



we all live in our homeland,
we meet up with friends,
we communicate with each other
we work together,
we have creative ideas,
we are critical

and our states form our future:



Our future is interesting

We develop the 10 commandments in the global village.

We consider the 10 recommendations for everyone on climate protection.

We work with the new drone technology.

We critically consider the opportunities and risks of artificial intelligence.

We take responsibility.

We are Europeans.



Mit dem Projekt "generation 4C - communicate, critical, creative and collaborate, ", (IP&IE) wird in der beruflichen Bildung einerseits auf den stetigen technischen Wandel eingegangen. Andererseits wird, vor dem Hintergrund des Klimawandels, des Migrationsdrucks, des Facharbeitermangels und der digitalen Transformation, die Notwendigkeit sich als Bürger in der europäischen Wertegemeinschaft zu engagieren, aufgezeigt. Gut ausgebildete, kompetente Facharbeiter und verantwortungsbewusste Persönlichkeiten garantieren durch eine sinnstiftende Teilhabe am wirtschaftlichen Erfolg eine stabile Europäische Union. Diese Qualifikationen schützen vor populistischen und nationalistischen Tendenzen. Die Bereitschaft miteinander, kritisch, kreativ und kommunikativ zusammen zu arbeiten und sich politisch zu engagieren, sichert Europas Zukunft in Frieden und Freiheit. Die Jugendlichen erfahren auch, dass jeder mit seinen Ideen und Kompetenzen wertgeschätzt wird. (Drohnen-technik und Datenschutz, smarte und klimafreundliche Fertigungsmethoden, ethische Grundregeln, Stärkung der sprachlichen Kompetenzen, interkulturelle Kompetenz). Fachliche und personale Kompetenzen erzeugen somit einen Kommunikationsraum, in dem sich jeder angenommen, geachtet und wertgeschätzt fühlt. Zusätzlich müssen immer stärker die klimatischen Folgen der eigenen beruflichen Tätigkeit berücksichtigt werden. Ressourcenschonende Fertigungsmethoden sind stets neu zu berücksichtigen (z. B. additive Fertigungsmethoden) und die Bereitschaft neue Wege zu gehen sind zu fördern (z. B. Mobilität durch Dronentechnik). Dadurch wird auch die Bereitschaft zum lebenslangen Lernen gefördert.

Partnerländer: Tschechien, Slowakei, Slowenien, Kroatien, Italien

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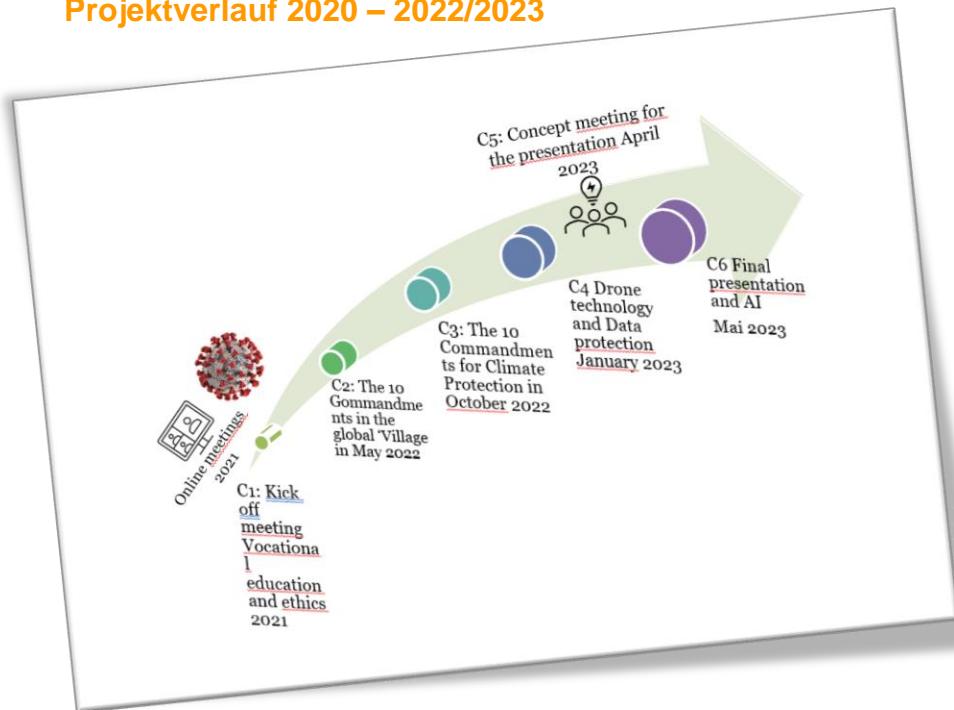
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Projektverlauf 2020 – 2022/2023



Online meetings Oktober/Dezember 2021

Bedingt durch die Pandemie musste der Projektstart um 1 Jahr verschoben werden.

Trotzdem wurden „online“ alle Vorbereitungen durchgeführt, um das Projekt erfolgreich durchführen zu können.

Das Projektende wurde um 1 Jahr auf das Jahr 2023 verlängert.





C1: Projektmanagement - Kick off meeting 2021- Triest

		Agenda – Triest Oktober Project management C1	
		18.10.2021	Monday
	10:00 – 17:00	Welcome at school (Paola Stuparich/Andrea Giacommelli/Luca Alborghetti)	Work on the project: schedule October 2021 till December 2022 or December 2023
	20:00	Meeting and unofficial dinner with participants who arrived	
		19.10.2021	Tuesday
	09:00 – 12:00	Schedule October 2021 till December 2022 or Dec. 2023	Work on the project (possible special guest: Francesco Contin, Project Manager of the Regional Digital Technologies Cluster - presentation of the Digital Report 2021)
	12:30 – 14:00	LUNCHTIME	Presentation and tour by the school
	14:00 – 16:00		DINNER / invitation from the school
	19:00		
		20.10.2021	Wednesday
	09:00 – 12:00	Work on the project	Preparation students meeting in Oroslavje (ethic, 3d print.)
	12:00 – 13:00	LUNCHTIME	
	13:00 – 18:00	Free time (?)	Possible tour: Visit to the interactive science museum "Immaginario Scientifico" and tour in the Old Port of Trieste
	19:00	Dinner from 16:30	Free time from 16:30
		21.10.2021	Thursday
	9:00	Tour to Udine through Collio - Gorizia hills – and visit to a local cellar	
	11:30 – 13:00	LUNCHTIME	
	15:00 – 17:00	Visit to a tech company (MEG 3D in Monfalcone)	
	20:00	DINNER on the Karst Hills	
		22.10.2021	Friday/Saturday
	9:00 – 15:00	Plan for the work at each school until the next	In the evening/Saturday morning return travel

Please note:
Changes in the agenda are possible

- Vorbereitung Schüleraustausch
- Neuer Terminplan für die Projektlaufzeit bis 2023
- Agenda Triest
- Verteilung der Aufgaben an die einzelnen Partnereinrichtungen
- Vorschläge zu den Inhalten und Gestaltung der Unterlagen



C2: Oroslavje – Kroatien The 10 commandments for the global village

Agenda

The agenda is organized into several days:

- Sunday:** Travelling Day, Welcome at school, Presentations of partner schools, Work on the project, Lunchtime (Hotel Zag), Sightsseeing tour of Oroslavje on foot, Visit to Šibenik Park (45kn per person), Dinner (Hotel Zag).
- Monday:** Breakfast (Hotel Zag), Welcome at school, Presentations of partner schools, Work on the project, Lunchtime (Hotel Zag), Sightsseeing tour of Oroslavje on foot, Visit to Šibenik Park (45kn per person), Dinner (Hotel Zag).
- Tuesday:** Breakfast (Hotel Zag), Work on the project, Bus trip to the town of Krapina, Visit to **Krapina Neanderthal Museum** (40kn per person), Bus trip to the town of Krapinske Toplice, Visit to **Aquae Viva Thermal spa** (50kn per person), Lunchtime (Aquae Viva restaurant - 60kn per person), Dinner by bus to Oroslavje, Dinner (Hotel Zag), Bus transport for the whole day (cca 60 kn per person).
- Wednesday:** Breakfast (Hotel Zag), Work on the project, Bus trip to the town of Zagreb, **WorldSkills Croatia 2022 Competition** (free entrance), **Avenue Mall shopping and Food Palace** (free choice), Sightseeing of Zagreb accompanied by a tour guide (in English), **Museum of Broken Relationships** (cca 3€ per person), Free time at Oroslavje by bus, Dinner (Hotel Zag), Bus transport for the whole day (cca 60 kn per person).
- Thursday:** Breakfast (Hotel Zag), Explore Zagreb, **Veliki Tabor castle** (20kn per person), **Old Village Museum Kumrovec** (20kn per person), **Gymnasium Villa Zelenak Ventek** (20kn per person), Free time, Dinner (Hotel Zag), Free time at **Java Bar Oroslavje**, Bus transport for the whole day (cca 60 kn per person).
- Friday:** Breakfast (Hotel Zag), Work on the project/presentation/evaluation, Preparing presentation of students work/Outlook for the next project/learning, Lunchtime (Hotel Zag), Free time of choice, Sport: tennis, Tennis Center, (free entrance) - town sports field (football, basketball, ...), possible to visit the Pilićović family products tasting room, from 18.00 Dinner (for teachers) - dinner at Pilićović family, Dinner (for students) at Hotel Zag, Dinner (for students) at Hotel Zag, Free time at **Java Bar Oroslavje**.
- Saturday:** Breakfast, Departure.

Arbeitsblätter



Gruppeneinteilung

Teamclassification — Rozdelenie do skupín - Rozdelení do skupin - Radne skupine — Grupowanie - Podjela u timove — Razdelitev v skupine - Podział na grupy - Classifica a squadre

Es sind 6 Arbeitsgruppen zu bilden. Die Gruppeneinteilung erfolgt per Los.

Vytvorí sa pracovných skupín. Rozdelenie do skupín bude pomocou žrebovania.

There will be 6 teams formed. The teams will be decided by drawing lots.

Radne skupine če se oblikovati neposrednim izvlačenjem.



Na osnovi žrebanja se oblikuje skupin

Bude vytvořeno 6 pracovních skupin. Rozdelení se provede losováním.

Si devono formare 6 gruppi di lavoro. I gruppi sono divisi per sorteggio.



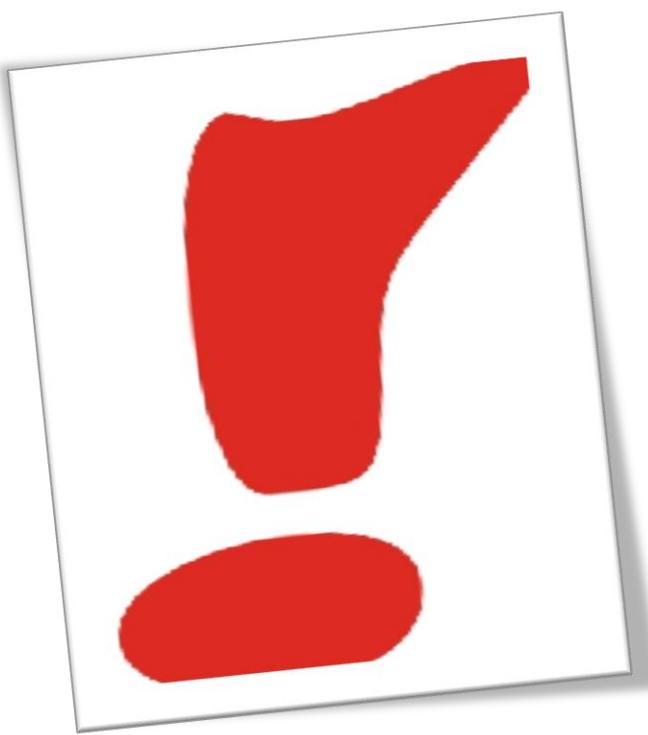
Important –Važno – Pomembno – Dôležité – Dôležité – Importante - Wichtig

Wichtig:

Die Arbeiten sind innerhalb der Gruppe so zu verteilen, dass das Projekt zügig abgeschlossen werden kann und die Arbeiten gleichmäßig verteilt sind.

