Learn more
with
ICT and outdoor

Practical guideline for teachers.

ERASMUS +

2015-2017

POLAND—SWEDEN

1. Introduction

1.1. The project Learn More with ICT and Outdoor

The project Learn More with ICT and Outdoor is an Erasmus+ strategic project and cooperation between:

- ➢ Gmina Stanin, Poland
- ➢ The Association Bona Fide in Stanin, Poland
- ➢ Zespół Szkół w Staninie, Poland
- ➢ The Childcare and Education Department in Mölndal, Sweden
- ➢ Östergårdsskolan in Mölndal, Sweden
- ➢ The National Centre for Outdoor Education, represented by Spetsa AB, at the University of Linköping, Sweden

The aim of the project has been to develop methods for outdoor teaching practices in primary school, using digital tools in order to provide students with engaging lessons and to motivate them to learn.

During the two years' project, we have:

- compared and studied the two countries' curricula, in order to adapt outdoor education to the requirements of the school policy documents,
- created a large number of lesson planning on an eLearning platform *For real,* and exchanged the lessons with our partners, in order to determine if the lessons could be taught in both the Polish and Swedish school systems,
- compiled best practices into this eBook in order to give other schools hands on help into a successful outdoor teaching.

This guideline, created in our project, gives the ideas about *how* to teach, *where* to teach, *when* to teach, *what* to teach and *why* to teach outdoor, as well as *how* to create interaction between the classroom and the close learning environment outdoors – in all the subjects connected to our curricula. Education and learning is a culture and a strong part

of a country's life. To reflect, rethink and reform is therefore an important part for educational development.

1.2. The principals' reflections

Agneta Johansson, Principal of Östergårds Primary School in Sweden.

My expectations before the project:

As the principal of Östergårds Primary School I have some expectations for the project ICT and outdoor teaching.

I think it´s very important and developing to learn from other cultures and other schools.

In this project I hope the teachers will learn how to create lessons even more fun and memorable then they do today when they have their outdoor teaching lessons. I also hope that the teachers will have a lot of fun during the project.

I would like them to have a comprehensible list of lessons or courses on what they can do outdoors and how they can work with ICT (since ICT is a very important part of today´s society), but also to be active outdoors and stay healthy.

I also want an comprehensible list that explains why it's good to work and learn outdoor.

My reflections after the finish of the project activities.

My understanding of the project so far is that the teachers are more interested and more focused on outdoor activities and ICT learning in school.

Our partnership with the other schools in Poland also makes us more understanding for other cultures, other ways of work and thoughts of education.

The teachers in the project have made other teachers in school more enthusiastic about outdoor teaching.

They have also worked a lot with planning their lessons in an ICT-programme called "Lärande på riktigt" / "Learning for real" and made the lessons available for the others. This is a very good way of learning from colleagues.

The teachers presented their work with outdoor-teaching with ICT on an in-service training

day in October for teachers in Mölndal. This was a way to spread the thoughts about outdoor-teaching.

Outdoor-teaching is good for all students and everyone can do it on his/her own way. It´s healthy for the student to move and learn.

I think that the teachers have reached the aim of making lessons more fun and interesting by outdoor-teaching. I also think that the teachers enjoy the work in the project and that they can see a progress in their work in school.

I hope they can present "Best practice" lessons with good work and learning outdoor to the Polish teachers as well.

Janusz Sobiech, headteacher of Complex of Schools in Stanin, Poland

My expectations before the project:

1. Teachers who will join the project, acquire skills of leading outdoor activities.

2. Teachers will lead them much more often than before.

3. 30% of teachers will join the project.

4. The school will be developed into ICT materials for language laboratory.

5. Teachers' ICT competence will increase.

6. ICT will be appearing in the classroom more often than before.

7. In the context of the association, all schools from the Stanin Commune will join this project.

8. From each school in our area at least 1 person from the primary school, 2 people from the school complex will take part in the project.

9. Schools from the Stanin Commune will receive equipment to teach with using ICT.

10. Eager teachers will take a part in the appropriate training of using the Swedish Internet platform.

11. 75% of teachers will use the Swedish Internet platform in their work.

12. The Complex of Schools in Stanin will be better known in our region because of our innovative activities.

My reflections after the end of the project activities

1. Competence of conducting outdoor activities of some teachers in Complex of Schools in Stanin has increased.

2. Competence of conducting outdoor activities of some teachers in Stanin Municipality has increased.

3. The outdoor classes of some teachers are much more common than before.

4. Competence of using ICT has increased in both - Complex of Schools in Stanin and other schools in Stanin Municipality.

5. Thanks to the project many interesting scenarios were created.

6. Many teachers in our municipality are able to use the Swedish Platform "For real ".

7. We are aware of the fact that students work actively during the outdoor lessons, they remember more thanks to the outdoor games; movement and fresh air make students' work more efficient; the whole body is involved in learning ....

8. Complex of Schools in Stanin and Stanin Municipality are better known because of their innovative actions.

Part A

2. Outdoor education in primary school.

Definition of Outdoor education

Learning indoors is the main method of organizing education. However, teachers and learners value other opportunities for learning that can take place outside the classroom. Outdoor Education is perceived as an opportunity to use an extended learning environment, which can strengthen the link between theory and practice and bring the curriculum to life.

The research group at the Centre for Outdoor Environmental Education, Linköping University, has proposed the following definition in an attempt to describe the field of outdoor education:

> Outdoor education is an approach that aims to provide learning in interplay between experience and reflection, based on a concrete experience in authentic situations.
>
> *(Translated from the Swedish original text by FD Norman Davis at the National Centre for Outdoor Education, Linköping University 2004)*

3. Why outdoor education?

A growing body of literature shows that the natural environment has profound effects on the wellbeing of adults, including better psychological well being, superior cognitive functioning, fewer physical ailments and speedier recovery from illness. It is widely accepted that the environment is likely to have a more profound effect on children due to their greater plasticity or vulnerability (Wells 2003).

Research provides convincing evidence of the significant benefits of experiences in nature to children. Findings include the following (see also Appendix 3):

- Children with symptoms of Attention Deficit Hyperactivity Disorder (ADHD) are better able to concentrate after contact with nature (Taylor 2001).
- Children with views of and contact with nature score higher on tests of concentration and self-discipline. The greener, the better the scores (Wells 2000, Taylor 2002).
- Children who play regularly in natural environments show more advanced motor fitness, including coordination, balance and agility, and they are sick less often (Fjortoft 2001).
- Student performance improves in standardized test scores, grade point average, willingness to stay on task, adaptability of different learning styles and problem solving (Leiberman & Hoody 1998).
- Antisocial behavior such as violence, bullying, vandalism, littering and absenteeism reduce (Coffey 2001, Moore & Cosco 2000).
- Understanding of society, milieu and sustainable development is conceived as meaningful when education is placed in an outdoor environment (Szczepanski, A. & Andersson Per 2016).
- Outdoor Education motivates learning and curiosity, increases the physical activity level, improves concentration, and increases knowledge, understanding and memory. Furthermore it improves social contacts and relations, language, motivation and relations for students with disabilities. It also increases the understanding of connections in environmental knowledge and increases a healthier lifestyle. (Helene Ekwall 2012)
- The stress hormone cortisol significantly decreases. Concentration - learning and teaching in this case can be linked to the place and learning environment. (Gustafsson, P.E., Szczepanski, A. et al., 2011)
- Young people learn about and care for ecological and social well being of the communities they live in, and that the schools should be part of their community, which leads to improved engagement and participation in democratic processes (Fägerstam 2012).

4. Outdoor Education in the Polish and Swedish curricula in comparison.

Both the Swedish and Polish curricula create opportunities in a methodology perspective to use of the outdoor environment as a learning environment. Similarly, there are no theoretical grounds, that hinder teaching and learning, where society becomes a part of the school and the school is a part of society. One might say that teaching traditions to some extent “sit in the walls " and that different teaching cultures must meet and open up so that education does not stop at the doorstep.

Both in Sweden and Poland there is a possibility to implement outdoor education in most parts of the curricula, but in general the outdoor is not specified as a method of work. If the local school, the headmaster and the teachers want to implement outdoor education, it is fully possible both in Sweden and Poland.

A comparison of subject syllabuses for primary school (see Appendixes 1 and 2), resulted in the following:

- In *Biology* and *Environmental Education* both the Swedish and Polish curriculum recommend field studies in the local environment.
- Even in *Mathematics* and foreign languages both the Polish and Swedish curriculum support the natural world, society, local surroundings and outdoor environment as the place of learning.
- When it comes to *Civics* and *History*, it is possible to use the local area around the school both in the Polish and Swedish curriculum, but it is also specified in *Religion* in the Swedish curriculum.
- In the Swedish curriculum *Crafts* and *Mother tongue,* the local environment outside the school as a learning environment, is weaker expressed.
- In *Physical Education* and *Sports,* outdoor education has a strong connection to the outdoors both in the Swedish a Polish curriculum.
- In *Arts*, the Polish curriculum gives the possibility to work in the local community.

The *Craft* subject has a week connection to other learning environments.

5. Practical possibilities and obstacles to be overcome.

Our project work shows that there are no major obstacles to move out the teacher, children and the teaching outdoors, if a school, the teacher collective and the principal agree. There are many ways to teach and learn and outdoor education is one way to turn the school subjects into a diversity of both text-based and non-text-based practices.

The hindrance could be tradition, educational school culture, risk management, parents, the teachers' skills and how close a suitable area is to the school. In general most of the teachers see natural sciences and physical education as the only reason to leave the classroom. Civics, math or language studies are not the subjects teachers consider, when it comes to outdoor education, and place-based learning.

This is also what we can reflect on in this project. There is a need for breaking up the main barriers and main obstacles that we can identify and that need to be overcome. They are as partly suggested above:

- School culture – timetabling, disruption, planning time
- Legitimacy of outdoor learning – lack of curricular imperative
- Risk/litigation perception
- Health and safety bureaucracy
- Staff competence and confidence
- Access to suitable outdoor venues
- Resources – cost, transport, ratios and weather

How to avoid problems or to deal with them

So here we are. How do we work outdoor? Do we need more teachers? Do we need more fences for the safety reasons? And how do we solve thirst or toilet problem?
These are reasonable questions, but do not get stuck in the problems. Work something out in your neighborhood, maybe in your schoolyard. It is not always necessary to leave the schoolyard.

We recommend to prepare a backpack ready to bring with you outdoors. Have first aid kit, a bottle of water, a little blanket, toilet paper and a trash bag in it. If you plan to go for a walk, try to give the students the habit of always bringing a little backpack of their own with their own bottle of water, something to sit on and maybe a raincoat, since you never know what will happen.
Depending on what kind of lesson you plan, we also recommend sheets, ropes, magnifying glass and bucket and spade. We also like to have a wagon if possible. It is not the best solution, if you walk in the forest, but if you need to bring lots of things, it might ease the trip.

6. Students in need of special support.

If your students have disabilities you might see moving outdoors as a challenge. But remember that the students practice balance, strength and probably the will to get forward in spite of the struggle. Courage and patience are some of the most necessary and important parts in your profession.

Your students might be worried, scream and have concentration problems, but outdoors, they probably will calm down. Also, they will not disturb their friends in the same way as indoors, since their noises do not sound as much outdoors. They will find interesting stuff to focus on and maybe even relax when they see green plants and blue sky.

What you have to be aware of is that no person's needs are similar to the others, as well as that the needs change over time. Sometimes from day to day and sometimes from week to week, or depending on what temperature it is or what the person has had for breakfast.
The different needs a person with disabilities might have, cannot be generalized, but common ways to help the students to function in the school are:

- ➢ Prepare the lesson by using pictures that show what to do, when to do it, with whom, where and what is next.
- ➢ Prepare the students for the upcoming activities by letting them watch instruction films, like learning circles on the platform *For real* for example.
- ➢ Work in small groups where one or some classmates have the task to support the

others.

- ➢ Work in small groups with a teacher or a supporting teacher.
- ➢ Some students need longer time to understand or to finish tasks. Offer extra tasks to the students who are finished first.
- ➢ Follow routines. Start the lessons in the same way and in the same spot. Finish by repeating what you have done and learned during the lesson.
- ➢ Always give instructions to the class first, and after that help the students with disabilities to get started, before you help anyone else.
- ➢ Have a routine for the student how to signal if she or he does not understand or needs help. A visible sign like a read hand in the air for example or entering a spot agreed on in advance.
- ➢ Agree on what to do while they are waiting or if they get tired, sad, angry, hungry, scared or curious.
- ➢ Decide a place to go to, if someone needs to be alone for a while. In that way you do not have to go looking for missing children.
- ➢ In some activities you might have to set up borders that the students are not allowed to cross, even more than the fences in the schoolyard offer. In that case it is a good idea for the borders to be visible in some way. Younger students you might have to walk along the border in order for them to understand it.

