook explores the history of rights and feminism in depth, allowing students to learn about the

historical struggles of women such as Mary Wollstonecraft and Sojourner Truth and to understand the deep-rooted causes of present-day inequalities.

The treatment of gender-based violence and power inequalities also occupies an important place in the book, in line with the learning outcomes aimed at defining the vulnerability of women and girls to different forms of violence. The textbook links these problems to the structure of patriarchy and the lack of bodily autonomy in different parts of the world, promoting a critical view of justice and legality. Likewise, the book addresses intersectionality by establishing connections between gender and other forms of discrimination, such as disability or migration, especially in its units devoted to social justice and global citizenship.

Finally, the textbook reinforces the objectives relating to action and equality policies by distinguishing between gender equality and gender equity. By including the Sustainable Development Goals (SDGs), specifically Goal 5 of the 2030 Agenda, the book guides students towards understanding the importance of economic empowerment and equal representation. Through its ethics workshops and learning situations, the resource not only provides theory, but also invites students to become agents of change, aligning itself with the idea that education is the fundamental tool for breaking glass ceilings and ensuring conditions of genuine equality.

Big Ideas: Migration

The book *Faro: Education in Civic and Ethical Values 2* is closely related to the GET project document *Big Ideas Migration*, as it integrates the phenomenon of migration within the frameworks of global justice, human rights, and ecosocial interdependence. The textbook approaches migration not as an isolated event, but as an intrinsic feature of human existence and of today's world, enabling students to understand this process at both local and international level.

With regard to the legal foundations and the causes of displacement, the textbook links the study of human rights and the history of rights with freedom of movement and the right to choose one's place of residence. By dealing with topics such as the nature of society and social structures, the book makes it possible to analyse "pull" and "push" factors, such as the search for safety, employment, or better living conditions in the face of poverty or conflict. In addition, the inclusion of democratic memory and the history of rights in the text helps establish connections between past events — such as processes of colonisation — and contemporary migratory flows towards Europe.

The analysis of the equality gap and climate change as drivers of migration is another key point of convergence. The book devotes specific sections to the global and unequal world, as well as to the ecosocial perspective, which makes it possible to explain how planetary degradation and the lack of resources in the Global South generate environmental migration. The treatment of social justice in the textbook helps students understand the role of remittances and how economic inequality between countries shapes family well-being, aligning with the objective of understanding the economic dimension of migration.

With regard to coexistence in diverse societies, the textbook addresses the construction of identity and the relationship with 'the other' through its content on global citizenship and groups of belonging. The book provides tools for identifying prejudice and discrimination, analysing how media portrayals of immigration in both Andalusian and Spanish media can influence public perception and community cohesion. Furthermore, the inclusion in the text of topics relating to legislation and children's rights helps readers to understand the purpose of local and national laws on equality and the protection of the most vulnerable groups.

Finally, the textbook addresses the risks and ethical challenges of the migratory process, including the fight against inequality and the promotion of a culture of peace. Through its "Ethics Workshops" and its focus on

the Sustainable Development Goals (SDGs), the resource encourages analysis of exploitation and the dangers faced by migrants at the hands of mafias or traffickers. The book also offers a framework for discussing government strategies to control or encourage migration according to their need for qualified personnel, promoting in students a critical and empathetic view of migrants' individual stories.

Big Ideas: Global Inequalities

The book *Faro: Education in Civic and Ethical Values 2* shows coherent alignment with the key concepts in the GET project document *Big Ideas Global Inequalities*, especially through its section on global citizenship and justice. The textbook enables students to understand inequality not only as a difference in income or wealth, but also as a factor that conditions access to basic services and the protection of human rights. By addressing the "global and unequal world" in its fifth unit, the book reflects the objective of analysing how wealth is concentrated in the Global North while a large part of the world's population lives in poverty.

With regard to historical and systemic causes, the textbook provides the necessary context to understand that present-day inequality has deep roots in processes such as European colonisation and the Industrial Revolution. This content makes it possible to explain why the current global economic system often keeps low-income countries in unfavourable trading conditions or trapped in financial debt that is difficult to repay. Moreover, by addressing the nature of society, the book connects with the idea that the concepts of justice and equality are fundamental to human beings, referring to historical movements that have sought to correct these disparities over the centuries.

The book also stands out for the way it interrelates inequality with other global issues such as education, health, and the environment. The textbook highlights the crucial role of education (SDG 4) in raising wage levels and reducing the gender gap in literacy. Likewise, by treating health as a basic right (SDG 3), the text helps to make visible the enormous differences in child mortality between rich and poor countries. The ecosocial perspective of the book's final unit reinforces the idea that countries with fewer resources are the most vulnerable to the effects of climate change, despite being the ones that produce the least CO2.

Finally, the textbook aligns with the section on action and solutions by focusing on the Sustainable Development Goals (SDGs), particularly SDG 10, which is devoted to reducing inequalities. Through its learning proposals, the book promotes knowledge of civil society initiatives such as Fair Trade or campaigns for the cancellation of external debt, which have achieved significant progress in international equity. The resource empowers students by showing that individual and collective actions are essential for making a global difference and moving towards a world in which the well-being of the community takes precedence over exclusive economic growth.

2.2. GEOGRAPHY AND HISTORY



2.2.1. General description

Textbook audience: Geography and History, 4th Year of Compulsory Secondary Education

Textbook author(s): Algaida Editores S.A.