Important

The jobs must be shared in the group so that every member has something to do. Work should be efficient and finished at the time of the project.



Važno:

Zadaci unutar grupe su podjednako podijeljeni za svakog člana.
Rješavanje zadataka treba biti svrholito i na vrijeme .

Pomembno!

Naloge si razdelite tako, da bo vsak član tima imel svoje delo.

Dôležité:

Práci uvnitř skupiny je třeba rozdělit tak, aby projekt mohl být plynule ukončen a aby se práce rovnoměrně rozdělila.

Dôležité!

Prácu je potrebné rozdeliť v skupine tak, aby sa projekt mohol ukončiť plynule a aby bola práca rozdelená rovnomerne.

Importante:

Il lavoro deve essere distribuito all'interno del gruppo in modo efficiente e che ogni membro abbia qualcosa da fare. Deve essere terminato per tempo.

Aufgaben und Problembeschreibung

Problem and formulation of the problem

Problem i formulacija problema

Problém a formulácia problému

Zadania i opis problemu Zadání a popis úloh

Formulace problému – Problem in formulacija problema

Il problema e la formulazione del problema.



E: Development of the 10 commandments for the global village

D: Entwicklung der 10 Gebote für das globale Dorf

CZ: Vytvoření deseti přikázání pro globální vesnici

SK: Vývoj 10 prikázaní pre globálnu dedinu

HR: Kreiranje deset pravila uspješnog suživota ljudi globalnog sela

SL: Razvoj desetih zapovedi za globalno vas

IT: Stesura dei 10 comandamenti per un villaggio globale



E:
In the digital transformation of our coexistence, rules must also apply so that peace, freedom, respect and tolerance remain guaranteed

D:
In der digitalen Transformation unseres Zusammenlebens müssen auch Regeln gelten, damit Frieden, Freiheit, Respekt und Toleranz gesichert bleiben.

CZ:
V digitální přeměně našeho soužití je nutné zachovat taková pravidla, aby byly zajištěny mír, svoboda, respekt a tolerance.



HR:
U digitalnoj transformaciji suživota ljudi globalnog sela ne smijemo zaboraviti na opće vrijednosti kao što su: osobna sloboda, tolerancija i poštovanje, mir među ljudima i narodima

SK:
Pri digitálnej transformácii nášho spolužitia musia platiť aj pravidlá, aby mier, sloboda, rešpekt a tolerancia zostali zaručené.

SL:
V digitalni preobrazbi našega sobivanja morajo veljati tudi pravila, da ohranimo mir, svobodo, spoštovanje in strpnost.

IT:
Nel processo di trasformazione digitale della nostra coesistenza le regole devono essere applicate il modo che la pace, la libertà, il rispetto e la tolleranza siano garantite.



Combito

Zadání Task Zadatak Aufgabe Úloha Naloga

E:
Create a Powerpoint presentation with the following content:

- Introduction of the group members
- Answer the following questions:
Group 1: Question 1, 7, 13, 14
Group 2: Question 2, 8, 13, 14
Group 3: Question 3, 9, 13, 14
Group 4: Question 4, 10, 13, 14
Group 5: Question 5, 11, 13, 14
Group 6: Question 6, 12, 13, 14
- **presentation of results**

All groups:
After the presentation, work on question 15 together

SK:
Vytvorte prezentáciu v Powerpoinete s nasledujúcim obsahom:

- Predstavenie členov skupiny
- Odpovedajte na nasledujúce otázky:

Skupina 1: Otázka 1, 7, 13, 14
Skupina 2: Otázka 2, 8, 13, 14
Skupina 3: Otázka 3, 9, 13, 14
Skupina 4: Otázka 4, 10, 13, 14
Skupina 5: Otázka 5, 11, 13, 14
Skupina 6: Otázka 6, 12, 13, 14

• **prezentácia výsledkov**
Všetky skupiny:
Po prezentácii spoločne pracujte na otázke 15
Po prezentácii spoločne pracujte na otázke 15

D:
Erstelle eine Powerpoint Präsentation mit folgendem Inhalt:

- Vorstellung der Gruppe
- Beantworte folgende Fragen:
Gruppe 1: Fragen 1, 7, 13, 14
Gruppe 2: Fragen 2, 8, 13, 14
Gruppe 3: Fragen 3, 9, 13, 14
Gruppe 4: Fragen 4, 10, 13, 14
Gruppe 5: Fragen 5, 11, 13, 14
Gruppe 6: Fragen 6, 12, 13, 14
- **presentation of results**

Alle Gruppen:
Nach der Präsentation gemeinsam Frage 15 bearbeiten.

CZ:
Vytvořte prezentaci v programu Powerpoint s následujícím obsahem

- představení skupiny
- zodpovězení následujících otázek:

Skupina 1: otázky 1, 7.,13, 14
Skupina 2: otázky 2, 8, 13, 14
Skupina 3: otázky 3, 9, 13, 14
Skupina 4: otázky 4, 10, 13, 14
Skupina 5: otázky 5, 11, 13, 14
Skupina 6: otázky 6, 12, 13, 14

• **prezentace výsledků**
Všechny skupiny:
Po prezentaci pracujte společně na otázce 15



SL:

**Ustvarite Powerpoint
predstavitev z naslednjo
vsebino:**

- Predstavitev članov skupine
- Odgovorite na naslednja vprašanja.

Skupina 1: vprašanje 1, 7, 13, 14

skupina 2: vprašanje 2, 8, 13, 14

skupina 3: vprašanje 3, 9, 13, 14

skupina 4: vprašanje 4, 10, 13, 14

skupina 5: vprašanje 5, 11, 13, 14

skupina 6: vprašanje 6, 12, 13, 14

- predstavitev rezultatov

Vse skupine:

**Po predstavitvi skupaj odgovorite na
vprašanje 15**

IT:

Crea una presentazione PowerPoint con il seguente contenuto:

- Presentazione dei membri del gruppo
- Rispondi alle seguenti domande:

Gruppo 1: Domande 1, 7, 13, 14

Gruppo 2: Domande 2, 8, 13, 14

Gruppo 3: Domande 3, 9, 13, 14

Gruppo 4: Domande 4, 10, 13, 14

Gruppo 5: Domande 5, 11, 13, 14

Gruppo 6: Domande 6, 12, 13, 14

- Presentazione dei risultati

Tutti i gruppi:

Dopo la presentazione, lavorate insieme sulla domanda 15

HR:

**Napravite Powerpoint
prezentaciju sa sljedećim
sadržajem:**

- Predstavljanje članova grupe
- Odgovorite na sljedeća pitanja:

Grupa 1: Pitanje 1, 7, 13, 14

Grupa 2: Pitanje 2, 8, 13, 14

Grupa 3: Pitanje 3, 9, 13, 14

Grupa 4: Pitanje 4, 10, 13, 14

Grupa 5: Pitanje 5, 11, 13, 14

Grupa 6: Pitanje 6, 12, 13, 14

- prezentacija rezultata

Sve grupe:

**Nakon prezentacije, zajedno radite
na pitanju 15**

Pitanja Questions Otázky Fragen Opyt' sa Chiedere Vprašanja

1.

E:
Explain the term „global village”.

D:
Erkläre den Begriff „Globales Dorf”.

SK:
Vysvetlite pojem „globálna dedina”.

CZ:
Vysvětli pojem „globální vesnice”.

HR:
Objasnite pojam „globalno selo”

SL:
Razložite izraz „digitalna vas”.

IT:
Spiega il termine „villaggio globale”

2.

E:
Explain the term digital responsibility.

D: Erkläre den Begriff digitale Verantwortung

CZ:
Vysvětli pojem digitální odpovědnost.

SK:
Vysvetlite pojem digitálna zodpovednosť.

HR:
Objasnite pojam digitalne odgovornosti.

SL:
Razložite izraz digitalna odgovornost.

IT:
Spiega il termine "responsabilità digitale"

3.

E:
Explain the term BigData.

D:
Erkläre den Begriff BigData.

SK:
Vysvetlite pojem BigData.

CZ:
Vysvětli pojem BigData.

HR:
Objasnite pojam „BigData”

SL:
Razložite izraz BigData.

IT:
Spiega il termine „Big Data”



4.

E: What is hate speech and how do you recognize it?

SK:

Čo je to „hate speech“ (nenávistný prejav) a podľa čoho ho spoznáme?

HR:

Što je govor mržnje na internetu i društvenim mrežama i kako ga prepoznati?

IT:

Cosa si intende per hate speech e come lo riconoscete?

D: Was ist hate speech und woran erkennt man diese?

CZ:

Co znamená „hate speech“ (projev nenávisti) a podle čeho se pozná?

SL:

Kaj je sovražni govor in kako ga prepozname?

5.

E:

Give examples of hate speech.

D:

Nenne Beispiele von hate speech.

SK:

Uveďte príklady na nenávistné prejavy.

CZ:

Uveďte příklady „hate speech“.

HR:

Navedite primjere govora mržnje.

SL:

Navedite primere sovražnega govora

IT:

Fate alcuni esempi di „hate speech“.

6.

E:

Hate and hate speech online always affects certain groups.

Who are the target groups?

D:

Hass und Hetze im Netz betrifft immer bestimmte Gruppen.

Wer sind die Zielgruppen?

SK:

Nenávist a nenávistné prejavy online vždy ovplyvňujú určité skupiny. Kto patrí k týmto cieľovým skupinám?

CZ:

Projevy nenávisti a „štvaní“ po internetu se týkají určitých skupin. Kdo patří k těmto cílovým skupinám?

HR:

Mržnja i govor mržnje na internetu uvijek utječu na određene skupine. Tko su ciljne skupine?

SL:

Sovražstvo in sovražni govor na spletu vedno prizadanejo določene skupine? Kdo so ciljne skupine?

IT:

L'odio e l'incitazione all'odio colpisce sempre alcuni gruppi. Chi sono questi gruppi target?



7.

E:
What is fake news and how do you recognize fake news?

D:
Was sind fake news und woran erkennt man fake news?

SK:
Čo sú fake news a ako ich spoznáte?

CZ:
Co jsou „fake news“ a jak je poznáte?

HR:
Što je lažna vijest i kako istu prepoznať?

SL:
Kaj so lažne novice in kako jih prepoznamo?

IT: Che cosa si intende per „fake news“ e come le riconoscete?

8.

E:
What can I do against hate speech?

D:
Was kann ich gegen hate speech tun?

SK:
Čo môžem spraviť proti nenávistným prejavom?

CZ:
Co můžu dělat proti projevům nenávisti?

HR:
Što možemo učiniti kao osoba i društvo protiv govora mržnje ?

SL:
Kaj lahko storim proti sovražnemu govoru?

IT:
Cosa posso fare contro l'incitamento all'odio?

9.

E:
How can I protect myself from online hate speech?

D:
Wie kann man sich im Netz vor Hass schützen?

SK:
Ako sa ja sám môžem chrániť pred nenávistnými prejavmi na internete?

CZ:
Jak se můžu chránit před projevy nenávisti po internetu?

HR:
Kako se mogu zaštititi od govora mržnje na internetu i društvenim mrežama?

SL:
Kako se lahko zaščitite pred sovraštvom na spletu?

IT:
Come posso proteggermi dall'incitamento all'odio?



10.

E:
What is cyberbullying?

SK:
Čo je kybešikana?

HR:
Što je virtualno (elektroničko) nasilje?

IT:
Che cos'è il cyberbullismo?

D:
Was ist cybermobbing?

CZ:
Co je kyberšíkana?

SL:
Kaj je spletno ustrahovanje?

11.

E:
What are bots and algorithms?

SK:
Čo sú boty a algoritmy?

HR:
Što su botovi i algoritmi?