Close to our school in Kållered, we have a local sports ground. The way to reach it is along a meadow that ends in a stream. And along the road people often ride bikes and mopeds. To minimize the risks we have to respect some rules:

- ➔ Walk only along the little road, not through the meadow!
- ➔ If a cyclists shows up, stand still!
- ➔ If a dog shows up, stand still, stay calm, and if you want to say hello to the dog first ask the owner if it´s allowed!

In the local sport ground we always gather in the same spot, in the same way, in a marked circle where we wait for everybody to show up. We also get together there and count in before leaving. It is also our recommendation to have a teacher sign if the class should get

together quickly. For example the teacher can stand still with a raised hand. The students who pay attention to the teacher's sign do the same thing.

It might be a good idea to plan activities in a way so you do not have to explain a lot. Maybe solve it by introducing the lesson in the classroom. The students can get their tasks individually or maybe on their iPads. Give the students an obvious way of how to finish the task. In that way they know what to do and maybe they work faster if they get the possibility to play for a while.

Other recommendations we would like to give are to use joy and laughter, but to be clear about the task. Some students have problems when routines change. In that case, let them observe first. The ultimate lessons for those students are the lessons they already have seen. Or prepare the students with detailed pictures or films that tell them what to do and what is expected.

Part B

7. Best practices

7.1 Water, plants and weather

7.1.1 Do the leaves breathe?

Authors: Katarzyna Koślacz, Anna Nowak, Poland  
http://circletool.pariktigt.com/circles/8012
Age:
11
Materials/Preparations:
Jars, water, sunny and shady place, cards, pencils for taking notes, instruction of the experimental procedure.
Time:
45 minutes
Environment:
Schoolyard
Subject/Theme:
Nature Studies, How does plants' nutrition look like?

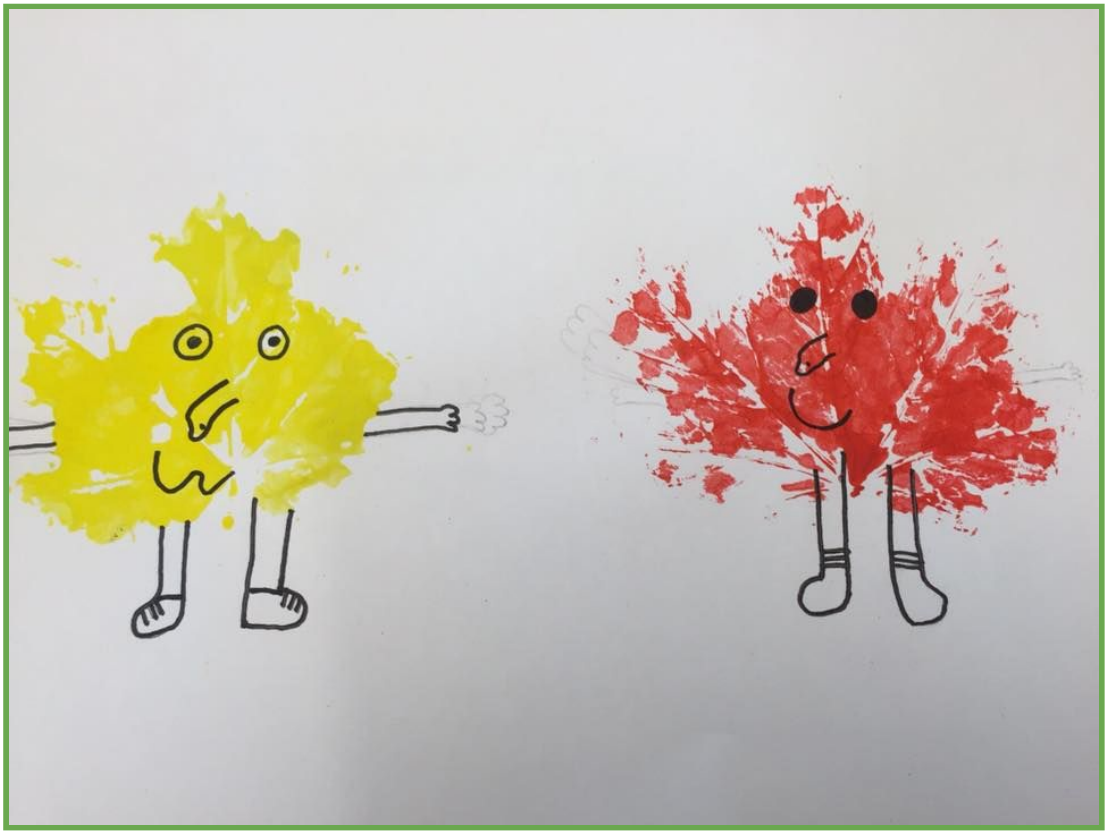
Curriculum:
4.5 - student .....knows basic differences in nutrition of autotrophic and heterotrophic organisms.
Description/Plan:
Phase 1: The organizational activities, discussion of the rules of work, going outside. Phase 2: - Making groups - preparation of the control and experimental trials according to the instruction. - Observation of gas bubbles evolved in the control and experimental trials. Making schematic drawings. - Comparisons and discussion of the results of work. Phase 3: The search for answers to the question What do plants need to live?

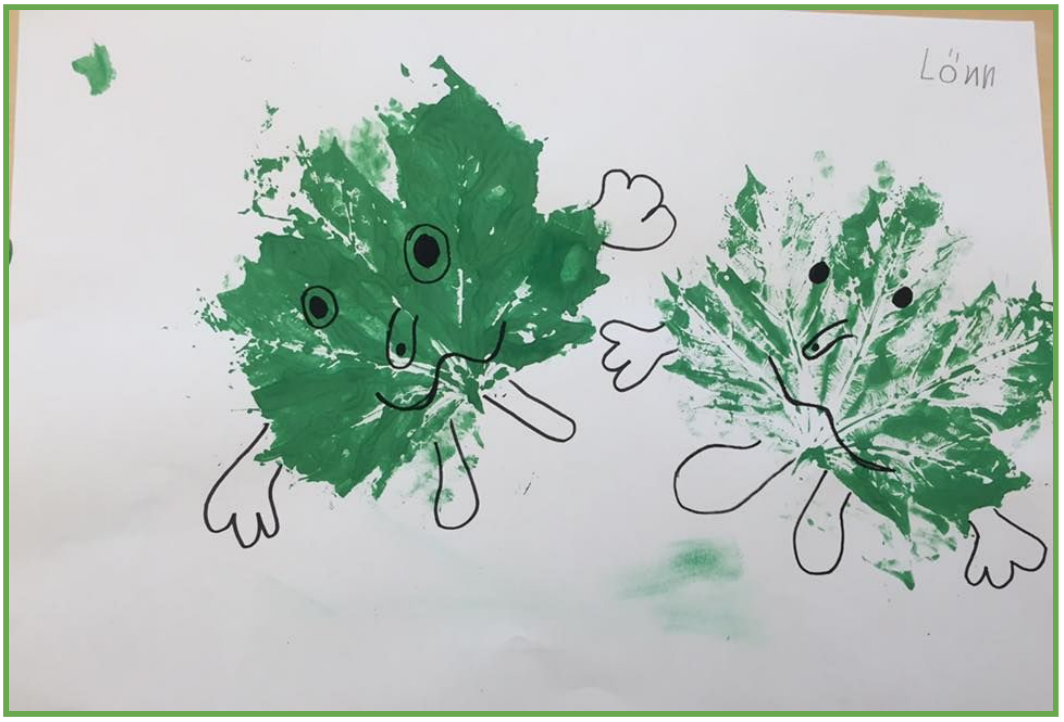
Teachers evaluation:

It was much fun. We did some monsters out of the prints.

Students in the age of 9:

It was much fun. The students liked the experiments and the artwork.

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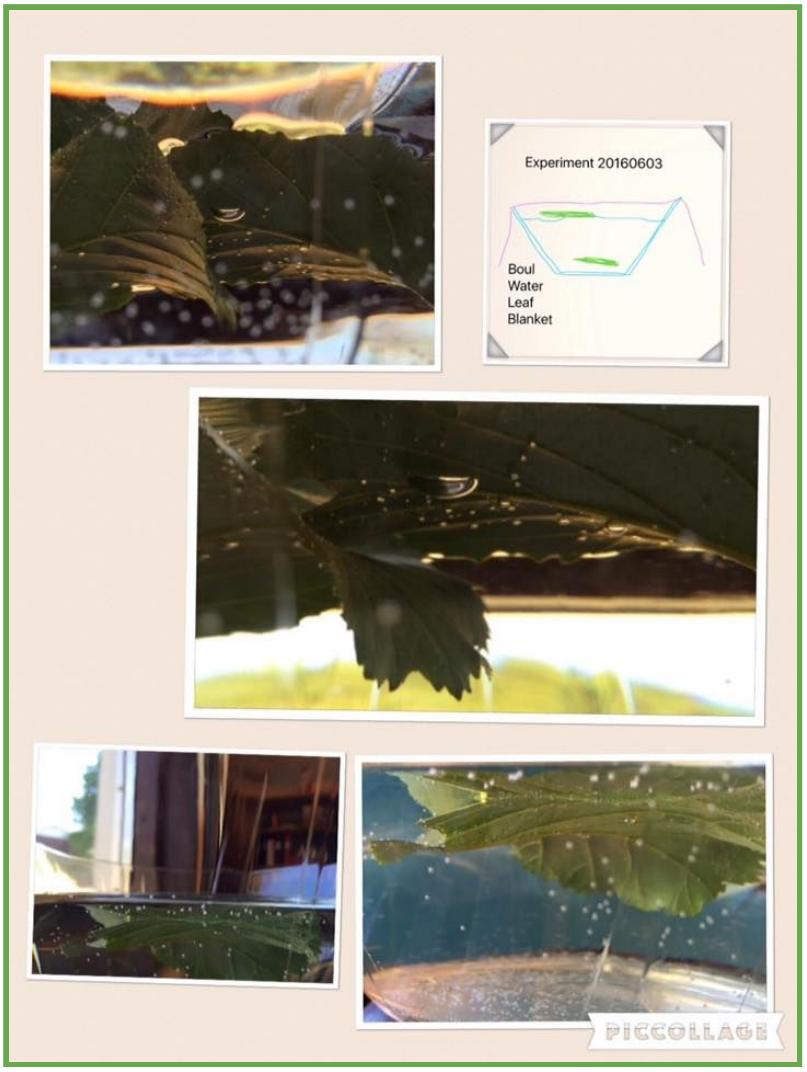


