Heritage of the tallest buildings

Image caption: The Shard: the tallest building in Europe Union (London, United Kingdom, 2019)
Photo source: https://unsplash.com/photos/fk50kc-DzSg

Image caption: The tallest building in the world for 238 years (Lincoln, England, 1311–1548)

Photo source: https://lincolncathedral.com

CONTENT

General overview

Men have been trying to touch the sky since the dawn of time. Living in tall buildings has actually become synonymous with being at the top of the social order. Even when looking at the Egyptian pharaohs, it's quite obvious that they believed "the taller, the better". The truth of this statement is not lost on the current generation, where skyscrapers were initially meant for commercial vanity, rather than cultural significance. For centuries and right up until 1901, the tallest buildings in the world were always either a church or cathedral. (source: https://www.scienceabc.com/eyeopeners/from-pyramids-to-skyscrapers-history-of-the-tallest-buildings.html)

The Council on Tall Buildings and Urban Habitat (CTBUH) has developed their own system for classifying tall buildings, measuring from the "level of the lowest, significant, open-air, pedestrian entrance to the architectural top of the building, including spires, but not including antennae, signage, flag poles or other functional-technical equipment." Using this system more than 3,400 buildings have been categorized as over 150 meters tall. (Source: https://www.archdaily.com/779178/these-are-the-worlds-25-tallest-buildings)

Today, going through the list of these tallest buildings, we can notice that the one's in Europe are not the world leaders by height – the top of this list belongs to Asia and North America continents. There can be some explanations and reasons for this – the urban situation of the city, social and economic factors. For example, in the end 19th century, with the construction of several very high-rise hotels in London (one of the largest hotels in the world, the Grand Midland at the time), the idea of builders to design a tall building was criticized by the administration of Queen Victoria. Concerns were raised because of the aesthetics and firefighting requirements of these buildings. As a result, regulations were adopted and used to be applied to limit the height of buildings, with some exceptions until 1950. For similar reasons, in the first half of the XXth century, high-rise construction was also constrained in other European cities. Various offers, such as Plan Voisin by Le Corbiuze, one of the earliest proponents of skyscrapers, made public in 1925, draw an idea to reconstruct the center of Paris - to demolish the old city, except for the most important buildings, and to reclaim the area with newly skyscrapers with planted area around, demonstrated the trends, but not the real practice. So, at a time, when Europe architects were taking their first steps to height, constrained by traditions and government regulations, the real skyscrapers being built in the US were competing against each other to set new records. As a result, most European cities today have tall buildings as exception, stand-alone objects, not world high-altitude contestants.

Tall, taller, the tallest. Activity overview

The aim of this exercise – encourage students to deepen the knowledge about the long-standing architectural heritage sites – churches, widely known because of their height. The analysis of this topic, which is divided into 3 activities, aims to help to improve student's analytical skills, the skills of planning by use of digital technologies and the skills for the data and/or idea presentation. The first activity will invite students to plan the trip around the highest churches in Europe. This activity also could be developed with additional tasks, agreed upon the goals of the lesson – present history of the building, architectural style of it or even fuel consumption by plan to visit them by car. The second activity aims to encourage students to take a closer look and be aware of the visual exclusivity of these buildings. Students will also be able to present their impressions and opinion about these cultural heritage sites using the knowledge and skills gained in the previous exercises of this workbook (e.g. Inside the visual arts). The last – third activity of this exercise aims to broaden the area of interest of the students including modern buildings and invites students to think over both of the groups – old and new buildings – why are they interesting, what arguments they can formulate and provide for this. This activity also provides the possibility to integrate the topic into the math related subjects by planning the length of the trip.

What impact the evolution of technology had had on the role of churches - the tallest building and authority in society - as the visual identity of cities has evolved with tall modern buildings; how churches, and their high interior and exterior spaces serve society not only as religious but cultural and tourist attractions today also should be discussed and explored within this exercise.

General objectives:

- To help the students to understand the importance of the architectural sites, known by their height, in the perspective of the evolution of the society.
- To increase knowledge about European architectural heritage.
- To increase the knowledge about the tallest churches/ modern buildings in Europe

The activity can be applied for the VET students of various programmes during the subjects related to #history, #geography # ICT, #math, #economic, #art, #ethics, #technology, #cultural education.

Descriptive activity sheet

Activity 1 "Tallest in Europe. Tour around"

Resources for the activity implementation. Network, computer.

