



Erasmus+ KA201

School Education – Strategic Partnership

Cooperation and Innovation for Good

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Out-of-School Learning Environments National Info Pack 'PORTUGAL'



Erasmus+

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PART 1

1. OUT-OF-SCHOOL LEARNING

A. Out-of-school learning: theoretical background and practice history in Portugal

In accordance with Portuguese Decree-Law No. 55/2018, of July 6, which establishes the curriculum for primary and secondary education and the guiding principles for the assessment of learning, the curriculum is designed and developed by aggregating all activities and projects of the school, assuming them as a source of learning and skills development.

Out-of-School activities have come to assume a leading place as a strategy for the curriculum implementation, which are of particular importance to the quality of learning and to the whole development of the students, since they promote the knowledge through multidisciplinary activities and projects, the personal and social training of the students and the articulation between the school and the environment.

In Portugal educational regulation the concept of “out-of-school learning” is mainly stated with the term “Field trip” (Oliveira 2012), comprising their different formats. Is defined as a “curricular activity intentionally and pedagogically planned by the teachers, aimed to the acquisition, development or consolidation of learning, carried outside the school space, with a view to reaching the areas of competences, attitudes and values predicted in the Students Profile....” (Order n.º 6147/2019).

In the school community, the awareness that “field trips are strategies of teaching-learning process, which allow the connection of school to real life and community, and are a means of achieving interdisciplinarity” was visible in a series of internal regulations of portuguese schools (Reis 2009). However, the regulation in out of school learning activities was dispersed by different guiding instruments until 2019, when was created a specific regulation, the Order n.º 6147/2019, to update and aggregate all the definitions of concepts and guidelines.

Also according to this Order, the drawing of curriculum that benefits and enhances learning activities carried out outside the classroom, namely, through field trips prepared and planned by the school, consolidate the full exercise of an informed and discerning citizenship.

According to Monteiro (1995) what distinguishes a field trip from a tour or excursion is its integration in the teaching-learning process, as well as its careful planning and preparation.

There are several grade theses/ reports, from different Portuguese Universities, proposing the integration of “field trips” in specific school subjects, discussing approaches and its importance as educational tool, such as Leal 2010, Oliveira 2012, Rato 2016, Silva 2020.

B. Places defined as out of school learning environment and examples of activities held

Museums, science centers, interpretative centers, monuments, natural parks, geoparks, natural protected areas, botanical gardens, *ecotecas*, civil institutions, industries, factories, markets, theaters, cinemas, music shows, the oceanaire, the zoo and many more are all places that can be defined as out of school learning environments. In those places, several based learning approaches are used such as guide visits, workshops, field trips, hands-on activities, games, shows, dialogues/conferences, story telling, among many others. Hereafter are listed some of the referred places and as well as, examples of activities performed.

The Portuguese Museums Network (RPM 2021) is an organised structure based on voluntary membership with the aim of promoting decentralization, mediation, accreditation and inter-museum cooperation. The RPM is an autonomous body including 159 museums. The richness of its universe lies in the diversity of governing bodies, collections, spaces and premises, of both educational and cultural nature, including different types of relationship with the communities and diverse management systems. For instance, the Côa Museum (CoaPark 2021) is an important pedagogical resource for school audiences of all education levels in which the addressed contents pertain to different areas of knowledge . In like manner, the Contemporary Art Museum of Serralves contributes to an active citizenship and a more conscious living experience with several activities throughout the year such as tours, workshops, conferences and others (Serralves 2021).

