



## Expo Milano 2015 and education: no discipline left behind!

Read more at: <http://www.policulturaexpo.it/world/learning-tips/>

**Expo Milano 2015** ([www.expo2015.org/en](http://www.expo2015.org/en)) is about *Feeding the Planet, Energy for life*. The issues involved range from agriculture to food, from nutrition to world hunger, from biodiversity to sustainability, from food chain to traditions, from localization to globalization, from food identities to food rituals, etc. All of this amounts to a knowledge and an attitude crucial for those who will be the citizens of tomorrow.

**Schools can put the basis for a world citizenship: it is a challenge and an opportunity for each country (as local concern) and for the planet (in a global perspective)**

We know that some teachers wonder if their discipline is relevant for Expo Milano 2015 or worry that tackling a new set of issues will “distract” their class from curricular activities. But the issues involved by the Universal Exposition are by their nature multi-faceted, open to debate and multi-disciplinary. That is why we think that any discipline has a say in the matter. Therefore, this brief document has the purpose of making two simple points:

**All disciplines are relevant for Expo Milano 2015  
Every discipline can develop an activity and still “stay curricular”!**

A few hints and examples are given, only with the purpose of stimulating teachers (and students) to find their way and use their creativity.

### Humanities and culture

Humanities revolve around mankind: that is why they are relevant for understanding deep relationships between man and the environment, going beyond merely biological aspects.

- **Literature**

How people eat, how people work in the countryside, how people in the city buy and consume food, what banquets they have, .... All these subjects are favorite themes in literature, in all areas of the world.

*Curricular tip:* take any body of literature relevant for the curriculum and investigate the above aspects.

- **History**

The relevance of food and agriculture, in all ages, in the shaping of history, civilization, wars, culture, is unquestionable and evident. Also, many conflicts arose as a consequence of different approaches: countryside vs. cities, nomadic societies vs. sedentary societies, ...

*Curricular tip:* take an area and period relevant for the curriculum, and investigate the above aspects.

- **Geography**

Modern geography is about how people live in different areas of the world, including reflections on agriculture, food, economics, waste, etc.

*Curricular tip:* take any area under current study and examine its agricultural output, how the areas for agriculture have changed over the years, the commerce related to food, etc.

- **Social sciences**

Social sciences are about human behavior. All the Expo Milano 2015 issues are related to human behavior, therefore any aspects (e.g. agriculture, food commerce, food distribution, patterns of food consumption, etc.) can be investigated through the lenses of social sciences.

*Curricular tip:* take any socially relevant problem (e.g. waste, pollution, land consumption, obesity, hunger, commercial systems and rules, ...) and investigate it with the social theories and methods currently being studied in the curriculum.



- **Philosophy / Religious studies**

Philosophers have always provided a formula about why the world and humans are what they are. Religions have provided various answers (inspired by something above humans) to the same problem. Philosophy and religion are therefore crucial in order to investigate the deep issues related to Expo Milano 2015.

*Curricular tips:* take an ethical problem related to Expo Milano 2015: e.g. killing animals for food, whether and how to respect life of non-humans, food beliefs and taboos, and investigate it under the philosophical or religious point of view currently being studied in the curriculum.

## **Science, Technology**

The whole food chain has always been dependent on the progress of science and technology. In the opposite direction, we can say that science and technology were largely propelled by two main needs: feeding and (unfortunately) making war.

- **Agriculture and livestock raising; food processing**

These disciplines are by themselves related to Expo Milano 2015.

*Curricular tip:* take the current curricular subject and apply it to the local territory or another region of the world. As an alternative, compare current methods with old ones.

- **Mathematics and Geometry**

Mathematics was born (from geometry) probably in order to help with field measurements. Mathematics can still be applied to all sorts of problems related to Expo Milano 2015.

*Curricular tip:* take any current subject of mathematics (equations, statics, plotting functions, histograms, ...); get the students to understand a phenomenon (e.g. commerce), collect information and data, and utilize mathematics to better understand what is going on.

- **Biology, Genetics**

These sciences are at the basis of several phenomena in agriculture, food processing, nutrition, ...

