

**CROSS-CURRICULAR TEACHING
IN
PUČIŠĆA ELEMENTARY SCHOOL**

BRAČ IN THE EARLY MIDDLE AGES
6. grade

Pučišća elementary school, january / february 2016

PURPOSE OF CROSS-CURRICULAR TEACHING:

- Increasing the quality and effectiveness of education

Based on dominant theories of teaching and learning:

- the theory of constructivism and experiential learning
- theory of multiple intelligences

Methods of realization:

- More dynamic teaching process
- Including emotions in the process of teaching
- Concentrating teaching topics (through all teaching areas in about the same period of time)

Expected results:

- Increased student motivation for learning
- Teaching content associated with life
- The students being aware of the purpose of learning
- Knowledge: permanent and applicable in practice
- Developed students' key competencies
- Realization of specific potentials of each individual (considering the dominant type of intelligence)

Teaching areas included:

- History
- Croatian language
- Mathematics
- Fine arts
- English language



**BRAČ IN THE EARLY
MIDDLE AGES
HISTORY, 6. GRADE**

ADMINISTRATION AND MUNICIPAL GOVERNMENT

OBJECTIVE: to get to know the conditions in which Brač residents lived in the early Middle Ages, to understand the laws and their application

Teaching tasks (material): to connect the territory in which Brač residents lived in the Middle Ages with living conditions; to compare these facts with life in Croatia and Europe; to get familiar with medieval municipal government on Brač

Students' competences:

- 1. **learning competences** (collecting information on the topic from primary and secondary sources; applying the knowledge of the medieval way of life and the municipal government on Brač to the situation in Croatia and in Europe.
- 2. **problem solving competences** (applying the knowledge of the municipal government in real-life problem situation; for example, one commoner has violated the statute not treating the land: role-play of the problem)
- 3. **social & civic competences** (understanding the need for creating and respecting the rules in the community; understanding the role of each individual in the community; understanding the social conditions in which a certain community develops)

Teaching topics (mandatory, from the official curriculum) :

- The rise of Croatia in the early Middle Ages
- The rise of medieval Europe

(settling of the Croats, orientation on the timeline, everyday life and occupation of the people in the early Middle Ages, social and economic development, formation of principalities, territorial administration, historical evidences (tangible and intangible))

Researching the topic in the immediate surroundings: Brač in the early Middle Ages

WORKFLOW

1. INTRODUCTION

- **Motivational conversation** (Who were the first inhabitants of the island ? Where did they live? (in the interior, on the hills) Why? Who lived on the coast? When? Who represented a threat to the island's coastal residents? What did they do? How can we make conclusions today on the life in the early middle Ages? (early Romanesque churches and chapels, distributed on the peaks of almost every hill) From what sources we get to know how medieval inhabitants of Brač lived? (exploring the conditions of life and written sources).
- The most thorough written source is **Brač Medieval Statute**, which regulated the functioning of the community.
- The statute was applied for almost 700 years, and many of today's traditions are based in this document. So it is useful to study it thoroughly.

2. PROCESSING NEW INFORMATION (from Brač statut)

The most important info on the municipal government

- The seat of Brač commune was in Nerežišća
- All the power belonged to the aristocracy.
- Aristocracy and the common people were not the same before the law (their word did not have the same value in court)
- The aristocracy carefully guarded their privileged position, always asking to confirm the Statute that described and identified all the privileges.

SYSTEM OF GOVERNANCE

MUNICIPAL BODIES

1. COLLECTIVE

2. INDIVIDUAL

THE GROUND COUNCIL

(composed of all adult nobles)

Adopt the Statute; elects the Prince, the most important officials and the executive authorities.

2. KURIJA

executive authority: the prince and the 3 judges

individual authorities

1. KNEZ (PRINCE) (manages and represents the community)

2. JUDGES (make judgments in all disputes)

3. Municipal officials

3.1. KANCELAR (manages the budget, draws up contracts and testaments)

3.2. KAMERARIJ (keeps written documentation of the commune)

3.3. JUSTICIJARIJ (verifies Measures and Weights)

3.4. BUKARIJ (confiscates the property for the purpose of tax collection, carries out the transfer of ownership)

Individual authorities

3.5. PRISTAV (gives final judgments in disputes)

3.6. GUARDS (ČUVARI) (find violators, take them to the judge or punish them according to the Statute)

3.7. STIMADUR (estimates values)

3.8. LAWYER (ODVJETNIK) (represents clients or commune in dispute)

3.9. GASTALDI (heads of villages, set by the prince and represent prince)

Individualni organi

3.10. SOPRAKOMIT (nobleman, head of gallium).

3.11. IZASLANIK (emissary) (ad hoc elected, represent the interests of the aristocracy in front of the central authority)

3. RESEARCH PROBLEM:

a) To investigate how medieval inhabitants of the island treated the fertile land?

(having studied the parts of the Statut, we found out that initially no one had ownership of the land, the land was communal and rented to residents. The land was very respected. Twice a year it had to be treated. If it hadn't been done twice in a row, the land was confiscated.)

b) Show by role playing the functioning of municipal administration if contractual obligations were disregarded (treating the rented land)

- describing the administrative procedure (detection of the offense)
- involving the municipal authorities in solving the dispute
- trial (arguments of the prosecution and defense)
- implementation of court decision

- **The order of activities :**

- 1. to determine which persons will take part in the play
- 2. to divide roles among students
- 3. to determine the scene
- 4. every dramatic character must create its own personality (shy, withdrawn, resigned, combative, honest, superficial ...)
- 5. to play the scenes (with particular attention to the text of the indictment, the arguments of prosecutor and defense lawyer)
- 6. to analyze the play (determine which actions and arguments of the characters were possible in the circumstances, what was illogical or impossible, why)
- 7. to express impressions about solving social problems, shown by the play (impressions will show whether the students understood the social relations in the medieval community)







Scenario of students' play:

- Roles: farmer, keeper of the field, prince, judge, defense attorney, gastaldi (village chief), kamerarij (municipal scribe)

The scenes:

- 1. keeper of the field establishes offense (uncultivated land)
- 2. he reports the offense to the Prince
- 3. Prince gives the order to the judge to take legal action
- 4. Judge reports the farmer to court in writing
- 5. Farmer seeks help from municipal attorney
- 6. Attorney passionately defends the client (the arguments: first time the farmer was not at home, second time he was sick)
- 7. Judge rejects arguments and brings the verdict to the detriment of farmer; informs the village head
- 8. gastaldi gives the order to municipal scribe (kamerarij) to record a new state in the books