The National Ciência Viva Science Centres Network, is a network of 21 interactive Science Centres, all of them operating in close collaboration with universities, local authorities, and Civil Society Organizations (Ciência Viva 2021). Ciência Viva is a national agency for the promotion of initiatives for the public awareness of Science and Technology in Portugal, whose associate bodies include public institutions and research laboratories. In the Archipelago of the Azores, there is also the Azorean Science Centres Network (RECCA 2021) that is distributed by four of the nine Islands of the archipelago. This regional network is a structure created by the Azorean Government that aggregates six interactive Science Centres in the many fields of science such as volcanism, geothermism, geology, microbiology, environment, biodiversity, astronomy, physics, biology, ecology, sea sciences, etc. In addition to the common goal of promoting scientific culture in different areas of knowledge, they are linked by the interactive character and openness to the community. Like the museums, the science centers also offer a diversity of activities. For example, the Expolab - Ciência Viva Science Centre, offers different activities for all levels of learning where visitors can explore different exhibitions and workshops, new technologies and do several experiments (Expolab 2021). Likewise, the Science Center Fábrica of Aveiro helps promote the scientific and technological culture through a diverse program for schools with activities for each level of education (Fábrica 2021).

Furthermore, the Oceanário de Lisboa offers a wide range of educational programs focused on ocean literacy, including subjects such as earth, life and natural sciences, literature, mathematics

and nature conservation with methods suited to distinctive education levels, in an attempt to complement curricular programs (Oceanário 2021). Akin, the Lisbon Zoo has educational programs adapted to different curriculum with tours, video conference sessions, workshops and encounters with mammal trainers and attendants (Lisbon Zoo 2021).

To learn more about the mentioned and other portuguese out of school learning environments and activities please see ANNEXE I.

C. Out-of-school learning in the curriculum of schools

Out of school learning activities are included in the schools curricula through their annual activities plans. The activities must be related to official curricula objectives. Curriculum implementation activities, which are of particular importance in the quality of learning and in the comprehensive training of students, since they promote knowledge through multidisciplinary activities and projects, the personal and social training of students and the articulation between the school and the surrounding environment.

In tables 1, 2 and 3 are listed some examples of activities related to the industrial, natural and cultural heritage, respectively, performed in São Miguel Island, Archipelago of the Azores.

Table 1. Examples of out-of-school activities related to the industrial heritage, included in the curriculum a school located in São Miguel Island.

Activity	Description
ABC of tea	A -Presentation/Agriculture/ Environment B - Drink (Preparation and tasting) C - Consumption (Benefits of Tea Consumption) - Awareness raising action on the importance of consuming tea - Promoted by Porto Formoso Tea Fraternity
Visit to Finanças Factory	To learn the production process of different food products
Study visits to Unileite	-Understand the transformation process of milk; -Know the industry processes and machinery in the production of milk and its derivatives; -Understand the economic impact of the dairy sector in the region.

Table 2. Examples of out-of-school activities related to the natural heritage, included in the curriculum of a school located in São Miguel Island.

Activity	Description
World Tree Day – Tour and visit to the António Borges Garden	<ul style="list-style-type: none"> -Expresses respect for the preservation of the environment; -Observe/learn different types of trees; -Become familiar with the different stages of tree growth; -Recognizes the importance of the tree for other living beings; -Recognizes the environment as a universal heritage that must be preserved.
Trekking – A Sport for Education	<ul style="list-style-type: none"> - Provide students with an activity understood to be enriching for their training, namely with regard to the creation of healthy lifestyle habits; - Recognize natural patrimony.
Study visits to Pinhal da Paz	<ul style="list-style-type: none"> -Know endemic species of fauna and flora in our local environment; -Carrying out nature trails; -Play traditional games; -Sensitize students to the defence and protection of the environment.

Table 3. Examples of out-of-school activities related to cultural heritage, included in the curriculum of a school located in São Miguel Island.

Activity	Description
“Pão por Deus” Day (Bread for God)	<ul style="list-style-type: none"> - Recognizes the meaning of the expression "Pão por Deus" (Bread for God) - Learn a traditional spiel alluding to the day - Make a basket or bag with recycled material
Visit to the Ponta Delgada Public Library and Archive	<ul style="list-style-type: none"> - Promote a taste for reading; - Create reading habits
Castles Day	<ul style="list-style-type: none"> -Valuing the historical and cultural heritage; -Know why castles exist, their characteristics, purposes and functions; -Build a castle in a classroom context.
Study visits to the Capelas Museum	<ul style="list-style-type: none"> - Bring awareness to students about the importance of different professions.