Title (original and in English): *Geografía e Historia 4.º ESO / Geography and History, 4th Year of Compulsory Secondary Education*

Publisher: Algaida

Brief description of the textbook: It covers contemporary history, the current geopolitical configuration, and the study of Andalusian geography and heritage. It is characterised by a competency-based approach and incorporates texts, maps, images, graphs, and activities for competency assessment.

Recommended retail price: 42€

Brief description of any additional elements: It offers a digital version of the textbook with interactive content, self-correcting activities, and offline access, available mainly through its Algaida+ and Blinklearning platforms.

Hyperlink (if available):

https://www.algaida.es/catalogo/secundaria/geografia-e-historia-4o-eso-9788491898047

2.2.2 Rationale for inclusion

Algaida is a leading publisher in the educational and literary field in Andalusia, especially because of its deep knowledge of and respect for Andalusian culture and heritage.

We selected this textbook because it is a key resource, it has been updated in accordance with LOMLOE regulations and is specifically tailored to the Autonomous Community of Andalusia, which facilitates contextualised learning of local geography and history. In addition, the syllabus focuses on the development of historical content related to the twentieth century, geopolitics, and the contemporary world, thereby providing the broad perspective required in the fourth year of Compulsory Secondary Education.

2.2.3 Audit methodology

See Education in Civic and Ethical Values.

2.2.4 Alignment - curriculum, GCE pedagogy and GET project big ideas:

2.2.4.1 Alignment with curriculum document(s)

The *Geography and History* textbook for the 4th year of Compulsory Secondary Education (ESO), published by Algaida, is fully aligned with the official curriculum of the Regional Government of Andalusia, as regulated by the Order of 30 May 2023. The structure of the book, organised into twelve teaching units, provides comprehensive coverage of the core knowledge on contemporary history required for this year group, from the crisis of the Ancien Régime to the challenges of the twenty-first century. This alignment can be seen in its treatment of key processes such as the liberal revolutions, industrialisation, imperialism, and the major world conflicts, all of which the Andalusian curriculum establishes as essential for understanding the transformation of human beings from servitude to citizenship and the origin of liberal systems.

The content of the book specifically incorporates Andalusian identity and culture, fulfilling the regulatory requirement to contextualise learning within the regional reality. The textbook includes dedicated sections on nineteenth-century Andalusia, the Restoration period in the region, and the process through which Andalusia achieved autonomy. In addition, the inclusion of topics on democratic memory and a final project on the Civil War in Andalusia directly addresses the compulsory knowledge relating to the painful historical experiences of the recent past, as well as the recognition and reparation of victims.

From a methodological point of view, the textbook adopts the strategic focus of the Andalusian curriculum: competency-based learning and learning situations. Each unit presents a “Featured Practice” linked to a “Final Product,” enabling students to act as agents of their own learning through meaningful and creative tasks. Examples include writing a Wikipedia article, composing a song in defence of the environment, designing a poster about fast fashion, or producing a news bulletin on current affairs — activities that promote cooperative work and problem-solving in real contexts.

Finally, the book reinforces the area of local and global civic engagement and the media literacy required by Andalusian regulations. Through its activities on propaganda, fake news, and the use of social media as a source of information, the material trains students in the critical use of sources and in identifying disinformation. Likewise, the connection between the content and the Sustainable Development Goals (SDGs), together with the analysis of the current ecological and civilisational crisis, ensures that students develop a critical and responsible perspective on present-day challenges. Taken as a whole, Algaida’s material stands out as a support tool that is fully consistent with the teaching programme and the pedagogical principles established by the educational authorities.

2.2.4.2 GCE pedagogical practice

The *Geography and History* textbook for the 4th year of Compulsory Secondary Education (ESO), published by Algaida, shows strong alignment with the principles of Global Citizenship Education (GCE) described in the curriculum, especially through its focus on active methodologies and social engagement.

The textbook systematically implements project-based learning (PBL), since each unit concludes with a "Final Product" that invites students to move from theory to action. Examples include creating a campaign to support refugees, producing a podcast on current conflicts, or preparing a news bulletin — activities that allow students to "develop their voice" and propose solutions to real problems.

The promotion of historical and geographical thinking is structured through the "Featured Practices," which focus on the critical analysis of primary and secondary sources such as texts, maps, photographs, and film. The book consistently encourages the analysis of current issues from a historical perspective, thus fulfilling the curriculum's aim of fostering reflection. This can be seen in activities that compare labour conditions during the Industrial Revolution with today's "fast fashion," or in the study of fake news and propaganda in contrast with factual information, thereby reinforcing media literacy and critical thinking.

In relation to cross-curricular approaches and civic engagement, the textbook explicitly incorporates the Sustainable Development Goals (SDGs) and ecosocial awareness. It proposes tasks such as calculating one's ecological footprint or creating songs in defence of the environment. Likewise, the book gives a prominent role to gender equality by analysing bias in digital encyclopaedias, examining the role of women in war, or creating timelines on progress in equal rights, which fully aligns with the values of GCE.

Finally, the textbook promotes community participation and the use of digital tools for civic action. Writing articles for Wikipedia, preparing digital presentations to strengthen democracy, or designing roll-up banners to encourage electoral participation all position the student as an active and responsible citizen. By addressing sensitive issues such as democratic memory, the Israeli-Palestinian conflict, and the civilisational crisis, the book ensures that learning goes beyond the classroom and becomes a tool for analysis and action in both the global and local environment.

