

# The project “Living with the Sun (LWS) in European Schools”

## EDUCATIONAL CONTEXT

Educational cooperation is one of the axes on which the Erasmus Plus program is built, and the promotion of good practices and pedagogical innovation are among its priorities.

We are fully involved in this framework through **our health and environmental education project “Living with the Sun in European School”**. The European dimension of our project provides an opportunity for schools across Europe to integrate core educational values set forth by the UNESCO Chair for Global Health and Education -- namely, holistic and intersectoral approaches to health and education, international perspective, effective participatory method, cultural sensitivity, diversity of knowledge and research process.

Furthermore, quality education is crucial in addressing contemporary health and environmental challenges as is illustrated by its incorporation as one of the UN's 17 Sustainable Development Goals. Improving the quality of education would thus further align European schools with the global effort towards these objectives for a more sustainable future. The current context also shows how important it is to give pupils reliable information about their health and how to manage the risks associated with their behaviour.

## HEALTH CONTEXT

The negative health effects of overexposure to the sun are a growing worldwide concern. The INTERSUN program was launched in 1993 by the World Health Organization (WHO) to study the effects of UV radiation on health, and provided WHO member states with recommendations to prevent these risks. There are many: sunburn, cataracts, and skin cancer, especially when this exposure takes place during high levels of UV radiation.

The risk is amplified by certain behaviors : tanning fashion, multiplication of outdoor activities, lack of knowledge of the solar risks, lack of use of protection means and an incorrect use of cosmetic products. In Europe, the population is facing a steady increase in skin cancer cases in recent decades. 144,000 new cases of melanoma are reported each year, a toll that has increased by 237% over the past 30 years<sup>1</sup>. 27,000 melanoma deaths are also reported in 2018<sup>2</sup>. In France, skin cancer (mainly melanoma) kills 1,500 people per year, with the number of new cases doubling every ten years, becoming the leading cause of cancer-related death in the 20-40 age group<sup>3</sup>. The fair skin of a large part of the population constitutes an important risk factor.

Studies estimate that most solar radiation is received before the age of 18, with outdoor activities being predominant during childhood. It is therefore very important to raise awareness from early childhood on the risks related to sun exposure.

## OUR ASSOCIATION AND OUR METHODOLOGY

As a UNESCO club member and in collaboration with the WHO collaborating centre for solar education Sécurité Solaire (*Sun Safety*), Passerelles Info develops educational curricula aimed at promoting education for health and sustainable development. In particular,

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<sup>1</sup> Estimates of the worldwide mortality from 25 cancers in 1990. *Int. J. Cancer.* 1999;83:18–29. Pisani P., Parkin D.M., Bray F., Ferlay J. doi: 10.1002/(SICI)1097-0215(19990924)83:1<18::AID-IJC5>3.0.CO;2-M.

<sup>2</sup> Globocan, 2018.

<sup>3</sup> *Epidémiologie du mélanome cutané: données descriptives en France et en Europe [Epidemiology of cutaneous melanoma: descriptive data in France and Europe]*. Grang F. in *Ann Dermatol Venereol.* 2005 Dec;132(12 Pt 1):975-82. French. doi: 10.1016/s0151-9638(05)79560-0. PMID: 16446640.

the programme entitled *Vivre avec le Soleil (Living with the sun - LWS)*, dedicated to solar education, mobilises 75,000 teachers **in France and elsewhere** (Spain, Italy, Portugal, Canada etc.).

On a voluntary basis, teachers and their trainers benefit from easy-to-use **and turnkey educational resources and training**. Teacher's guides are available online and printed copies are sent free of charge to teachers after registration on the web platform. *Passerelles's* pedagogical method is effective and innovative, **putting the pupil at the heart of the learning process by encouraging him or her to build knowledge with the teacher** in an interactive way.

The program deployed by Passerelles leads teachers and students to discover everything they need to know about the sun, UV radiation and its effects on health, and to learn how to protect themselves. Designed with *La Main à la Pâte* (French Academy of Science) the activities are partly based on the use of a special paper called "UV paper" which turns blue when exposed to UV light, depending on the dose it has received. This method has been validated by numerous studies, surveys and evaluations published in scientific journals<sup>4,5,6</sup> and have shown very encouraging results **in terms of improved student knowledge and, above all, changes in behaviour**.

## **OUR PROJECT**

After various requests from foreign governments and associations in Canada, Germany, Belgium, Portugal, Spain...and taking into account the WHO recommendation in the field of skin cancer and cataract prevention, Passerelles.info and Securite Solaire are considering to extend LWS to European countries. Namely, the project "*Living with the Sun in European Schools*" aims **to study the transferability of the methodology** described above. The target group of the project is **primary school pupils (3-12 years old)**.