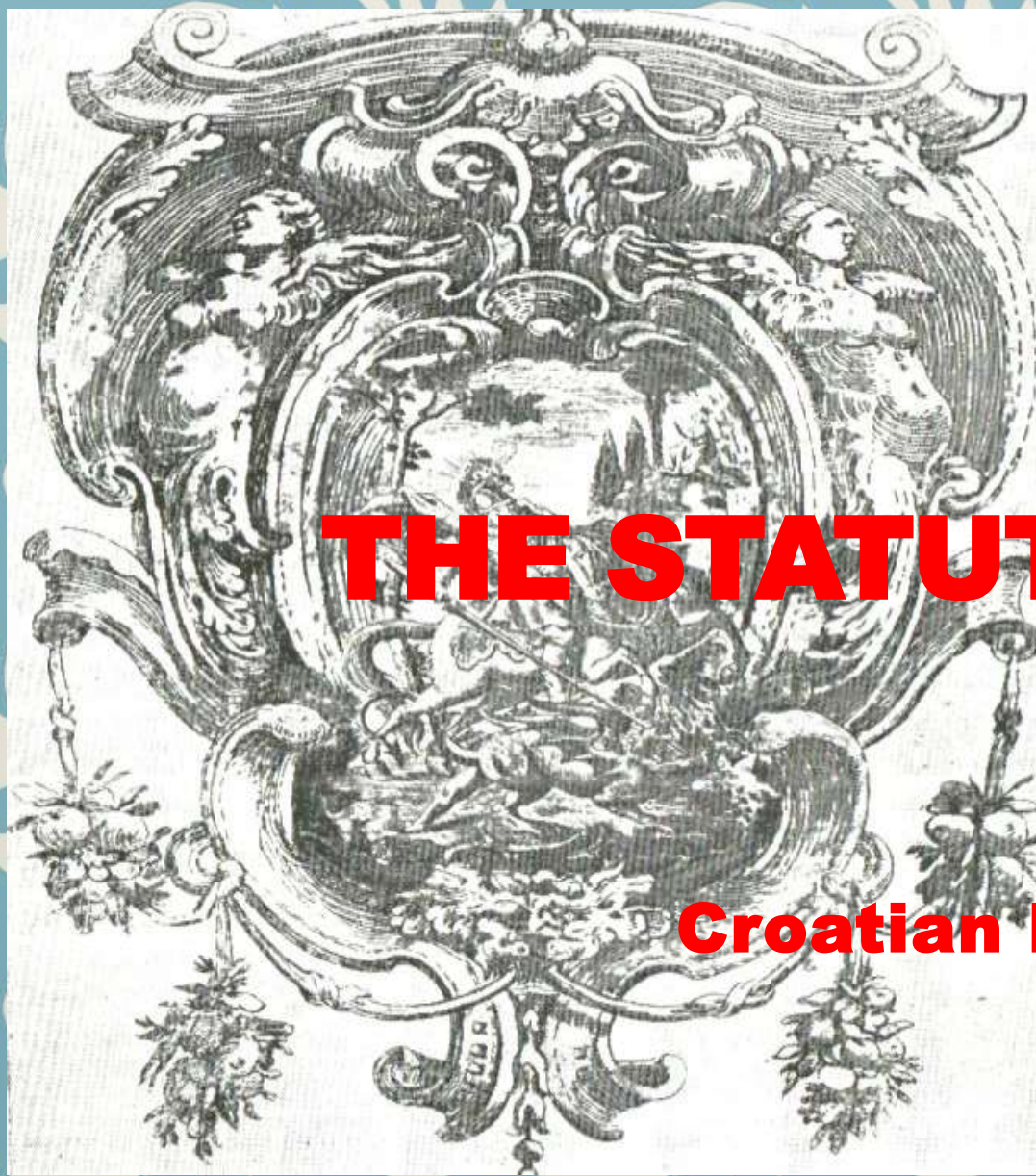
Analysis of the play

Heuristic conversation:

- What was not in line with information from the literature in a play? Who used a written communication in the early Middle Ages? How was public posts transferred? Who could lease the land? (Pater familias) Who cultivated the land? (All family members)
- Why did lawyer fail to defend a client? Was he able to do it using some other arguments? What was the position of farmers in court? Did the aristocracy have the same position? Why?
- What was the position of the farmers in medieval Croatia? In Europe? What are the similarities and differences?
- The written work: **What could improve the status of farmers in medieval society?**

CONCLUSION

- Working on the topic students have significantly **increased their motivation to learn** and developed interest in the history and culture of the homeland
- They understood the reasons why the medieval inhabitants settled Straževnik area (possibility of defense of the territory and communication with other communities, the existence of water, fertile land and pasture for livestock)
- They understood the way of organizing the municipal community, roles of certain officials and the reasons for the adoption of the Statut.
- They succeeded in practical application of the knowledge gained (**theoretical knowledge has become procedural knowledge**)
- Procedural knowledge can be applied to other research situations, and they draw conclusions about the historical conditions in which Croatian and European inhabitants lived (**procedural knowledge becomes permanent**)
- Students effectively **developed their key competencies**. They want the research to continue, which guarantees further educational achievements



THE STATUTE OF BRAČ

Croatian language



IN nomine Dei misericordis, cuius
nutu sermo recipit gratiam, & do-
ctrinam perfectam, & sicuti scribitur
per Prophetam dicentem, Ius-
tus Iudex est; Quia Iustitia non
potest plenarie adimpleri propter hominum imbecil-
litatem memoriae, & propter malitiam ei obuiam,
nisi vinculo scripturarum comprobetur, volumus
dictam Iustitiam propalare; quoniam est ei con-
stans, & perpetua voluntas, Ius suum unicuique
tribueret. Hic est in illo Iustitia super cuius so-
lone Iustitia dicitur, quod si quidquam ma-
gnum. Hic est, quod Iustitia, Regna cor-
roborat, Principatus amplificat, auget, & multi-
plicat Ciuitates, & parit concordiam, nutrit pacem,
gentes, & populos regit in statu pacifico, & quieto.
Ad hanc ergo Iustitiam ministrandam, manus enen-
dam, & reddendam subiectis, vigilare, & insuda-
re tenentur ex debito vniuersi, & singuli, quibus
tam à Deo, quam ab hominibus populorum guber-
nacula, & Ciuitatum Regimina committuntur.
Marinus Falerio Potestas Pharen-
sis, & Bračhiensis considerantes meditatione fre-
quenti, quod Statutis Insulae Bračiae Domus Com-
munis dictae Insulae carebat, quoniam in ipsa Demo

A di-

1587

GENERAL OBJECTIVE:

- to understand that language is used to transmit messages, and that the form of the message depends on the context (real and linguistic)
- become capable for communication using different communication styles

The main source - medieval Brač statute

1. Introduction

- 6th graders were involved in the project. The project covers the subject areas of history of language and written and oral expression.
- Working on assignments lasted ten teaching hours.