2.2.4.3 GET project: 4 global challenges

Climate Change

The analysis of the *Geography and History* textbook for the 4th year of Compulsory Secondary Education reveals a direct connection with the GET project document *Big Ideas on Climate Change*. The textbook uses historical and geographical narrative to address the climate crisis not as an isolated event, but as a systemic consequence of human development.

The textbook explains clearly that current climate change involves a long-term rise in global temperature that threatens the sustainability of civilization and the survival of a great number of species. By incorporating international targets, the material helps students understand that the 1.5-degree limit is a prudent goal in the face of a rate of change that exceeds earlier scientific forecasts.

As regards the origins of the crisis, the book's contents reflect the scientific consensus of over 99% on the human cause of the phenomenon. It addresses the term *Anthropocene* to describe the historical moment in which human beings are causing severe biophysical impacts on the planet. The textbook encourages understanding that activities such as the burning of fossil fuels and soil degradation are the main drivers of warming, stressing that the protection of nature is essential in order to reverse this trend.

The book also successfully links consumption patterns with the physical processes of climate change. It explains how carbon dioxide, methane, and nitrous oxide trap heat at the Earth's surface, connecting these emissions with a lifestyle based on the plundering of natural resources. This approach allows students to analyse the relationship between the historical industrial development of Minority World countries and the current climate crisis, providing solid arguments about who should assume responsibility for accumulated emissions.

With regard to impacts, the textbook details environmental consequences such as ocean acidification, sea-level rise, and extreme weather events. It emphasises that climate change disproportionately affects the most vulnerable communities in the Global South, where millions of people are already suffering climate-related disasters. The book also introduces the concept of climate migrants, people displaced by crop failures and environmental hazards who currently do not enjoy the legal protection of the Refugee Convention.

The response strategies proposed in the book are aligned with the need to adopt a precautionary principle in the face of catastrophic tipping points. Students learn to distinguish between mitigation actions, such as reducing consumption and using renewable energy, and adaptation actions, such as building resilient infrastructure. By promoting reflection on the importance of individual and collective action, the material equips students with tools to participate in the global struggle for a resilient and sustainable future on Earth.

Besides, the book responds to the learning outcome that requires students to describe the relationship between past industrial development and current climate change. This is addressed specifically in Unit 3, which deals with the Industrial Revolution and capitalism. It includes a featured activity on "working conditions in textile factories yesterday and today," enabling students to understand how the production model that began in the nineteenth century lies at the origin of the increase in greenhouse gases.

As regards the relationship between consumption patterns and climate change, the textbook presents very practical content. The final product of Unit 3, consisting of a "poster on fast fashion," is aligned with the need to understand how excessive consumption of goods drives global warming. This idea is reinforced in Unit 12, where students carry out an "ecological footprint calculation" activity, thus fulfilling the goal of raising awareness about individual impact and the life cycle of products.

With regard to consequences and climate migration, the book connects historical processes with current challenges. Unit 9 proposes an activity on "refugees after the Second World War and today" together with an aid campaign, allowing students to describe the connection between environmental crises and human displacement, as suggested in the *Big Ideas* document when it refers to climate migrants. In addition, Unit 12 explicitly addresses the "ecological and civilisational crisis," providing the necessary context for students to understand the scale of the threat to life on Earth.

Finally, the book encourages civic engagement and collective action. From Unit 2, with a final product consisting of a "song in defence of the environment," to Unit 12, which culminates in a "news bulletin on current issues," the textbook encourages students to become agents of change. These activities respond to the learning objectives concerning the importance of civic participation and the understanding that the present actions of the global community will determine the future of life on the planet.

Big Ideas: Gender Inequalities

The analysis of the *Geography and History* textbook for the 4th year of Compulsory Secondary Education reveals strong coherence with the GET project document *Big Ideas on Gender Inequalities*. The textbook

uses the historical context to help students understand how gender norms and roles are social constructs that have varied over time, making it possible to explain the roots of current inequalities.

In relation to concepts of gender, roles, and stereotypes, the book addresses these issues early on and in a critical manner. In Unit 1, it includes a featured activity on "gender bias in online encyclopaedias," which allows students to identify the factors that shape gender norms and how stereotypes are created that render women invisible in history. Likewise, Unit 4 devotes a specific section to "Spanish society". The role of women" during the nineteenth century, which helps students understand how traditional roles assigned power to men in both the political and private spheres, a central feature of the patriarchal system.

With regard to the struggle for rights and changes in social norms, the textbook is aligned with the need to explain how these transformations are driven by the actions of groups and individuals. The final product of Unit 4, a roll-up banner on the "right to vote," responds directly to the learning outcome concerning knowledge of women who fought for equality, such as Mary Wollstonecraft or the suffragette movement. In addition, Unit 5 analyses the role of "women in the First World War," a factor that the *Big Ideas* document identifies as decisive for access to voting rights and for changes in gender norms in Europe.

The book also meets the objective of helping students understand gender equality as an ongoing historical process. The final product of Unit 5 consists of creating a "timeline on progress in gender equality," enabling students to visualise the evolution from legal discrimination to current equity policies. This approach is reinforced in the final units (11 and 12), which address "society and culture in recent decades" and "social movements in a globalised world," ideal frameworks for discussing contemporary feminisms, the 2030 Agenda, and Sustainable Development Goal 5.

Finally, the textbook provides tools to analyse gender-based violence and discrimination from a critical perspective. The study of repression during the Franco regime in Unit 11 and the analysis of the "ecological and civilisational crisis" in Unit 12 offer contexts for discussing women's vulnerability and the intersectionality of discrimination. By proposing products such as the biography of an important figure in democracy, the book encourages recognition of women as subjects of rights and as agents of change, as required by the Global Citizenship framework.