<u>Teachers' evaluation and students in the age of 9:</u>

1. We did the experiment.

2. We draw guesses what would happened.

3. We saw the film.

4. We waited 2,5 h.

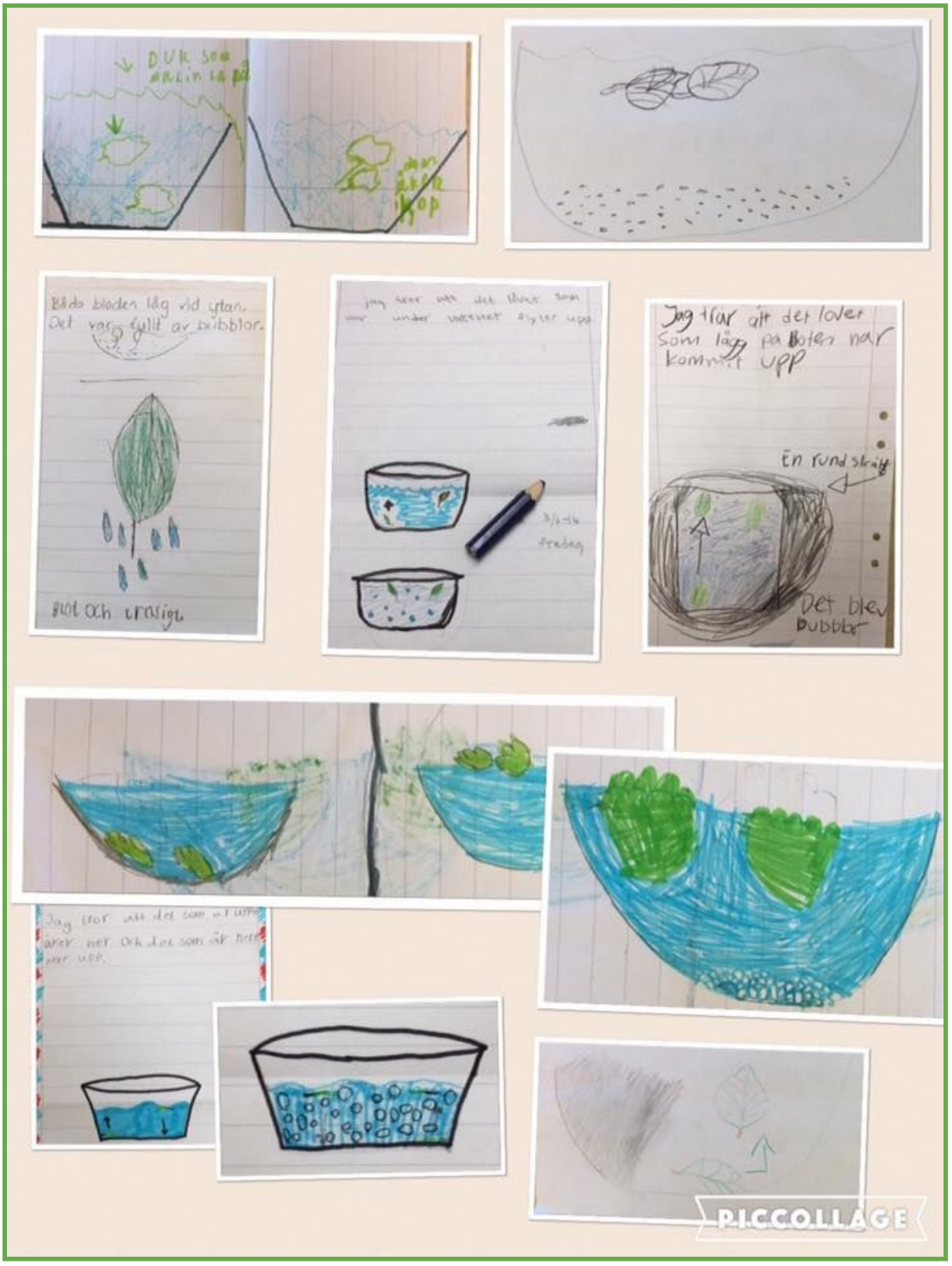
5. We checked and found the bubbles.

6. The pupils liked the experiment.

The film was easy to stop and translate. 20 students liked to draw and 5 prefered to write.

They saw the bubbles and understood that plants helps us with oxygen.

Some drawings of the guesses and the results. Most pupils thought the leaves would come up to the surface. Afterwards they saw the bubbles.



7.1.2 Different kinds of weather.

Authors: Åse Nilsson, Nina Grimhage, Sweden  
http://circletool.pariktigt.com/circles/7550
Age:
6-9
Materials/Preparations:
A PowerPoint and pictures of different kind of weathers. For example: rainy, sunny, cloudy, windy, stormy, cold, warm, snowy etc. Word pictures of weather both in national language and in English. Ipads for the pupils. Wifi indoor.
Time:
30 minutes a day for a whole week. 5-10 minutes preparations indoor 10-15 minutes carrying out outdoor 5-10 minutes to reflect and document through “For real”
Environment:

Schoolyard
Subject/Theme:
Theme: The Weather Physics, Chemistry, Biology, Swedish, Swedish as a second language, Arts and English.
LGR11:
Physics, Chemistry, Biology People's experiences of light, sound, temperature, taste and smell using all the different senses. Simple field studies and observations in the local environment. **Swedish, Swedish as a second language** Handwriting and using computers for writing. Oral presentations and relating everyday topics to different recipients. Pictures and other aids that can support presentations. Words and terms used to express feelings, knowledge and opinions. **Arts** Photography and transfer of images using computer software. Some tools for drawing, painting, modelling, designing and photographing and what these are called. **English** Subject areas that are familiar to the pupils.
Description/Plan:

Phase 1:

The teacher puts the children in small groups.

The pupil opens the PowerPoint presentation of different kind of weather in their Ipads and follows the instructions. First they see pictures of different weather.

Phase 2:

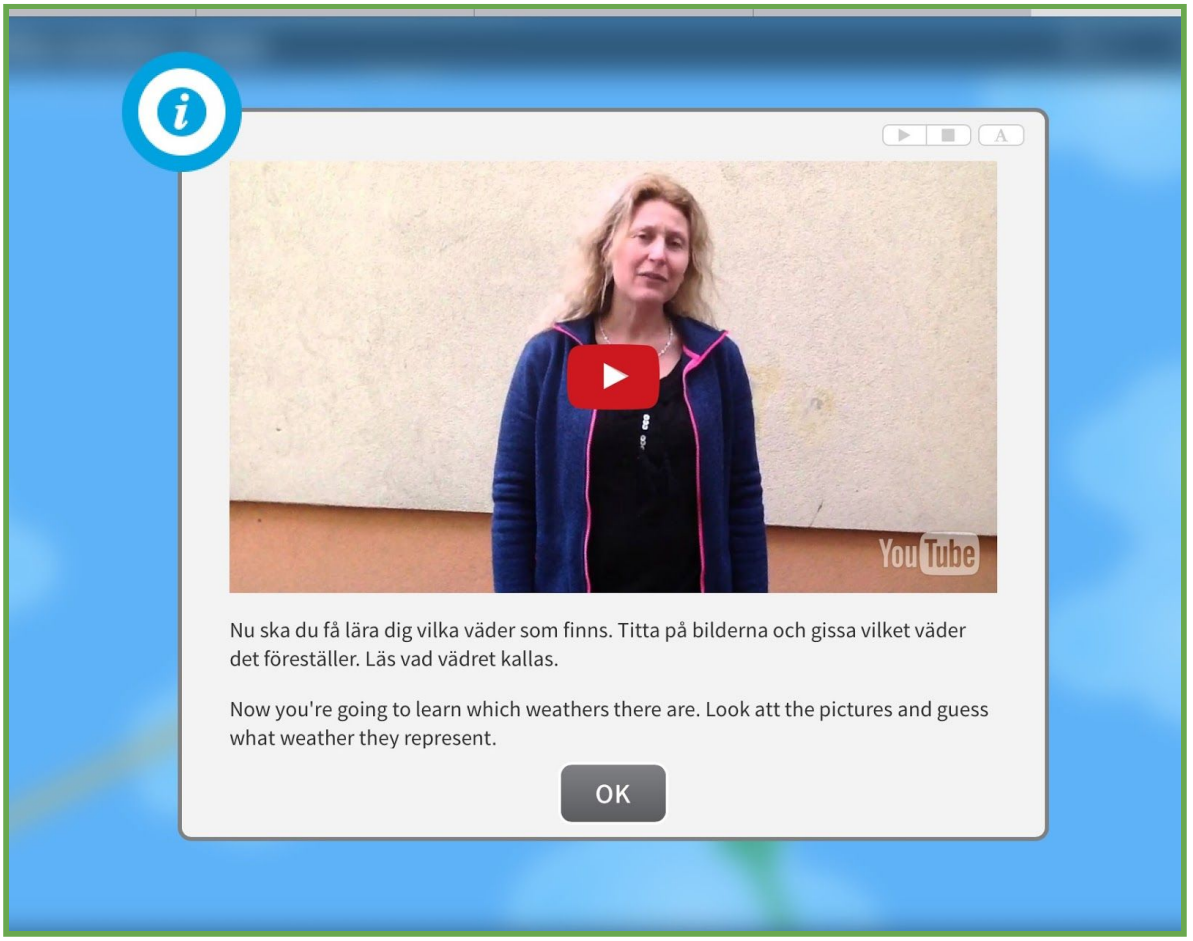
The instructions say that they are going to photograph the weather. How is the sky? The sun? The surroundings?

They also are going to film each other when they describe the weather. What kind of weather is it? How does it make you feel? Use all your senses.

Last the pupils reflect and document the weather of the day through "For real". A picture of the weather, a film of a description of the weather and a symbol of the weather. They shall also write the name of the weather in Swedish and English.

Phase 3:

Last they are supposed to write the day, month and year of the day both in Swedish and in English.



Teachers evaluation and students in the age of 9:

Students understood what to do.

Some thought it was a bit simple and boring. And some liked the activity.

It was fun to go out and take a photo and write about it.

They said the activity probably would fit younger students.

22 students participated.

We only did one lesson.

We should have a little bit more time because the students were late from the break so we started 15 minutes later than we should have.

VÄDER

Vädret idag är soligt.

De finns många olika väder t.e.x regnigt, molnigt, soligt, dimmigt och blåsigt.
Regn är tråkigt.

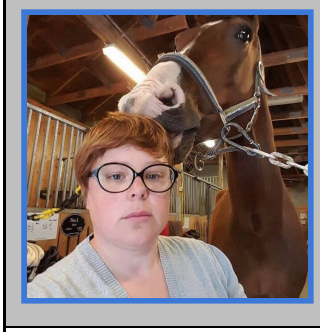
The weather
The weather today is Sunny.
There are different kind of weather for example rainy, cloudy, foggy and windy.
Rain is boring.

PIC•COLLAGE


Idag är det soligt.
Det är varmt och skönt.
Det finns olika väder
tex åskoväder, soligt,
molnigt, dimmigt,
halvklart, och regnigt.
Vad är det för väder? Det är
fint väder och solen skiner.
Det känns och lite svettigt.
Det finns olika väder till
exempel regnigt, molnigt,
åskoväder, klart och
halvklart.
Idag är det soligt det är
varmt och skönt. Det
finns många väder ex
dimmigt, molnigt och
regnigt.
Det är soligt i dag. Det
kan vara sol det är
varmt i luften,regnigt
det är blött,blåsigt det
är kallt,
Idag är det soligt. Det
är inga moln. Men
jätteskönt.
PIC•COLLAGE

7.1.3 English outside.

Authors: Madelene Ahlström, Malin Berntsson, Sweden



http://circletool.pariktigt.com/circles/7704

Age:

7-9

Materials/Preparations:

Ipad and a ball.

Time:

2 lessons

Environment:

Schoolyard

Subject/Theme:

English

Curriculum:

English: 1-3

Objectives:

The teaching in the English department should aim to develop students' knowledge of English language and knowledge of areas and contexts where English is used as well as increasing confidence in their ability to use language in different situations and for different purposes.

Through teaching, students are given the opportunity to develop a comprehensive communicative ability.

Abilities:

Formulate and communicate in speech and writing.

Central content:

• Various forms of simple conversations and dialogues.

• Songs, rhymes, poems ...

Proficiency at the end of year 6

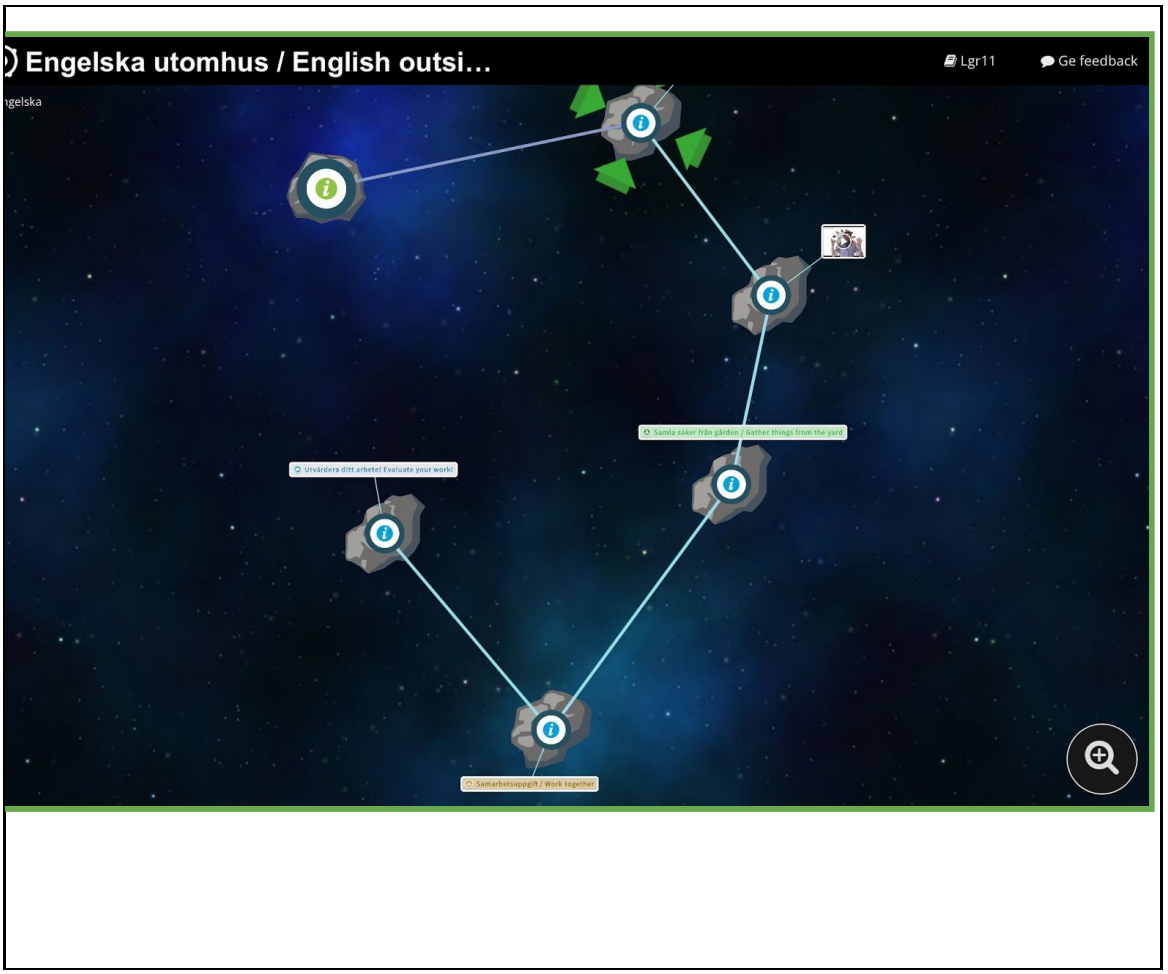
Students can understand the whole ... in clearly spoken, simple English in a relaxed pace and in simple texts about everyday and well known topics ...