Topics - regular curriculum

Croatian language

- the beginnings of Croatian literacy
- comprehensive reading of non-literary texts
- speaking and listening

Civic Education

- The role of citizens in identifying, researching and solving community problems
- Protection of common interests and well-being
- Fostering the principles of fairness, the building of democratic relations and the protection of the common good
- Collaboration and teamwork in exploring and solving common issues

2. Motivation

- to determine the students' knowledge of the historical and political events in the island's history, using heuristic conversation

(Illyrian period, Roman period, Byzantine government, Neretljan government, Venetian government)

3. Written exercise


- Students work in groups, with the task of writing essays: "How did living on Brač in the Middle Ages look like?,"
- *(How many people were living on the island? Where were the settlements? How did the houses look like? Did people differ according to social status? What did people do for living? Were they rich or poor? In what kind of communities they were living? Were they connected to the mainland? Was it easy to get to the mainland?)*

Work results

BRAČE U SREDNJEVI VJEKU

Na Braču je u srednjem vijeku živjelo oko 2500 ljudi. Kuće su se najviše gradile na brdima ili blizu poljama, uz stoku ili uzgoj biljaka. Kuće su se gradile kao suhozid, bez zidova, najviše u obliku kvadrata.

Ljudi su se razlikovali po profesiji. Na vrhu su bili plemići. Nekom njih su bili stotokna građevništvo i ma kraju su bili kametovi. Plemići su "kupovali" kametove za obradu njihovih polja. U to doba na Braču je bio mlatarski dužak. Ljudi su se najviše bavili stočarstvom i poljoprivredom. Folklorni su bili kovači i stolari. Ljudi su većinom bili relativno siromašni, tako je bilo i bogatijih ljudi. Živjeli su u malim selima od 10 do 15 kuća. U obitelji je bilo 5 do 7 članova. Najveći neprijatelj su bili plućni. Do kopma su doticali u malim čamcima. Na putu do kopma uvijek je vrebala opasnost od plućne marnovice, što nije bilo sigurno odložiti na kopma.



4. Introducing the key concepts - the law

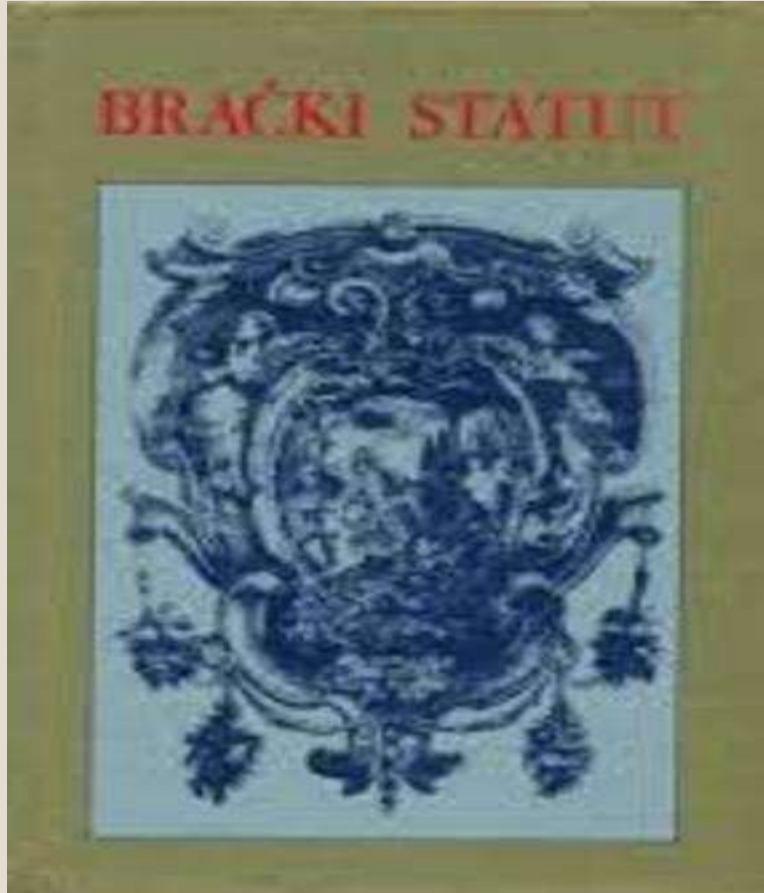
- Brain storming on the concept of *law*
- Heuristic conversation - encouraging students to think about the need to create laws.

(What is the purpose of laws? Who brings the laws? What do the laws regulate? What is the most important law in today's Croatian society? What today's laws do you know? What would happen if the laws were not respected?)

5. Introducing the Brač statute - basic info

- Brač statute is a collection of legal texts that regulate the common norms of the island.
- It was created in 1305. as a copy of the Statute which was burned in the fire 1277. It was probably created before that.
- Autonomy of Brač commune - the central government acknowledged the provisions of this Statute.

- Brač statute was written in Latin.



I

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A di-

6. Getting to know Brač statute - working on text

- Students in groups read the parts of Statute. After the first encounter with the text, students briefly describe the characteristics of the text.

(How the text differs from literary texts? What are the main issues? Is the language of the Statute any different from the standard language?)

7. Analysing the laws of Brač Statute

- Students read and study the laws. They group them according to the areas.
- They create five sets of law: family law, law on agriculture, trading law, criminal law and administrative law.



OBITELJSKI ZAKON

Obiteljskim zakonom se utrođuje pravo na nasljedstvo i izbacivanje člana u kuću. Muškarci i žene, prema ovom zakonu imaju ista prava, zbog toga jer kada je u pitanju nasljedstvo, sva djeca dobiju u jednako. Obiteljski zakoni štite prava ovih obitelji. Ovi zakoni, većim dijelom se ne koriste. Kasnije su blažie, i dopadaju se okruzi koje se nisu prije dopadali Zakon. "Oženjena žena ima muža" vrijedi i danas jer odluka da se žena mora konzultirati s mužem je ispravna Zakon. "O onima koji umru bezopasnici a nemaju nasljednika ni ovdnjika" bi mogao vrijediti i danas zbog toga jer mislimo da je ispravno dati trećinu komuni ako nema nasljednika. Zakon. "O ženi koja je umrla bezopasnici i bez nasljednika" bi mogao vrijediti i danas. Ako žena ima muža, sve njeno mora pripasti njemu, a ako žena nema muža, se njeno mora pripasti njenim bližim srodnicima.

