

BARRIERS IN THE MEDIEVAL ROUTES LEARNING UNIT

ERASMUST KAZ PROJECT ,,GREAT ROUTES IN THE MIDDLE AGES AND THEIR SYMBOLOGY"



Co-funded by the Erasmus+ Programme of the European Union





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ntroduction

During the Middle Ages, as nowadays, people from different countries travelled through the different routes. Now it's quite easy to travel from one country to another, but in that times, travellers

had to face different problems, from the problem of the language, which could cause them not understanding the rest of the people when they had to ask for help, to the problem of the plagues that could travel together with them and who often caused the death of thousands of persons. But also due to different battles, and other reasons, the



Medieval Routes changed their drawing, what could also create problems, and could also have consequences.

Another problem was the use of different measuring units in the different countries, which could cause problems in trade and for



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other type of travellers using these routes. The use of different measuring units could create problems due to confusion using them,



but it was also a way of cheating to people not knowing them. Related to that, in the "Legal Status of the Pilgrim" in the Way of Saint James, from the 12th Century explicitly prohibited cheating pilgrims. Learning the medieval units in the different countries and the equivalence among them were extremely important so for

traders and sellers.

During this learning unit we will try to study four different topics, allowing us to learn about different subjects:

- 1. Converting Units
- 2. Language problems
- 3. Changes in the Routes drawing
- 4 Plague studies.

With the proposed activities we will improve our knowledge about the Middle Ages.

This Learning Unit was created during the Erasmust KA2 Project "Great Routes in the Middle Ages and their Symbology", during the years 2016-2018 by six countries: France, Greece, Italy, Latvia,



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Poland and Spain. This project was co-funded by the Erasmust Programme of the European Union. The Schools taking part in the project were:

- Lycée Les Rimains, Saint-Malo (France)
- 1st General Lyceum of Trikala (Greece)
- ITE Vitale Giordano, Bitonto (Italy)
- Jelvaga 4 Vidusskola (Latvia)
- Zespoł Szkoł nr 5 im. Jana Pawła II, Jastrzębie-Zdrój (Poland)
- IES Emilio Jimeno, Calatayud (Spain)

It includes materials in different formats. Those in digital format are linked with the printed material by several ways:

- With QR codes, possible to read with any QR reader. We will find two types of QR codes in this Learning Units, as we can see in the following pictures:





The one on the left refers to contents present in the web. The one on the right contains materials present in the web but created during the project.

- With short URL, possible to type if necessary producing less errors than usual URL.



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- Augmented reality contents, which are linked to images containing the logo of HP Reveal, the app needed to access to them.



To be able to access to these contents, you have to follow the HP-Reveal account , greatmiddleroutes"





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bjectives

- 1. Get acquainted with the ancient units of measurement and to find out the correlation between different units of measure: weight, volume, length.
- 2. Understand the process of unit's conversion and how to calculate an equivalence table among different units
- 3. Exercise the transformation of ancient units according to the system adopted today.
- 4. Draw conclusions about the possibilities of using ancient units today.
- 5. Value the International System of Units and the reasons to arrive to it and adopt it.
- 6. Learn how to program an Excel sheet so that it allows
- 7 Introduce students with the language tree and Indo-European language family.
- 8. Show students that the knowledge of a foreign language allows learning others based on similarity.



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- 9. Introduce students to the most commonly used phrases in the language of the countries participating in the project.
- 10. Introduce European Medieval Routes to students.
- 11. Raise awareness about the unity of European values.
- 12. Learn how to work with arci, highlighting the road into the map.
- 13. Discuss reasons of the road changes.
- 14. Introduce the several types of diseases in the Middle Ages and nouradays.
- 15. Recognise symptoms and triggers of different illnesses
- 16. Recognise the ways of spreading for different illnesses.
- 17. Simulate the prevalence of the disease today.
- 18. Develop students' ability to work in groups



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Onverting Units

One of the problems the Medieval people could have when travelling through other country was the use of different units. To measure lengths, volumes, areas, weight, ... in the different countries we could use different units, and even in a same country, the uses could depend on the region.



Traders when trying to sell their goods in foreign countries should know the units used there, to be ready to measure and fix prizes depending on the amount of good the unit represents.