Description/Plan:

1: Use words and sentences the teacher hands the student.

2: Play a game to learn and repeat words.

3: Create your own text.



Teachers evaluation and students in the age of 8:

We have tested the English language learning circle. Most of the students thought it was an easy circle and they learned new words.

In the beginning of the circle they would learn the words and how they were pronounced. Because they did not know how to pronounce them, they used the speech function and got the words read out loud. Unfortunately, several words were wrong when they were read.

The other activity was to listen to a song. That song was highly appreciated by the students and they listened to it over and over again and sang along. They thought it was fun even though it felt a little weird.

Going out and collecting things they knew by name in English, everyone thought was great

fun. Some students also painted the things they found in the app tayasui sketches.

The last activity was the ballgame. Here the students were divided into two rings with each ball. This means that there were 11 students in each group. Most learned a lot of new words in the game and we also tested the words we had as homework during this week. Still, many students did not like this game. If you needed a lot of time to think out a word, you felt stressed by other students who hurried you on. If you had difficulty pronouncing the words, some students could correct you. If you waited for the ball, but did not get the ball so much, you could be sad.

It is therefore important to think about how to behave towards each other in such a game, and it may be a good idea to have small groups playing the game, so that waiting and stress are decreased.

Finally, the students would evaluate and we did that in the whole class. Many thumbs up.

7.1.4 Knowledge about maps.

Author: Malin Berntsson, Sweden 
http://circletool.pariktigt.com/circles/8071
Age:
7 - 9
Materials/Preparations:
Sand, bucket, shovel, sticks, grass, Ipad or camera, paper and coloured pens, one meter sticks or small scraps and things that can symbolize the characters of the map.
Time:
4-8 lessons
Environment:
Classroom and the schoolyard
Subject/Theme:
Physical education
Curriculum:

Physical education

Purpose:
... Prevent risks during physical activity ...

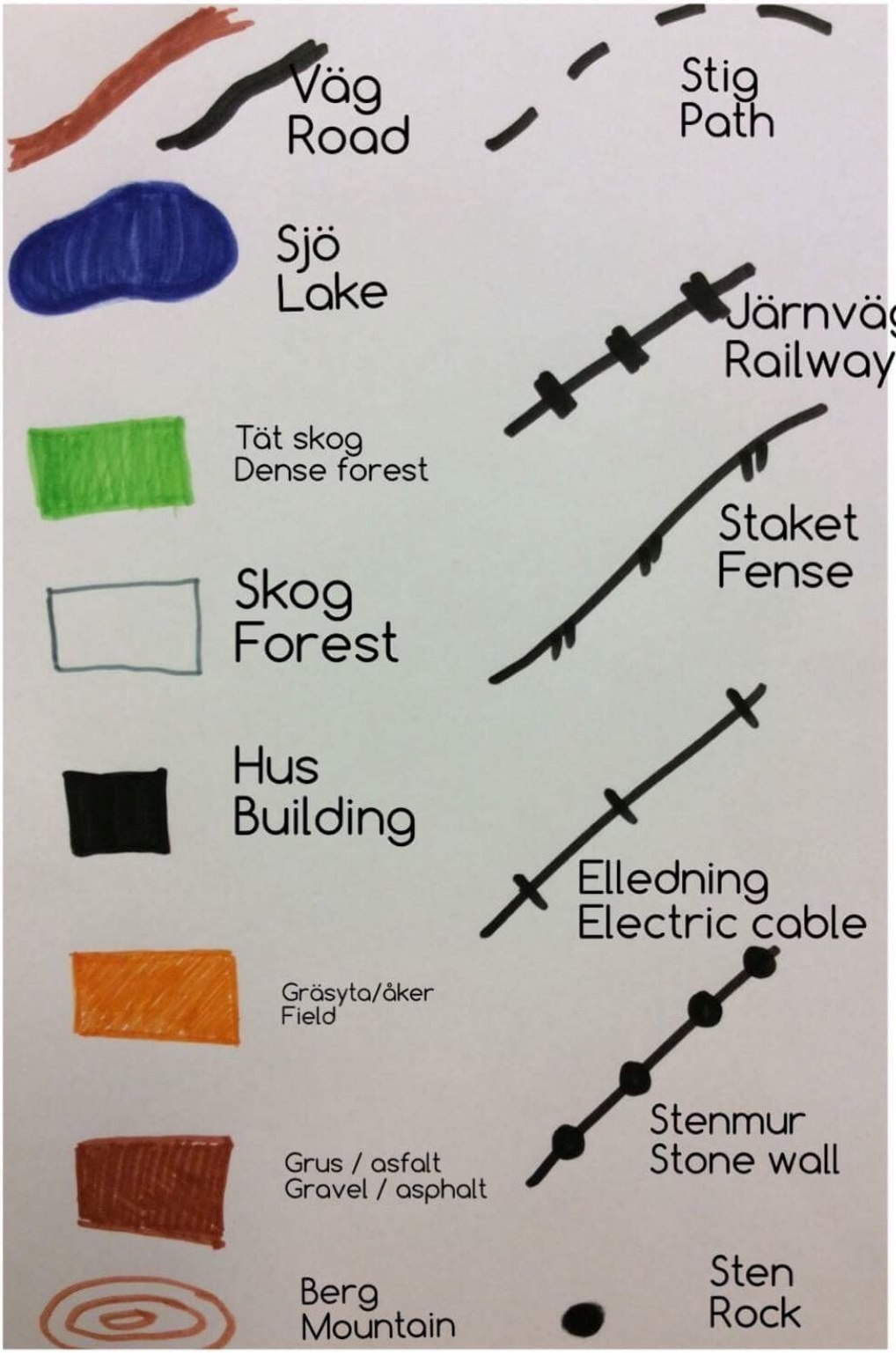
Central content:
Health and lifestyle
Words and concepts ...
Outdoor recreation and outdoor
Orienting themselves in the local environment and simple construction of maps.
Concepts that describe the spatial perception.

Proficiency in school year 6:
... Orient themselves in familiar environments using maps.

Description/Plan:

Choose if you want to do it all or just some parts of the Learning circle. My opinion is that pupils need to repeat the knowledge of how a map works and how to use it. A funny way of using maps is to create treasure hunts. Maybe with problems to solve in groups?

1. Talk about what use you have of knowing how maps work, when a phone or a gps does not help you and what to do if you get really lost?
2. Draw a map of your own. Talk about the bird's eye view. Draw either your own room, your classroom or your schoolyard.
3.Watch movies about how a map works.
4. Draw or write what you remember about the map. To show your teacher what you understand and to remember what you have learned in a better way.
5. Work in the whole class, half of the class or in pair. Create a grid with 5x5 Squares. Either with 60 sticks or with 25 small scraps. Write A-E on top of the grid and 1-5 on the side. Create or write different characters in the grid, for example a lake, a house and a forest. Draw maps of the grid (a good idea is to offer the pupils paper with Squares on it. Put a path on the grid-paper. Change map with a friend and follow the path.
6. Probably at least two lessons. Work in small Groups. Create a landscape on the schoolyard with a mountain, a forest, a house, a lake, a yard and a road. If you want to make it harder add a railroad, an electric cable, a stone wall and a fence. Take a photo of the landscape. Draw the landscape in a realistic way. Draw the landscape as a map with the maps characters.
7. Finish by letting the pupils tell what they have learned about maps. If they like, they can do a test about the characters of the map.


Väg
Road
Stig
Path
Sjö
Lake
Järnväg
Railway
Tät skog
Dense forest
Staket
Fense
Skog
Forest
Hus
Building
Elledning
Electric cable
Gräsyta/åker
Field
Stenmur
Stone wall
Grus / asfalt
Gravel / asphalt
Berg
Mountain
Sten
Rock


King's Road
Royal Road
Green Street
YOU ARE HERE
Giving directions

Teachers evaluation:

We have tried this circle out with students in the age 7-10 year old.

We have tried it out in some different ways. Some have had the circle as individuals. For example when they were hurt and could not move. Some have seen the movies about maps as individuals and some have seen them in group.

When we worked with the grid the students knowledge of coordination-system were developed.

The students first built a landscape and after that took a picture of it, then draw the landscape as a picture and then as a map with symbols. It developed their knowledge of what a map is and how the symbols work. Some thought it was hard.

We have tried it out two years in a row for some students and it is obvious that they develop their knowledge of the symbols.

7.1.5 Spring

Author: Malin Berntsson, Sweden 
http://circletool.pariktigt.com/circles/7639
Age:
9
Materials/Preparations:
Ipad or computer
Time:
5 lessons
Environment:
The local environment, the schoolyard, the classroom and the internet.
Subject/Theme:
Biology
Curriculum:

Biology 1-3

Purposes:
Get the possibility to search for answers by systematic investigations and different kind of sources.
Develop a critical thinking to your own results, others arguments and different kind of sources.
Develop the ability to talk about, interpret and create texts and different aesthetic expression with scientific content.

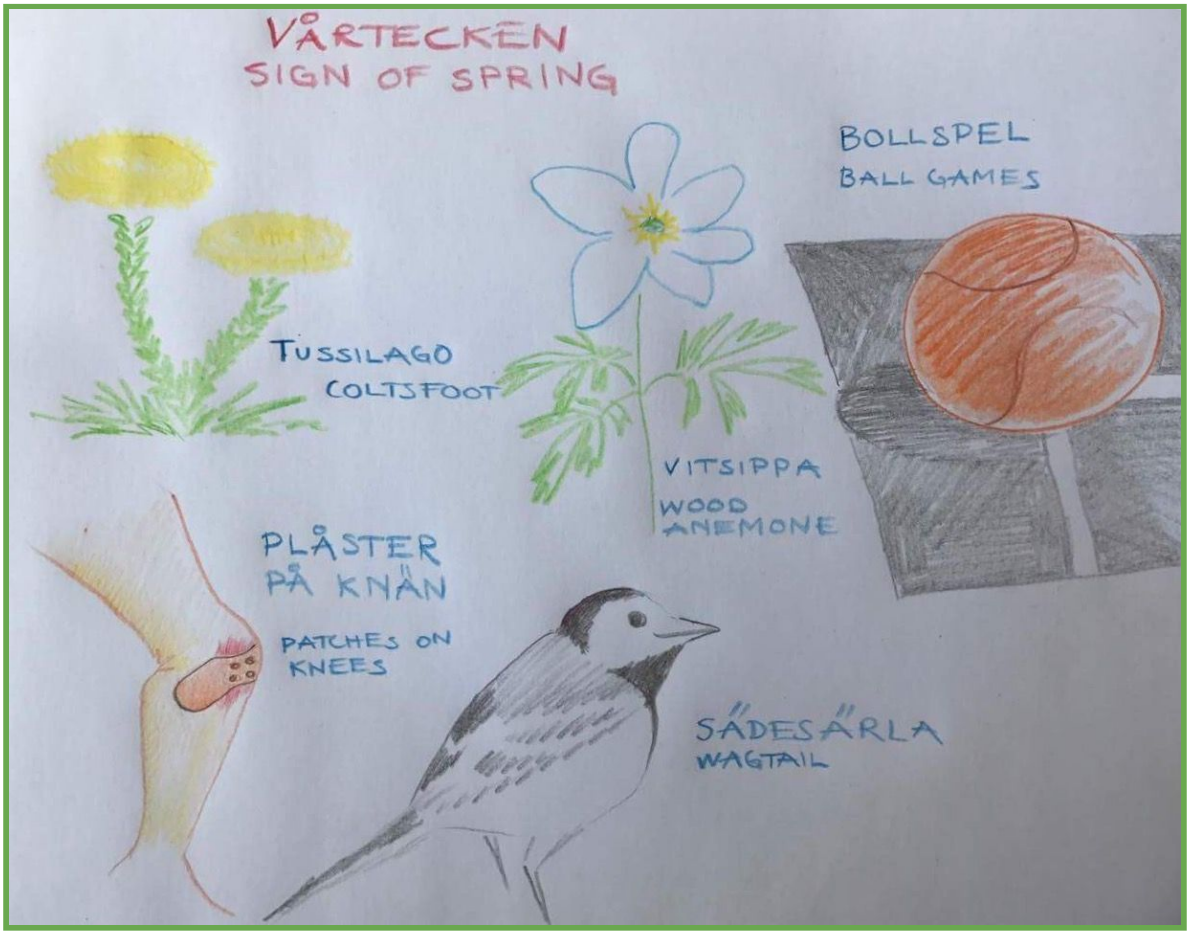
Central content:
The year in nature.
Simple field studies and observations in the local environment.
Documentation of scientific investigations with text, picture and other expressions.