4. KAZNENI ZAKON

<p>1) § 101. Kazna zbog čina protiv kuće i obitelji § 101. 1) 1979</p> <p>1) § 102. Kazna zbog čina protiv kuće § 102. 1) 1979</p> <p>2) § 103. Kazna zbog čina protiv obitelji § 103. 1) 1979</p> <p>3) § 104. Kazna zbog čina protiv kuće i obitelji § 104. 1) 1979</p> <p>4) § 105. Kazna zbog čina protiv kuće i obitelji § 105. 1) 1979</p> <p>5) § 106. Kazna zbog čina protiv kuće i obitelji § 106. 1) 1979</p> <p>6) § 107. Kazna zbog čina protiv kuće i obitelji § 107. 1) 1979</p> <p>7) § 108. Kazna zbog čina protiv kuće i obitelji § 108. 1) 1979</p> <p>8) § 109. Kazna zbog čina protiv kuće i obitelji § 109. 1) 1979</p> <p>9) § 110. Kazna zbog čina protiv kuće i obitelji § 110. 1) 1979</p> <p>10) § 111. Kazna zbog čina protiv kuće i obitelji § 111. 1) 1979</p>	<p>1) § 101. Kazna zbog čina protiv kuće i obitelji § 101. 1) 1979</p> <p>2) § 102. Kazna zbog čina protiv kuće i obitelji § 102. 1) 1979</p> <p>3) § 103. Kazna zbog čina protiv obitelji § 103. 1) 1979</p> <p>4) § 104. Kazna zbog čina protiv kuće i obitelji § 104. 1) 1979</p> <p>5) § 105. Kazna zbog čina protiv kuće i obitelji § 105. 1) 1979</p> <p>6) § 106. Kazna zbog čina protiv kuće i obitelji § 106. 1) 1979</p> <p>7) § 107. Kazna zbog čina protiv kuće i obitelji § 107. 1) 1979</p> <p>8) § 108. Kazna zbog čina protiv kuće i obitelji § 108. 1) 1979</p> <p>9) § 109. Kazna zbog čina protiv kuće i obitelji § 109. 1) 1979</p> <p>10) § 110. Kazna zbog čina protiv kuće i obitelji § 110. 1) 1979</p> <p>11) § 111. Kazna zbog čina protiv kuće i obitelji § 111. 1) 1979</p>
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8. Analysing the laws by fields

- Students are divided into new groups according to their own preferences (Committee for Family Law, Committee for Agricultural Law, Committee for Trading Law, Criminal Law Committee and the Committee for Public Administration).
- The task of each group is to analyze laws, using guidelines.

Example of the task

- **Law on Agriculture**

- *Can we determine what the people on the island do according to these laws?*
- *What kinds of issues, concerns and problems are regulated by this law?*
- *Who do these laws protect?*
- *Are the prescribed laws strict, mild or realistic?*
- *Do the laws equally treat commoners and nobles, domestic and foreigners on the island?*

9. Choosing the law to be applied in present time

- Students choose the laws that might be valid in today's society
- They study them additionally thinking how to adapt them to the present moment.

10. Comparison of legal texts

- Students analyze the language of the Brač statute, and of modern legal text

(What is the language used in legal texts? What is the vocabulary?
How the sentence look like?)

11. Writing the versions of the law

- Students adapt the selected laws to be valid in today's society, by content and linguistically.



Zakon o spravi

Ali vijećnik ne bi došao na Sjedinicu vješta bez valjanog razloga, dašac je platiš novčanu kaznu u iznosu od petito (500) kuna.

Ali optuženi, tužitelj ili tužitelj ne bi došao na sudenje bez valjanog razloga, dašac je platiš novčanu kaznu u iznosu od Ešuća (1000) kuna.

Ali je optuženi ili tužitelj rodbinski povezan sa sudcem, taj sudac mora biti izvzet iz tog slučaja. Ukoliko se utvrdi suprotno, sudac je dašac platiš novčanu kaznu u iznosu od pet Ešuća (5000) kuna te mu se na godinu dana zabranjuje rad.

Zakon o posjedovanju

Ali bi stva posjedao stakla bez dovolje vlasnika, mora bi platiš stakla (1000) kuna naknade, od toga jedna trećina ide Općini, jedna trećina posjedatelju stakla, a jedna trećina vlasniku stakla (Ešućiću).

Ali bi stva stakla u razji: uz ili vinograd bez dovolje vlasnika, mora bi platiš odštara vlasniku (prema izvornu nadležnik stakla) i dodatnik pet stotina (500) kuna, od toga jedna trećina ide Općini, jedna trećina posjedatelju stakla, a jedna trećina vlasniku stakla (Ešućiću).

Obiteljski zakon

Kada u ime stakla stakla bez sprave i bez nadležnika, u svjetlu izvornu stakla posjedatelj naplatiti sudbinu. Sudac se od nadležnika izvornu stakla nadležnik sudbine pogrešno.

Ni jedna nadležnik ne stakla naplatiti dugove svojih nadležnik, ovim stakla ne posjeduje stakla stakla ni svjetlu nadležnik stakla dugova.

Kazneni zakon

Ali netko nekome ukrade nebotičaru, sa ukradeni nebotičaru mora platiš punu cijenu (prema odlici posjedatelja nebotičaru) i vratiti nebotičaru na vlasnika.

Ali netko puka ukradeni nebotičaru i kupac je odliče vratiti, mora platiš dvostruku cijenu nebotičaru (prema odlici posjedatelja nebotičaru) vlasniku (Ešućiću).

Zakon o trgovini

Stakla posjedatelj mora na svoj rad biti platiš. Cijena rada na posjedovanju svjetlu mora biti iznositi stakla sudac (1.20) i stakla (400) kuna ovim o stakla. Ukoliko posjedatelj naplati stakla od posjedanog na svoj rad, mora platiš kaznu od petito (500) kuna.

Svaki posjedatelj stakla i stakla Ešuću mora biti u skladu s kaznenom propisanim od strane Općine. Ukoliko se propisane kazne ne počinju, posjedatelj stakla mora kaznjeno u skladu s Odbličen optine.



12. Making *The Book of Brač laws*

- The selected texts are included in the joint document – *The Book of Brač laws*.

12. The analysis of project work

- Talking with students discovers what they have learned, and how they felt while working on assignments.