D. Expolab’s activities within the scope of out-of-school learning environments

It is important to mention that Expolab is located in São Miguel Island, one of the nine islands of the Archipelago of the Azores. All the nine islands of the Azores Archipelago are of volcanic origin and are located in the North Atlantic, scattered along a 600 km stretch of ocean from Santa Maria to Corvo, approximately between 37° and 40° north latitude and 25° and 31° west longitude (Morton et al. 1998). The islands of the archipelago are divided in three geographical groups: the Eastern Group, comprising Santa Maria and São Miguel, the Central Group,

including Terceira, Graciosa, São Jorge, Pico and Faial, and the Western Group, composed by Corvo and Flores (Morton et al. 1998). The Azores geodiversity represents elements closely linked to the dynamics of planet Earth, in particular, the volcanism and geotectonicity of this region. This geomorphological factor together with the insular dispersion, isolation and the Atlantic climate, create distinctive ecological conditions (GeoPark 2021, Morton et al. 1998). The Azores archipelago belongs to the biogeographic region of Macaronesia, composed also by the archipelagos of Madeira, Canary Islands and Cape Verde, that is one of the richest in terms of biodiversity in Europe (GeoPark 2021).

For the above mentioned characteristics of the arquipelago, Expolab has a privileged contact with nature and is close to several distinct natural heritages, being able to organize several out-of-school learning activities such as, field trips, outdoor activities, outdoor hands-on activities, among others.

Indoor, Expolab implement many non-formal education activities like:

- School groups visits to the science centre (Exhibitions, hands-on activities; games; demonstrations; workshops; maker activities; discussion dynamics...)
- Science, Technology, Environment and Health fairs at schools;
- Science & Technology and Digital Competences Clubs
- Timed-continued programs such as: Special Education Needs Programs; Science & Technology at Programs; CT at School; Novas Rotas...

It is important to mention that Expolab has large experience in the implementation of non-formal education activities within schools, and in promotion of networking between schools/local communities/CSO's, having multiple partnerships with distinct stakeholders, like the Azores Natural Park, the Azores Geopark, the Portuguese Society for the Study of Birds (SPEA, Bird Life's partner in Portugal), among other institutions.

Furthermore, the Centre has a consolidated position in the local community, having established protocols with several public bodies. We also have privileged contact with all the regional schools and integrate the regional and national science centre's network.

The Centre has developed, along the time, many specific extended projects with the local schools, like Science & Technology and Digital Competences Clubs (with 4 school units), and After-school Activity Centre's (ATL's), with regular activities during all year. In these clubs/ATL's, the students engage with science related activities in distinct fields of science, like biology, chemistry and physics, and technology. Expolab is also part of several timed-continued programs such as: four distinct typologies of Special Education Needs Programs, Science at School Programs (6 School Clusters, +20 school units) and ICT at School.

Believing that the learning process is organic, dynamic and in constant evolution, in 2019 Expolab has joined a new Regional pedagogic innovation project, named Novas Rotas. Novas

Rotas Project is based on the theoretical assumptions of Holistic Education, with a more inclusive and cooperative philosophy, that seeks to engage all aspects of the learner, including mind, body, and spirit. Expolab's role is to realize science related activities in its facilities and within Nova Rotas school.

E. Compulsory or elective courses, in-service training, courses, etc. on the use of out-of-school learning environments in Portuguese teacher training programs (practices, content, etc)

The continuous training of teachers and other education agents is a structural element in improving the quality, effectiveness and efficiency of the education system. Moreover, training with accreditation is promoted by the government (DGE 2021; SRE 2021; DRE-Madeira 2021).

Hereafter are presented some examples of both compulsory and elective courses available for teachers and other educational agents.

COMPULSORY COURSES

General Directorate of Education (DGE)

The continuous training of teachers and other education agents is a structural element in improving the quality, effectiveness and efficiency of the education system (Teacher training - Order No. 779/2019).