IT:
Cosa sono i bots e gli algoritmi?

D:
Was sind bots und Algorythmen?

CZ:
Co jsou bots a algoritmy?

SL:
Kaj so roboti in algoritmi?

12.

E:
Christianity, Islam, Judaism, Hinduism and Buddhism are among the major world religions. They all have one rule in common. Because it is seen as so valuable, it is also called the "Golden Rule".

What is the "Golden Rule" called?

SK:
E: Kresťanstvo, islam, judaizmus, hinduizmus a budhizmus patria medzi hlavné svetové náboženstvá.
Všetky majú jedno spoločné pravidlo, ktoré sa veľmi cení a preto sa nazýva sa aj „zlatým pravidlom“.

Ako sa nazýva „zlaté pravidlo“?

HR:
Kršćanstvo, islam, judaizam, hinduizam i budizam su među glavnim svjetskim religijama. Svima im je zajedničko jedno pravilo.

D:
Das Christentum, der Islam, das Judentum, der Hinduismus und der Buddhismus gehören zu den großen Weltreligionen. Sie alle haben eine gemeinsame Regel. Weil sie als so wertvoll gesehen wird, nennt man sie auch "Goldene Regel".

Wie heißt die „Goldene Regel“?

CZ:
Křesťanství, islám, judaismus, hinduismus a budhismus patří ke světovým náboženstvím. Všechna mají jedno společné pravidlo, které je velmi ceněno, proto se také nazývá zlatým pravidlem. Které to je?

SL:
Krščanstvo, islam, judovstvo, hinduizem in budizem so med glavnimi svetovnimi religijami. Vsem je skupno eno pravilo. Ker velja za tako dragoceno, se imenuje tudi "zlato pravilo".



Budući da se smatra tako vrijednim,
naziva se i "zlatnim pravilom".

IT: Cristianesimo, Islam, Ebraismo, Induismo e Buddismo sono tra le maggiori religioni del mondo. Hanno tutti una regola in comune. Poiché è considerata così tanto di valore, viene anche chiamata la "Regola d'oro".

Cosa si intende per "Regola d'Oro"?

13.

E:
What is meant by the term "ethics"?

D:
Was versteht man unter dem Begriff „Ethik“?

SK:
Čo rozumieme pod pojmom etika?

CZ:
Co rozumíme pod pojmem etika?

HR:
Što se podrazumijeva pod pojmom "etika"?

SL:
Kaj pomeni pojem etika?

IT: Cosa significa il termine „etica“?

14.

E:
Based on the golden rule, create the 10 commandments for digital ethics. You can also use the 10 commandments of Christianity for help.

D:
Erstelle auf der Basis der goldenen Regel die 10 Gebote für die digitale Ethik. Du kannst auch die 10 Gebote des Christentums zur Hilfe nehmen.

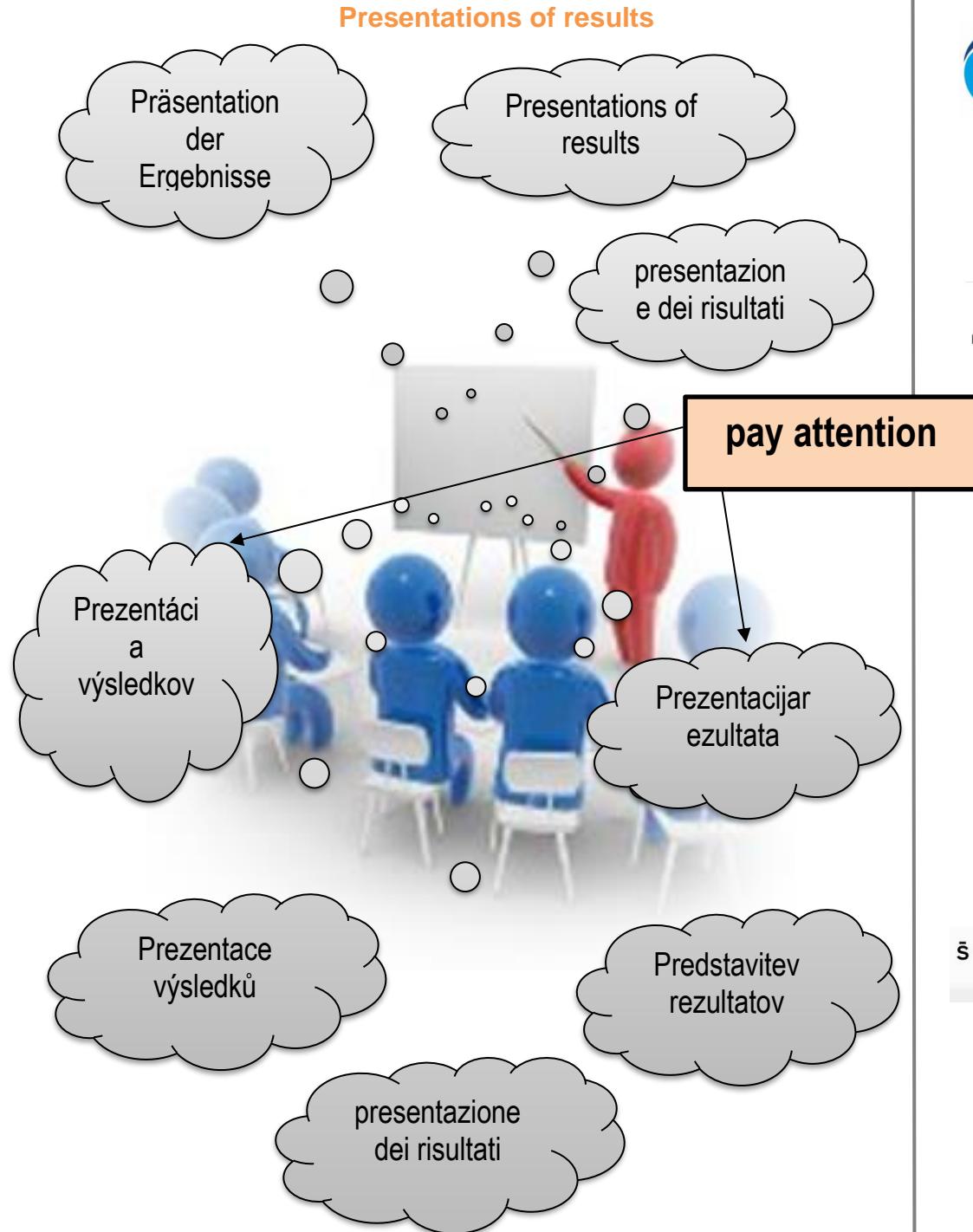
SK:
Na základe zlatého pravidla vytvorte 10 prikázaní pre digitálnu etiku. Na pomoc môžete použiť aj 10 Božích prikázaní.

CZ:
Na základě „Golden rule“ (zlatého pravidla) vytvořte 10 příkázání pro digitální etiku. Jako pomůcku můžete použít 10 božích příkázání.

HR:
Na temelju zlatnog pravila kreirajte 10 pravila digitalne etike. Prilikom izrade možete korisiti i 10 Božjih zapovijedi kršćana

SL:
Na podlagi zlatega pravila ustvarite 10 zapovedi digitalne etike. Za pomoč lahko uporabite tudi 10 krščanskih zapovedi.

IT: Basandovi sulla regola d'oro, create i 10 comandamenti per un'etica digitale. Potete anche usare i 10 comandamenti del Cristianesimo come aiuto.





15.

E:

All groups together create the 10 commandments in the global village/digital ethics.

- Create the 10 commandments Rollup.
- Create a layout/design for the Rollup
- Calculate the production for the Rollups for every school.
- Present the 10 Commandments Rollup

D:

Alle Gruppen zusammen erstellen gemeinsam die 10 Gebote im globalen Dorf/der digitalen Ethik.

- Erstelle das 10-Gebote-Rollup.
- Entwerfe ein Layout/Design
- Kalkuliere die Kosten für die Produktion eines Rollups für jede Schule
- Präsentiere das 10-Gebote-Rollup
-

SK:

Všetky skupiny spoločne vytvárajú 10 prikázaní v globálnej dedine/digitálnej etike.

- Vytvorte súhrn 10 prikázaní.
- Vytvorte rozloženie/dizajn
- Vypočítajte náklady na výrobu jedného súhrnu pre každú školu
- Predstavte súhrn 10 prikázaní

CZ:

Všechny skupiny sestaví společně 10 přikázání digitální etiky pro globální vesnici.

- Vytvoř rollup s deseti přikázáními
- Navrhni jeho rozvržení/design
- Udělej kalkulaci na výrobu jednoho rollupu pro každou školu
- Prezentuj rollup s deseti přikázáními



HR:

- Zajedno, grupe stvaraju 10 pravila života u globalnom selu / etiku u digitalnom okruženju.
- Napravite 10 prikupljenih pravila.
- Izradite roll-up dizajn.
- Izračunajte proizvodnju svitka za svaku školu.
- Predstavite zbirku od 10 pravila.

SL:

Vse skupine skupaj ustvarijo 10 pravil življenje v globalni vasi / etika v digitalnem okolju.

- Ustvarite 10 zbranih pravil.
- Ustvarite zasnova za „roll-up“ – zvitek.
- Izračunajte izdelavo zvitka za vsako šolo.
- Predstavite zbirkko 10 pravil.

IT:

- Tutti i gruppi lavorano insieme per creare i 10 comandamenti nel villaggio globale/etica digitale.
- Create una serie di dieci comandamenti da dieci dadi.
- Etichettate il dado su un lato nella tua lingua madre e su un lato in inglese.
- Presentate il muro di cubi con i Dieci Comandamenti.



Ergebnisse
Rollups with the 10 commandments in the global village



- ⇒ Die Layoutentwürfe wurden in der Projektwoche erstellt.
- ⇒ Die Mediengestalter an der Partnerschule in Spisska Nova Ves haben die Laoutentwürfe überarbeitet und einen Vorschlag allen Partnern zugesandt.
- ⇒ Das finale Layout wurde bis zum nächsten Projekttreffen fertiggestellt und produziert.
- ⇒ Die „10 Gebote“ sind an allen Schulen zweisprachig vorhanden, in der jeweiligen Landessprache und in der englischen Sprache.
- ⇒ Die Arbeitsergebnisse wurden präsentiert.
- ⇒ Ein Projektvideo wurde erstellt.





C3: Tabor – Tschechien The 10 recommendations for the global village

Agenda

KA2 strategic partnership

Agenda – Tábor

Date	Day	Activities
16/10/2022	Sunday	Travelling Day Meeting at students accommodation
17/10/2022	Monday	Breakfast (at accommodation) Welcome at our school Presentations of partner schools Work on the project + group sorting Lunchtime (at school canteen) Sightseeing tour of school (by groups) VR Reality (by groups) Engraving (by groups) Dinner (at accommodation)
18/10/2022	Tuesday	Breakfast (at accommodation) Work on the project – Energy Mix Work on the project – Consumption measurement Lunchtime (at school canteen) Sightseeing tour of Tábor by foot + visit the Kotnov Tower Dinner (at accommodation)
19/10/2022	Wednesday	Breakfast (at accommodation) Walking around the river – the task the old water mills Lunchtime (Restaurant Pintovka) Visit the Temelin Nuclear Power Plant and a small water power plant by a bus Dinner (at accommodation)
20/10/2022	Thursday	Breakfast (at accommodation) Work on the project – Recommendations for reducing consumption Work on the project – Finishing tasks Lunchtime (at school canteen) Work on the project – Making story Preparing of presentation Project meeting Dinner for students (at accommodation) Dinner for teachers (invitation by school)
21/10/2022	Friday	Breakfast (at accommodation) Preparing presentations Presentation of the project for school students Lunchtime (at school canteen) Possibility to visit the Chýnov Cave by a bus Dinner (at accommodation) Departure
22/10/2022	Saturday	Breakfast (at accommodation) Departure

Erasmus+

SPS TECHNICKÁ SPIŠSKÁ NOVÁ VES Slovakia

EUROPA-BERUFSCHULE WEIDEN i.d. OPf. Germany

Strední prumyslová škola strojní a stavební, Tábor Czech Republic

Srednja škola Oroslavje Croatia

ŠOLSKI CENTER ŠKOFJA LOKA Slovenia

ENRIP Friuli Venezia Giulia Italia



Strední prumyslová škola
strojní a stavební, Tábor
Czech Republic



SREDNA ŠKOLA Oroslavje,
Croatia



Arbeitsblätter



Hinweis:

Die folgenden Unterrichtsunterlagen/Arbeitsblätter wurden nicht mehr in die einzelnen Landessprachen übersetzt.