MATHEMATICS

TRIANGLE **(area of the triangle)**

6th grade

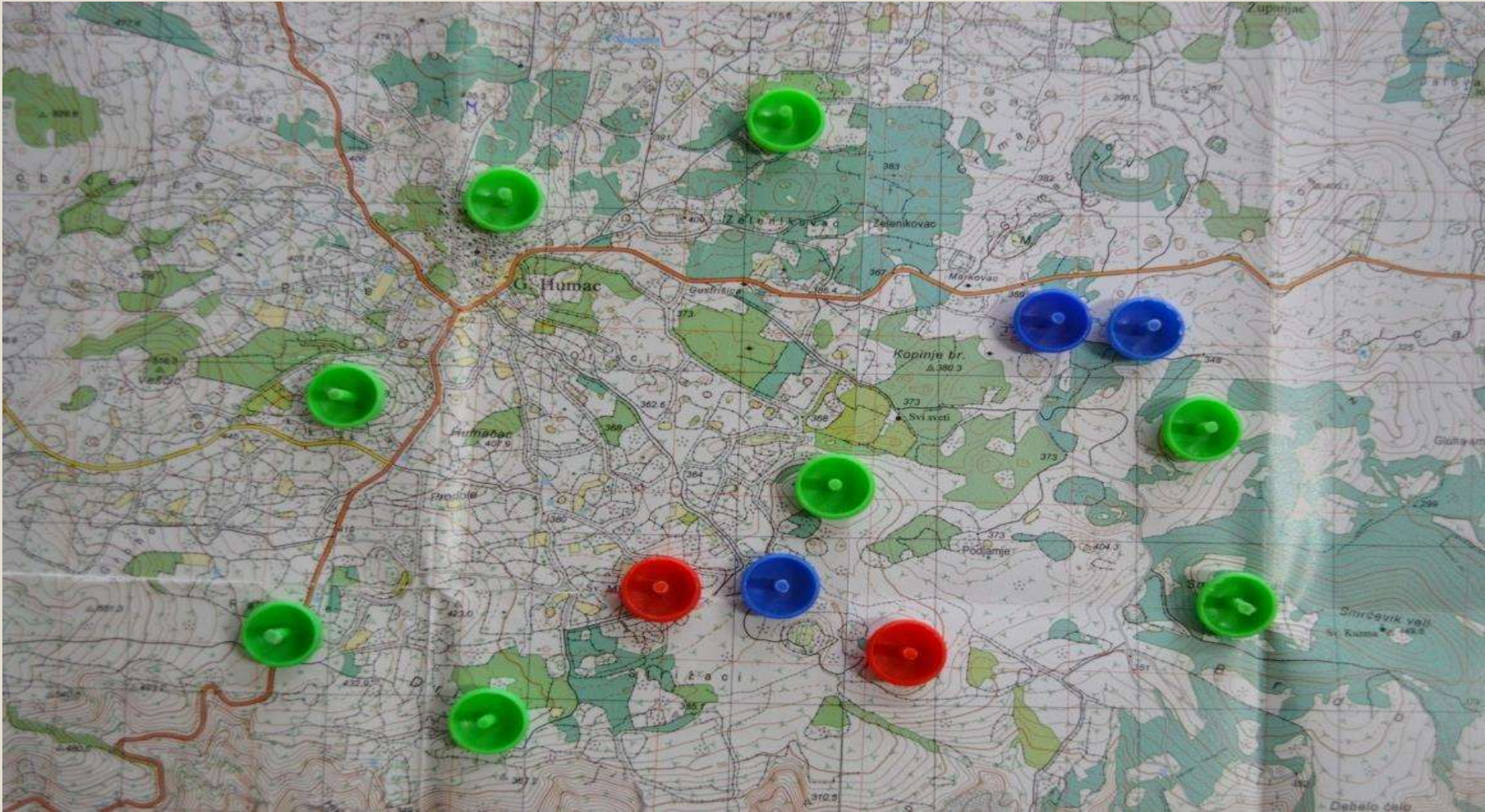
TEACHING TASKS:

- to determine the height of triangles, to create a formula for the area of a triangle; to calculate the area of a triangle
- to apply the acquired knowledge in the tasks of everyday life

PROBLEM TASK

- Calculate the area of the territory of the medieval village *Mehumi* (on the map and in the nature)

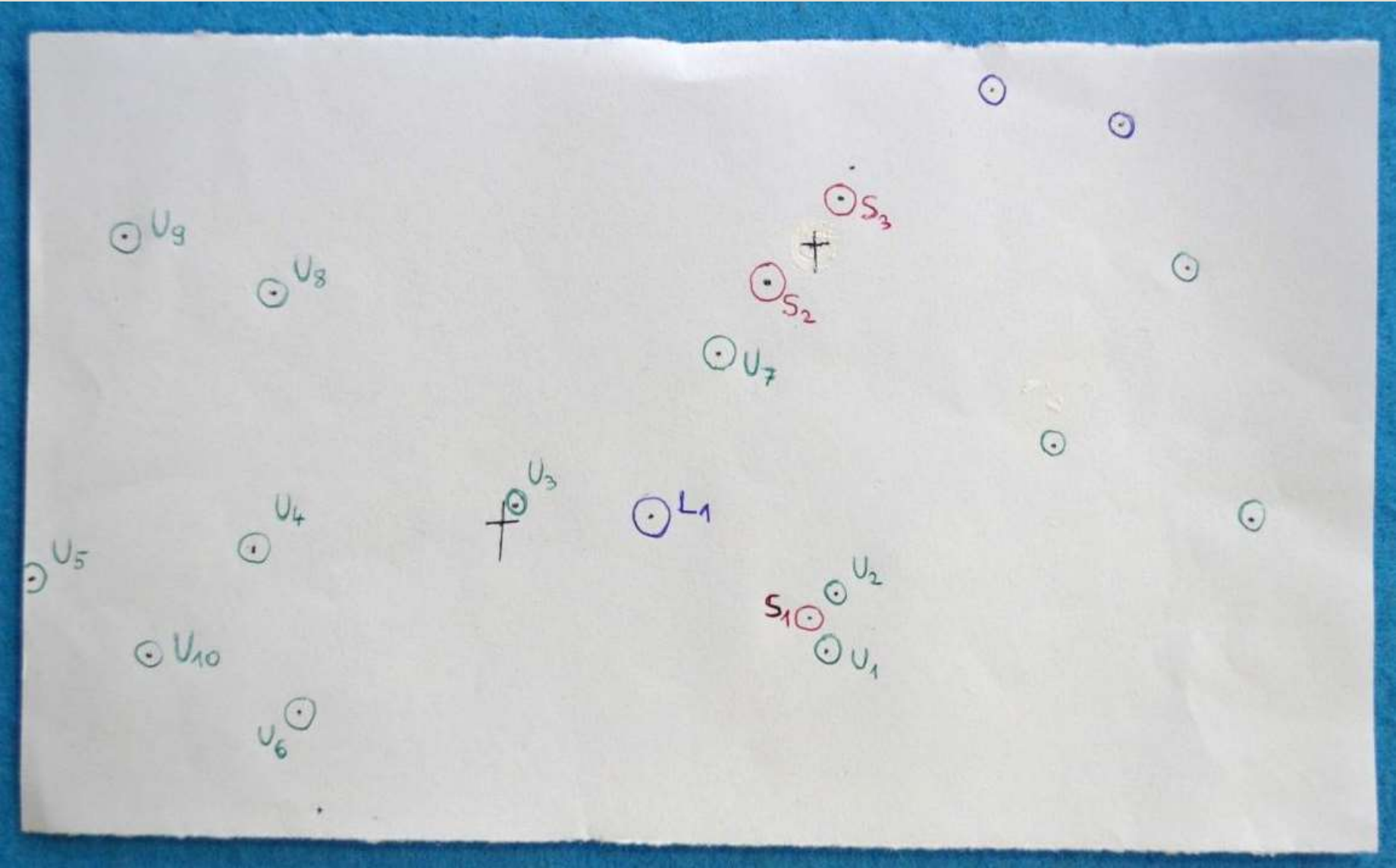
1st STAGE: Students mark significant natural and social facilities in the territory of Mehum.