Activity starts by introducing the situation, the students have to empathize with:
Put yourself in the shoes of a guide. You have to organize the trip to your friends around the 5 tallest churches in Europe Union. Plan the route:
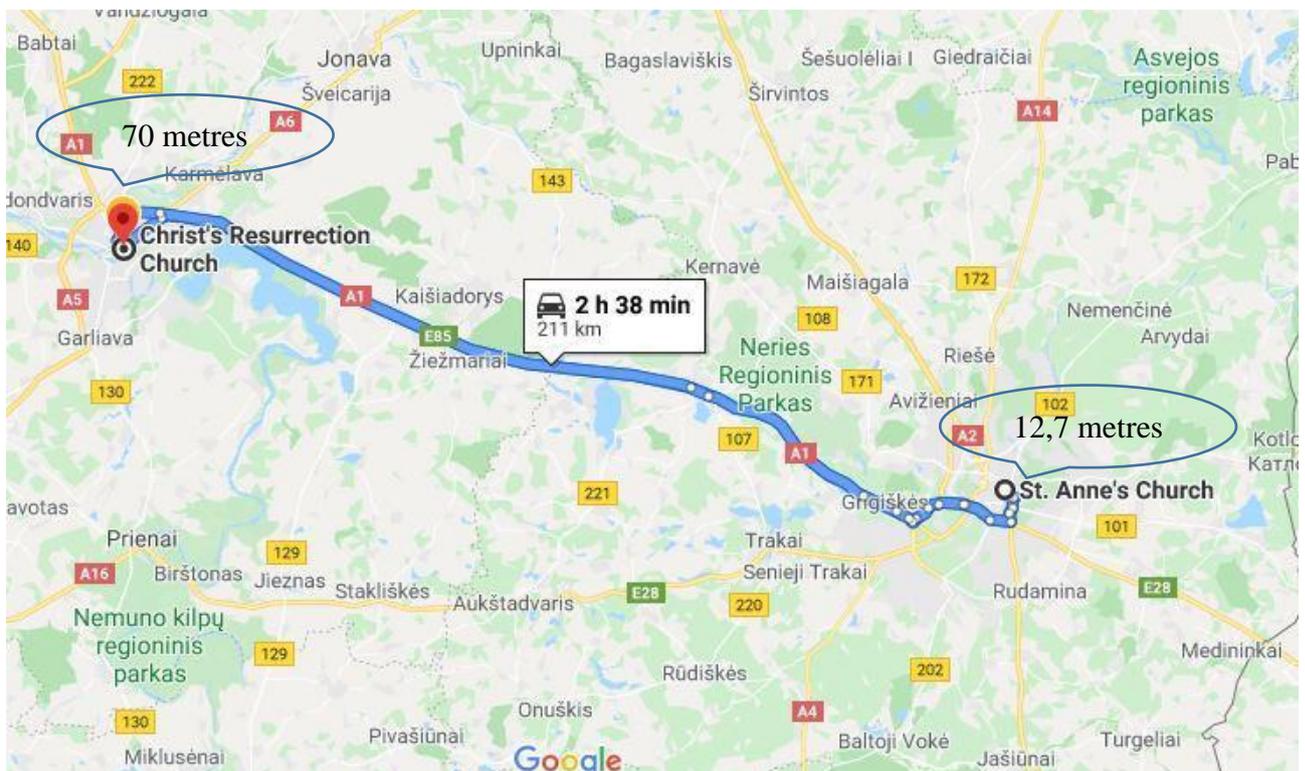1. *Find 5 tallest churches in Europe.*
2. *Offer the 2 possible routes:*
   - *from the smallest to tallest*
   - *from the nearest to farthest*

The starting point of your trip should be the location of the school. Use the Google map (or other similar programme) to present your findings.

Results of the activity.
Facts about the tallest 5 tallest churches in Europe found/ /presented (possible example provided below).

Route from Vilnius St. Anne Church: http://www.vilnius-tourism.lt/en/what-to-see/places-to-visit/churches/church-of-st-anne/ to Kaunas Chirst's Resurrection Church:
https://visit.kaunas.lt/en/see-and-do/top/kauno-paminkline-kristaus-prisikelimo-bazilika/

Recommendations for the teacher:
- The exercise can be organized as a group work or individual task by the need.
- The learners, working in the group, have to find required info, check the reliability of the digital source (for example, visit few similar sources), summarize it and present to classmates orally. In order to verify the reliability of the information presented, you can give an additional task to provide information about the sources used in the search.
- Define the length appointed for the information search according to the students pre-entry level.
- Decide on the language of the presentation in line with the learning subject and lesson goals defined.
- According to the topic of the lesson / available time we recommend to ask the students to add additional info to the routes: possible means of the transport, other possible sites of the cultural heritage on the planned route.
- We also recommend deepening the knowledge in a cultural heritage area – provide information about the height of each building in measures of length used in ancient times of the country where it is located.