Pilgrims needed months to go through the routes they had to travel. During these months, they had to buy wine, bread, and other goods, just to cover their necessities. It was so often that they were tried to be tricked that in several laws, it was explicitly fixed the punishment to be fixed to all that tricking Pilgrims.



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Because the problem is that when you change the unit of measure, you open the possibility of cheating. To prevent the fraud, in some regions there exist the job of the supervisor of the measures. For example, in Spain this person was called "fiel-almotacén". His function was supervising the measure process and fine those cheating in the process.

First units on length were based on length over the human body, due to the ease of the access to it. The name of containers was used as the name of their capacity, as nowadays. And the problem emerged when they had to convert from one unit to another.



And it's this problem that we are trying to study.

But our first aim should be to know which measure units were used during the Middle Ages.

To learn about that, we can visit the following link:



https://goo.gl/u6cj3D



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There you can find information about the different measure units used during the Middle Ages in the countries involved in the original project.

- 1. Build a table classifying the different units as length units, volume units, ...
- 2. Students are divided into 3 groups, that are going to study length, volume and weight units respectively.
- 3 Each group will need ruler, measuring scales and scales pictures cut as a puzzle (In 4 or 6 parts, depending on the number of students in the class).
- 4 Each of the groups will construct the puzzles and look at cards with pictures and try to determine for what measuring might be used these measurements and try to relate these images on the cards and the units we are used to: meters, centimetres, millimetres, grams, kilograms, litres, ...
- 5. Each group has to perform a small creative task, as preparing one concrete example using the group's old units of measurement (for example, calculate the quantity of menu items, calculate the area of the premises, etc).
- 6. Students will have to prepare a group presentation about their research and present them to other groups.
 - a Each group will prepare 1 or 2 questions/tasks for the other groups on the type of units they are studying.
 - b Students in the group prepare an answer/perform tasks, to allow comparing results with results of the other groups.
- 7. To end with this part of the unit:



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- a Each group will dray conclusions about the practical application of the ancient units nowadays.
- b Each group will give feedback on the information obtained in lessons and evaluates the work of his group during the lesson.
- 8 All the materials created, pictures, videos about the presentations or whatever you consider related with the activities can be shared in the Social Networks by using the hashtag the main dall of reduced to only and the social #greatmiddlereuse.

After getting used to these units, our next aim will be to understand the process of measure conversion.

- 1 Prepare enough number of pieces of paper or cord of different lengths.
- 2. Divide the class into separate groups. Give enough pieces of paper or cord to each of the groups.
- 3. The aim of this activity is trying to compare units of different length to calculate the equivalence among them. For example, if we have the two following units:

The idea is putting one after the other to have equal lengths with all units:



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so, it means that 2 blue units are equivalent to 7 red units. Using this process, students must determine the equivalence among the ,, units" presented to the different groups.

- 4 After calculating the equivalence among units of length, students have to think in groups about the same process to compare units of volume and weight.
- 5. Present the process to the rest of the class and adjust it with the suggestions of the remaining groups.

Finally, once we have become familiar with the Medieval Units and understand the process of units conversion, it's the moment to calculate the equivalence of the old units and the International System of Units.

1. Find information about the equivalence of these units and the current units. You have most of it in the project's webpage:



https://goo.gl/u6cj3D

- 2. Use an excel sheet to resume all the converting information. Use one column for each of the old units.
- 3. Use the information in the previous sheet to calculate a second one reflecting the conversion from each of the units to each of the other units.
- 4. Did you know...

Your internet browser allows you to convert units automatically.



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Google	73 yards	s to km						پ م
	Todo	Maps	Shopping	Noticia	s Vídeos	Más	Configuración	Herramientas
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		ias		en espa	añol. Puedes esp 0,066		idioma de búsque	ada en

Use this tool to find conversions between the following units:

- Length: Yard, meter, inch, foot
- Weight: Stone, pound, ounce, kilogram
- Area: Square meter, acre, square foot, square yard.
- This conversion also works with currency.

After working with all these units and studying the process of unit conversion, it's the moment to answer some final question:

- 1. When did the International System of Units was born?
- 2. According to what you have learnt, why it was created?
- 3. Look for information about this historical decision.