Ability:
Use knowledge in biology to check information, communicate and take a stand...

Description/Plan:

In this learning circle we will work with one of the year's four seasons, the spring. We will learn about when we have ours and what is peculiar to the spring in our nature.
We will see several short films and we'll see what we can find in nature during this season.
We will produce a presentation about the spring.
We will also work to seek facts on the internet and to be critical.


Vår / Spring
Lgr11
Ge feedback
- Biologi


VÅRTECKEN
SIGN OF SPRING
BOLLSPEL
BALL GAMES
TUSSILAGO
COLTSFOOT
VITSIPPA
WOOD
ANEMONE
PLÅSTER
PÅ KNÄN
PATCHES ON
KNEES
SÄDESÄRLA
WAGTAIL


A walk in search of signs of spring!
PIC•COLLAGE


Sidan
PIC•COLLAGE

7.1.6 Scale with nature materials

Author: Clara Hoglund, Sweden 
http://circletool.pariktigt.com/circles/8987
Age:
9-11
Materials/Preparations:
Divide the students into groups, iPad/camera, ball (or other item for the warm up game), materials for nature.
Time:
1 lesson
Environment:
Classroom and outside.
Subject/Theme:
Arts and Maths
Curriculum:

Arts: 4-6

Purpose

• In teaching, students will be given the opportunity to develop knowledge about how to produce and present their own images with different methods, materials and forms of expression.

Abilities

• Create images using digital and craft techniques and tools as well as different materials,

Central content

• Photography and filming as well as editing in computer programs.

• Flat and formable materials and how these can be used in various image work

Mathematics: 4-6

Purpose

• Teaching mathematics aims at students developing knowledge about mathematics and the use of mathematics
in everyday life and within different subject areas.

• It will also give students the opportunity to experience aesthetic values in meetings with mathematical patterns, shapes and relationships.

• Students will also be given the opportunity to develop a familiarity with mathematical expressions and how they can be used to communicate mathematics in everyday and mathematical contexts.

• Through the teaching, students should also be given the opportunity to reflect on the importance, usage and limitation of mathematics in everyday life, in other subjects and in historical cases, and thereby show the context and relevance of mathematics.

Abilities

• formulate and solve problems using mathematics as well as evaluate selected strategies and methods,

• use and analyze mathematical concepts and relationships between concepts.

Central content

• Construction of geometric objects. Scale and its use in everyday situations.

Description/plan

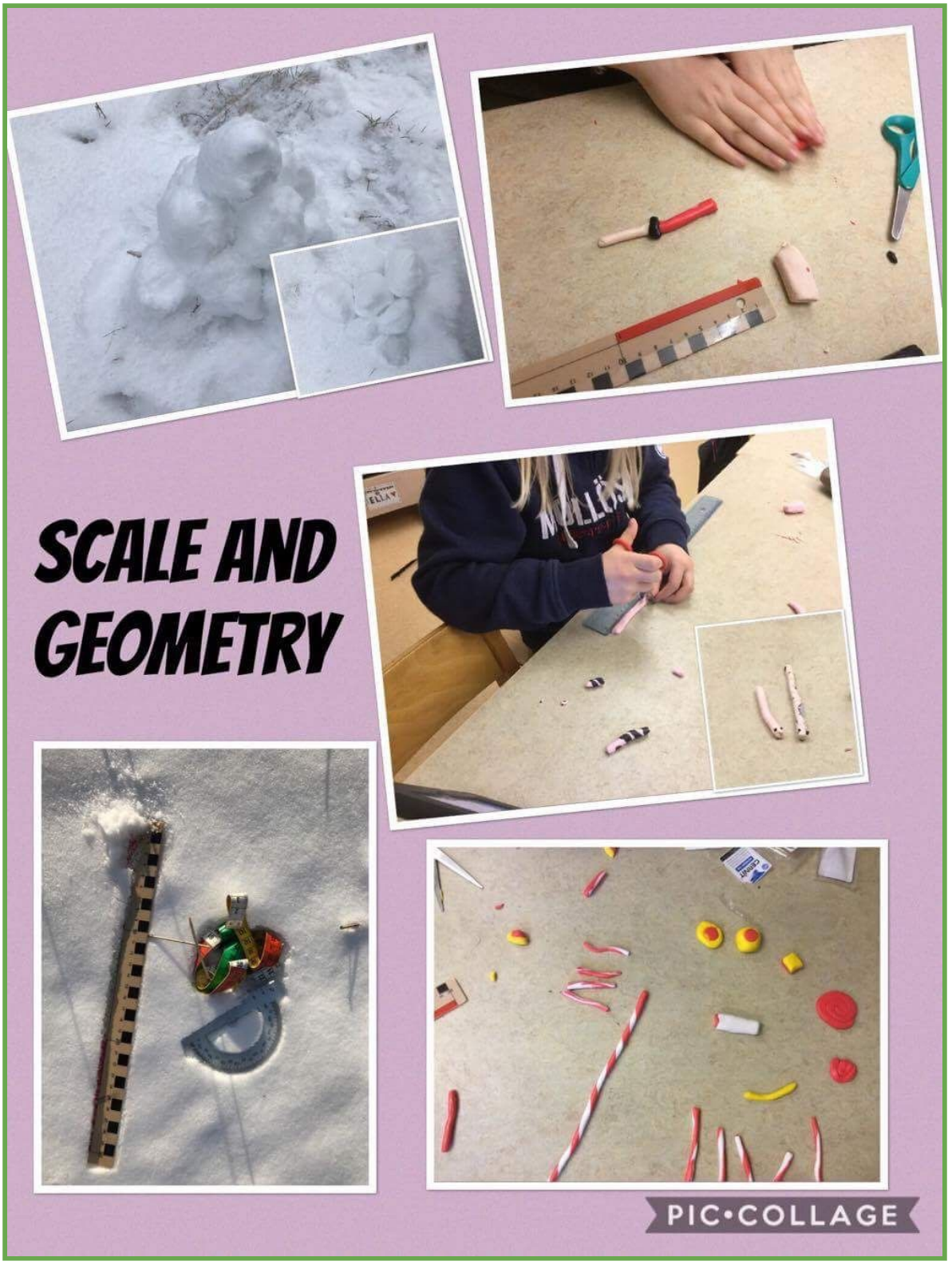
Step 1: Watch the introduction film.

Step 2: Go outside and play the warm up game.

Step 3: Divided into groups the students get to great one figure in scale 1:2 and one in scale 2:1.

They use one of the group's members as a model.

Step 4: Evaluation in the learning circle.



Student evaluation, 10 year old:

• It was fun to work with our hands and not write in a book.

•The clay was a bit hard to use before it was warm.

•The snow was very cold.

•It was easier to understand Scale when we did it like this.

Teachers evaluation:

•Most of the student understood the task right away. The work with your hands and the possibility to see the similarities and differences makes it easier to understand.

•I would use another type of clay if I do it again. But it was better than the rainy sand one of the days we worked with scale and geometry. Snow was a good material but very cold.

•As a teacher you have to think about if you want it to be a group assignment or an individual task. It works as both.

7.2 Humans and animals

7.2.1 Happy tooth, sad tooth.

Authors: Katarzyna Koslacz, Hanna Sobiech, Poland

http://circletool.pariktigt.com/circles/9155

Age:

5-7

Materials/Preparations:

"Guess who?" poster with all the smiles, milk, water, grape juice, Coke, 4 eggs, pictures of food, coloring pictures of teeth.

Time:

45 minutes

Environment:

Classroom/schoolyard

Subject/Theme:

Health

Curriculum:

Students:

- will know the impact of nutrition on dental health
- will understand the need the tooth control
- will apply to the recommendations of the dentist

Biology Education 6.9., 6.10

Physical Education, Health Education 10.4.a.

Description/Plan:

Phase 1: Students make a selfie and create a poster showing their smiles. They guess the owners' of the smiles.

Phase 2: Students watch a video on how to care about the teeth.

Phase 3: Experiment - eggs in different liquids, hypothesis, observing the results.

Phase 4: Discussion about the influence of different foods on teeth.

Phase 5: Children create an artwork - healthy and unhealthy for teeth products.

Åse Nilsson Some pictures from the tooth experiment.

Teachers evaluation with students in the age of 8:

My class 2 tested the circle of teeth. They thought it was great fun to take pictures of their teeth. All students took a selfie of their teeth with his or hers iPad. We did not write out the photos, but let all the photos remain on their ipads. Then we took an iPad

at a time and they had to guess whose teeth it was. A very funny idea with a lot of laughs!

It was very convenient to do and the students thought it was fun to make a mind map of teeth. Also reporting to the class at the end was a really fun way to evaluate.

The experiment with the eggs was successful. We let the eggs lie in the various liquids for a whole week. We asked hypotheses and documented what was happening in the glasses.

Although the film and all of the text were in English, the students did not think that it was difficult to understand. We translated everything together. Basically, a very well-planned circle.

7.2.2 Snails

Authors: Malin Berntsson, Sweden, Katarzyna Koslacz, Poland  
http://circletool.pariktigt.com/circles/8013
Age:
7 - 9
Materials/Preparations:
Ipad and/or projector, paper and pens and if possible other materials to create art with.
Time:
4 lessons
Environment:
Classroom and the local environment
Subject/Theme:
Swedish, Arts and Biology.
Curriculum:

Swedish 1-3

Purpose: Express themselves in speech and writing.

Central content:

Read and write

... Creation of texts in which words and images interact.

Narrative texts and nonfiction texts

... Narrative texts messages, structure and content ...

Proficiency:

... Students can write simple texts with legible handwriting and computer ...

... By combining their texts with pictures, students can clarify and reinforce their message ...

Figure 1-3

Purpose:

Explore and present different topics with images ...

Central content:

Image Processing

Production of narrative images, such fairytale images.

…photographing…

Proficiency at the end of 6:

Students can produce some different types of narrative and informative photos ...

Biology 1-3

Purpose:

... Use of biology concepts ... to describe and explain the biological relationship of ... nature

Central content:

Year-round in nature

... Animal ... life cycles and adaptations to different seasons.

Proficiency 1-3

Students can describe and give examples of simple connection of nature based experiences and exploration of the local environment. In talking about the seasons telling students about the changes in nature and gives examples of life-cycles in some animals ...