Big Ideas: Migration

The *Geography and History* textbook is aligned with the GET project document *Big Ideas on Migration* by presenting this phenomenon as an intrinsic feature of human existence and an ongoing global process. Through its content on imperialism and the colonisation of Africa and Asia in Unit 5, the book enables students to understand the connection between past events and contemporary migration towards Europe.

With regard to the causes of migration, the book addresses "pull" and "push" factors through the study of historical and current conflicts. For example, the units devoted to the Second World War and the Cold War facilitate understanding of how violence, persecution, and political factors force people to become refugees. In addition, Unit 9 includes a specific activity on historical and present-day refugees, culminating in a campaign to support an organisation that works directly with refugees, aimed at fostering empathy towards the stories of migrants.

The book also responds to the need to analyse the equality gap and climate change as drivers of migration. In Unit 12, it addresses the ecological and civilisational crisis, while the "cartographic appendix" provides data on GDP by country and population density, which are necessary tools for helping students become aware that migration from the Global South is a consequence of global inequality. These resources make it possible to explain the role of remittances in the development of countries of origin. Whilst the book focuses primarily on migration to Western Europe, it does not address the global significance of migration

and internally displaced persons within countries of the Global South, which could reinforce the idea that Europe is being 'invaded'.

With regard to the effects on host societies, the book trains students to identify prejudice and develop media literacy. Through the analysis of fake news, propaganda, and the use of social media as a source of information, the book helps explain how immigration can be distorted by the media and exploited by political parties. This is essential for addressing issues such as fear of "the other" and the fostering of racism in communities that struggle to adapt to diversity.

Finally, the book facilitates understanding of culturally diverse societies and of governments' attempts to control or encourage migration according to their need for qualified personnel. By addressing social movements in a globalised world and the consolidation of democracy, the book provides the context for discussing equality legislation and integration strategies that protect the rights of migrants.

Big Ideas: Global Inequalities

The *Geography and History* textbook has a close relationship with the the GET project document *Big Ideas on Global Inequalities*, enabling students to understand that inequality is not merely a difference in income or wealth, but a reality that conditions access to basic services and the protection of human rights. Through its "cartographic appendix," which includes maps on GDP by country and population density, the book makes it easier to identify the current gaps between the Global North and the Global South, where rich countries control most of the world's wealth despite representing a minority of the population.

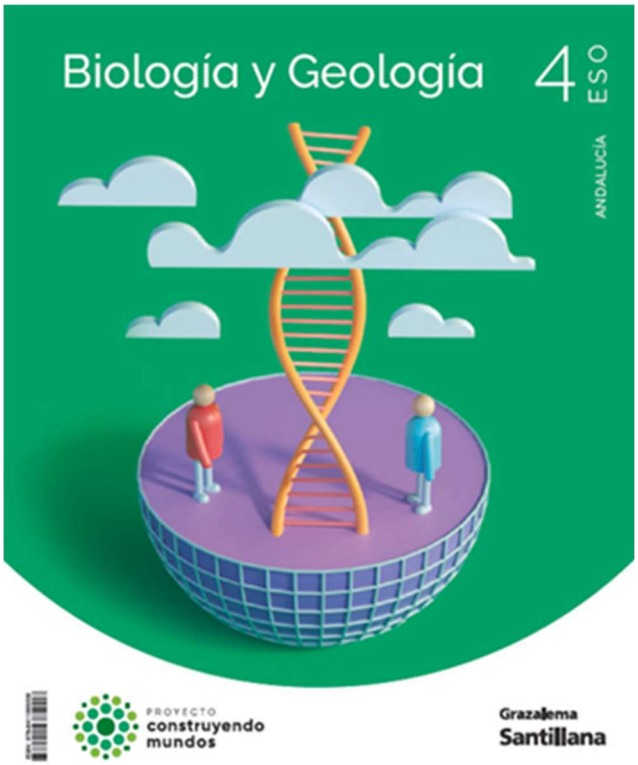
With regard to the historical roots of inequality, the book responds directly to the premise that the current situation derives from processes such as European colonisation and the Industrial Revolution. In Unit 3, by dealing with industrial capitalism and working conditions, and in Unit 5, by analysing imperialism and the conquest of Africa and Asia, the book explains how trade and financial systems were established that favoured industrialised countries while trapping low-income nations in disadvantageous conditions. This historical approach enables students to understand why international inequality increased drastically during these periods.

The book also addresses the interrelationship between inequality and other global problems such as poverty, education, and health. While the *Big Ideas* point out that millions of people live in extreme poverty, earning less than is necessary to cover basic needs, the book analyses in Unit 12 social movements and the characteristics of the contemporary world. In addition, the treatment of compulsory education and suffrage in Unit 4 is aligned with the objective of understanding that education is crucial to reducing the poverty gap and the gender divide.

The connection between inequality and the environment is another significant point of convergence. In Unit 12, the book addresses the "ecological and civilisational crisis" and proposes an activity on the "calculation of the ecological footprint," which reflects how consumer demand in unequal societies generates higher carbon emissions and affects poor countries more severely, as they have fewer resources to adapt. Likewise, the activity on present-day refugees in Unit 9 makes it possible to discuss how climate and conflict increase food insecurity and poverty.