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anguage Problems

Language can be a problem while travelling. This is something all of us can have realize when we travel to a country which language we don't speak or understand. But now adays many people have at least a minimum knowledge of a foreign language.

During the Middle Ages, even when we can consider Medieval

Latin as a common language for the lands belonging once to the Roman Empire, at least, in fact it was not a language spoken by all the people. Medieval Latin was used mainly



for education and liturgy, but also for science, law, administration and literature. For this reason, lots of people, who has not access to education, could not communicate properly in this language, which derived in the romance languages in the different areas.



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And we must remember that the Roman Empire was not all Europe. We can't forget that in distinct parts of Europe, other languages were spoken.

Could it represent a problem for travellers? Of course. Let see these videos representing situations where people from different countries need a mutual contact. Each of the characters speaks in their own language, and they must try to understand each other. You can use the App HP Reveal to show them directly over the paper.

Here we can see a Medieval Spanish Lord who needs a Greek mason to construct a palace for him:





https://goo.gl/exsrsz



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The second video is about a Medieval Spanish Innkeeper and a Greek Pilgrim searching for somewhere to stay for the night:





https://goo.gl/oEc570

The third video shows us two traders: a Latvian fabric trader and an Italian olive oil trader, trying to exchange their products:



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https://goo.gl/wc13ek

In the fourth video, we can see an Italian ill searching for the help of the Latvian doctor:





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https://goo.gl/GPb1Hd

In the fifth video, a French knight wants to marry a Polish Princess.





https://goo.gl/UT591H

In the sixth and last video, a French knight wants to buy clothes from a Polish trader.



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https://goo.gl/ieP7ij

After watching all the six stories, answer the following questions:

- 1. Do you think they really understand each other?
- 2. In which stories do you consider they really communicate?
- 3. How do they manage to communicate if in fact they don't understand each other?
- 4. How could they improve their communication abilities?
- 5. Do you think the coupling of languages helps or make more difficult the possibility of communication?
- 6. Do you think some of the languages could communicate among them more easily? Which ones?
- 7. Could you find in the videos any word like words in your own language?



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As you can see in the previous videos, European languages are quite different among them Even languages with a common origin, they can be not as close one to the other to allow two persons speaking these languages to communicate properly without speaking the other's language.

Look at the following tree where you can see the classification of the Indo — European languages:





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 First, we will do an overview of the national languages of the countries involved in the original project: French, Greece, Italy, Latvia, Poland and Spain Look for information about languages spoken in that countries, their belonging to the certain language group and in what countries it is used in the word. If different, include also your country.
With all the information, fill the following chart:



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Country	Languages	What language type	In what countries is
	H PARA	does language belongs?	language spoken?
France		The local of the	·清楚小学院、李林
Greece	学校の	and the second second	
Italy	A STA	(1)的一个方法 对于	and a start franker with
Latria		and the second second	
Poland	A DECISION		
Spain			Service to the service of the
Your			
country			and a street

3. Indo-Europeans and Indo-European language family.

Indo-Europeans are nations group with the common roots of the language, and on this basis, there have been developed other languages. Indo-European language family is the biggest group of related languages

Compare the information about Indo-Europeans' history given in the text above with the graph information given in the following page:



https://goo.gl/BnKZPu



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- 4 Which European languages do not belong to Indo-European language family?
- 5. Compare the sentences written in different Indo-European languages and find similarities and differences:

English	God gave his teeth, God will give bread.
French	Dieu a donné ses dents, Dieu donnera du pain.
Greek	Ο Θεός έδωσε τα δόντια του, ο Θεός θα δώσει ψωμί.
Italian	Dio ha dato i suoi denti, Dio darà il pane.
Latvian	Diers dera zobus, Diers dos maize
Polish	Bóg dat swoje zeby, Bóg da chleb.
Spanish	Dios dió sus dientes, Dios dará pan

Similarities: Differences:

6. Listening.

Listen to the text and try to identify the language: English, French, Greek, Italian, Latvian, Polish, Spanish.