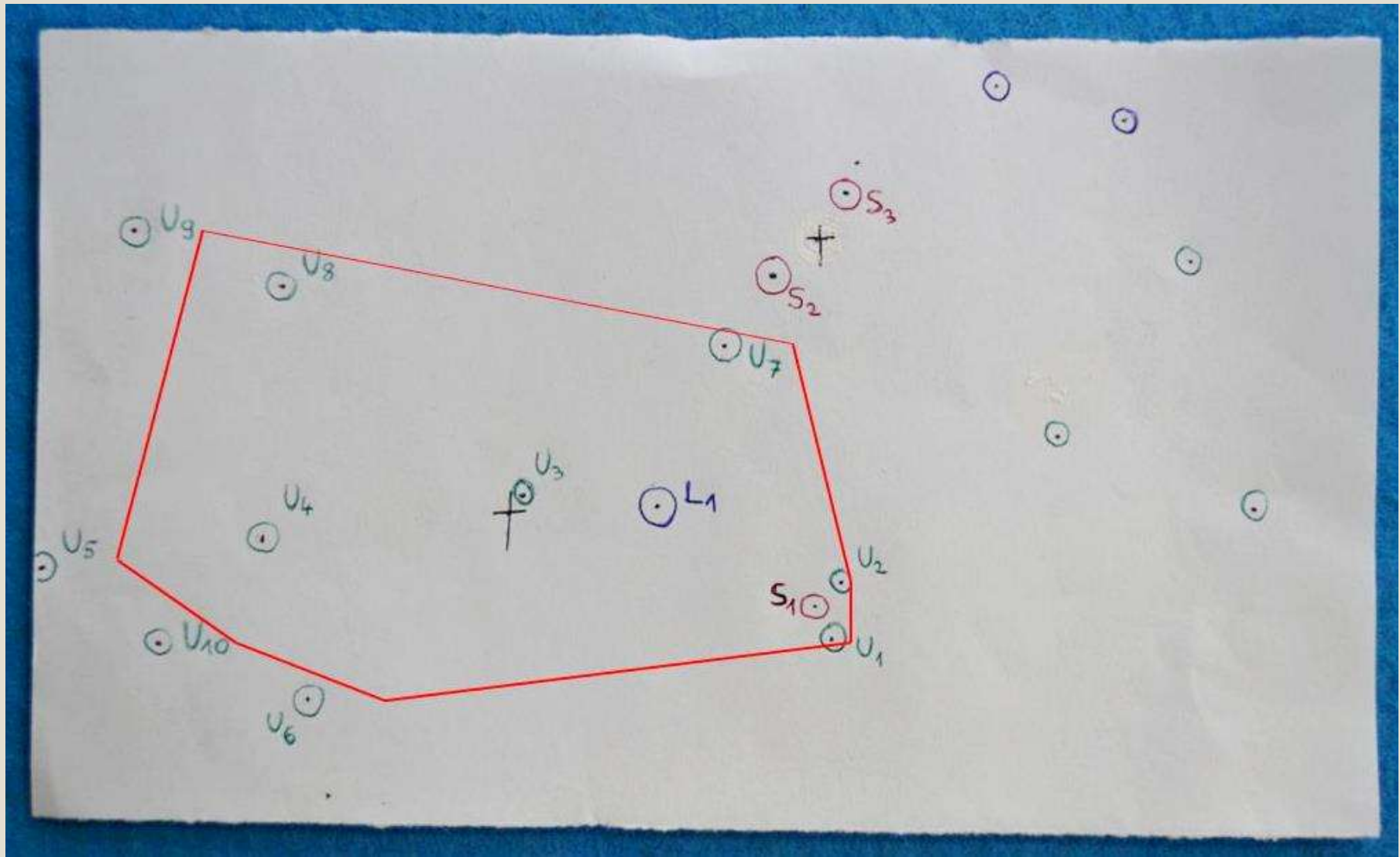
Marking assumed borders of the area on the map



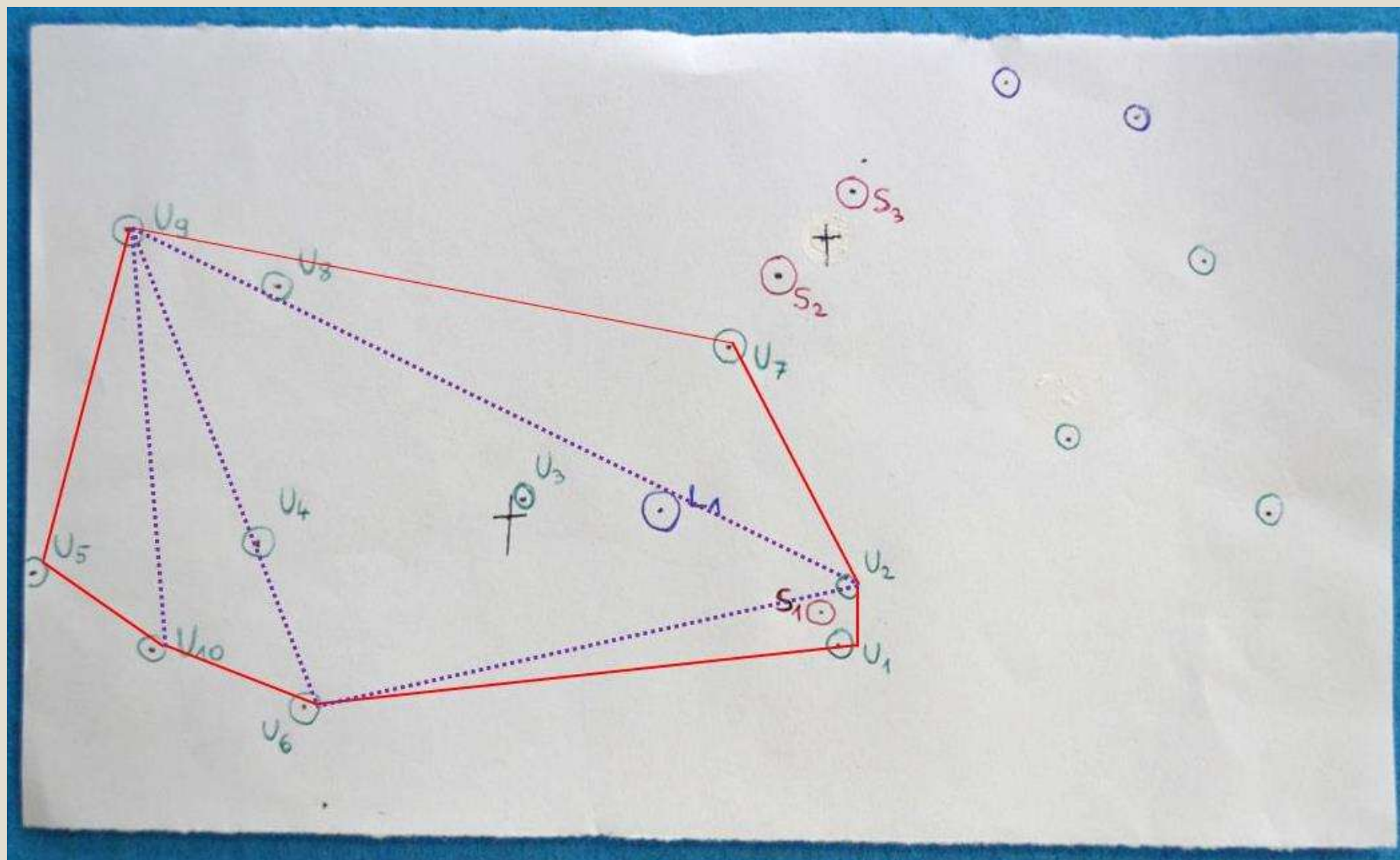
STAGE 2: Creating a simplified display of marked points.