Das Projektteam will damit die Sprachkompetenz der Jugendlichen in der englischen Sprache stärker unterstützen.



Meeting C3 Tábor

Worksheet 1 – Getting to know the teams

Introduction:

Work together.

You have been divided into 6 international teams in which you will perform the assigned tasks.

The topic of our whole meeting is ENERGY. Its acquisition, consumption and responsible behavior when dealing with it.

The outcome of the whole project week will be a joint presentation of your conclusions, which you will present to our students on Friday 21.10.2022. Therefore, keep your work, documents, take pictures.

Each team will then prepare a part of the collective presentation. The presentation will have these parts, always on about 3-6 pages.

1. Introduction of participating cities.
2. Introduction of participating schools.
3. Introduction of teams.
4. Tasks solved in the project.
5. Ten Energy Saving Recommendations – Project Output
6. Leisure activities, trips

Agree with other groups who will take care of what area.

You are team number: and you take care about part:



Your companion will be a lottery dice for each of you, which is so far described only on three sides. At the end of the week, it will be full whole.

Now, introduce each other within your group, say something about yourself. Add your names to the third side of the dice **in your worksheet**.

Use the fourth side of the dice to write your best good quality and your favorite hobby (make two line).

Do not write it directly on the dice, only here on the paper.

How many members have your team:

Member no.1

Spišská Nová Ves SLOVAKIA	 Erasmus+ Tábor, CZE October 2022		

Spišská Nová Ves SLOVAKIA	 Erasmus+ Tábor, CZE October 2022		

All members (1 -7) has to do the same

Thank you for completing the task. Keep the worksheet. Bring the worksheet and dices to the engraving activity which starts after lunch



Meeting C3 Tábor

Worksheet 2 – Present sources of energy

Introduction:

Work together.

Use school computers to search for required information. The computers are in Czech language, but Google Chrome is simple, as is the Microsoft Office suite. Alternatively, a Czech or Slovak colleague will help you.

Login: skoleni

Password: jsmenaprumyslovce

In general, you can use a network disk to exchange data between the teams T:\Skoleni\!ERASMUS+ KA2 C3

This worksheet is also saved there in PDF format for study.



What is energy? A simple question with a difficult answer.

Most often you will learn that it is the ability of mass to do work. Scientists assume that the energy in the universe exists in the same quantity since the Big Bang, only changing its form.

We know mechanical, magnetic, thermal, nuclear, and electrical and many others.

For our life it is very important only the electric.

With electricity shining our light work of home appliances, there is internet, flowing water, car rides, etc. Where, however, takes electricity? In the drawer?

Electrical energy is transformed into another type of energy using generators. Most often converts mechanical energy that rotates a generator.

Mechanical energy used by people even in times past, for example in water or wind mills, today the wind energy and transforming the water in hydro and wind power plants just to power.

Since the steam engine, where we can utilize the power of the steam to move, we can use this power as well as the production of electricity in thermal and nuclear power plants.

Sources of electricity:

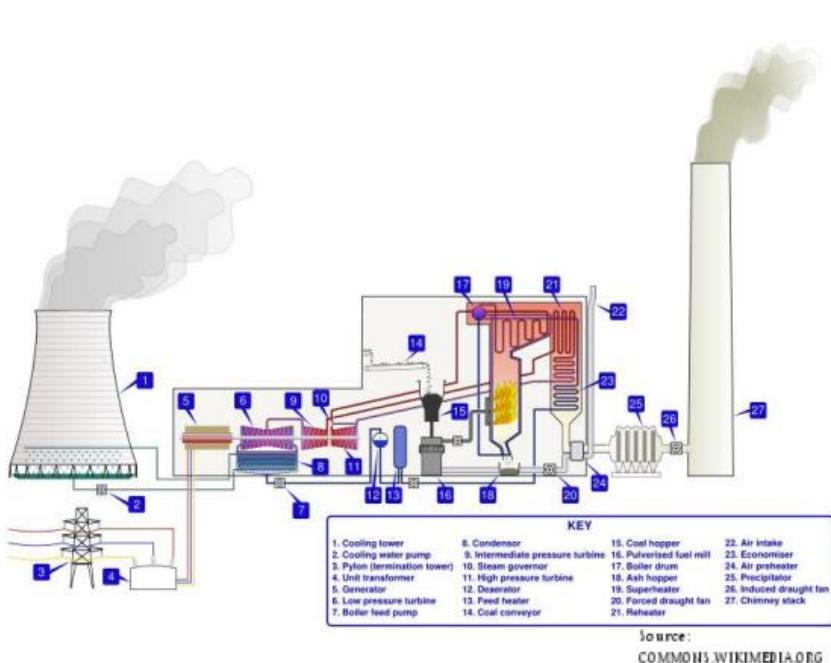
Thermal

Thermal power plants use to shake, power generator steam. To produce water steam, it is necessary to supply heat to the water.

As a source of heat power plants using fossil fuels such as coal and natural gas, or biomass.

After heating the resulting steam flows through the turbine and rotates the generator that generates electricity. It is the most common type of power peak production.

Due to the limited amount of fossil fuels is their future uncertain.

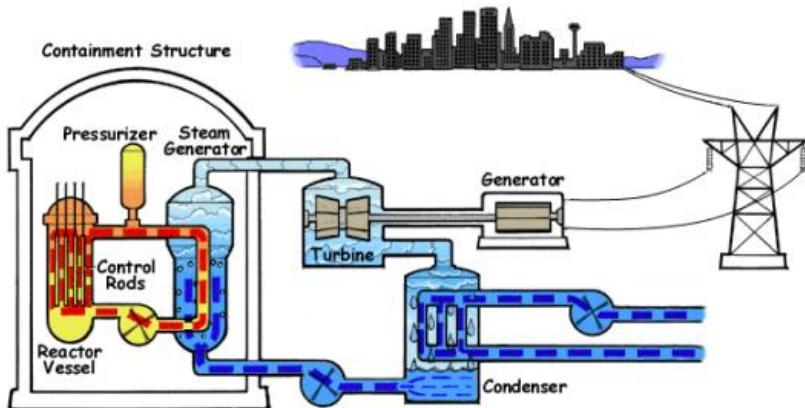


Nuclear

Nuclear power plant works on the same principle as heat, water heating are, however, uses a controlled fission reaction, which occurs when the necessary heat.

This power supply is better for environment and even with a smaller number of nuclear power plants, the share of nuclear energy quite high.

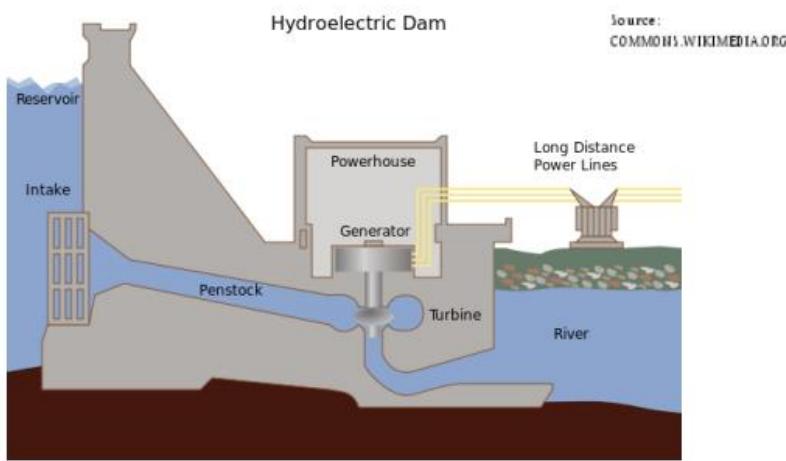
Uranus but we have a limited amount so in the future, this source is uncertain.



Source:
COMMONS.WIKIMEDIA.ORG

Aquatic

Hydroelectric power plants use the energy of flowing liquid that is fed to the turbines, which spins and spins the generators. Hydroelectric power plants are dependent on water resources, but they are very environmentally friendly.



We can build large dams with powerful power plants or more environmentally friendly small hydroelectric power plants with minimal impact on the river surroundings.





Wind

Wind power generator rotor is spinning flowing air similarly as in the case of windmills. This power supply is also very environmentally friendly, but it still depends on the weather.

Convenient location of wind power plants are offshore waters of the seas, or areas with a windy climate (coastal areas, mountains).



Source:
COMMONS.WIKIMEDIA.ORG



Photovoltaic

Solar panels use the energy of solar radiation and the photoelectric effect. They are the only plants that do not use a generator convert's mechanical energy into electrical energy.

The disadvantage of these plants is that they produce only during the day and depend on the intensity of solar radiation.

Another disadvantage is the rather large area of the panels needed to achieve reasonable performance.



Energy Future

People are using more and more electrical devices and growing demands for energy in industry. Therefore, researchers are beginning to examine what power source will be able to meet the needs of humanity. One tract is thermonuclear fusion. If you have time, you can check information about it.

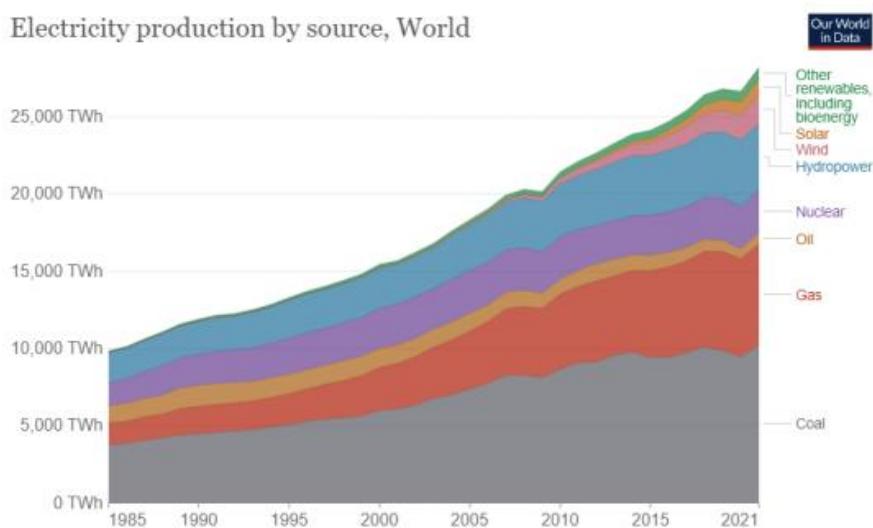
- The basic principle of fusion
- Tokamak
- Nuclear fusion in Europe
- ITER

We can also encounter other sources of energy (mostly thermal), such as geothermal sources, tidal power plants...

There are always various systems trying to store energy (battery fields, pumped storage plants, etc.).

And how powerful are these power plants?

Electricity production by source, World



Source: Our World in Data based on BP Statistical Review of World Energy (2022) . Our World in Data based on Ember's Global Electricity Review (2022) . Our World in Data based on Ember's European Electricity Review (2022).
Note: 'Other renewables' includes biomass and waste, geothermal, wave and tidal.
OurWorldInData.org/energy • CC BY

And in history?