Language	Text
English	https://goo.gl/B8X9Ki
French	https://goo.gl/yyjXcR
Greek	https://goo.gl/uflc9H
Italian	https://goo.gl/PXB6XZ
Latvian	https://goo.gl/hmh2M4
Polish	https://goo.gl/9emMp5
Spanish	https://goo.gl/YmSrem



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After completing these activities, we can recognise at least the languages of the countries involved in the original project. But our aim would be to learn the basis of each of them, to be able to use the principal words we can need to communicate in each of the countries language.

In this link, we can see a Multilingual Dictionary including the basic words and expressions needed to survive in these countries:



https://goo.gl/4cjDfk

- 1. Study the basic words and expressions included in the dictionary above.
- 2. With the students organized in groups, a contest is stablished to determine which group is the fastest and the most correct

in identifying common phrases in project countries. To do that, a game is created by writing in pieces of paper different words or expressions extracted from the dictionary above In rounds, each team





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selects randomly a paper and has to identify the language, and/or the type of word/expression, and/or the meaning

- 3. Did you know... Google Translate helps you to know how to pronounce a word or sentence. How does it work?
 - Go to: http://translate.google.com

× Es seguro https://translate.google.com		
Google		
Traductor de Google		
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Escribe texto o la dirección de un sitio web, o bien, traduce un documento.

select a language and write a sentence you need to know how to pronounce.



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Use the speaker icon to listen how it should be pronounced (more or less)

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	39/5000

Use this tool to learn how to pronounce Hello, good morning, good afternoon, good evening and good by y the six languages of the original project.

4 How could people communicate without knowing foreign languages? They used the gesture language, understood similar phrases in other languages, and used their own language knowledge, because small nations learn the languages of the big neighbours. For example, in Latvia, for many years, there were Germans, Swedes, Poles, and Russians. With this activity, we will try to improve the gesture language abilities. Remember the six situations we watched



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in video at the beginning of this part. Working in pairs, the teacher prepares similar situations, and give a number to each of them. In pieces of paper, the numbers are chosen randomly by the pairs of students. The teacher gives to each of the members the characteristics of his role, and they have to perform something similar as in the videos, but without words.

Was it difficult? Where did you find the main difficulties? How could you improve your abilities?

5 Now, we are working with different short dialogs, written in the different languages. Working in groups, the teacher gives to each of the group the dialogue in English, and the remaining languages, are separated in different papers, and cut sentence by sentence.

Each group must reconstruct the dialogue in the six languages. 6 If at the class there is any students that speaks fluently any language not spoken by the rest of the class, play a dialogue as in the videos at the beginning of this part.

Of course, you can record any result and share it or any other activity or product created on the Social Networks with the hashtag #greatmiddlereuse.

At the end of this part of the learning unit, we are going to check the learning of the students by playing the kahoot linked here:



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https://goo.gl/gCe3gg

Remember you can share all your experiences and other materials created using the hashtag #greatmiddlereuse.



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hanges in the Routes Drawing

Middle Ages was a really extended period lasting for more than 10 Centuries and ended more 5 Centuries ago. So much time makes nearly impossible for Medieval Routes to not have suffered any change since them.

During the two years working in this project, we have studied several routes through the European lands. Some of them arrived to our days, but did all of them continue having the same drawings?

The answer is no. Several factors affected the drawing of the commercial and religious routes: wars, invasions, search for new products or adventures, dangers to avoid, ...

With these activities, we will try to understand the reasons behind these changes.



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We can start by analysing some of the changes in the routes we have studied. We can find information about them in the following link:



https://goo.gl/3RTUVt

- 1 With the students divided in groups, each group creates a series of maps illustrating the changes in the drawing of one of the studied routes with the information in the link.
- 2. Look for information about the main Medieval warlike conflicts and fill a table like this one with the information you get:

Conflict	Dates	Territories affected	Routes drawing changed
			and the second second

3. In the maps created, represent the lands affected to show the existing correlation among conflicts and changes in the original routes.



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In the Middle Ages the population was guite young several causes were responsible for people dying at really early age. One of the main causes were epidemies.

Really common illnesses nowadays could cause the death due

to the lack of hygienic conditions and the poor medical knowledge. And these made Death been present constantly in the daily life of Medieval men.

made

N no distinction among social 1 CC 3

classes, and its equalizer power was represented in arts. Different



Death

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illustrations, architectural elements, but also poems included this topic as something to have present.