Finally, the book encourages civic engagement and the search for solutions aligned with the Sustainable Development Goals (SDGs), especially SDG 10 on reducing inequalities. By studying the role of the United Nations and its challenges in Unit 10, and by proposing a news bulletin on current issues in Unit 12, the book equips students to identify collective and individual actions, such as fair trade or the defence of education, which are essential for making a global difference and moving towards a more just society.

2.3. BIOLOGY AND GEOLOGY



2.3.1 General description

Textbook audience: Biology and Geology, 4th Year of Compulsory Secondary Education .

Textbook author(s): Martínez Orozco, J. M.; Esteban Benito, M. J.; and García Martínez, M.

Title (original and in English): Biología y Geología 4.º ESO – Andalucía (Proyecto Construyendo Mundos)/ *Biology and Geology, 4th Year of Compulsory Secondary Education – Andalusia* (*Building Worlds Project*

Publisher: Santillana Educación, S.L.

Brief description of the textbook: This is an educational resource focuses on real-life learning situations, promoting meaningful learning, sustainability, and a connection to current challenges, and is specifically designed for the Andalusian context. It is based on the development of key competencies through learning situations and adapted to Andalusia's educational regulations and realities. It stands out for its methodology based on the active construction of knowledge by the student (building worlds).

Recommended retail price: 40€

Brief description of any additional elements: Students are provided with textbooks divided by term, the workbook *Scientific Advances of the 21st Century*, and access to the interactive *Libromedia* platform with videos and activities. Teachers, in turn, have access to specific resources on the *e-vocación* platform.

2.3.2 Rationale for inclusion

We selected this textbook because it is one of the most widely requested by schools, as it is a valuable teaching resource that combines curriculum alignment, active methodology, critical thinking, social relevance, and substantial practical support for both teaching and learning. It includes sections designed to analyse misinformation, fake news, and myths, as well as activities based on the analysis of current news stories.

2.3.3 Audit methodology

See Education in Civic and Ethical Values.

2.3.4 Alignment - curriculum, GCE pedagogy and GET project big ideas:

2.3.4.1 Alignment with curriculum document(s)

The textbook *Biology and Geology, 4th Year of Compulsory Secondary Education – Andalusia* (*Building Worlds Project, Grazalema Santillana*) shows full and systematic correspondence with the official curriculum established by the Regional Government of Andalusia in the Order of 30 May 2023. This alignment is reflected both in the organisation of the blocks of core knowledge and in the adoption of a pedagogical model based on competences and learning situations that place the student as an active agent.

With regard to the core knowledge, the book's eleven units comprehensively cover the curriculum blocks required for the fourth year of this stage. The textbook integrates the Scientific Project block both transversally and specifically at the outset, addressing the scientific method and laboratory work. The contents on geography and astronomy are developed in Units 1 to 5, covering the blocks *The Earth in the Universe* (origin of the solar system and astrobiology) and *Geology* (plate tectonics, geological hazards, and the history of the Earth). The study of life, meanwhile, is organised in Units 6 to 10, fulfilling the blocks *The Cell* (cell theory, mitosis, and meiosis) and *Genetics and Evolution* (Mendel's laws, genetic engineering, and evolutionary theories). Finally, Unit 11 addresses the block *Environment and Sustainability*, analysing environmental impacts and waste management.

From a methodological perspective, the textbook complies with the regulatory requirement to implement Learning Situations (LS) in each unit. These practical proposals are linked to the Sustainable Development Goals (SDGs) and invite students to solve real-life challenges, such as collaborating in campaigns to protect the night sky or carrying out environmental audits in their local area. This approach enables the development of Specific Competence 5, aimed at promoting sustainable habits and the critical analysis of health and the environment from the Andalusian context. Likewise, the book fosters Specific Competence 3 through "Scientific Procedures" that train students in planning investigations and carrying out laboratory experiments. In addition, it reinforces the critical attitude and scientific literacy required by Specific Competence 2 through sections that encourage students to contrast information about pseudosciences, hoaxes, and conspiracy theories, such as debates on UFOs or water diviners, fostering sceptical thinking grounded in evidence.

A distinctive feature of the book is its grounding in the reality of Andalusia, in accordance with the requirement to apply knowledge to the regional context. The textbook proposes activities focused on Andalusian geological heritage, the analysis of natural hazards specific to the region, and the study of local biodiversity.

In conclusion, the Santillana material analysed not only respects the thematic sequence established in the *BOJA* (Official Gazette of the Regional Government of Andalusia), but also fully adopts the pedagogical

principles of the LOMLOE in Andalusia, facilitating the acquisition of the key competences by the end of compulsory basic education.

2.3.4.2 GCE pedagogical practice

The *Biology and Geology* textbook is deeply aligned with the methodologies of Global Citizenship Education (GCE), promoting active and participatory learning that fosters curiosity and scientific literacy. This relationship is expressed mainly through the Learning Situations (LS) included in each unit, which act as project-based learning frameworks through which students develop knowledge by means of observation and research. Clear examples include carrying out an environmental audit in the student's local area or designing activities on geodiversity, tasks that foster a creative and enterprising scientific culture.

The promotion of critical thinking and the rigorous evaluation of sources, both fundamental pillars of GCE, is developed in the book through sections entitled "Critical Attitude." In these sections, students are invited to distinguish between reliable and unreliable sources when addressing topics such as the existence of UFOs, the alleged ability of water diviners to find water, or myths about genetics. This approach ensures that students do not simply consume information, but evaluate it with scientific rigour, developing an independent and reflective voice.