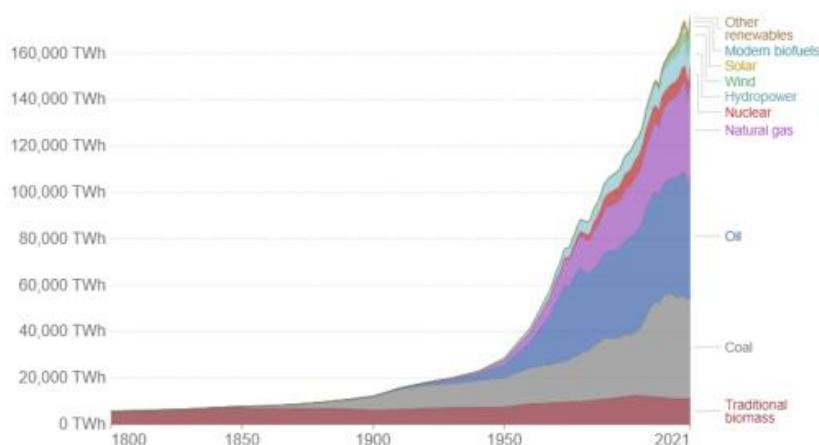




Since the Industrial Revolution, energy consumption of all kinds has increased sharply. We have become accustomed to the fact that energy is available without restrictions and at a low price.

Global primary energy consumption by source

Primary energy is calculated based on the 'substitution method' which takes account of the inefficiencies in fossil fuel production by converting non-fossil energy into the energy inputs required if they had the same conversion losses as fossil fuels.



Source: Our World in Data based on Vaclav Smil (2017) and BP Statistical Review of World Energy

OurWorldInData.org/energy • CC BY

We are dependent on energy. We cannot live without energies.

The answer to this question is completely up to you.

In the first part of the task, search on the internet how big is the production of electricity in the country allocated to your group and how it contributes to whole different sources.

Total production in _____ (fill the allocated country)

Annual production of electricity in this country is:

_____ (.....Wh)



On the production is involved:

Power source	Share [%]
Thermal power stations	
Nuclear power stations	
Hydroelectric power stations	
Wind power stations	
Photovoltaic power stations	

If this country was replaced with thermal and nuclear power plants, wind or solar, how much would they be needed?

The overall performance of nuclear and thermal power plants:

_____Wh

Power of solar panel is 5 kW

Power of wind power is 3000 kW

	The number of required power
Wind power stations	
Photovoltaic power stations	

Is it real?



All of you choose one image below for your dice. Choose a different one of each other, taking into account how the type of energy or behaviour is suitable for you.



NUCLEAR PLANT



WATER ENERGY



SOLAR ENERGY



WIND TURBINE



ENERGY SAVING



GAS FUEL



BIO ENERGY



COAL



ATOMIC ENERGY



RECYCLABLE



ACCUMULATOR



WASTE REDUCTION

Type the name of the picture in the free field next to your dice.

Also, please write your name again on the marked field.



Member no.1

You name?			
Spišská Nová Ves SLOVAKIA	 Erasmus+ Tábor, CZE October 2022	Ability Hobby	

Member no.2

You name?			
OROSLAVJE CROATIA	 Erasmus+ Tábor, CZE October 2022	Ability Hobby	

Meeting C3 Tábor

Worksheet 3 – Consumption measurement

Introduction:

Work together.

Use school computers to search for required information. The computers are in Czech language, but Google Chrome is simple, as is the Microsoft Office suite. Alternatively, a Czech or Slovak colleague will help you.

Login: skoleni

Password: jsmenaprumyslovce

In general, you can use a network disk to exchange data between the teams T:\Skoleni\IERASMUS+ KA2 C3

This worksheet is also saved there in PDF format for study.

For this task you will use Geti GPM01 consumption meter of electric energy



Use the button ENERGY to set display ENERGY to show actual spend in W units in up

Use the button COST to set display TOTAL ENERGY in kWh units in middle field

Each team has two meters at its disposal.



1 first measurement

Use one meter. Use a toaster and prepare a toast for everyone in this room during the activity. With jam will be even better.

After preparing all the toasts - Write down the values:

Peak of W?		W
STARTING VALUE TOTAL ENERGY		kWh
FINAL VAUE TOTAL ENERGY		kWh
CONSUMPTION		kWh /toasts
PRICE		€ / toasts

To calculate the price, use the average price per kWh in the Czech Republic in 2022 0,35 €

Just for the record, in 2021 the average price of kWh in the Czech Republic was 0.15 €

Be careful, the toaster is hot.



2 second measurements

**Did you notice the monitors were swith on
after entering the room?**



Measure what is their consumption?

Peak of W?		W
CONSUMPTION (estimate)		kWh / hour
PRICE		€ / hour

Is there a possibility of savings?



3 third measurements

Use your phone chargers and measure their consumption. Sort them from high to lowest.

Name	Measurment Peak of W	
		W
		W
		W
		W
		W
		W
		W

Is it that simple?

- Do all phones charge at the same time?
- Do they have the same amount of battery life?
- Do the hours of operation vary depending on how you use the phone?

Discuss with others in your group.



4 Fourth measurement

Use your laptops.

Measure their consumption after switching on without using applications.

Then start your favorite game, and measure the consumption again.

What are the results?

Name of the game	Measurment Peak of W After start laptop	Measurment Peak of W After start a game	Difference in W

What do you think about it, are the differences big? Discuss with others.



5 Fifth measurement

If you have time.

You can measure the power consumption of a desktop computer after startup and compare it with the consumption of a laptop after startup.

What are the results?

Computer	Measurment Peak of W	
Desktop		W
Averages of your laptops (you can use a data from fourth part)		W



Here is the last page of your dice:

Write down the measurement value that surprised or entertained you the most. The values will be the same for the whole team:

All Members of the team must agree on one value!

All of member:

		name	
Town	 Erasmus+ Tábor, CZE October 2022	Ability Hobby	
	Symbol Of Energy		

Thank you for completing the task.

Submit the worksheet.



Meeting C3 Tábor

Worksheet 4 – Source of energy before and now

Introduction:

Work together.

Use school computers to search for required information. The computers are in Czech language, but Google Chrome is simple, as is the Microsoft Office suite. Alternatively, a Czech or Slovak colleague will help you.

Login: skoleni

Password: jsmenaprumyslovce

In general, you can use a network disk to exchange data between the teams T:\Skoleni\!ERASMUS+ KA2 C3

This worksheet is also saved there in PDF format for study.

In the first part you need to find some information and then after a short break to go on the trip

Today we will speak and visit two modern energy sources and walk around the places where energy was obtained in the past.

Past will be first.



In the past, mainly hydropower and wind energy were used. Today we will focus on the water one.

Have you ever wondered why cities are often built in past on rivers?

Because the river provided water for supply, energy for mills, and was often the most feasible route for travel.

Note that the town of Tábor was founded in 1420 and compare it further with the first mentions of mills on the Lužnice River.

First, find some information about the Lužnice River:

Where is its source:

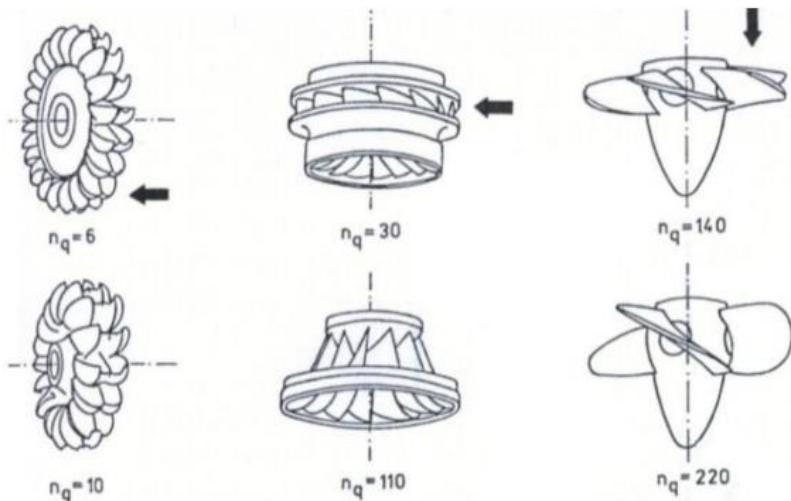
How long is it?

What river does
it flow into?.....

What is the largest city
located on the river Lužnice?.....

And now we will be speaking about water mills.

Select the Francis turbine in the picture. What is its principle?



What is the main difference between a hammer and a mill?

.....

.....

What are the so-called FLUME?

.....



And these days?

What are old mills used for today if not for grinding grain and still exist.

.....

Today we will visit the most powerful Czech power plant Temelín.

What is the principle of its operation?

.....

How many blocks does it have?

.....

What is its combined power output?





After a break, use the map and walk around the river Lužnice and observe the old Křížík power plant and the old mills in Tábor. Stop on market places and check the data.

Be safe on the way and use sidewalks.

If you don't have data in your mobile phone fill the worksheet right now.

Use the QR code and enter the web sites with information about the places.

www.pamatkovykatolog.cz

www.vodnimlyny.cz

Take picture of your group the visited places!

Unfortunately, they are only in the Czech language, so use a team member from the Czech Republic or Slovakia who is able to catch the information.



Stopover no.: 1

Name of object	
Exist? (Y/N/Ruin)	
Found (year)	
Author's name?	
Have you heard of him this week? Where?	
Type of engine?	
Usage for?	
Have you made a picture of you?	

QR code for Number 1





Stopover no.: 2

Name of object	
Exist? (Y/N/Ruin)	
Found (year)	
Name of the first miller	
Convert to power plant? (Y/N)	
Type of turbine	
Output (kW)	
Have you made a picture of you?	

QR code for Number 2





Stopover no.: 3

Name of object	
Exist? (Y/N/Ruin)	
Found (year)	
Name of the first miller	
Convert to power plant? (Y/N)	
Type of turbine	
Output (kW)	
Have you made a picture of you?	

QR code for number 3





Stopover no.: 4

Name of object	
Exist? (Y/N/Ruin)	
Found (year)	
Name of the first miller	
Convert to power plant? (Y/N)	
Type of turbine	
Output (kW)	
Have you made a picture of you?	

QR code for number 4



Stopover no.: 5

This point of interest is a little different, yet it is very interesting.

The Tábor was an important mining town in the past.

It has been mined here for more than 650 years.

Miners mined **(find what)**.

The mills were not used only for grinding grain, or later for generating electricity.

The mined ore was processed in ore mills on the Lužnice River.

QR code for number 5





Stopover no.: 6

Name of object	
Exist? (Y/N/Ruin)	
Found (year)	
Name of the first miller	
Convert to power plant? (Y/N)	
Type of turbine	
Output (kW)	
Have you made a picture of you?	

QR code for number 6





There is no task for you dice.

We will meet at 11:45 in front of the Pintovka restaurant **point no.7 in your map**, where we will have lunch and then go to visit the Temelín nuclear power plant and the small hydroelectric power plant Hluboká.

Meeting C3 Tábor

Worksheet 5 – playing dice

Introduction:

Work together.

Use school computers to search for required information. The computers are in Czech language, but Google Chrome is simple, as is the Microsoft Office suite. Alternatively, a Czech or Slovak colleague will help you.

Login: skoleni

Password: jsmenaprumyslovce

In general, you can use a network disk to exchange data between the teams T:\Skoleni\!ERASMUS+ KA2 C3

This worksheet is also saved there in PDF format for study.



Do you remember your dice?



Now is time to play dice in your group.

Roll the dice and repeat the roll of the dice,
where the same pictures will fall.

As a result, you will have 6 or 7 different
pictures on top.



Write the name of pictures in the list below:

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)
- 7)

Now.... Make the story using the pictures/words from your list, it will be good if the topic will be energy.

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

Thank you for your work.

Submit your worksheet.

You can keep the dice it is a souvenir for our project week.



Introduction:

Work together.

Use school computers to search for required information. The computers are in Czech language, but Google Chrome is simple, as is the Microsoft Office suite. Alternatively, a Czech or Slovak colleague will help you.