Read this Spanish poem written at the end of the Middle Ages:

Our lives are fated as the rivers That gather downward to the sea We know as Death; And thither every flood delivers The pride and pomp of seigniory That forfeited;

Thither, the rivers in their splendour; Thither, the streams of modest worth, The rills beside them; Till there all equal they surrender; And so with those who toil on earth, And those who guide them.

> Jorge Manrique (Coplas on the Death of his Father)

- 1. Working in groups of four, try to explain on your own words the meaning of the poem.
- 2. Comment the ideas about Death presents in the poem taking into account the social characteristics of the Medieval Ages.



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Observe the following pictures of the Purgatory church in Bitonto (Italy):







NOTE: Veniam et metam: I'm going to end Qua hora non putatis: At a certain time you don't know

1. Comment the meaning of the decorative elements present in them.



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2. Do you find any relationship among the poem and the pictures?

3. Use Internet to search for other similar examples in the art of your own country.

But where this idea of representing the Death as a character and considering it as an everyday fact came from? It is considered to have started after the great spread of Black Death in 1348, devastating the European population.

The following extract is taken from the book The Decameron, writen by Boccaccio in the 14th Century. It contains a description of the life in the Middle Ages, and specifically the effects of the Black Death:

,, I say, then, that the years of the beatific incarnation of the son of God had reached the tale of one thousand and three hundreds and forty-eight when in the illustrious city of Florence, the fairest of all the cities of Italy, there made its appearance that deadly pestilence, [...]

In Florence, despite all that human wisdom and forethought could devise to avert it, as the cleansing of the city from many impurities by officials appointed for the purpose, the refusal of entrance to all sick folk, and the adoption of many precautions for the preservation of health; despite also humble supplications addressed to God, and often repeated both in public procession and otherwise, by the devout; towards the beginning of the spring of the said year the doleful effects of the pestilence began to be horribly apparent by symptoms that shewed as if miraculous.

Not such were they as in the East, where an issue of blood from the nose was a manifest sign of inevitable death; but in men and women alike it first betrayed itself by the emergence of certain tumours in the groin or the armpits, some of which grew as large as a common apple, others as an egg, some more, some less, which the common folk called gavoccioli. From the two said parts of the body this deadly



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gavoccioli soon began to propagate and spread itself in all directions indifferently; after which the form of the malady began to change, black spots of livid making their appearance in many cases on the arm or the thigh or elsewhere, now few and large, now minute and numerous. And as the gavocciolo had been and still was an infallible token or approaching death, such also were these spots on whomsoever they shewed themselves [...] Not merely were those that recovered few, but almost all within three days from the appearance of the said symptoms, sooner or later, died, and in most cases without any fever or other attendant malady.

Moreover, the virulence of the pest was the greater by reason that intercourse was apt to convey it from the sick to the whole, just as fire devours things dry or greasy when they are brought close to it. Nay, the evil went yet further, for not merely by speech or association with the sick was the malady communicated to the healthy with consequent peril of common death; but any that touched the cloth of the sick or aught else that had been touched or used by them, seemed thereby to contract the disease."

> Boccaccio The Decameron

1. After reading the extract, answer the following questions:

- a About which city do Boccaccio writes? Place it in a map.
- b. Which is the illness he is speaking about?
- c Which are the symptoms of this illness?
- d. How is this illness spread according to Boccaccio?
- e Write a resume about what Bocaccio is explaining in the text
- g. Look for information about the author and place him

so, this is the climate that propitiated the representation of Death as a character in all the arts as something impossible to



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avoid, as something joining all the social groups, as something arriving without warning. In several points of Europe, the Dance of Death was represented to try to protect, or to appeal the mercy of Death.

Here you can see a representation of one of these Dances:



https://goo.gl/ydzrax

Inspired by the video and the texts read above, in groups, prepare, and perform a similar representation in groups. Follow these steps:

- 1. Watch carefully the previous video
- 2. Organize in groups. The teacher decides the number of students depending on the amount of students in the class and the amount of characters the group wants to include in the performance.
- 3. Decide the amount of characters you are going to represent, and the plot
- 4. Look for the appropriate music Record the performance and if possible, share it on the social Networks using the hashtag #greatmiddlereuse.