The book's methodology encourages teamwork and experimentation, connecting science with everyday reality and the students' own experiences. Through the "Scientific Procedures" sections, it proposes practical activities such as extracting DNA from fruit, solving genetic problems based on the *Harry Potter* family, or using plasticine models to understand geological folds. These interdisciplinary learning situations enable greater application of acquired knowledge and promote effective communication and solidarity among students.

Finally, the book incorporates a cross-curricular approach to sustainability and environmental education, aligning with the principles of GCE by addressing the impact of human actions on the planet. Each unit is linked to specific Sustainable Development Goal (SDG) targets, such as nature protection (SDG 12), responsible consumption, or climate action. Activities such as calculating one's ecological footprint or producing guides for sustainable visits to natural spaces allow students to make informed and responsible decisions in their daily lives, becoming global citizens committed to the ecological transition.

2.3.4.3 GET project: global challenges

Big Ideas: Climate Change

The *Biology and Geology* textbook shows a direct and effective connection with the GET project document *Big Ideas on Climate Change*. This relationship is articulated mainly through Unit 11, devoted entirely to "Environment and Sustainable Development," and through cross-curricular sections on critical thinking and learning situations.

With regard to the human role and the causes of climate change, the book responds to the objective of ensuring that students understand the scientific consensus on the influence of human activities. The textbook addresses core knowledge such as "human pressure and environmental degradation" and "pollution" in its final unit. In addition, the "Critical Attitude" section in Unit 2 raises the question "Is plate tectonics responsible for climate change?", enabling students to contrast natural factors with the impact of the Anthropocene and fossil fuels, thereby reinforcing understanding of the anthropogenic origin of the current crisis.

Regarding the relationship between consumption patterns and greenhouse gases, the book incorporates practical procedures that fulfil the learning outcomes related to describing how what we consume

generates emissions. The textbook includes a specific activity in which students "calculate their ecological footprint," allowing them to link individual lifestyles with CO2 production and the use of natural resources. Likewise, the contents on "responsible consumption" and "sustainable development" in Unit 11 facilitate discussion of the economic system that encourages excessive consumption of goods and energy.

As for the consequences and global impacts, the book addresses the need to identify the effects of climate change on people, animals, and plants. Its contents on "environmental degradation" and "natural resources and their overexploitation" provide the framework for explaining why certain places, such as the Global South, are more vulnerable to extreme climate events and biodiversity loss. Although the index does not explicitly mention the term "climate migrant," its focus on the ecological crisis and climate action (SDG 13) lays the groundwork for analysing human displacement resulting from the uninhabitability of territories.

Finally, the book is aligned with the learning outcomes relating to action and civic engagement. The learning situation in Unit 11, entitled "Think globally, act locally," invites students to carry out an environmental audit of their local area, fulfilling the objective that students identify both collective and individual actions to curb climate change. By working with SDG targets (such as 13.3 and 12.8), the textbook encourages students to understand that their present decisions will determine the future of life on Earth and the resilience of their communities.

Big Ideas: Gender Inequalities

The *Biology and Geology* textbook shows clear alignment with the GET Project document *Big Ideas on Gender Inequalities* by integrating scientific concepts with a critical social perspective. First of all, the book helps distinguish between sex, gender, and gender identity, which is a fundamental objective of the reference document. Through Unit 8, which deals with the "genetics of sex" and human inheritance, students can understand that biological sex is a medical and physiological classification, whereas gender and associated roles are dynamic social and cultural constructions. This approach makes it possible to explain that, although sex is assigned at birth, gender identity corresponds to an internal and individual experience that may be fluid.

Likewise, the book provides tools to identify and question the stereotypes and gender norms that limit people's development. The "Critical Attitude" section in Unit 8, entitled "Myths of Genetics," is an ideal space for analysing how prejudices are created around supposedly "natural" abilities that are, in reality, usually patterns of behaviour learned and transmitted by culture. By addressing these preconceived ideas, students can explain how stereotypes negatively affect personal and professional pathways, perpetuating a system in which men have historically exercised authority in the political and economic spheres.

The visibility of women in science and their historical struggle for equality is another important point of convergence. The book begins with a section on the "Great figures of science," which allows recognition of women who challenged patriarchal barriers in order to gain access to education and professional recognition. This content is aligned with the need to understand that current rights are the result of the demands of women such as Christine de Pizan or Mary Wollstonecraft, and that feminisms are essential movements for analysing the deep-rooted causes of inequalities and promoting real change towards social justice.

On the other hand, the book distinguishes between the concepts of gender equality and gender equity through its learning situations. In Unit 7, under the title "Equal but Different," SDG 10 on reducing inequalities is addressed, helping students understand that equity is the necessary means — through laws and policies that compensate for historical disadvantages — to achieve the final result of equal opportunities and rights. This practical approach makes it possible to justify the need for positive action in

order to break "glass ceilings" and ensure that all people can participate in their communities without barriers based on gender.

Finally, the book fosters a global and responsible outlook aligned with the 2030 Agenda and civic engagement. Through learning situations such as "Think globally, act locally" in Unit 11, students are encouraged to make informed decisions and to analyse how gender discrimination can interact with other factors such as poverty or origin, a concept known as intersectionality. By connecting scientific knowledge with the Sustainable Development Goals, Santillana's material prepares students to become agents of change and defenders of human rights in a world that still faces serious challenges of violence and power inequality.

Big Ideas: Migration

The *Biology and Geology* textbook is significantly related to the the GET project document *Big Ideas on Migration* by providing the scientific context needed to understand human mobility as a biological, evolutionary, and environmental process. Through the study of human evolution in Unit 10, the book enables students to understand that migration is an intrinsic feature of human existence and that all modern humans share a common origin. This biological approach reinforces the idea that migration has always been a fundamental behaviour for the survival and adaptation of our species.