Description/Plan:

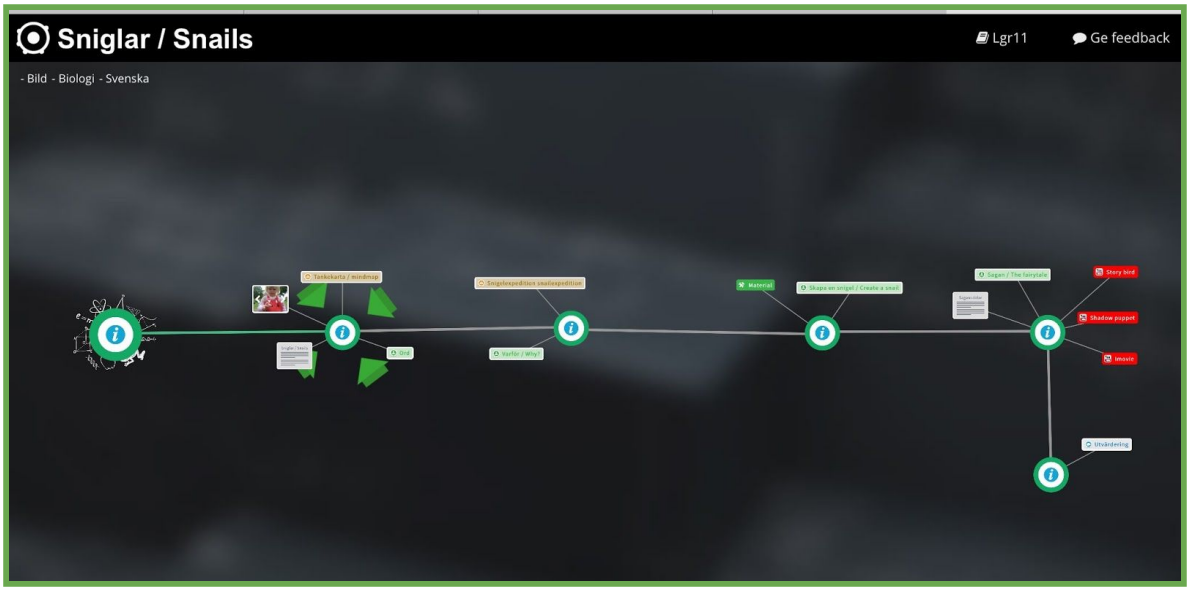
1 Presentation of snail farming.

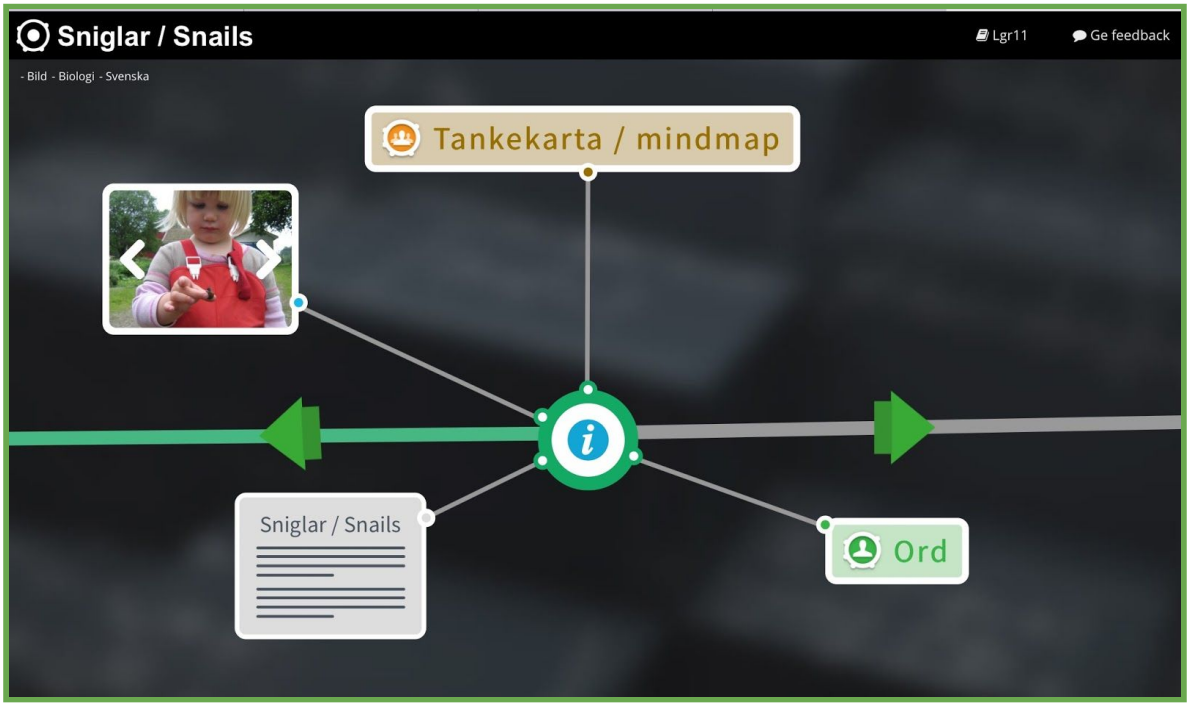
2 Take pictures of snails.

3 Create a sculpture of a snail with sand, mud or leaf and sticks. Document.

4 Draw a snail.

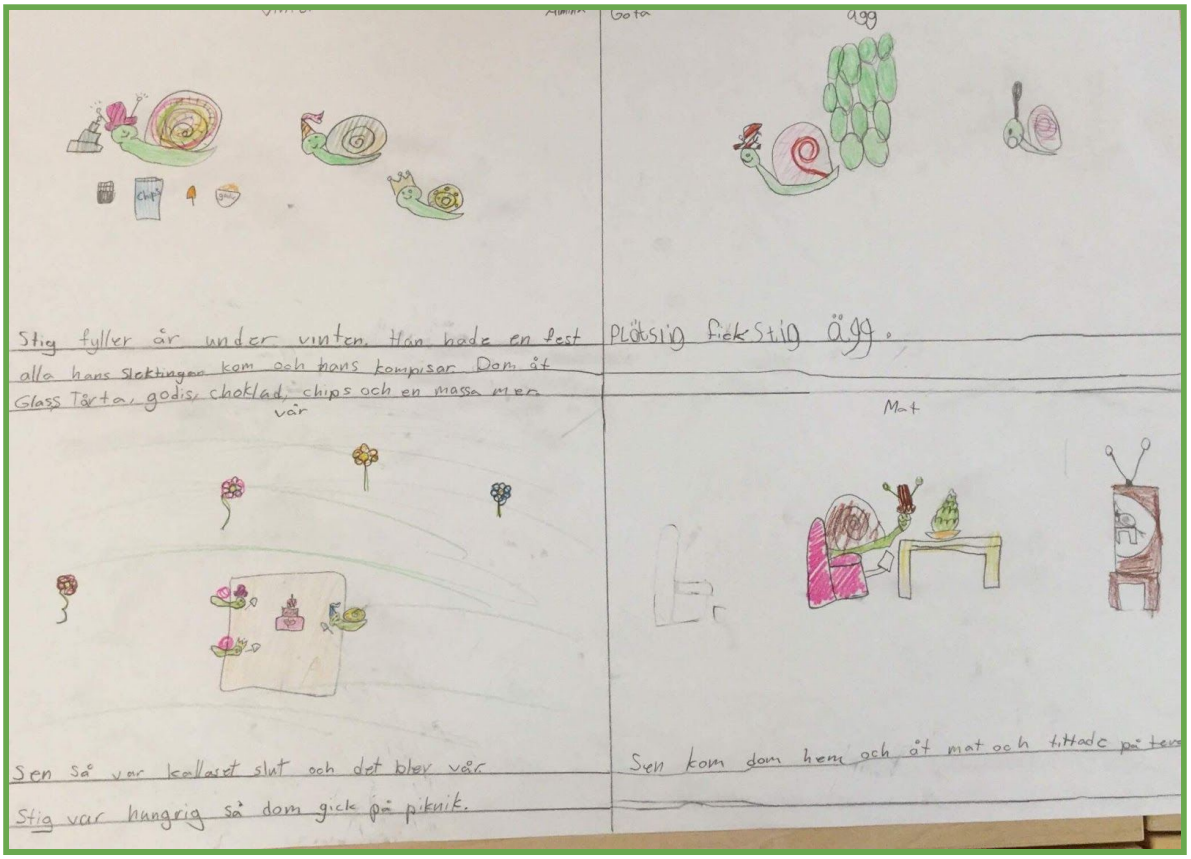
5 Create a comic strip or a fairytale with drawings and text. Use the Words snail, live, eat, egg or children and winter.


Sniglar / Snails
Lgr11
Ge feedback
- Bild - Biologi - Svenska


Sniglar / Snails
Lgr11
Ge feedback
- Bild - Biologi - Svenska
Tankekarta / mindmap
Sniglar / Snails
Ord


Stig sover hela vintern
Stig vaknar och får Ägg
Han ser ormar men orkar inte gå dit. Han ropar Hjälp!! Master Bertil kommer och ger honom en svamp
Hjälp
Våren kommer och Stig och Bertil är vännen. Äggen kläcks.
Den kommer
Mia William


Jag hater stig LOL
Det är vinter ute. H
Det var en gång en snigel som hette Stig.
Det är vår och äggen kläks. Han/Hon skakar.
Hjälp
Jag har fått ungar
Hurra
Sommar
Nu är det ute på fälten och äter
Höst


Stig fyller år under vinten. Han hade en fest
alla hans Slektingar kom och hans kompisar. Dom åt
Glass Tårta, godis, choklad, chips och en massa mer.
vår
Sen så var kalaset slut och det blev vår
Stig var hungrig så dom gick på piknik.
Plötsig fick Stig ägg.
Mat
Sen kom dom hem och åt mat och tittade på tev

Art with snails in the schoolyard.

Teachers evaluation:

We have tried this one out with 7 to 10 year olds. To learn about snail farming was

totally new to us and therefore very exciting. If you go out to look for snails it is good to compare where you found them and write it down in a table. It´s probably possible to see a pattern. The activity to write a story about snails was easy to some and harder to some. There were many thumbs up to the snail information. Some less to the story activity. It helped us out since the pupils could write in their Ipads where it´s easier to correct the text.

Teachers evaluation and students in the age of 8:

The circle was interesting for most but some had difficulty understanding when it was in English, and quickly lost interest.

The slideshow on how the work at snail farm continued during the year was very clear and easy to understand. In addition, the students felt that they learned a lot from it. Some students felt that they needed to write down keywords so that they remember better.

Since there were many new words to the students, they liked that they could pick out a few words and explain them. Several needed then to go back to the show and read it several times.

In the whole the students thought that the circle was interesting and fun. A student who really do not like snails thought she was nauseous.

The second time we worked with snails, we made the practical task of producing snails. Since it was frost and cold outside, we were looking not only for snails outdoors but instead for snails online.

7.2.3 Force, motion and friction

Author: Nina Grimhage, Sweden 
http://circletool.pariktigt.com/circles/7667
Age:
7-9
Materials/Preparations:
A bill, a slide or a wooden plank, different kind of shoes with different kind of shoe soles, IPad
Time:
3 days as a theme
Environment:
Playground with a slide or/and in a classroom
Subject/Theme:
Technique/force, motion and friction
Curriculum:

Tea 1-3 Some common objects where simple mechanisms such as levers and various links are used to achieve a particular function, such as items in playgrounds and housewares of all kinds. Tea 1-3 A few simple words and concepts used to name and discuss technical solutions. Tea 1-3 Documentation in the form of simple sketches, pictures and physical models.
Description/Plan:
We will assess your ability to: • implement simple design works by testing out possible ideas for solutions. • help to discuss and choose different solutions leading the work forward. • document your own and your group's work.

Students evaluation in the age of 9:

It was fun to try the experiments.

We understood what to do.

Thumbs up!