DGE, within the scope of the competences that are committed to it, and seeking to respond to detected problems / needs, provides a set of training actions that aim to contribute, among other aspects, to:

- Improving the quality of teaching and students' school results;
- The professional development / enhancement of teachers and other education agents, with a view to their continuous improvement throughout life;

The training actions are available here: <https://www.dge.mec.pt/formacao-continua> and can be promoted by several entities, including the out of school learning places, such as:

- Museums for what?! The national museum of ancient art as a pedagogical-scientific resource;
- “OU VI VER” Cultural Heritage: A transdisciplinary approach
- Educate to a blue generation

Regional Secretariat of Education– Azores

The Regional Government of the Azores promotes the continuous training of teachers and other education agents (SRE 2021).

More information is available at the the Continuous Training of the Education System of the Autonomous Region of the Azores page:

<http://srec.azores.gov.pt/formacaocontinua/pt/default.asp>

Regional Directorate of Education– Madeira

The Regional Government of Madeira promotes the continuous training of teachers and other education agents (DRE-Madeira 2021).

More information is available here:

<https://www.madeira.gov.pt/dre/Estrutura/DRE/Areas/Forma%C3%A7%C3%A3o-Inova%C3%A7%C3%A3o>

ELECTIVE COURSES

Erasmus+ <https://www.erasmusmais.pt/?lang=en>

Several mobility projects for students, trainees, recent graduates, educators and professionals in education and training, are available through Erasmus + Education and Training National Agency (Erasmus+ 2021).

KEY-ACTION 1 (KA1): encourages international education of students, trainees, educators and other professionals belonging to organisations linked to education and training. Projects can be developed by a single institution or by a consortium of Portuguese institutions for education abroad. The types of projects include:

SCHOOL EDUCATION AND ADULT EDUCATION: The fields of School Education (from preschool to secondary) and Adult Education provide opportunities for the training of human resources in an international context.

HIGHER EDUCATION AND PROFESSIONAL TRAINING: In the fields of Higher Education and Vocational Education and Training, projects may include mobility for training both students and trainees as well as professionals linked to education and training.

EPALE <https://epale.ec.europa.eu/pt>

EPALE is a European, multilingual, open membership community of adult learning professionals, including adult educators and trainers, guidance and support staff, researchers and academics, and policymakers.

EPALE is funded by the Erasmus+ programme. It is part of the European Union's strategy to promote more and better learning opportunities for all adults.

EPALE provides a wealth of high-quality, accurate information relevant for adult learning practitioners. Over time, more and more of this content should be provided by members themselves.

EPALE resources: Massive Open Online Courses (MOOCs); Open Educational Resources (OERs); Resource Centre.

NAU platform <https://www.nau.edu.pt/en/courses/>

NAU is an online project, pioneering at Portuguese national level, to support education and training, aimed at large audiences.

The NAU platform is a service developed and managed by the FCCN Unit of the Foundation for Science and Technology (FCT) that allows the creation of courses in MOOC format (Massive Open Online Course), that is, courses open and accessible to all, produced by recognized and relevant entities in society, with the participation of thousands of people.

This platform is part of the transversal actions of the Portugal INCoDe.2030 initiative by promoting digital development, digital inclusion and literacy, education and qualification of the active population. INCoDe.2030 finds in NAU a tool that contributes to greater access to knowledge and to the development of skills, making the population more qualified.

F. What are the activities of your organisation as out-of-school learning activities in the Covid-19 process?

Since the beginning of the COVID-19 pandemics, Expolab have delineated a series of activities aimed at taking non-formal education activities directly to its public, at home or outdoors. During the first lockdown in Portugal in 2020, when all the students were at home, the first main activity held was the development of a website with activities to do at home, for the children and their families. At this website, they could have access to hands-on activities, digital activities, film suggestions, quizzes, laboratory activities, among many others. To learn more, please visit: <https://expoccv2020.wixsite.com/cienciacasa>

Expolab also developed online workshops and conferences, created videos explaining several scientific concepts and natural phenomena and also evolving scientists. (https://www.youtube.com/channel/UCcysCyd_yHaSs3-s4m84R5Q)

The outdoor activities gain a reinforced importance in our offer and the centre bet on the expansion of Expolab to another island (Santa Maria) with no science centre, but with a pandemic situation that allowed the development of activities inside the schools.