Passerelles.info and Securite Solaire hope to work on this project in partnership with European organizations. Within the framework of a possible partnership, two specific objectives seem to be able to be pursued through the multidisciplinary educational programme LWS:

- To carry out a solar education and prevention action in European schools
- To promote cooperation between schools from different European countries (Spain, Bulgaria, Ireland...)

## **ERASMUS PLUS FUNDING SUMMARY**

Our project is part of the school education field and corresponds to key action 2: international cooperation.

We are considering two types of cooperation partnerships: large-scale cooperation partnerships and small-scale cooperation partnerships.

## **TRACKS / OBJECTIVES OF A PARTNERSHIP**

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<sup>4</sup> *A Cluster Randomized Trial to Evaluate a Health Education Programme "Living with Sun at School"*. Int. J. Environ. Res. Public Health 2012, 9, 2345-2361; doi:10.3390/ijerph9072345.  
Hélène Sancho-Garnier, Bruno Pereira and Pierre Césarini

<sup>5</sup> *Lutter contre l'échec scolaire en réseau d'éducation prioritaire*, in Zay D. (ed.) Education inclusive. Une réponse à l'échec scolaire ?, Paris, L'Harmattan, p. 212-217. Reuter Yves, (2012)

<sup>6</sup> *Éducation nutritionnelle à l'école: évaluation d'une méthode pédagogique «La Main à la Pâte»* Santé Publique 2010/2 (Vol. 22) Editeur S.F.S.P. Stéphane Tessier et col

## **Objective 1: To carry out solar education and prevention initiatives in European schools**

- Running the transferability study of the LWS health education programme in European schools

Two groups of classes participating in the transferability study:

- An active group, which will implement the activities. Teachers in this group will receive the guide, and their pupils will benefit from health awareness and education sessions.

Some of the teachers will be trained (active group 1) - 3 to 6 hours of training - and assisted by trainers if necessary during the implementation of the activities, and another part (active group 2) will be self-trained, without external intervention.

- A control group. Teachers and students will not benefit from training or awareness, and will not carry out activities related to the educational programme.

*In France, 80% of the teachers use the guide without training, and 99% of the teachers and trainers believe that the guide is self-training: it can be interesting to see if this advantage (self-training) is verified in other countries in Europe.*

- Selection of teachers who will agree to participate in the study as members of the control group and members of the active group.
- Providing compensation for teachers of the control group: e.g., provision of the LWS teachers guide the following year
- Publication of the teacher's guide in the language of each partner's country. The guide is already translated into Bulgarian, Spanish and English
- Organization of the distribution (paper/digital support?): if the paper version is chosen, ensure the printing and distribution of the guides
- Production and distribution of UV papers
- Organisation of training sessions for the active group 1
- Promotion and follow-up of the project, by setting up a web platform dedicated to the project, "mirroring" the French website <http://soleil.passerelles.info/>
- Assessment of the project and its results.

Pre-assessment: assessment before the start of the project to determine the state of knowledge about solar risks and behaviour in all classes (control and active groups).

Post-assessment: assessment at the end of the project to determine the state of knowledge and behavior in all classes (control and active groups), after the project has been carried out.

The assessment can take the form of questionnaires (see in page 5 to 9 the questionnaire used in France).

## **Objective 2: Promote cooperation between European schools**

- The transferability study will be carried out on comparable samples by local teams and associations in each country
- Organisation of virtual exchanges between classes of pupils and teachers from the schools of each country
- Organisation of joint training courses
- Translation of the educational resources developed into all the languages of the countries involved for mutual enrichment
- Sharing of the results of the transferability study at European level

- Creation of a dedicated platform to ensure this coordination and exchange at all levels of the project

## **KEY TECHNICAL POINTS TO CLARIFY FOR PROJECT SUBMISSION:**

**- Does it make sense to include the primary and/or middle school level in this cooperative project?**

**- After translation and some minor adaptations, is the guide suitable?**

**- How will the guide be published and distributed (digital / paper)?**

**- Is there a need for training? If so, what format would be most appropriate for widespread use? Trainers/teachers - face-to-face/distance?**

**- What digital strategy should be designed?**

\* one or a few simple info pages on Passerelles's website?

\* a new website?

\* a "mirror" site of the French site, with the content online?

\* an intranet/backoffice to manage registrations, mailings, evaluations?

**- What evaluation(s) should be set up? Who should conduct them?**

\* a "mirror" study of the French study analyzing the participation and opinions of teachers?

\* a comparable but simpler study, online? on a google form? on paper?

\* an impact study on students like these?

\* tracking some indicators only?

\* ..

**- At what scale should the project be conducted?**

\* national?

\* regional?

**- What partnerships should be sought?**

\* Ministries (health, environment, education) to endorse - help operationally - finance the project?

\* experts societies / associations (cancer, dermatology, ophthalmology...)?

\* Specialists in evaluation (academics, associations, etc.)?