Login: skoleni

Password: jsmenaprumyslovce

In general, you can use a network disk to exchange data between the teams T:\Skoleni\!ERASMUS+ KA2 C3

This worksheet is also saved there in PDF format for study.



Depending on what you've already experienced this week....

What kinds of energy do you know? (use electricity only once)

1)

2)

3)

4)

Is it easy to produce energy?

•

Is it possible to store electrical energy in bulk?

•

Did our ancestors use any type of energy?



In your group, discuss, think about where you consume energy in your life, study, work and whether this energy could be saved.

Try to agree on 8 different activities in your group, regardless of whether you can save or not.

What kind of activities do you use energy for?	What type of energy do you use?	In your opinion, it is possible to save energy during this activity.	And how?



When all the groups in **your classroom** are done, connect with them, discuss with them, and select 12 activities from your worksheets.

The tables are on two pages.

What kind of activities do you use energy for?	What type of energy do you use?	In your opinion, it is possible to save energy during this activity.	And how?



What kind of activities do you use energy for?	What type of energy do you use?	In your opinion, it is possible to save energy during this activity.	And how?

When you're done, connect with a big group from the other classroom and choose and agree with them on the final 10 recommendations on how to save energy, you can use only one worksheet to fill recommendations.



Ten recommendations how to save energy

1)

2)

3)

4)

5)

6)

7)

8)

9)

10)



There is no more task for you dice.

Thank you for your work.

**Please remember it, and try to
some recommendation to follow.**

Submit the worksheets mainly the final
one.



Meeting C3 Tábor

Worksheet 7 – Final presentation

Introduction:

Work together. **Small repetition.**

You are working in 6 international teams in which you have made the assigned tasks.

The topic of our whole meeting have been ENERGY. Its acquisition, consumption and responsible behavior when dealing with it.

The outcome of the whole project week will be a collective presentation of your conclusions, which you will present to our students tomorrow from 10:45. I hope, you kept your work, documents, take pictures.

Each team will prepare a part of the collective presentation. The presentation will have these parts, always on about 3-6 pages.

1. Introduction of participating cities.
2. Introduction of participating schools.
3. Introduction of teams.
4. Tasks solved in the project.
5. Ten Energy Saving Recommendations – Project Output
6. Leisure activities, trips

Your agreement have been that according to the number of your group you will be in charge of the topic of part of the presentation.

**Agree on cooperation, who will create the design?
Who will present tomorrow, and how? You can use
my basic presentation design, stored on a shared
drive. Or you can create your own.**



Thank you for completing the task, this one is the one of the most important. Because you have to sell your work, and motivate other students to participate in similar projects.



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Croatia

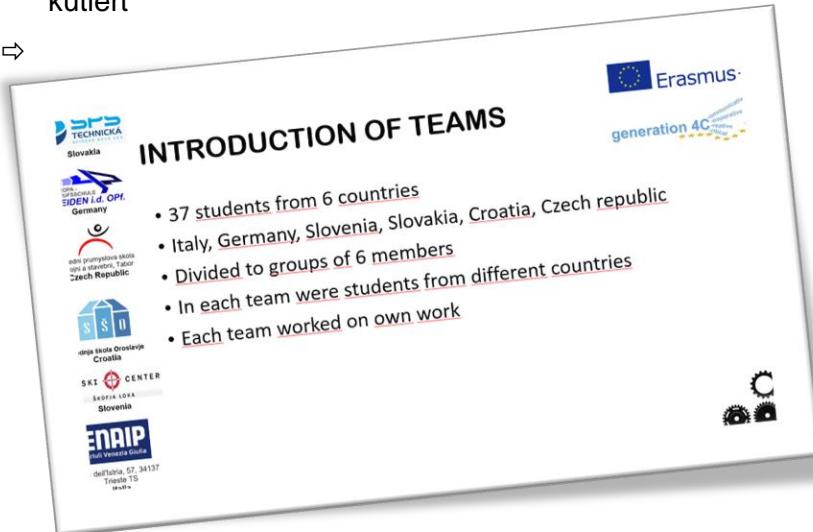


Slovenia

Ergebnisse The 10 recommendations for climate protection



- ⇒ Die "10 Empfehlungen zum Klimaschutz" werden online präsentiert.
- ⇒ Die Ergebnisse aus den Arbeitsaufträgen werden von den multinationalen Arbeitsgruppen jeweils als PP vorgetragen und diskutiert
- ⇒





**C4: Skofja Loka – Slowenien
Drohnentechnik**





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Agenda

Agenda - draft ŠC Škofja Loka, 23.1. - 27.1. 2023	
22/01/2023	Sunday 18.00 Travelling Day Meeting and dinner (school canteen - not yet confirmed)
23/01/2023	Monday until 09.30 Breakfast (at your accommodation) 09.30 - 09.30 Welcome at school 09.30 - 10.30 Presentations of partner schools 10.30 - 10.45 Group formation (a draw - done by 'drone pilots') 11.00 - 13.00 Work on the project: Drones - lecture, presentation and demonstration by Mr Robert Sipek, an aviation expert 13.00 - 14.30 Lunchtime (school canteen) 14.30 - 17.00 Škofja Loka - Sightseeing tour on foot (guided in groups by our students) Dinner (school canteen)
24/01/2023	Tuesday until 08.30 Breakfast (at your accommodation) 09.00 - 11.00 Work on the project: Drones - check list, instructions, regulations, done by drone pilots 11.00 - 12.00 School tour (guided by students and teachers) 12.00 - 13.00 Lunchtime (school canteen) 13.00 - 14.30 Work on the project: Drone flying instructed by drone pilots 14.30 - 17.00 Visit to the Škofja Loka castle 18.30 Dinner (school canteen)
25/01/2023	Wednesday until 09.00 Breakfast (at your accommodation) 09.00 - 11.00 Visit to Adria Tehnika (Ljubljana Airport) by bus 12.00 - 13.30 Visit to Europa (guided tour in English) 13.00 - 14.30 BTI Food Court, Shopping or Aqua Park - (free choice) 14.00 - 18.00 Return to Škofja Loka by bus 18.00 - 19.00 Dinner (school canteen) Bus transport for the whole day
26/01/2023	Thursday until 08.30 Breakfast (at your accommodation) 09.00 - 13.00 Work on the project: Drone flying - regulations, licenses 13.00 - 14.30 Lunchtime (school canteen) 15.00 - 16.30 Challenge: Drones flying 16.30 - 19.00 Free time 18.30 Dinner - teachers, Starmann, gostilnivo in turizem Stara Loka 22, 4220 Škofja Loka (courtesy of SC Škofja Loka)
19.00 - 22.00	Free time for students
27/01/2023	Friday until 08.30 Breakfast (at your accommodation) 09.00 - 13.00 Work on the project: presentation ppt / drone presentation, evaluation, preparing printed version of students work, outlook for the next project meeting 13.00 - 14.00 Lunchtime (school canteen) 15.00 - 18.00 Free time of choice: Ski museum, Bed 18.30 Dinner (school canteen)
28/01/2023	Saturday 8.00 Breakfast (at your accommodation) Departure



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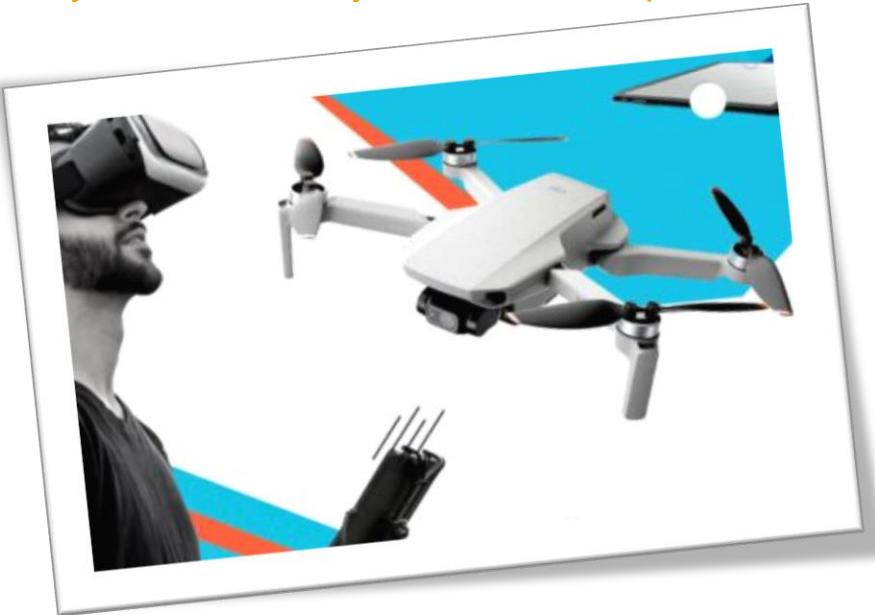


Croatia



Arbeitsblätter

Every drone is controlled by someone - The drone pilot!



What does a drone pilot need to know?

Knowledge

What must a drone pilot be able to do?

Practical competence...

What does a drone pilot have to consider?

EU laws,
flight rights,
data protection,
human rights,

What does a drone pilot have to do before he takes off?

Checklist like an airplane pilot.....



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Team classification

There will be 6 teams formed.



Drone pilot expert team

- ⇒ From every school one student is a drone expert. All drone experts from every school work together in this team (prepare the protocol).

Task for the expert team:

- ⇒ Create a checklist for the take off.
- ⇒ Create a test paper for drone pilots.
- ⇒ Create a practical test for flying drones
- ⇒ Create a certificate paper for the successful test
- ⇒ Create a licence plate for your drone

Pitanja Questions Otázky Fragen Opýtat' sa Chiedere Vprašanja

Task for all groups

Drones provide valuable services in many economic sectors. Annual turnover with commercial drones was estimated at 333 million euros in 2019. In 2017, sales of just 163 million euros were achieved. The drone market is a growth market.

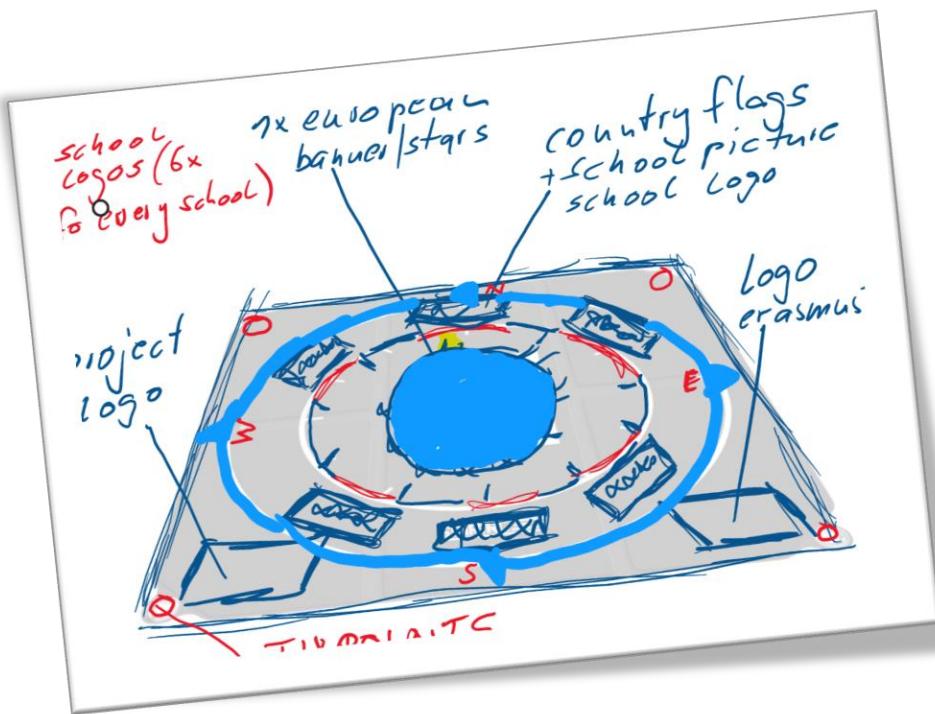
Develop a PowerPoint and illustrate the answers to the following questions with pictures:

1. Find examples where drones are used.
2. What should be considered when buying a drone?
3. Do I have to register the drone?
4. Which drone can I fly over my property?
5. What are the regulations of flying a drone over your own property
6. What do I have to consider if I want to fly a drone with a camera over my own property?
7. What do I have to consider if I want to fly my drone over my own property?