2. MUSEUM EDUCATION

A. What is the content of the training received by the staff working with schools in museums and science centers on out-of-school learning?

As for teachers, the continuous training of the staff of museums and science centers working with schools is a structural element in improving the quality, effectiveness and efficiency of the education system. Nonetheless, in the case of museums and science centres, training is composed of elective and not compulsory courses that the staff need to perform every year.

It is important to mention that training in these institutions could be given by the staff peers, network promoted, composed by elective courses (see point 1.5, Part A) both at national and international level, or be a mix of the three approaches.

Some examples of the content of the training given to museums and science centre staff are:

- Pedagogical methodologies (inquiry based learning; maker workshops; gamification);
- Scientific/Specialized training (Ocean literacy; 3D modeling);
- Technical Training (exhibitions creation; digital literacy and skills; project management; human resources);
- Science Communication...

A strong training strategy is a key factor for the effective implementation of non-formal education activities such as out-of-school learning activities, enhancing the acquisition of specific contents in the many fields of science, fostering knowledge, but also both social and civil competences.

B. Do you have Virtual Museum applications? If yes, please explain it in detail

Expolab doesn't have a virtual museum application.

PART 2

1. HERITAGE TEACHING

A. How is integrated the teaching of heritage items and out-of-school learning environments in your educational framework in your country?

The teaching of heritage items and out-of-school learning environments is integrated by specific national regulation (ex. Decree-Law No. 55/2018, Order n.º 6147/2019) and schools internal regulation. The department proposes the out of school activities and its framework is presented in the school board through the Annual Plan of Activities.

The out of school learning places, through their educational services, develop the Pedagogical/Educative offer integrating all the contents with specific school *curricula*.

B. What are your studies on cultural heritage, industrial heritage and natural heritage concepts?

Expolab is a Science Centre and its mission is to promote an active citizenship based on scientific knowledge in the many fields of Natural Sciences and Technology. The Centre is not devoted to the production of scientific knowledge or contents *per se*, like a university or an investigation centre. However, Expolab is managed by Sociedade Afonso Chaves - Associação de Estudos Açorianos (SAC), a non-profit organization with public utility status, devoted to the study of themes related to the knowledge of Nature Sciences in the Azores. It brings together naturalists and specialists in the various fields of Earth and Life Sciences. SAC was founded in 1932 and its name honors the meteorologist and naturalist Francisco Afonso Chaves.

Sociedade Afonso Chaves itself, is responsible for the edition of the *Journal Açoreana, Revista de Estudos Açoreanos: Boletim da Sociedade Afonso de Chaves* (Jornal Açoreana 2021), published annually, since 1934. This journal is devoted to the publication of studies on Azorean themes, in the areas of Meteorology, Geology, Botany, Zoology, History, Ethnography and Plastic Arts. More information could be found here: <http://www.icpd.pt/biblioteca/ver.php?id=2271>

Besides the edition of the *Journal Açoreana*, Sociedade Afonso Chaves, also produce other publications, from what we would like to highlight the following:

- Morton B, Britton JC, Frias Martins AM, 1998. Coastal Ecology of the Azores. Sociedade Afonso Chaves, Ponta Delgada, Açores, 249 pp.
- Farinha N, 2014. Forests - Biodiversity refuges. Sociedade Afonso Chaves - Associação de Estudos Açoreanos & Expolab. 76 pp.

- Melo A, Correia A, Ruela A, Dâmaso C, Leal C, Rodrigues C, Ferraz C, Rodrigues C, Silveira F, Mendes F, Almeida F, Bravo H, Medeiros J, Cruz MJ, Cáscon M, Rios N, Pereira N, Garcia P, Rosa R, Patarra RF, Cabral S, Cabral S, Gouveia V, 2018. Volta aos Açores em 30 Experiências. Sociedade Afonso Chaves - Associação de Estudos Açoreanos & Expolab. 76 pp.
- Frias AM, Carvalho MC, 2011. Celebrating Darwin - Proceedings of the Symposium “Darwin's Mistake and what we are doing to correct it”. Açoreana Supp 7.