\* Media? or a company specialized in press relations?

\* What type of co-funding (private/public, national, European, non-Erasmus, international)?

**- How to imagine cooperation between European schools?**

## **THE TEACHER QUESTIONNAIRE:**

Each year, Passerelles.info and Sécurité Solaire evaluate the participation and opinion of teachers and other professionals who register on the web platform. Below you will find the questionnaire sent to teachers.

The results are published online [on the project website](#).

## **Part 1: Teacher's Guide and Activities**

**How would you rate the teacher's guide?**

- Very well done
- Somewhat well done
- Somewhat poorly done
- Very poorly done

**If you used the UV paper, did you find it :**

- Very convenient
- Quite convenient
- Not very convenient
- Not convenient

**From an educational and practical point of view, the implementation of the activities appeared to you as :**

- Very easy
- Quite easy
- Rather difficult
- Very difficult

**On a personal level, you found these activities :**

- Very interesting
- Somewhat interesting
- Not very interesting
- Not interesting at all

**The Living with the Sun programm addresses many of the issues in the curriculum. To what extent do you agree with this statement? :**

- Strongly agree
- Somewhat agree
- Somewhat disagree
- Strongly disagree

**Would you recommend this program to your colleagues?**

- Yes
- No

**Do you plan to conduct this module next year / continue its activities after the Erasmus Plus project?**

- Yes
- No
- I don't know

**You have carried out the activities proposed in the guide: Which sessions?**

- Session 1: What happens when you are in the sun?
- Session 2: What happens if you stay in the sun for a long time?
- Session 3: who gets the most sunburns?
- Session 4: What is my shadow like?
- Session 5: do shadows change during the day?
- Session 6: What are the most dangerous times?
- Session 7: How can I protect myself from the sun?
- Session 7bis: is it cooler in the shade than in the sun?
- Session 8: becoming a prevention actor
- Evaluation sheets

**How much time did you spend on these sessions?**

...

**More specifically, during the session “Becoming a prevention actor”, did you cooperate with a school nurse, local authorities, staff associations...?**

- Yes
- Yes

**What action did your class take during the “Becoming a Prevention Actor” session?**

....

**In your opinion, how many people besides your pupils were sensitized by this action?**

- 10
- 25
- 50
- 100
- 200
- More than 200

**How much time did you and your students spend on this project?**

- 1h
- 2h
- 3h
- 4h
- 5-10h
- 10-15h
- + 15h

**Did you notify the students' parents about the implementation of the activity module in the classroom?**

- Yes, using the sample letter included in the guide
- Yes, by writing another letter
- Yes, by simply putting a note in the correspondence book
- Yes, but in another way
- No, I forgot
- No, I didn't want to do it
- No, for some other reason

**Did you download/use the following additional resources from the site?**

- Program links
- Pedagogical extensions
- UV paper, instructions for use
- Solar weather session adapted to the teacher's country
- Letter to Parents
- Songs

**If yes, these resources were :**

- Very useful
- Somewhat useful
- Not very useful
- Not useful at all

**Before implementing the activities with your pupils, were you already familiar with the scientific investigation process?**

- Yes, really
- Yes, slightly
- No, not really
- No, not at all

**After conducting the activities, do you feel you are better prepared to use the scientific investigation process on other subjects?**

- Yes, really
- Yes, slightly
- No, not very much
- No, not at all

**Before implementing these activities with your pupils, had you already implemented a health education project with your class?**

After conducting the activities, do you feel you are better able to address other health topics?

**Have you received any training, either face-to-face or distance learning, in which the guide was presented to you? If so, how?**

- Face-to-face

- Distance learning

**If yes, would you say that this training was :**

- Very useful
- Rather useful
- Rather useless
- Totally useless

## **Part Two: Impact on Pupils and Families**

**How would you rate your pupils' support for this project?**

- Very strong
- Rather strong
- Very low
- Rather low

**Do you feel that the pupils have talked about it around them, especially in their families?**

- Yes, really
- Yes, slightly
- No, not at all

**Do you feel that pupils have acquired knowledge and skills that have a good impact on their health?**

- Yes, really
- Yes, slightly
- No, not very much
- No, not at all

**Did these activities result in positive changes in students?**

**...in their behaviour in the sun :**

- Yes, really
- Yes, slightly
- No, not at all
- No, it was even the opposite

**...in terms of citizenship (relationships with others, listening, stigma...) :**

- Yes, really
- Yes, slightly
- No, not at all
- No, it was even the opposite

**...in terms of science and the scientific investigation process?**

- Yes, really



- Yes, slightly

- No, not at all

- No, it was even the opposite

**Have you received any testimonies or comments from parents of students?**

- Yes

- No

**Would you say that this project has contributed to fostering family/school ties?**

- Yes

- No

**Do you have any comments or suggestions?**