This activity should help students to broaden their geographical knowledge also knowledge about architectural monuments – churches, famous by building height, also develop these key competences:

Mathematical competence and competence in science, technology and engineering, by developing their skills:
- to apply basic mathematical principles and processes in everyday contexts at the learning process.

Digital competence, by developing their skills:
- to use digital technologies to support their communication;
- to use digital technologies towards learning goals;
- to use, access, filter, evaluate and share digital content;
- to engage with new software.

Cultural awareness and expression competence, by developing their skills:
- to acquaint and apply knowledge about European cultural heritage sites;
- to understand the different ways of communicating ideas in an architectural form.

Personal, social and learning to learn competence, by developing their skills:
- to work with others in a constructive way;
- to focus, deal with complexity, critically reflect and make decisions.

The evaluation of the activities of this stage:
Based on the tasks of this activity, we suggest a number of assessment criteria that may be applicable during this stage.

1. Assessment in relation to the requirements of the particular subject (Math: correct distance calculation / height comparison, ICT: preparation and presentation the route).

2. The whole task can be evaluated in the frame of group workflow – are the students involved in the activity, do they understand the task and can present their findings during it. The main criteria of such task evaluation should be presented to the class:

- ability to find information about the tallest churches in Europe;
- ability compare facts – height of the building;
- ability to plan the route;
- ability to present findings and ability to argue the answer.

3. Use / refinement of skills attributed to specific key competences areas during this exercise also ability to apply the pre- and gained knowledge of different subjects.

Recommended evaluation of the skills related to the mathematical competence and competence in science, technology and engineering, by developing their skills:

- mathematical knowledge (comparing heights, calculating distance) applied correctly;
- mathematical quantities were compared in the correct way.

Recommended evaluation of the skills related to the digital competence:

- search engines where exploited;
- validity and reliability of information was checked;
- creativity to use the digital technologies to present the findings are presented in the correct and creative way.

Recommended evaluation of the skills related to the personal, social and learning to learn competence:

- ability to deal with complexity and make reasoned decisions were demonstrated.

Recommended evaluation of the skills related to the cultural awareness and expression competence

- information about the planned route through the 5 tallest churches in Europe includes relevant information about cultural heritage sites.

Activity 2 "Tallest in Europe. The lost puzzle part"

Resources for the activity implementation. Network, computer.

Task starts by dividing the class into pairs. The students have to use the same list of the tallest churches in European Union (or extend it), made in the previous activity. Each student has to prepare the task for the classmate:

- save the pictures of 3 chosen churches from the list;
- snip the part from each of them (use e.g. Microsoft Windows - Snipping Tool);
- make a list (table) of them and email to your friend. We recommend creating the pairs from the students sitting far from each other – in this case they won't be able to see the primary picture.

After receiving the email, each member of the pair has work on the received list:

- identify the object from which the detail was snipped;
- present the full photo and short description (history, uniqueness of the site, other interesting info) about one of them.

Example:

Vilnius St. Anne Church: http://www.vilnius-tourism.lt/en/what-to-see/places-to-visit/churches/church-of-st-anne/

Results of the activity.

Identification of 3 architectural sites / collection / presentation of the important info about one them.

This activity should help students to broaden knowledge about architectural monuments and they features also develop these key competences:

Literacy competence, by developing their skills:
- to identify, understand, interpret facts and opinions in written and oral form by preparing the presentation about the church;
- to use visual and digital materials across disciplines and contexts, in a national and foreign language, by integrating intercultural competences;
- to formulate and express findings and arguments in a convincing way appropriate to the context, demonstrate critical thinking and ability to assess and work with information;
- to understand and use language in a positive and socially responsible manner.

Digital competence, by developing their skills:
- to use digital technologies to support them towards goals set;
- use of different devices, software, and network.

Personal, social and learning to learn competence by developing their skills:
- to work with others in a constructive way;
- to focus on provided information and make decisions.

Cultural awareness and expression competence by developing their skills:
- to understand the different ways of communicating ideas to the audience within digital form;
- to understand how architectural sites can be a way to both view and shape the world.

The evaluation of the activities of this stage:
Based on the tasks of this activity, we suggest a number of assessment criteria that may be applicable during this stage.
1. Assessment in relation to the requirements of the particular subject (e.g. ICT: work with the photo, art: identification of the architectural style).

2. The whole task can be evaluated in the frame of group workflow or individual work – are they engaged in the activity, demonstrate effort to implement it, present the findings in a creative way.

3. Use / refinement of skills attributed to specific key competences areas during this exercise also ability to apply the pre– and gained knowledge of different subjects.

Recommended evaluation of the skills related to the literacy competence:
- the presentation is in line with the provided task;

- different sources used to collect information;
- the all required info is presented;
- the provided info is essential, clear, valid and systemized;
- the path of the narrative is clear, catching the attention of the audience.