In relation to the drivers of migration, the book responds directly to the connection between the environment and population displacement. The *Big Ideas* document identifies climate change as one of the main drivers forcing families to migrate because of food shortages or natural disasters. The book addresses this reality in Unit 11, where it analyses "human pressure and environmental degradation," climate change, and the overexploitation of resources. These contents enable students to explain how the current ecological crisis generates "climate migrants," thus fulfilling the objective of understanding the predicted scale of environmentally driven migration.

The global equality gap is another important point of convergence. While the sources point out that migration from the "Third World to the First World" is a consequence of existing inequality, the book addresses this concept in the learning situation in Unit 7, entitled "Equal but Different," which is linked to SDG 10 (Reducing Inequalities). This pedagogical framework makes it easier for students to discuss how economic and social disparities between countries create migratory flows and how actions such as remittances can support development and reduce that gap.

The book also contributes to media literacy and critical thinking, both of which are necessary to combat the misrepresentation of immigration in the media. The *Big Ideas* document warns that emotional or negative representations of immigrants can fuel racism and fear of "the other." The book trains students to face these challenges through its "Critical Attitude" sections, where they are taught to evaluate sources rigorously and to distinguish between scientific information and pseudoscience or myths. This analytical capacity is essential for students to identify when migration is being politically exploited through disinformation.

Finally, the book promotes civic engagement and empathy in the face of humanitarian crises. By addressing topics such as biodiversity and sustainability in learning situations like "Think globally, act locally," the material fosters an ethic of care and responsibility towards the planet and its inhabitants. Although the book focuses on biology and geology, its approach to sustainable development and climate action (SDG 13) prepares students to make informed decisions and to defend the rights to freedom of movement and residence established in the Universal Declaration of Human Rights.

Big Ideas: Global Inequalities

The *Biology and Geology* textbook is connected to the GET project document *Big Ideas on Global Inequalities* mainly through its focus on the Sustainable Development Goals (SDGs) and the analysis of the ecosocial crisis. The book uses Learning Situations (LS) to help students understand that inequality is not just a difference in income, but a reality that affects access to opportunities and basic services. This alignment is explicit in Unit 7, where the learning situation "Equal but Different" is directly associated with SDG Target 10.2, whose central aim is to reduce inequalities.

As regards the connection between inequality and environmental problems, the book responds comprehensively in Unit 11. While the *Big Ideas* document points out that poor countries are more vulnerable to climate change and have fewer resources to adapt, the book addresses core knowledge such as "human pressure and environmental degradation" and the "overexploitation of resources." Through the activity to "calculate the ecological footprint," students can explain how consumer demand in developed societies impacts the global environment, exacerbating the gap between rich and poor.

The book also promotes understanding of sustainable development and responsible consumption as tools for combating international inequality. The reference document explains that the current economic system often traps low-income countries in unfavourable trading conditions, where they export cheap raw materials and import expensive products. The book addresses these challenges in its final unit, promoting the "transformation of economic sectors" and sustainable development, which allows students to identify actions to reduce the impact of economic and social inequality.

Finally, the book strengthens individual commitment and collective action to make a global difference, fulfilling one of the key learning outcomes of the *Big Ideas*. The learning situation in Unit 11, "Think globally, act locally," invites students to carry out an environmental audit in their own locality, encouraging them to make informed and responsible decisions in their daily lives. By integrating scientific literacy and critical analysis of information, the book prepares students to participate in movements that seek less unequal societies and greater respect for basic human rights.

SECTION 3

3.1 Main findings

The analysis carried out shows that, in Andalusia, lower secondary education textbooks are understood and regulated as curricular materials integrated within a precise regulatory framework, linked to the LOMLOE curriculum, to schools' textbook selection criteria, and to the public system of lending and reuse. In this context, the textbook does not replace teaching programmes or learning situations, but rather functions as a support resource that must be consistent with each school's Educational Project.

In the three textbooks analysed — *Education in Civic and Ethical Values*, *Geography and History*, and *Biology and Geology* — there is clear and consistent alignment with the official Andalusian curriculum. This correspondence can be seen both in the organisation of the core knowledge and in the treatment of specific competences, assessment criteria, and the inclusion of learning situations. Taken together, these materials respond appropriately to the competency-based approach established by Andalusian regulations.

Likewise, all three textbooks show a significant integration of the pedagogical approaches associated with Global Citizenship Education. Repeatedly, the textbooks incorporate active methodologies, project- or challenge-based learning, cooperative work, ethical reflection, analysis of contemporary issues, and proposals aimed at student participation. This indicates that the materials do not merely transmit content, but also promote the development of critical, deliberative, and socially engaged capacities.

With regard to the four global challenges analysed — climate change, gender inequalities, global inequalities, and migration — the study shows that they are present across the three subjects, although approached through differentiated and complementary perspectives. *Education in Civic and Ethical Values* addresses them mainly through human rights, social justice, democratic coexistence, and the ecosocial perspective. *Geography and History* situates them within long-term historical, economic, and geopolitical processes, making it possible to understand their structural causes. *Biology and Geology*, for its part, provides a scientific perspective focused on sustainability, scientific literacy, environmental health, and the relationship between society and nature.