8. Create landing platforms for the drones.

- ⇒ 1x with european flag/stars in the centre
- ⇒ 6x with each school logo/flag in the centre

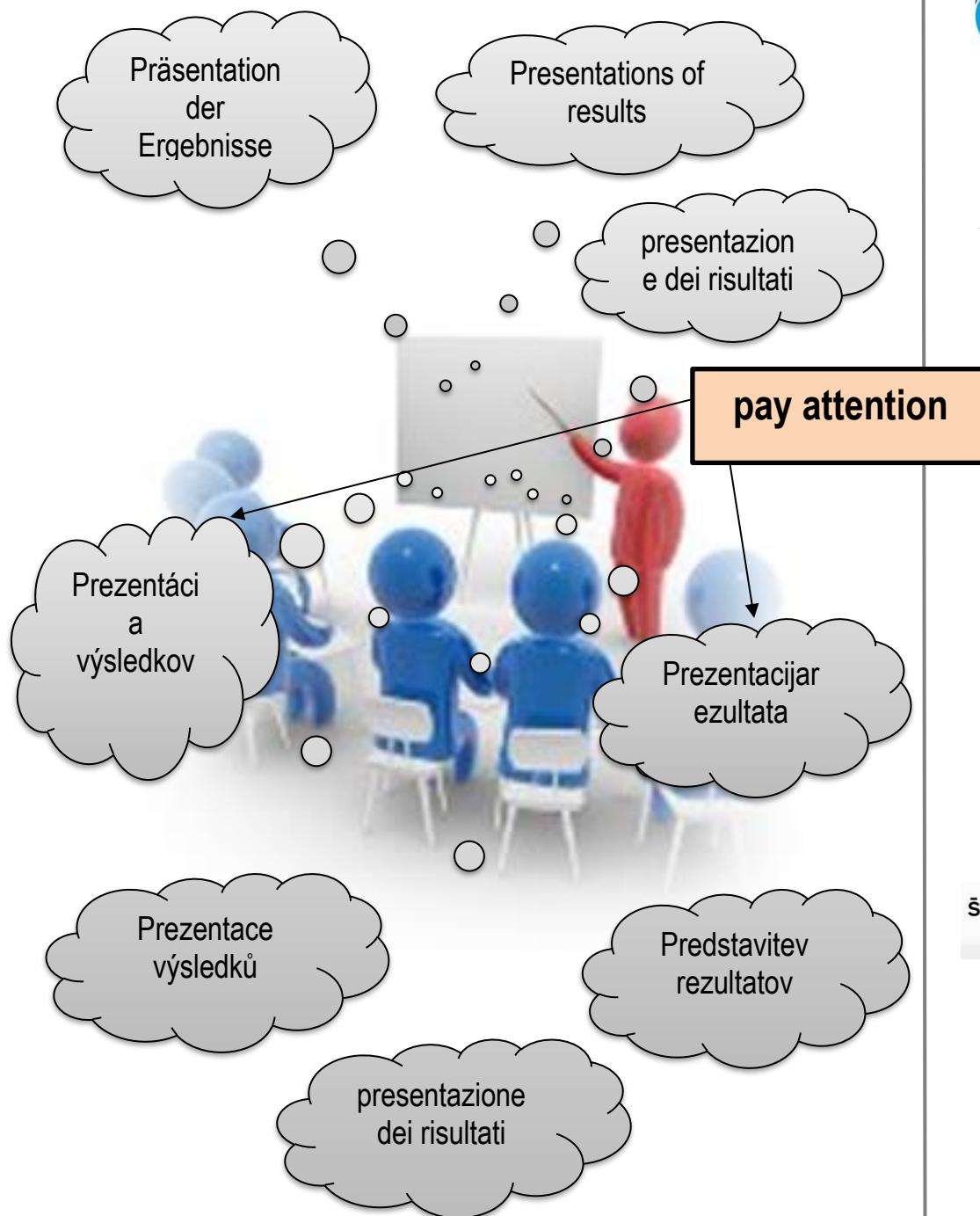


The design of the platforms should include:

- ⇒ European flag/stars
- ⇒ Flag from every country
- ⇒ Name/logo from every school
- ⇒ Erasmus+ logo
- ⇒ Generation 4C project logo

Print out two copies from each platforms.

Presentations of results





Dopo la presentazione
After the presentation
generation 4C
Nach der Präsentation
Po prezentaci
Po prezentácii

Nakon prezentacije
Po predstavivti
Po prezentácií

communicative
cooperative
creative
critical

The 10 Commandments for using drones.

- ⇒ All groups together create 10 Commandments for using drones.

Theoretical and practical challenge

- ⇒ The drone expert team organize a theoretical and practical test / instruction.





Construction and 3D-Printing

- ⇒ Create a utility to pick up the flags with the drone

Attention:

- ⇒ The weight of the drone must not exceed 249 grams
- ⇒ The sensors must not be impaired



Project video / picture gallery

- ⇒ The drone expert team organize a video production / picture gallery on how to operate drones (theoretical work, practical test, student groups, teachers.....).





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Ergebnisse: Checkliste Drohnenbenutzung

PILOTS DRAFT – DAY 3

FLIGHT PROTOCOL

BEFORE

- CHECK YOUR PHYSICAL CONDITION
- CHECK FLIGHT CONDITIONS
- ASSEMBLE THE DRONE
- CLICK IN THE BATTERY
- CHECK IF YOU HAVE THE RIGHT CABLE (iphone, android)
- ASSEMBLE THE REMOTE
- CLEAR LANDING SENSORS
- REMOVE GIMBAL COVER
- TURN ON EVERYTHING
- CHECK FOR FIRMWARE UPDATES
- TEST GIMBAL
- CHECK GPS SIGNAL
- SET RTH ALTITUDE (Return To Home)
- READY TO FLY

AFTER

- TURN OFF
- GIMBAL COVER
- RECHARGE BATTERIES
- CHECK YOU HAVEN'T LOST ANYTHING
- IF CRASH / ANMING HAPPENS CHECK FOR ANY DAMAGE

PILOTS DRAFT – DAY 3

ACTIVITY PLAN

- EXPLAIN THE CONTROLLER INPUTS
- SHOW THE MOST USEFUL FUNCTIONS OF THE APP
- TAKE OFF AND LANDING
- PITCH FORWARD AND BACKWARDS
- ROLL LEFT AND RIGHT
- YAW LEFT, RIGHT
- COMBINE ALL MOTIONS
- CAMERA CONTROL
- PHOTO, VIDEOS
- FLYING THE FULL COURSE

Date, place _____ Pilot: _____ Trainee: _____



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Drohnen Start-/Landeplattform



Drohnen Transportvorrichtung

TASK

Create a hanger to attach each country's flag (30 x 60 cm) to the drone. Depending on the given shape of the drone, design a suitable attachment. The space under the one when it lands is only 3mm. Be careful not to disturb the operation of the sensors on the bottom side. Some cooling slots may close temporarily. Also design a way to hang the flag.

PRODUCTION PROCESS

- Designing of the hook
- 3D printing of the hook
- Attaching the hook on the drone
- Hanging the flag from the hook
- Flying and raising the flags into the air



Praxistest



Videoproduktion



**C5: Spisska Nova Ves – Slowakische Republik
Lehrerfortbildung smart factory – künstliche Intelligenz**



- ⇒ Konzepterstellung für die Abschlusspräsentation und Aufgabenverteilung
- ⇒ Fortbildung der Lehrkräfte „smart factory“
- ⇒ Fortbildung „Künstliche Intelligenz“
- ⇒ Festlegung des fachlichen Inhaltes für die kommenden Projektmeetings
- ⇒ Ausarbeitung der handlungsorientierten Unterlagen für den Unterricht in multinationalen Gruppen.
- ⇒ Bis Juni 2023 Integration der Projektaufgabe in den jeweiligen fachlichen Unterricht der Partnerschulen, Herstellung der Teile, Dokumentation der Lösung
- ⇒ Die regelmäßige Kommunikation und der Austausch der Unterlagen findet über email und der Cloud statt.



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Agenda

AGENDA <u>SPŠ technická, Spišská Nová Ves (SK)</u> <u>17.4. – 21.4. 2023</u>	
Sunday, 16/04/2023	• Travelling Day
Monday, 17/04/2023	Breakfast
Until 08.30	Welcome at school (Aula)
09.00	Tour of the school
09.30- 10.30	Work on the project
10.30- 12.30	Lunchtime
12.30-13.00	Artificial intelligence
13.00-18.00	Dinner
19.00	
Tuesday, 18/04/2023	Breakfast
Until 08.30	Smart factory - Slovak company MTS https://www.mts.sk
09.00 – 16.30	
19.00	Dinner
Wednesday, 19/04/2023	Breakfast
Until 08.30	Visit Slovak company Nestville
9.00 – 13.00	Freetime
14.00	Dinner
19.00	
Thursday, 20/04/2023	Breakfast
Until 08.30	Artificial intelligence in education
09.00 - 12.30	Lunchtime
12.30	Work sheet AI
13.00 – 17.00	Dinner
19.00	
Friday 21/04/2023	
Until 08.30	Breakfast
From 09.00 – 13.00	Visit headmaster Spisska Nova Ves Presentation 'generation 4c'
13-14.30	Lunchtime
Saturday, 22/04/2023	Breakfast/ Departure



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Czech Republic



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C6: Triest – Italien Abschlusspräsentation – Künstliche Intelligenz im Unterricht



Agenda

generation 4C for Communicative for Cooperative for Creative for Critical		Erasmus+ KA2 strategic partnership	Erasmus+
ENAIP Friuli Venezia Giulia Via dell'Istria, 57, 34137 Trieste TS Italia		SPS TECHNICKÁ Slovakia	
<i>Agenda - draft</i> Friuli Venezia Giulia, 07/05. – 13/05 2023		SPS TECHNICKÁ Slovakia	
07/05/2023 Sunday Travelling Day		SPS TECHNICKÁ Slovakia	
08/05/2023 Monday until 08.30 Breakfast (at your accommodation) 09.00 – 10.30 Welcome coffee in Trieste 09.30 – 10.45 Presentations of partner schools and formation of students groups 11.00 – 13.30 Critical thinking a mean to raise awareness towards Artificial Intelligence 13.00 – 14.30 Lunchtime (catering at school) Visit to Miramare Castle and the Historical Park Free time		SPS TECHNICKÁ Slovakia	
09/05/2023 Tuesday 9.30 Arrival in ENAIP Pasian di Prato, Udine Welcome coffee break		SPS TECHNICKÁ Slovakia	
10.00 – 13.00 Workshop Workshop that will affect even change both in affects even change both in		SPS TECHNICKÁ Slovakia	
13.30 – 14.30 Lunchtime (at school)		SPS TECHNICKÁ Slovakia	
14.30 – 15.30 School tour (gu)		SPS TECHNICKÁ Slovakia	
15.30 – 17.30 Work on the project		SPS TECHNICKÁ Slovakia	
18.00 – 19.00 Walk in Udine		SPS TECHNICKÁ Slovakia	
19.00 Dinner at the E		SPS TECHNICKÁ Slovakia	
10/05/2023 Wednesday Working time in commitment to and the role of		SPS TECHNICKÁ Slovakia	
9.30 – 12.30 Visit to the Area Science Park of Trieste		SPS TECHNICKÁ Slovakia	
12.30 – 13.30 Lunch in school		SPS TECHNICKÁ Slovakia	
14.00 – 18.00 Visit at Eurodesk		SPS TECHNICKÁ Slovakia	
18.00 – 19.00 symposium FVG c		SPS TECHNICKÁ Slovakia	
Dinner at "Al d		SPS TECHNICKÁ Slovakia	
11/05/2023 Thursday		SPS TECHNICKÁ Slovakia	
11.00 Visit to the Area Science Park of Trieste		SPS TECHNICKÁ Slovakia	
13.00 – 14.30 Elettra Sincrotrone, a international research center		SPS TECHNICKÁ Slovakia	
15.00 – 17.00 Lunchtime (area science park) canteen		SPS TECHNICKÁ Slovakia	
17.30 Visit to High Educational Technical Institute special-		SPS TECHNICKÁ Slovakia	
18.00 – 19.00 isis technology – IT S.A. VOLTA		SPS TECHNICKÁ Slovakia	
Introduction to Artificial Intelligence: state-of-the-art		SPS TECHNICKÁ Slovakia	
and its use on the field of sciences of life		SPS TECHNICKÁ Slovakia	
Return to Trieste and free time		SPS TECHNICKÁ Slovakia	
12/05/2023 Friday		SPS TECHNICKÁ Slovakia	
09.00 – 13.00 For teachers: Visit to Ily coffee company		SPS TECHNICKÁ Slovakia	
For students: final questionnaires regarding the		SPS TECHNICKÁ Slovakia	
learning topic		SPS TECHNICKÁ Slovakia	
13.00 – 14.00 Lunchtime		SPS TECHNICKÁ Slovakia	
15.00 – 18.00 Final presentation to Regional Official Authority		SPS TECHNICKÁ Slovakia	
Mr. Fabris: VET system in FVG Region		SPS TECHNICKÁ Slovakia	
Ms Sedová: European Social Fund Projects in FVG		SPS TECHNICKÁ Slovakia	
Region		SPS TECHNICKÁ Slovakia	
Video of the project		SPS TECHNICKÁ Slovakia	
13/05/2023 Saturday		SPS TECHNICKÁ Slovakia	
09.00 Breakfast (at your accommodation)		SPS TECHNICKÁ Slovakia	
Deoarure		SPS TECHNICKÁ Slovakia	