Drawing the polygon



triangles in the polygon



We remembered the rules for calculating the area of a triangle:

$$P = a \cdot v / 2$$

We measure the length of the side of the triangle.



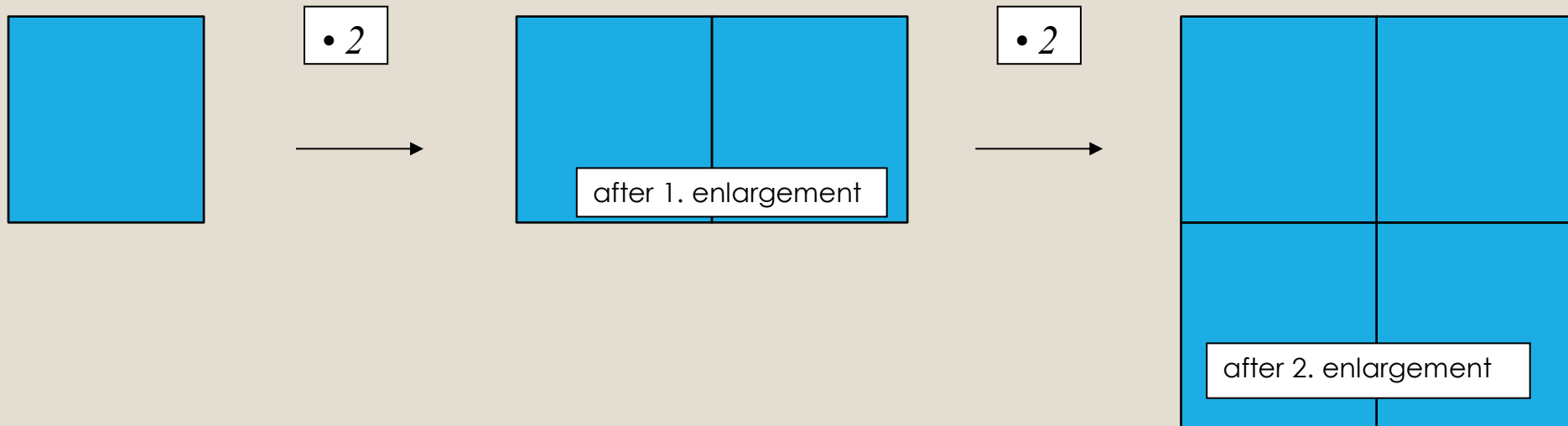
- We determined the height, calculated the area of each triangle, summed it and got the area of irregular polygons - the territory on the map.

$$P = 64 \text{ cm}^2$$

- We have to enlarge the area of the territory on the map up to natural size.

We remember the procedure enlarging the area.

Example: we will enlarge the area of the square twice.



- **Problem solving (area of the territory):**

Procedure of enlargement should be carried out 2 times to calculate the natural area of a figure.

- **Required data**

the scale of the map: 1 : 25 000

area of the territory on the map: 64 cm²

mathematical tool: the rule of enlarging area

- **$64 \text{ cm}^2 \cdot 25\,000 \cdot 25\,000 = 40\,000\,000\,000 \text{ cm}^2 = 4\,000 \text{ m}^2 = 4 \text{ km}^2$**

- The territory of the village Mehumi is **4 km²**

CONCLUSION

- Students were concentrated working on assignment and increased their mathematical skills. They measured the heights of many triangles and calculated areas. They summed the areas and compared the results with each other. They were very motivated to find out the final result. The motivation was high also because they knew in which situations their knowledge of geometry can be used.

(The problem in learning math is acquiring routine. The tasks in which the students see practical purpose motivates them to work.)

- As for the topics, the students found out that the area of Mehum was relatively small, comparing it with the area of the territory where their families grow olives. This way, they gained clear and comparable picture of the territory where medieval villages were created .

ARTS

- **three-dimensional designing**
- **the relationship between mass and space**

(architecture as a frame of everyday life,
some basic elements of architecture)

6TH GRADE

THE GENERAL PURPOSE

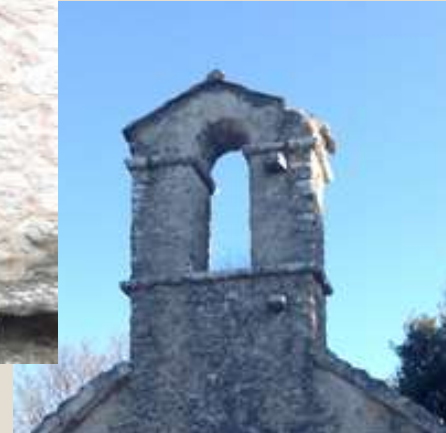
- evaluation of architectural heritage
- adoption and application of new art terms and concepts
- development of motor skills, perseverance and precision in work

KEY CONCEPTS: architecture, indoor and outdoor space



During the field work students got familiar with early Romanesque churches on our area (*Svi Sveti uz Mošuje i Dubravice, Sv. Juraj i Sv Klement u Straževniku, Sv. Nedija (Marija) uz Gradac*). We analyze photos in the class.

All the churches are simple, cuboid shaped, with two-sided roof and an apse shaped cuboid or semi cylinder.



There aren't many decorative elements.



The interior is simple. We notice the details: dents, steps, garlands, vaults.



Comparing the size and simplicity of these churches with the modern ones, we conclude that not many people lived in the settlements, and they probably were not rich. Condition of churches shows that these were significant buildings.

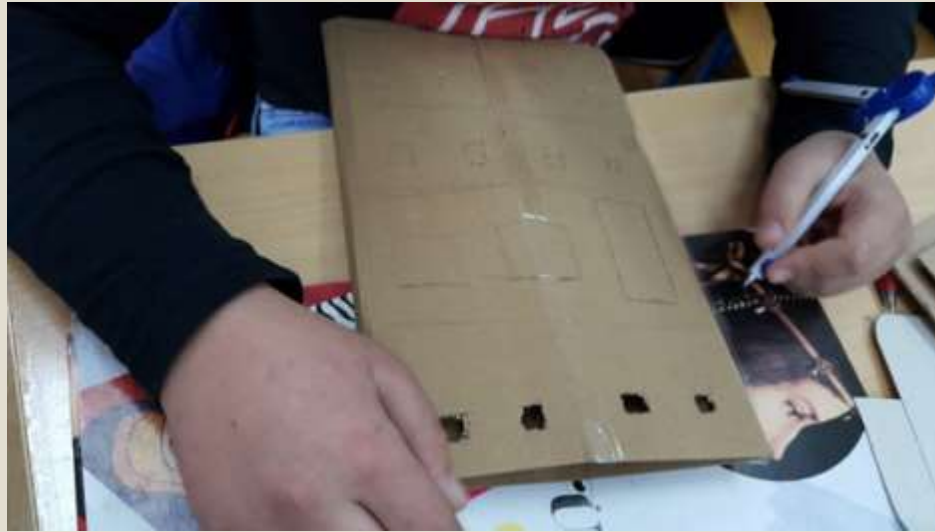
Although modern architecture is much more advanced, all the outlined elements are still in use, but in new and different ways.