C. How are the concepts of cultural heritage, industrial heritage and natural heritage included in the educational curriculum of your country?

The General Directorate of Education (DRE-Açores 2021a), prepare curricular guidance documents based on the planning, implementation and assessment of teaching and learning, named Essential Learnings (ELs), that aimed to promote the development of the areas of competences included in the Profile of Students Leaving Mandatory Schooling (PA 2017).

Having been built from existing curriculum documents, ELs are the common base of reference for the learning of all students, that is, the common curriculum denominator, never exhausting what a student has to learn. In this way, together with the Student Profile, they are the benchmark for the external evaluation.

The concepts of cultural, industrial and natural heritage are included in the educational curriculum, also among the ELS, according to each level of education (DRE-Açores 2021a).

To an in-depth exploration on how these concepts are included in the curricula of the schools in Portugal, please see the contents available at the website of the General Directorate of Education (DRE-Açores 2021b, 2021c).

For instance, in the first level of education (1st-4th grade) it is implemented by favouring practical activities (DRE-Açores 2021b). Recognizing and enhancing the natural and cultural heritage - local, national, etc. - identifying natural elements in the landscape (geological sites, Natura Network spaces, etc.) and material traces of the past (buildings, bridges, mills and statues, etc.), customs, traditions, symbols and ephemeris. Another way to include these concepts in the curriculum is to carry out interdisciplinary pedagogical-didactic courses, with Mathematics, Study of the Environment and Expressions, based on literary works and texts of popular tradition.

In the second level of education, interdisciplinary pedagogical-didactic courses are also implemented, according to those years subjects (DRE-Açores 2021c). As far as natural and historical heritage is concerned, one tries to identify and apply the concepts of leisure, tourism, National Park and Nature Reserve, landscape and environment. To know, whenever possible, episodes of regional and local history, valuing the existing historical and cultural heritage in the

region/place where the students live/study. In like manner, building scientific explanations based on scientific concepts and evidence, obtained by carrying out diversified practical activities - laboratory, field, research, experimental - planned to answer problems.

Lastly, in the third level of education, as mentioned above, these concepts are achieved by organized field work (with direct observation) to collect and systematize information on territories and geographic phenomena and enhance the material and immaterial, regional and national historical heritage (DRE-Açores 2021c).

ANNEXE I

Examples of places defined as out of school learning environment

Museums

The National Museum network

<http://www.patrimoniocultural.gov.pt/pt/museus-e-monumentos/rede-portuguesa/>

The Azorean Museums and Visitable Collections Network

<http://www.redemuseuscolecoesvisitaveisacores.pt/en/>

Madeira Museums online platform

<https://museus.madeira.gov.pt/>

Science Centres

The Ciência Viva Science Centres Network

<https://www.cienciaviva.pt/centroscv/rede/>

Azorean Science Centres Network

<http://centrosciencia.azores.gov.pt/>

Natural parks

Azores Natural Park

<https://parquesnaturais.azores.gov.pt/en/>

Madeira Natural Park

<https://ifcn.madeira.gov.pt/areas-protetidas/parque-natural-da-madeira.html>

Mainland Portugal Natural Park

<https://www.visitportugal.com/en/content/natural-parks-and-reserves>

Geoparks

Azores Geopark

<https://www.azoresgeopark.com/>

Ecotecas and Environmental Centers

Regional Network of Ecotecas – Azores

<http://educarparaoambiente.azores.gov.pt/Ecotecas.aspx>

Environmental Centers - Azores

<http://educarparaoambiente.azores.gov.pt/CentrosAmbientais.aspx>

Botanical gardens

Botanical Gardens – Madeira

<https://ifcn.madeira.gov.pt/29-areas-protegidas/6-parque-natural-da-madeira.html#>