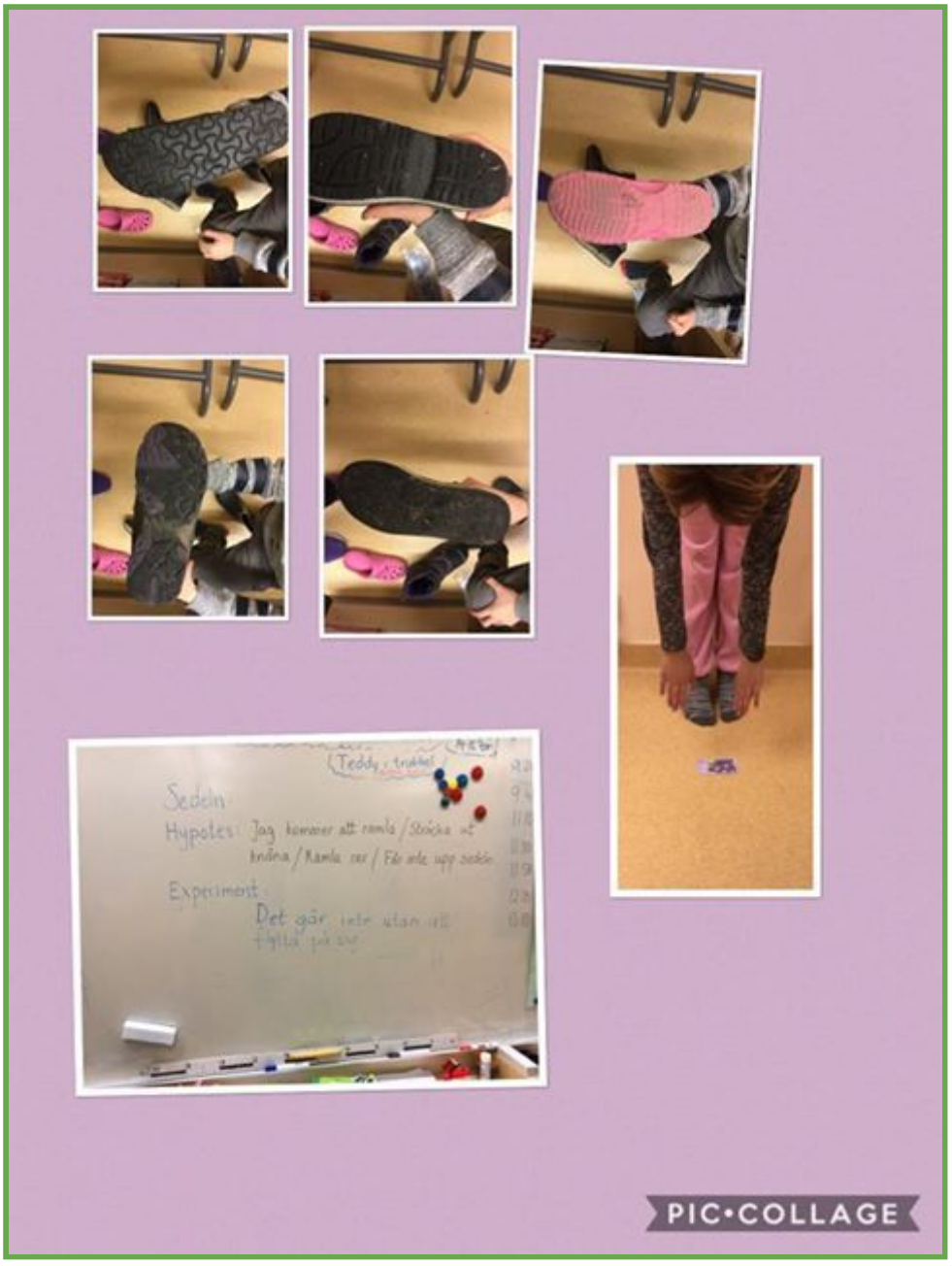
We learned what motion is and that you can't pick up a bill when you are standing with your legs straight against a wall.

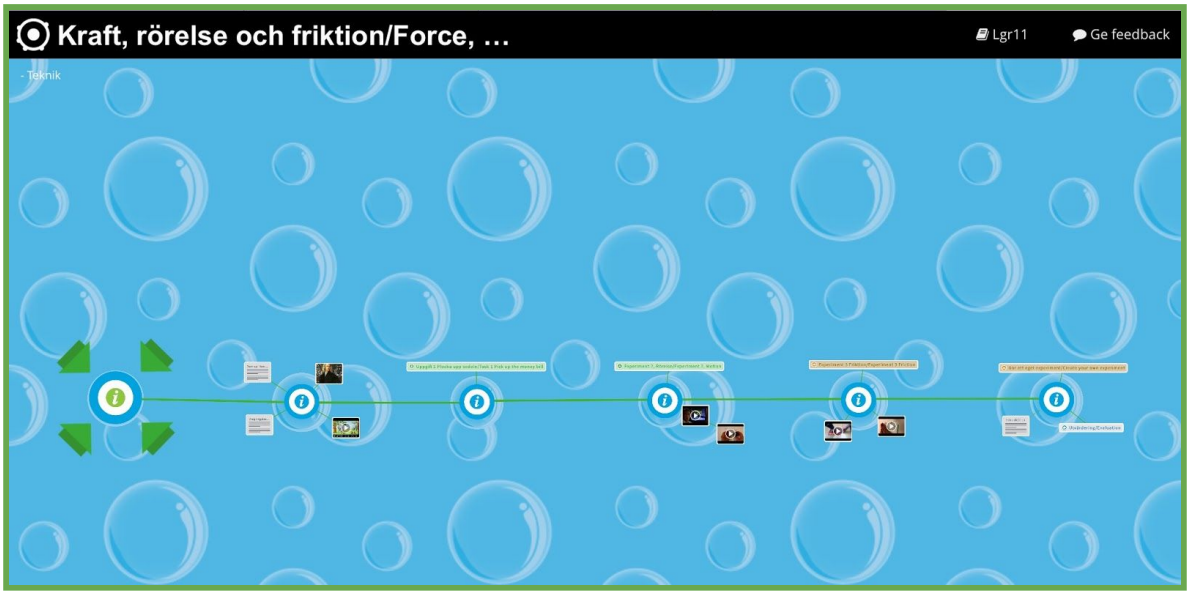
Teachers evaluation:

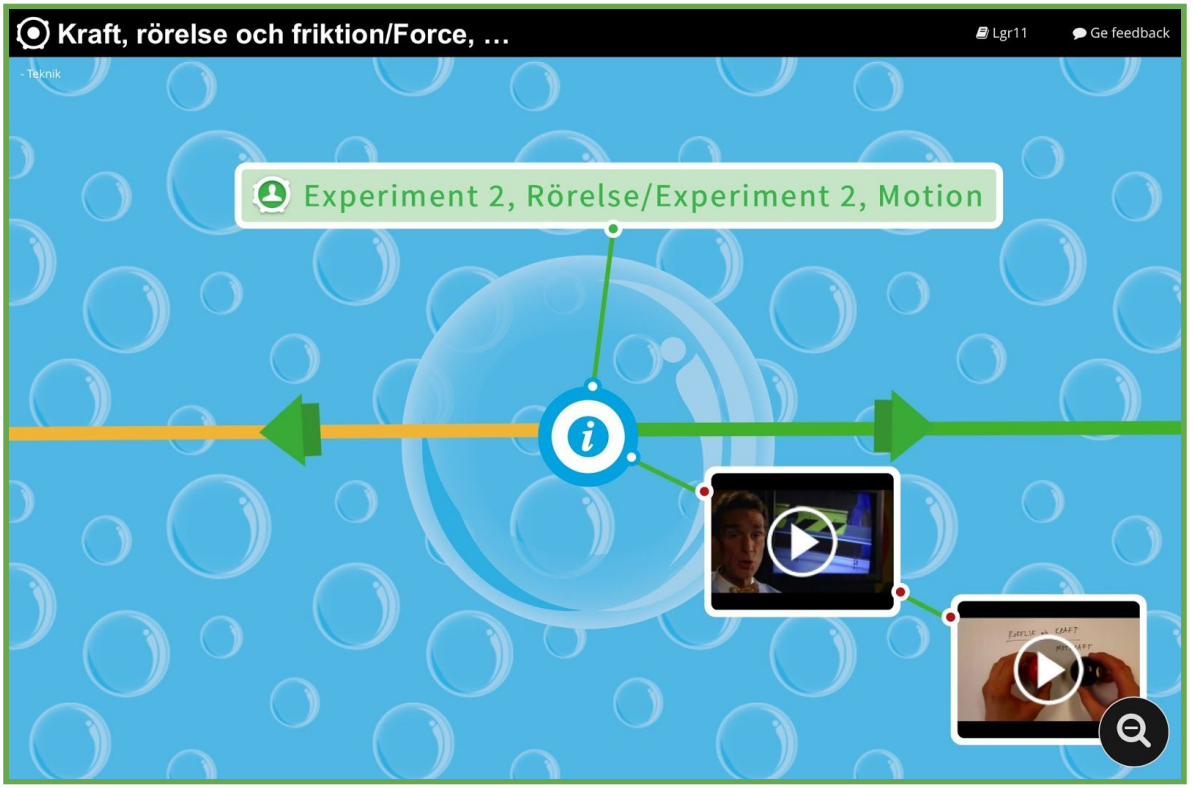
The class of 28 students worked in three groups.

They had fun and they understood what to do.

It was a lot of action so I should have done the lesson 2 times 14 students.


Sedeln
Hypotes:
Experiment:
PIC•COLLAGE


Kraft, rörelse och friktion/Force, …
Lgr11
Ge feedback
- Teknik


Kraft, rörelse och friktion/Force, …
Lgr11
Ge feedback
- Teknik
Experiment 2, Rörelse/Experiment 2, Motion

7.2.4 How sweet is fresh water?

Author: Mirjana Kragic, Sweden 
http://circletool.pariktigt.com:80/circles/8915
Age:
10-12
Materials/Preparations:
Paper and pencil Ruler A small paper plate or a napkin A pinch of salt (1ml) A small slice of lemon A small piece of peeled apple A clean glass or paper cup Some sugar (1ml)
Time:
60 minutes
Environment:
Classroom/schoolyard
Subject/Theme:
Biology
Curriculum:

Purpose

The teaching will contribute to the development of pupils' critical thinking about their own results, others pupils' arguments and different sources of information.

The teaching will give the pupils opportunity to use and develop knowledge and tools to be able to phrase their own, but also to review other person's arguments in contexts where knowledge in Biology has significance.

Furthermore, the teaching will contribute to the development of pupils ability to talk about, interpret and produce texts with different kind of aesthetic expressions with scientific context.

Abilities

Conduct systematical examinations in Biology.

Central Content

Easier field studies and experiments. Planning, execution and evaluation.

Documentation of easier studies with charts, pictures and written reports.

Description/Plan:

Prepare material

Divide pupils into groups

Practical work

Reflection

Students evaluation in the age of 11:

It was funny and interesting. Because we don't do this a lot. We want to do it again. We already knew that water doesn't taste.

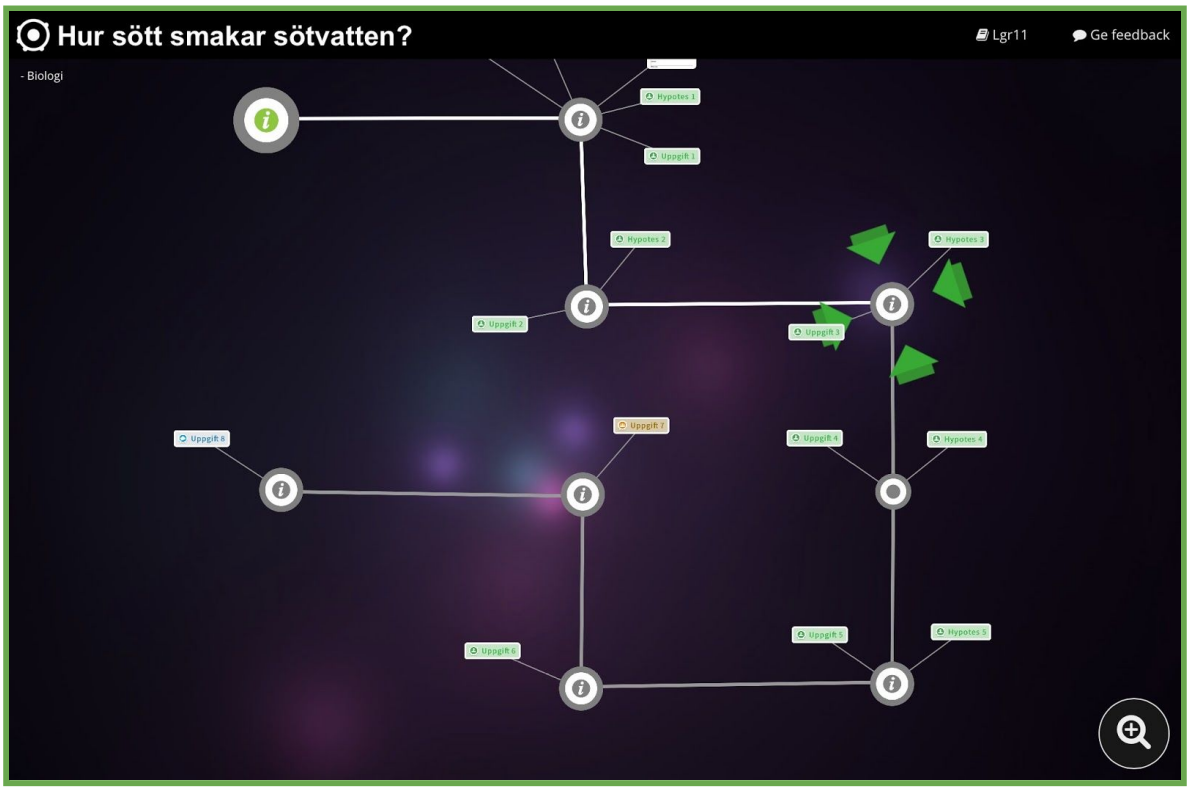
The Learning circle is a good way to learn. Thumbs up!