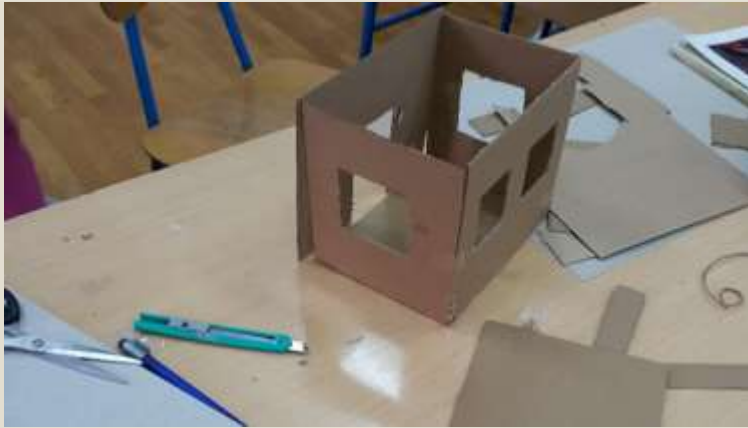


Michael Graves – Denver library

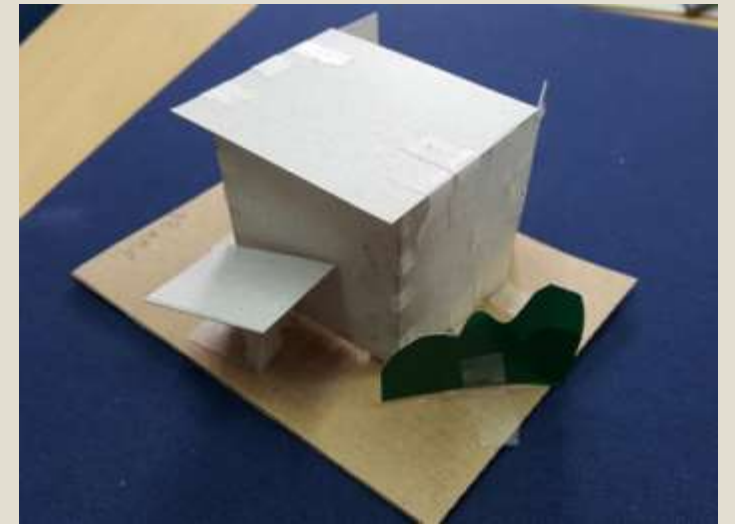
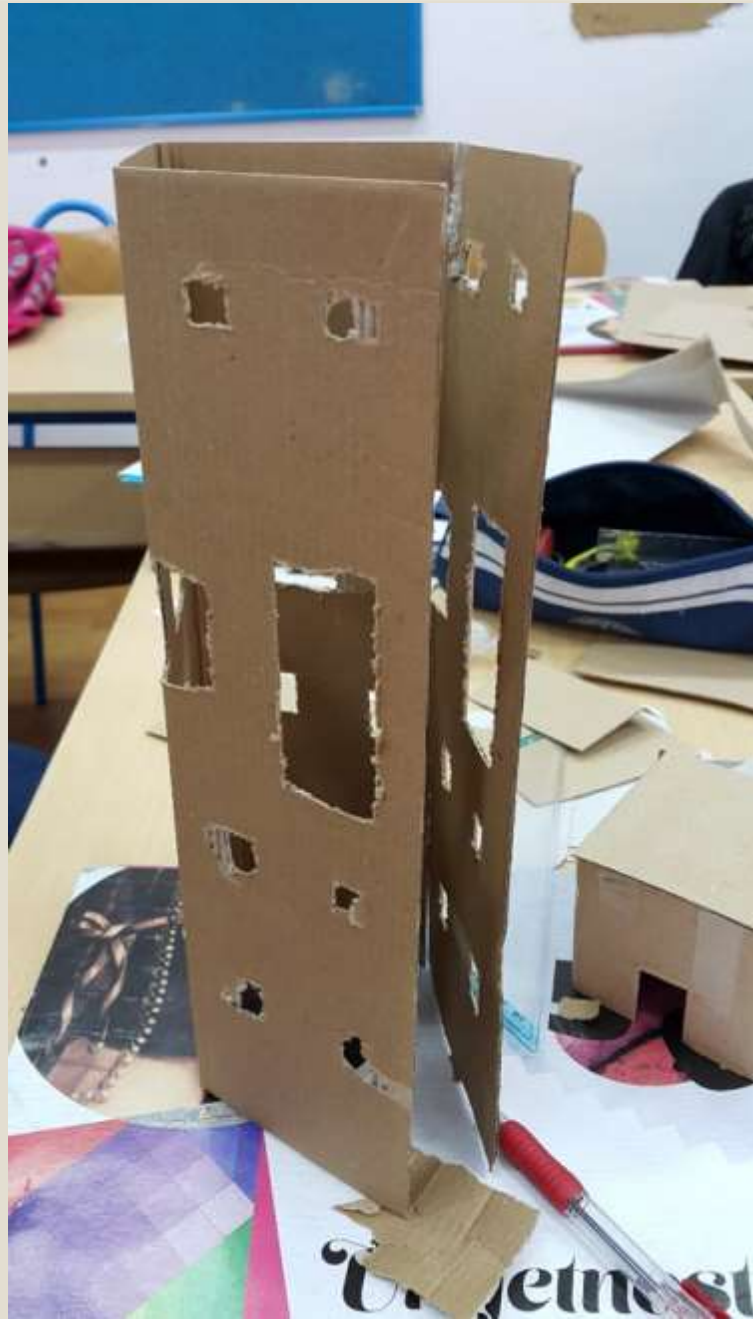
Students have the task: try to "build" a building combining some of the elements and forms.

Although it is made of cardboard, they should pay attention to strength of building. They work in pairs.





Work in progress!



FINAL PART:

Analyze the finished works; evaluate the complexity and imagination

Were the expected results achieved?

- Increased student motivation for learning
- Teaching content associated with life
- The students being aware of the purpose of learning
- Knowledge: permanent and applicable in practice
- Developed students' key competencies
- Realization of specific potentials of each individual (considering the dominant type of intelligence)