Botanical Gardens – Azores

José do Canto Botanical Garden <http://www.josedocanto.com/>

Botanical Garden of Faial <https://parquesnaturais.azores.gov.pt/pt/parques/3/centro/13>

Botanic Garden of the University of Coimbra

<https://www.uc.pt/en/jardimbotanico>

Botanical Garden of Lisbon

<https://www.museus.ulisboa.pt/pt-pt/jardim-botanico-lisboa>

Botanical Garden of Porto

<https://jardimbotanico.up.pt/>

Zoo, Oceanaire and Water Parks

The Lisbon Zoo

<https://www.zoo.pt/>

The Oceanário de Lisboa

<https://www.oceanario.pt/en/education/>

Zoomarine

<https://weprotect.zoomarine.pt/en/environmental-education/>

REFERENCES

- Ciência Viva, 2021. The National Ciência Viva Science Centres Network. Agência Ciência Viva. <https://www.cienciaviva.pt/centroscv/rede/>. Accessed May 2021.
- CoaPark, 2021. Côa Museum. Fundação Côa Parque. <https://arte-coa.pt/en/>. Accessed May 2021.
- Decree-Law N.º 55/2018. [Diário da República, 1.ª série — N.º 129 — 6 de julho de 2018](#).
- DRE-Açores, 2021a. Direção-Geral da Educação. Aprendizagens essenciais. *General Directorate of Education*. Essential Learnings. <http://www.dge.mec.pt/aprendizagens-essenciais-0>. Accessed July 2021.
- DRE-Açores, 2021b. Direção-Geral da Educação. Aprendizagens essenciais - Basic education. *General Directorate of Education*. Essential Learnings. <http://www.dge.mec.pt/aprendizagens-essenciais-0>. Accessed July 2021.
- DRE-Açores, 2021c. Direção-Geral da Educação. Aprendizagens essenciais - High school. *General Directorate of Education*. Essential Learnings. <http://www.dge.mec.pt/aprendizagens-essenciais-0>. Accessed July 2021.
- DRE-Madeira. 2021. Regional Directorate of Education— Madeira. <https://www.madeira.gov.pt/dre/Estrutura/DRE/Areas/Forma%C3%A7%C3%A3o-Inova%C3%A7%C3%A3o>. Accessed July 2021.
- EPALE, 2021. EPALE - Electronic Platform for Adult Learning in Europe. European Commission. <https://epale.ec.europa.eu/en>. Accessed July 2021.
- Erasmus+, 2021. Erasmus + Education and Training National Agency. Erasmus+ EU Programme. <https://www.erasmusmais.pt/?lang=en>. Accessed July 2021.
- Expolab, 2021. Expolab - Ciência Viva Science Centre. Sociedade Afonso Chaves – Associação de Estudos Açorianos. <http://expolab.centrosciencia.azores.gov.pt/>. Accessed July 2021.
- Fábrica, 2021. Fábrica Ciência Viva Science Centre of Aveiro. Universidade de Aveiro. <https://www.ua.pt/pt/fabrica/se-20-21>. Accessed July 2021.
- Farinha N, 2014. Forests - Biodiversity refuges. Sociedade Afonso Chaves - Associação de Estudos Açoreanos & Expolab. 76 pp.