As we were explaining, nowadays normal illnesses could kill medieval people, but if it were not enough with the common illnesses,



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some plagues spread during the Middle Ages causing the death in some cases of nearly one third of the population. Here you have different links to learn a bit more about them:



https://goo.gl/VKCm27



https://goo.ge/YXRTEN



https://goo.gl/mmd6mh



https://goo.gl/1tycuz

- 1. Working in groups of 4 5 students, search in the previous links information about different illnesses (on for each group). The use of additional links is optional.
- 2. Students read carefully all the information they can find about their corresponding illness.



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- 3. Students look for pictures/photos representing the different illnesses.
- 4 With the pictures and the obtained information, they have extracted from the links, prepare a poster including the main information: Name of the illness, symptoms, consequences, spread causes, images, ...
- 5. Posters will be places on the walls, and illnesses will be presented to the other groups.
- 6. After studying the illnesses, a game will be created, writing in different papers the causes of the illness, the symptoms, etc, and mixing them. Students take a paper randomly and they must identify the illness.
- 7. A competition among students will be performed.
- 8. A final product will be created, which can be a role play, a dialogue, or a video created. An example can be seen in the following link:



https://goo.gl/kHXJhe

You can publish your results in the Social Networks using the hashtag #greatmiddlereuse

Some of the illnesses that killed thousands of people during the Middle Ages are nowadays still present, some of them have



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disappeared and we must face now adays new illnesses not present during the Middle Ages, or at least, not studied at all.

There are several ways causing the spreading of illnesses, we will start by studying this aspect, and using it to link with the study of current illnesses.

- 1. Organize a "brainstorm" about the ways of spreading of illnesses nowadays.
- 2. In groups of 4 or 5 students, each group selects a current illness randomly and search in the internet and the web page of the project information about the illness. As it was made with medieval illnesses, with the information and pictures found, each group creates a poster with the main information. You can publish your posters in the
- Social Networks using the hashtag #greatmiddlereuse.
- 3. Posters are put on the wall and the information about the different illnesses is presented to all the class by the groups.
- 4 Again, after studying the illnesses, a game will be created, but this time with the form of a memory game writing in different cards the characteristics of the illnesses and the name of it and trying to match them.
- 5 A competition among students will be performed.

In the last years, a couple of current illnesses have been present in the news due to their spreading out of the regions where they are original from. These illnesses are Ebola and Zika viruses.



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We will try now to use all the learning acquired to that point to focus in the study of these two illnesses.

First, we are going to have a bit more of information. Watch the following video about Ebola Virus:



https://goo.gl/4GcGVs

As you did with Medieval and current illnesses, take notes about all the information in the video about ways of spreading, symptoms, prevention of the spreading, ... Search on the web more information about Ebola virus, about their origins and countries affected and about the treatment.

Now, watch this video about Zika virus:



https://goo.gl/GNZZ4P

Again, extract information about the Zika virus, ways of spreading, symptoms, history, prevention of the spreading, ... Search on the web for more information about this illness.



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Finally, with all the information collected about new illnesses, construct a web site as it can be seen in this example:



https://goo.gl/X8xCUx

But what could be more interesting about these two illnesses could be to try to predict in some way which could be the next country affected by them. Follow this link and download the program simulating the spreading of Black Death according to the different parameters:



https://goo.gl/m2mCP7

It works placing in some point of the map some ill people (represented by dots) and showing how they spread through the map.

- 1. Study the program and try to understand the way it works
- 2. Change the map of Europe in the Middle Ages by a map of the World nowadays. We start by trying to adjust it to the study of Ebola.
- 3. Study the parameters considered in the program: probability of curing, continue illness and die), and agree, according to



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scientific studies the new parameters to apply to the study of Ebola virus.

- 4 Modify the program so that it allows predicting a possible spread of Ebola virus through the different countries.
- 5. Include in the program parameters allowing to model longdistance connections with other countries according to the existing connections due to assorted reasons.
- 6. Use these modifications included to model the spread of Zika virus according to commercial, tourist and other connection existing with the other countries.
- 7. Publish the maps obtained with this program on the Social Networks by using the hashtag # greatmiddlereuse



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Les Rimains



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