Recommended evaluation of the skills related to the digital competence:
- search engines/ software programs were exploited correctly.

Recommended evaluation of the skills related to the personal, social and learning to learn competence:
- ability to identify one's capacities, focus, deal with complexity, critically reflect and make decisions was demonstrated.

Recommended evaluation of the skills related to the cultural awareness and expression competence
- ability to use information obtained in previous stages of the activity during the presentation was demonstrated.

Activity 3 "New meets old"

Resources for the activity implementation. Network, computer, projector.

Activity starts by introducing the situation, the students have to empathize with:

You and Your friends are thinking of visiting the tallest buildings in Europe. Part of the group would like to see historical sites – churches, the other part insist on the tour around the modern buildings, significantly taller than the older ones. After the long discussions, you decided to make a compromise – plan a tour around 10 sites, which includes both of them. The main criteria for preparing to convince Your friends – argument why should we visit this object? Choose, by your opinion, the most important one, draw and present the route. Try to calculate – how long it will take (by bus and/ or train, plane).

Results of the activity.
Rout, including 10 tall (-est) architectural sites is presented and described.

Recommendations for the teacher:
We recommend to use the same ones as listed in the activity 1.

This activity should help students to broaden knowledge about unique buildings in Europe also develop these key competences:

Literacy competence/ Multilingual competence, by developing their skills
- to identify, understand, interpret information in the different sources in written/digital form;
- to use visual and digital materials across disciplines and contexts, in a national and foreign language, by integrating task related competences;
- to formulate and express findings and arguments in a convincing way appropriate to the context through critical thinking and ability to assess and work with information;
- to understand and use language in a positive and socially responsible manner.

Digital competence, by developing their skills:
- to take a critical approach to the validity, reliability and impact of information and data made available by digital means;
- use of different devices, network and assistive software;
- to use digital technologies to support them towards goals set.

Cultural awareness and expression competence, by developing their skills:
- to acquire and / or use knowledge of European architectural objects;
- to present arguments comparing modern and ancient architecture;
- to portray different forms of architecture art.

Personal, social and learning to learn competence, by developing their skills:
- to think critically and make reasoned decisions;
- to find, systematize and use relevant information to implement the task;

- to work in the group and individually, follow the constructive arguments and other opinion in a respective way to make a joint decision.

Entrepreneurship competence, by developing their skills:
- to apply planning and strategic thinking skills purposively for the route preparation;
- to apply proper time and transport means planning techniques to organize the route.

The evaluation of the activities of this stage:
Based on the tasks of this activity, we suggest a number of assessment criteria that may be applicable during this stage.
1. Assessment in relation to the requirements of the particular subject (e.g. geography: the correct route, other available info provided e.g world directions, coordinates, math: calculation of the necessary time for the route).

2. The whole task can be evaluated in the frame of group workflow or individual work. The main criteria of such task evaluation should be presented to the class:
- comprehensive and reasoned presentation of the created route, ability to engage the audience;
- ability to communicate constructively with the audience and answer the questions.

3. Use / refinement of skills attributed to specific key competences areas during this exercise also ability to apply the pre- and gained knowledge of different subjects.

Recommended evaluation of the skills related to the literacy/multilingual competence:
- various sources have been used for presentation, the information contained in them has been systematized and presented according to the requirements of the task;
- the sources used for the presentation have been critically evaluated for their reliability;
- arguments of the route choice were presented, appropriate language style and context was used;
- the presentation includes an extensive vocabulary, there is no grammatical or stylistic errors;
- arguments and ask constructive questions are provided with the respect for the interlocutor/group.

Recommended evaluation of the skills related to the digital competence:
- ability to use search engines/ appropriate software was demonstrated;
- critical approach to the validity and reliability of information used for the presentation;
- creativity applying digital technologies to create a comprehensive content and present it.

Recommended evaluation of the skills related to cultural awareness and expression competence:

- knowledge, about different cultural forms/architecture/national and European identity was integrated into the presentation;

Recommended evaluation of the skills related to personal, social and learning to learn competence:

- individual involvement in group work;
- identification of individual/group capacities, focusing, dealing with complexity, critical reflection and decision making;
- ability to communicate constructively, collaborate and negotiate (groups work and presentation stage);
- demonstration of tolerance, expressing and understanding different viewpoints.

Recommended evaluation of the skills related to entrepreneurship competence:

- the idea of route has been consistently planned and implemented;
- necessary resources were organized and applied optimally, alternatives were discussed;
- the reasoning behind the choice of transport means have includes economical reasoning;
- an innovative, exclusive approach to route planning is demonstrated;
- sense of initiative and agency, pro-activity, being forward-looking, courage and perseverance in achieving objectives were demonstrated.