- Frias AM, Carvalho MC, 2011. Celebrating Darwin - Proceedings of the Symposium “Darwin's Mistake and what we are doing to correct it”. Açoreana Supp 7.
- GeoPark, 2021. Geopark Azores. GEOAÇORES Association – Azores Geopark Association. <https://www.azoresgeopark.com/>. Accessed July 2021.
- Jornal Açoreana, 2021. Journal Açoreana, Revista de Estudos Açoreanos: Boletim da Sociedade Afonso de Chaves. Sociedade Afonso Chaves - Associação de Estudos Açorianos. <http://www.icpd.pt/biblioteca/ver.php?id=2271>. Accessed July 2021.
- Leal D, 2010. As saídas de estudo na aprendizagem da Geografia e da História- Mestrado em Ensino de História e Geografia no 3º Ciclo do Ensino Básico e Ensino Secundário. Faculdade de Letras da Universidade do Porto. <https://repositorio-aberto.up.pt/bitstream/10216/54890/2/tesemestdanielaleal000122785.pdf>. Accessed July 2021.
- Lisbon Zoo, 2021. The Lisbon Zoo. <https://www.zoo.pt/pt/educar/escola/>. Accessed July 2021.
- Oceanário, 2021. The Oceanário de Lisboa. Oceano Azul Foundation. <https://www.oceanario.pt/en/education/>. Accessed July 2021.
- Melo A, Correia A, Ruela A, Dâmaso C, Leal C, Rodrigues C, Ferraz C, Rodrigues C, Silveira F, Mendes F, Almeida F, Bravo H, Medeiros J, Cruz MJ, Cáscon M, Rios N, Pereira N, Garcia P, Rosa R, Patarra RF, Cabral S, Cabral S, Gouveia V, 2018. Volta aos Açores em 30 Experiências. Sociedade Afonso Chaves - Associação de Estudos Açoreanos & Expolab. 76 pp.
- Morton B, Britton JC, Frias Martins AM, 1998. Coastal Ecology of the Azores. Sociedade Afonso Chaves, Ponta Delgada, Açores, 249 pp.
- Monteiro M, 1995. "Intercâmbios e Visitas de Estudo", in Novas Metodologias em Educação. Porto: Porto Editora, pp. 171-197
- Oliveira H, 2012. Potencialidades didáticas das visitas de estudo: a perceção dos alunos sobre a aprendizagem desenvolvida. XIII Coloquio Ibérico de Geografia. <https://repositorioaberto.up.pt/bitstream/10216/64778/2/helderoliveirapotencialidades00179141.pdf>. Accessed July 2021.
- Order n.º 6147/2019, [Diário da República, 2.ª série — N.º 126 — 4 de julho de 2019](#).
- PA, 2017. Perfil dos Alunos à Saída da Escolaridade Obrigatória. *Profile of Students Leaving Mandatory Schooling*. Ministério da Educação/Direção-Geral da Educação. http://www.dge.mec.pt/sites/default/files/Curriculo/Projeto_Autonomia_e_Flexibilidade/perfil_dos_alunos.pdf. Accessed July 2021.

- Rato V, 2016. A importância das visitas de estudo na aprendizagem: concepções de alunos e professores. <http://hdl.handle.net/10400.21/6467>. Accessed July 2021.
- RECCA, 2021. The Azorean Science Centres Network. Azores Government. <http://centrosciencia.azores.gov.pt/>. Accessed July 2021.
- Reis P, 2009. Propostas para planeamento, exploração e avaliação de visitas a museus e centros de ciência. Kit Pedagógico – Estudo do meio. Texto Editora <https://repositorio.ipsantarem.pt/bitstream/10400.15/718/1/KIT-Visitas-a-centros-de-ciencia-e-museus.pdf.pdf>. Accessed July 2021.
- RPM, 2021. The Portuguese Museums Network. Direção Geral do Património Cultural. <http://www.patrimoniocultural.gov.pt/en/museus-e-monumentos/rede-portuguesa/>. Accessed July 2021.
- Serralves, 2021. Serralves Museum. Serralves Foundation. <https://www.serralves.pt/en/>. Accessed July 2021
- SRE, 2021. Continuous Training of the Education System of the Autonomous Region of the Azores page. Regional Secretariat of Education– Azores. <http://srec.azores.gov.pt/formacaocontinua/pt/default.asp>. Accessed July 2021.
- Silva LFC, 2020. A Importância da Visita de Estudo no Ensino e Aprendizagem de História: Um Exemplo Prático. Mestrado em Ensino de História no 3º Ciclo do Ensino Básico e no Ensino Secundário. Universidade de Lisboa, 2020
- Teacher training, 2021. Order No. 779/2019. Defines the priorities of continuing training for teachers in Portugal. <https://dre.pt/home/-/dre/117982365/details/maximized>. Accessed July 2021.