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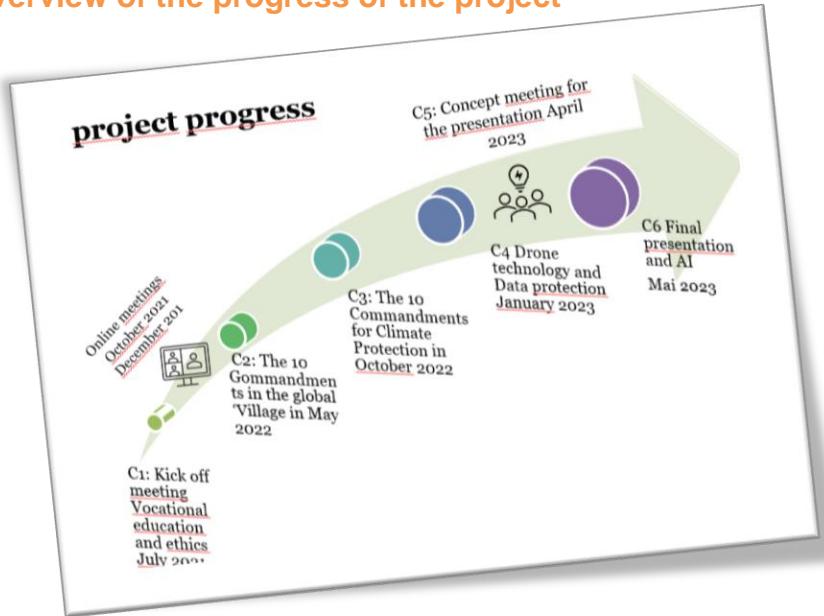


Arbeitsblätter Triest Mai 2023 Final meeting

Trieste 2023

- Theme: Vocational cooperation in the European community of values using the example of "technical and value and social competence in vocational training"
- We need to see the importance of equipping individuals with not only technical skills but also the necessary values and social competencies
- Result: Spectacular ending to long project

Overview of the progress of the project



We wanted to start in 2020 til 2022

We had a break til 2021

We decided to start in 2021 till 2023

We had online metting in 2021

- ⇒ All documents about the project meetings are here:
- ⇒ <https://www.dropbox.com/scl/fo/1fqhfwxnm4dqibr5n4yiv/h?dl=0&rlkey=z3a8d8fgq8vgsay01095kwsct>



- ⇒ You have to look in your folder. The folders are organized like the teams (see next pages)
- ⇒ The **worksheet** is in the folder „**C6_Triest_2023**“



European-Team classification

- ⇒ We are working in 6 teams.
- ⇒ There will be 6 teams formed.



Task for the teams:

This week, the results of the "generation 4c" project will be presented and questions about artificial intelligence will be answered.

- ⇒ The individual groups presents the results with examples.
- ⇒ At the end of the presentations, the moderator team gives a brief reference to the new challenge in the future: artificial intelligence
- ⇒ Each group presents their answers.

Group 1 -Banana- „Moderation team”



- ⇒ The project idea and the project goals are briefly presented.
- ⇒ A brief introduction (location, task, etc...) must be presented for each project phase.
- ⇒ All information about the project are available here.
- ⇒



- ⇒ At the end of the presentations, the moderator team gives a brief reference to the new challenge in the future: artificial intelligence
- ⇒ Each group presents their answers.
- ⇒ **The moderation team the team of moderators carry out the evaluations and present the results.**

Group 2 - Papaya - (Folder C2..) “The 10 Commandments in the global ‘Village’”



- ⇒ Present the project section and finds examples for each commandment.
- ⇒ All information are available here.



- ⇒ Create a picture galery from the project week
- ⇒ Create a PP with examples

Group 3 - Apple - (Folder C3) "The 10 Commandments for Climate Protection"



- ⇒ Present the project section and find examples of each with calculation of energy savings.
- ⇒ Create a picture galery from the project week
- ⇒ Create a PP with examples
- ⇒ All information are available here.





Group 4 - STRAWBERRY - „Energy saving questions“



⇒ Present a test with Kahoot”.

Examples....

How much do you save when washing clothes in the washing machine at 30° instead of 60°?

If you turn on the washing machine twice a week. How high are the savings per year at a kilowatt price of 0.25 – 0,37 € per kilowatt?

In your room, the lamp has an output of 60 watts. The light in the room is on 3 times a week, although you are in the kitchen having dinner. How much do you save if you switch off the light (electricity price 0.25 euros per KW).

⇒ All information are available here.



Tip: You can use the examples in the folder



Group 5 - AVOCADO - (Folder C4) "Drone technology"



- ⇒ Present the project section
- ⇒ How the students works in the project week and finds examples of using drones.
- ⇒ All information about the project are available here.





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Group 6 – ANANAS - Website and documentation team



- ⇒ creates a website/documentation (Word, video, PP, ...) for the generation 4c project
- ⇒ With films, pictures, etc. is the project-work to show.
- ⇒ All information about the project are available here.
- ⇒

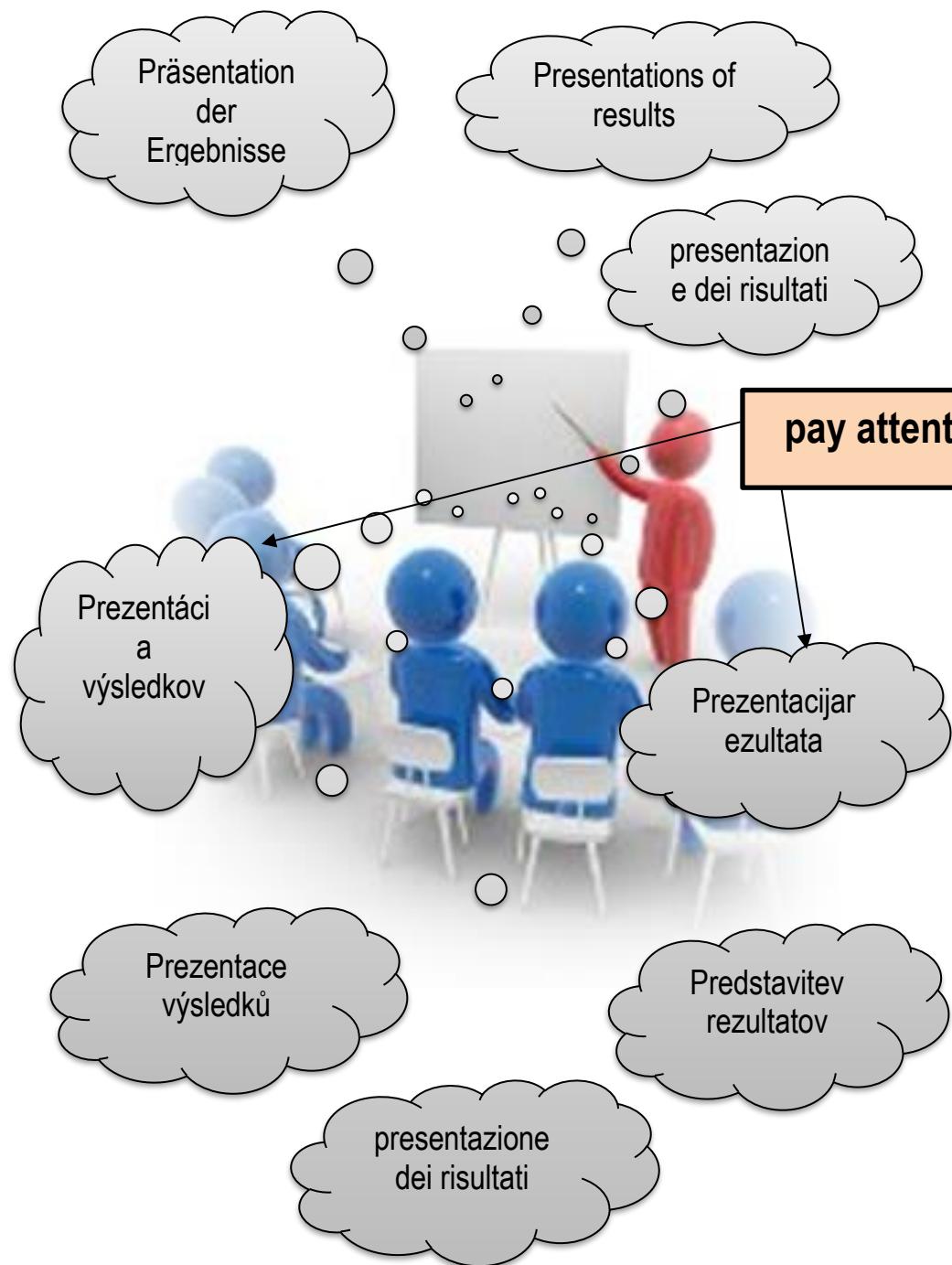


Pitanja Questions Otázky Fragen Opýtat' sa Chiedere Vprašanja

Questions for all groups about artificial intelligence (AI)

- ⇒ What is meant by artificial intelligence?
- ⇒ What is meant by an algorithm?
- ⇒ What is the difference between AI, ML and algorithms?
- ⇒ Where do you encounter AI in everyday life?
- ⇒ Show 3 examples of how AI is used in healthcare.
- ⇒ Show 3 examples of how AI is used in school/at work
- ⇒ In AI there are applications ChatGPT and Dall-E.
Explain both programs with an example.
- ⇒ What opportunities and risks does AI have for us?

Presentations of results



Ergebnisse

⇒ Video zu den 10 Geboten im globalen Dorf



⇒ Präsentation zu den Fragen zur Künstlichen Intelligenz





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- ⇒ Video über die Partnerschulen und den Projektinhalt



<https://youtu.be/Nd8zPSzuCME>

- ⇒ Online-Fragebogen mit Kahoot und forms



- ⇒ Selbstorganisierte Abschlusspräsentation im Theater in Triest