*Curricular tip:* take any current subject and get the students to investigate how it applies to one or more aspects of the food chain. As an alternative, investigate it from an historical perspective.

- **Chemistry, Physics**

These sciences are at the basis of some crucial methods in agriculture, food processing and food preservation. In a sense, they can also provide explanation about how cooking works.

*Curricular tip:* take any subject current for the class and see how it applies in the food chain. Another option: investigate fertilizers, food preservation, food processing and cooking from a chemical point of view.

Yet another option: investigate how famous contemporary chefs have created innovative recipes using (intuitively or scientifically) advanced science.

- **Mechanics, Electronics, Computer science... any technology**

Mechanics and electronics are at the base of most current solutions in agriculture, food transportation, food logistics, food distribution, etc. It is interesting to investigate these solutions either from a synchronic (what is done today) or from a diachronic perspective (how different solutions were in the past? 50/100 years ago? Centuries ago?)

*Curricular tip:* take any current subject (in mechanics, electronics or another technology) and study how it applies to modern equipment and methods.

## **Art**

Food, agriculture, abundance vs. scarcity have been popular subjects in fine arts.

*Curricular tip:* take a movement/artist/ period and analyze what you can understand of that period's life style from the works about food, food procurement (e.g. agriculture, hunting, fishing, ...), food preparation (e.g. cutting, processing, cooking, ...), food needs (e.g. hunger, deprivation, ..), etc.



### **Foreign languages**

Studying a foreign language is the gateway to access a different culture, which is particularly relevant in the frame of a world-wide educational activity.

*Curricular tip:* take educational resources on the Expo Milano 2015 issues from sources (websites, documents, videos..) in the foreign language of your curriculum and have your students analyze them and may be translating (or synthesizing) them for the sake of their peers.

### **Sport and outdoor activities**

Nutrition, fitness and lifestyle are strictly interwoven and the related issues are widely discussed today.

*Curricular tip:* analyze how advertisements in your country (through television, radio, the web...) describe the relationship between being fit, working out and eating healthy food. What kind of guidelines emerge? Guide your students' critical reflection on them.

### **Economy**

Sustainability, biodiversity, waste disposal, food production and distribution etc.: all these issues have huge economic implications, which can be investigated within the class, at local as well as global level.

*Curricular tip:* investigate what food products your country exports and what products are imported and the related economic implications.

Another option: take any subject students are currently studying and investigate how it applies to the various stages of food chain (e.g. agriculture, commerce, food trade, food processing, distribution, ...).

Field research: investigate how the economic models apply in your territory.

### **Law**

A great number of legal norms are related to food production, food distribution, cultivation, etc., in all countries and at all levels (e.g. European Union, World Trade organization, ...)

*Curricular tip:* investigate your country's norms in relation to food labels. What kind of information is it compulsory to provide and for what products? Start a critical reflection, answering to questions like the following: is the information provided clear and accessible to any consumer? What kind of information you think the consumer would need that she's not given?

What are the most important regulations in your country? In what sense do they affect the food consumption or the food chain?

### **Travel, Tourism and Food**

There is no need to provide arguments on the relationship among travel, tourism and food. Tourist destinations are typically advertised together with/through their culinary traditions and offer.

*Curricular tip:* examine the tourist advertisements of your territory and see what reference is made to food; is food seen as a way to define the territory's identity?

Develop better communication artifacts (e.g., multimedia narratives, posters, leaflets, websites, ...) valorizing food and food tradition of your territory.

### **Other**

There are certainly several other disciplines not covered by the above list.

Here are some additional tips.

*Tip:* create communication artifacts (technology based or traditional) to encourage your fellow citizens to recycle their waste.

*Tip:* dramatize the situation in your country on the topic "abundance vs. scarcity". Who is there who's got plenty of resources and who is lagging behind in poverty?

*Tip:* analyze the food chain in your territory, identifying the critical aspects.

*Tip:* create a strategy to persuade families to have a better attitude about food.

*Tip:* describe (to the world) all the "rituals" related to food of your territory.

*Tip:* design an APP (for mobile devices) stimulating young people to have a better attitude toward food.