A comparative reading suggests that climate change is the most cross-cutting and most fully developed challenge across the three materials. It appears linked to the human causes of global warming, consumption patterns, ecological footprint, climate justice, biodiversity, and the need to combine mitigation, adaptation, and collective action. Alongside this, there is also a strong presence of gender inequalities, migration, and global inequalities, which are treated not as isolated phenomena, but as processes connected to power relations, historical inequality, and global interdependence.

Another important finding is the emphasis all three textbooks place on media literacy, scientific literacy, and critical thinking. In the different cases, there are activities aimed at analysing fake news, propaganda, pseudoscience, prejudices, and stereotypes, as well as comparing sources and building arguments based on evidence. This aspect is especially valuable for addressing global challenges from an educational perspective that not only informs, but also equips students to interpret reality critically.

The study also highlights the presence of shared cross-curricular elements, such as references to the Sustainable Development Goals, the connection between the local and the global, inclusion, attention to diversity, and contextualisation within the Andalusian reality. In all three textbooks, there is a clear effort to link curricular content with students' immediate surroundings, without losing sight of the global processes and problems that shape the contemporary world.

However, the analysis also suggests that the transformative potential of these materials depends to a large extent on how teachers use them pedagogically. The findings and final recommendations themselves suggest that, although the textbooks offer a valuable foundation, there is still a need for critical teacher mediation, the complementary use of specific Global Citizenship Education resources, greater interdisciplinary work, and deeper engagement with issues such as justice, participation, power relations, and student agency.

Taken as a whole, the Andalusian case shows that it is possible to find lower secondary textbooks with a notable degree of alignment between the official curriculum, Global Citizenship Education methodologies, and the treatment of the four global challenges analysed. At the same time, it also confirms that the textbook alone does not guarantee transformative education: its value depends on how it is integrated into broader, critical, and context-sensitive pedagogical projects.

3.2 Recommendations

3.2.1 Recommendations for textbook publishers

1. Focus and Content Framework

- Move beyond minimal curricular compliance: Publishers should go beyond legal requirements and engage proactively with the educational purposes of Global Citizenship Education (GCE) by integrating rights-based perspectives, ethical questions, and opportunities for critical reflection.
- Reframe rather than add: It is not necessary to create entirely new topics; instead, publishers should reframe existing material to include questions of responsibility, power relations, and civic engagement.

2. Methodological Innovation

- Promote inquiry and participation: It is vital to add tasks involving critical work with sources (such as comparing maps or graphs from different sources) and to encourage discussion on future scenarios.
- Base in experiential learning: The quality of textbooks is enhanced when they propose pedagogical approaches based on experience and active participation.
- Reflection on impact: Activities should invite students to reflect on how decisions impact different actors and social groups.

3. Editorial Process and Complementary Resources

- Multidisciplinary author teams: It is recommended to include specialists from the GCE area in the authoring teams—not just subject specialists or teachers—to provide broader perspectives.
- Establish interdisciplinary links: Given that some content overlaps across different subjects, publishers should propose ways to work on subjects in an integrated manner.
- Bibliographic transparency and extra resources: It is essential to specify the main bibliographic sources to make the schools of thought underlying the narratives transparent. Additionally, links to specific GCE resources should be included for deeper study

3.2.2 Recommendations for teachers

1. Critical and Creative Use of Textbooks

- Selective and reflective use: Teachers should treat textbooks as structured reference points rather than exhaustive pedagogical scripts. It is recommended to choose only specific tasks and supplement them with personal materials, such as current news, local data, or students' stories.
- Complement with local contexts: It is essential to enrich textbooks with active teaching methods and locally or globally relevant examples that foster student empathy and agency.
- Integrate specialized resources: Classroom practice and textbook use should be consciously linked with specific Global Citizenship Education (GCE) methodological materials.

2. Methodology and Cross-curricular Approach

- Interdisciplinary teaching: A key strategy is to create interconnected thematic blocks across subjects (e.g., projects on "Migration and global inequalities" combining geography, history, and civic reflection).
- Prioritize critical reflection: Educators should identify and emphasize textbook sections that encourage critical reflection and debate on global challenges.
- Active pedagogical mediation: It is recommended to supplement textbook content with discussion-based activities, case studies, and multiple perspectives that highlight social justice and participation.

3. Collaboration and Professional Development

- Foster teacher collaboration: Teachers should cooperate within their schools and support one another through learning communities to address global themes in a coordinated way.
- Specialized GCE training: Professional development in specific subject areas should be complemented with specialized training in the thematic and methodological dimensions of Global Citizenship Education.

3.2.2 Recommendations for the GET project

1. Development and Design of Educational Materials

- Target identified gaps: GET materials should be specifically prioritize themes of participation, justice, and learner agency.
- Strategic curricular alignment: Learning units should be carefully mapped to curricular language and textbook topics to enhance their legitimacy and facilitate their uptake in schools.
- Complementarity and depth: GET resources should serve as essential complementary materials that deepen Global Citizenship Education (GCE), linking them to expected learning outcomes, key competences, and cross-curricular themes.

2. Capacity Building and Training

- Teacher competence development: It is essential to provide methodological guides, workshops, seminars, and model lessons that practically demonstrate how to connect GET themes across various subjects.
- Foster exchange: Spaces for exchange and inspiration should be created so that educators can share experiences and strengthen their pedagogical practice.

3. Dissemination and Best Practices

- Evidence-based promotion: Improve the promotion of GET materials by showcasing examples of good practice and success stories in the classroom.
- Wide and accessible distribution: Materials should be shared extensively to ensure they reach the widest possible range of schools and teachers.

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