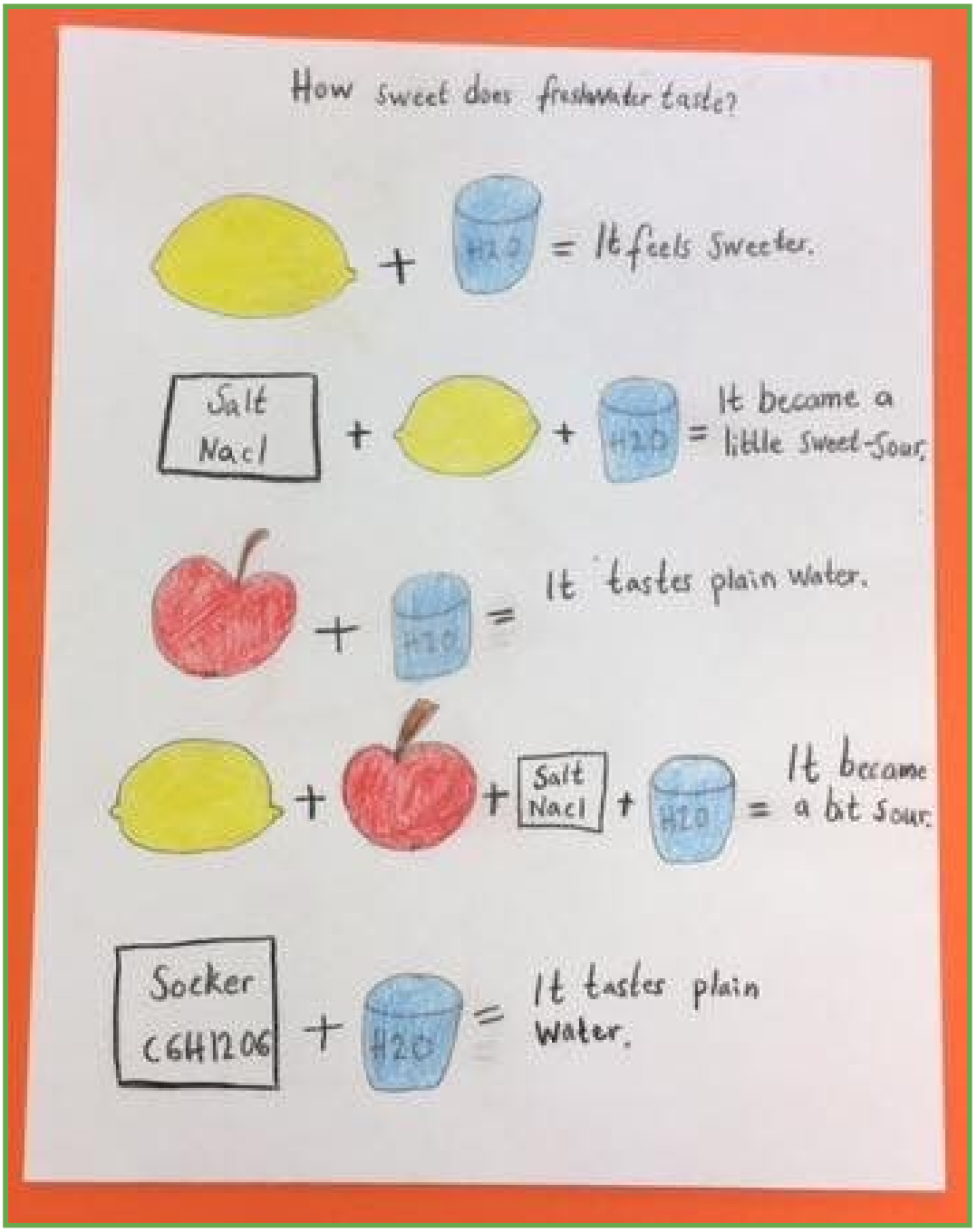
Some students thought it was a hard way to learn / teach.

Teachers evaluation:

20 students worked together.

The task was presented by a projector. The students had fun and did what was intended to. It's important to plan in detail. If you do it in the wrong order you destroy the learning guesses. Do the hypothesis and then the experiment.




How sweet does freshwater taste?
H2O
= It feels sweeter.
Salt
NaCl
H2O
= It become a little sweet-sour.
H2O
= It tastes plain water.
Salt
NaCl
H2O
= It become a bit sour.
Socker
C6H12O6
H2O
= It tastes plain water.

7.2.5 Purifier.

Authors: Mirjana Kragic, Malin Berntsson, Sweden  
http://circletool.pariktigt.com:80/circles/7536
Age:
10
Materials/Preparations:
Ipad or projector for viewing movies.
Time:
1-2 lessons
Environment:
Classroom and field trips
Subject/Theme:
Biology and Chemistry
Curriculum:

Biology 4-6

Purpose:

By teaching students to be given the opportunity to ask questions about the nature and man based on their own experiences and current events. Furthermore, the survey provides the students to answer questions using both systematic surveys and various types of sources.

Central contents:

Man's dependence and impact on nature and what this means for sustainable development. Ecosystem services such as decomposition, pollination and purification of water and air.

Ability:

Using biology concepts, models and theories to describe and explain to biological relationship of the human body, nature and society.

Description/Plan:
See the film about the plant Visit to the treatment plant Reflection group

Students evaluation in the age of 10:

We really enjoyed the study visit, combining a lesson outside with the regular lesson. Thumbs up ɵ ! The smell was really bad and it was scary walking over the different pools with dirty water and the spiral staircases. We learnt about how the Purification works, what we are allowed to flush down the toilet, and the different purification steps.

Teachers evaluation:

They seemed to have a good time and asked a lot of questions. Next time someone is doing this learning circle you might add a practical exercise, constructing your own Purification plant.


PÅ MINUTEN
3597
1402
0.14
31
162
50
89

7.2.6 Dogs in our families.

Author: Katarzyna Stachniak, Poland 
http://circletool.pariktigt.com/circles/9274
Age:
7-8
Materials/Preparations:
a phone /a tablet; short stories about dogs in different families; printed words to form sentences; illustrations of objects associated with caring about dogs; codes
Time:
1 lesson – 45 minutes
Environment:
The area in front of the school, the natural environment.
Subject/Theme:
Integrated education
Curriculum:

A pupil:

a) carefully listens to speech and uses the provided information

b) understands the meaning of coding and decoding information; reads the simplified drawings, pictograms, signs

c) knows all the letters of the alphabet; reads and understands texts for children and draws conclusions from them, searches the detailed information in the text

d) creates a few sentences

e) cares about the culture of speaking; properly articulated sounds, accents words

f) cooperates with others in play, at school and in life situations

g) names and distinguishes animals and plants typical of selected Polish regions.

Description/Plan:

stage 1:

Introduction - give the topic of the lesson, give lesson goals and a key question "Can a dog be a true friend of a human?"

stage 2:

Reading the history of several dogs - division into three groups. Talking about each of these stories. Filling sentences based on the text. Talking about dogs.

Playing in pairs "A dog and the blind" - carrying a person with blindfolded, avoiding obstacles.

stage 3:

Summary - answer the question "Do you like a lesson?", "What will we remember from today's lesson?", answer the key question - which task confirmed that the dog can be a true friend of man.


Nosek
Dork

7.3 Examples of how you can work in outdoor education

7.3.1 Mathematics

In the book Matematikundervisning som fungerar (Mathematic teaching that works-for real, 2008, Helen Rundgren) you can read about what helps you to get out with your pupils to teach and learn outdoor. They describe a mathematical backpack, one per four pupils. A recommended content is a thermometer, a stopwatch, a measuring tape, a calculator, a scale, a thick rope, clothesline, pegs, tape, measures, forms of areas, oilcloth, papers, pens, calipers and clothespins. In the teacher's backpack they also recommend knives, a saw, first aid, a long measuring tape, asphalt crayons, a spirit level and a book about learning mathematic outdoors. According to the author it is good to give the pupils open problems without "any given road to follow". The important part is to talk about the solutions. What did the pupils think and how did they find a solution. In that conversation the teacher can see who understands and who does not.

We do agree on the importance of dialogue about the lesson, the work, the experiences to see what the pupil understands.


I Have...Who Has...
Multiplication Game
I have
35
Who has
4 x 4 ?
ave...Who Has...
Multiplication Game
I have
25
Who has
x 6 ?


0:15'13

7.3.2 Maps and symbols

Practices spatial awareness, concepts and the understanding of how a map works. A good introduction for maps are the one-meter sticks. If you have a hundred sticks you can create fantastic maps to walk in. Build maps with squares where you know what way north is. Use rocks as mountains, small, black painted blocks as buildings, hula hoops as wells, something blue as water, green ropes as forests and yellow ropes as lawns for example. Mark the sidelines with letters and numbers. The first task can be to put the mountains, the buildings and the other stuff in correct position. The second can be to draw a map with the stuff in correct position and then draw a path on the map. Change maps with each other and follow the paths. A fun way of learning how a map functions and what the different signs mean.

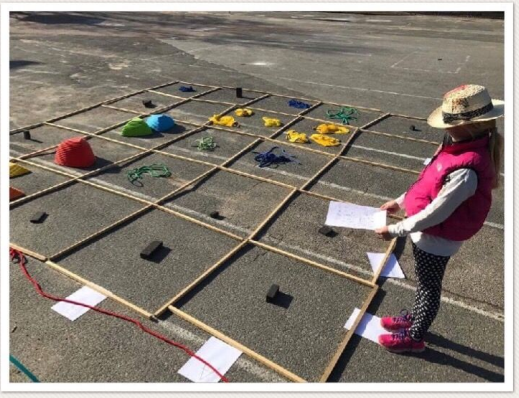
Next step can be to find spots on a map in the schoolyard. At first you walk all together in the group. Next step can be to walk to different spots in the schoolyard and point them out on the map. After that the young students might dare to work in pairs or maybe even alone. A completion can be to make your own marks on the map of the schoolyard and then change the map with a friend.

You can build your own areas and then draw maps of the areas. Next step could be to draw your own map of the schoolyard. That is a difficult task, not meant for everyone! Some students need to practice by creating drawings of their own rooms or classrooms first, to understand proportions and different perspectives.

Orientation with maps, a few details for younger students and more detailed maps for the older students. Every station can be a challenge. A problem to solve in group, or a question to answer or a physical challenge to try.

A GRID

BUILD IT.
PUT OUT LETTERS AND NUMBERS AS COORDINATES.
TELL THE STUDENTS WHAT COORDINATES TO PUT THE DIFFERENT PARTS AT. "PUT THE MOUNTAIN AT SQUARE 2D."
DRAW THE GRID WITH ALL THE PARTS.
DRAW A PATH.
CHANGE THE GRID WITH A FRIEND AND TRY TO FOLLOW THE PATH.



7.3.3 Quiz walk

Another activity is a quiz walk. You can connect it to any subject. If you are done

with a theme you can sum up with a quiz walk. Or if the students have access to the internet or literature they can find out what the answers are and learn that way. If you have an environment with historic background it is a bit exciting to find out what has happened there and what signs from it you can see today.

7.3.4 Qr-codes

Qr-codes are popular to use in lessons. It´s exciting to go and look for them and it is exciting to find out what the code will say. But you need tools like Ipads or telephones and you have to be connected to the internet. The codes can give you a question or a task. Maybe you want to focus on religion and the five big religions. The tasks can be to illustrate different prayers, religious buildings, draw a map over the world and mark the areas where different religions are common.

The task can also be to create activities and codes for others, for example friends in the class or younger students.

7.3.5 Geocaching

Geocaching is also an alternative. Tools you need is gps or maps you will find on the internet geocaching.com. Or Ipads or telephones with internet connection. You can have mathematic activities with problems to solve in group. Toothpicks, cords, trees, hands and feet, rocks and friends can be the ingredients.

If you geocache for real with students it´s very important that you start with the rules. How do we act in nature and in different environments? If you find the treasure sign the findlist properly and only take a treasure if you leave something that has a higher value. Not anything dangerous, not anything to eat and not money.

7.3.6 Hunts

Different kind of hunts raise the pulse all the time.

For example you have clap-hunt. Two teams and a jail. One team hunts the other. If

you get caught you have to go to jail. You can be free if a friend claps your hand.

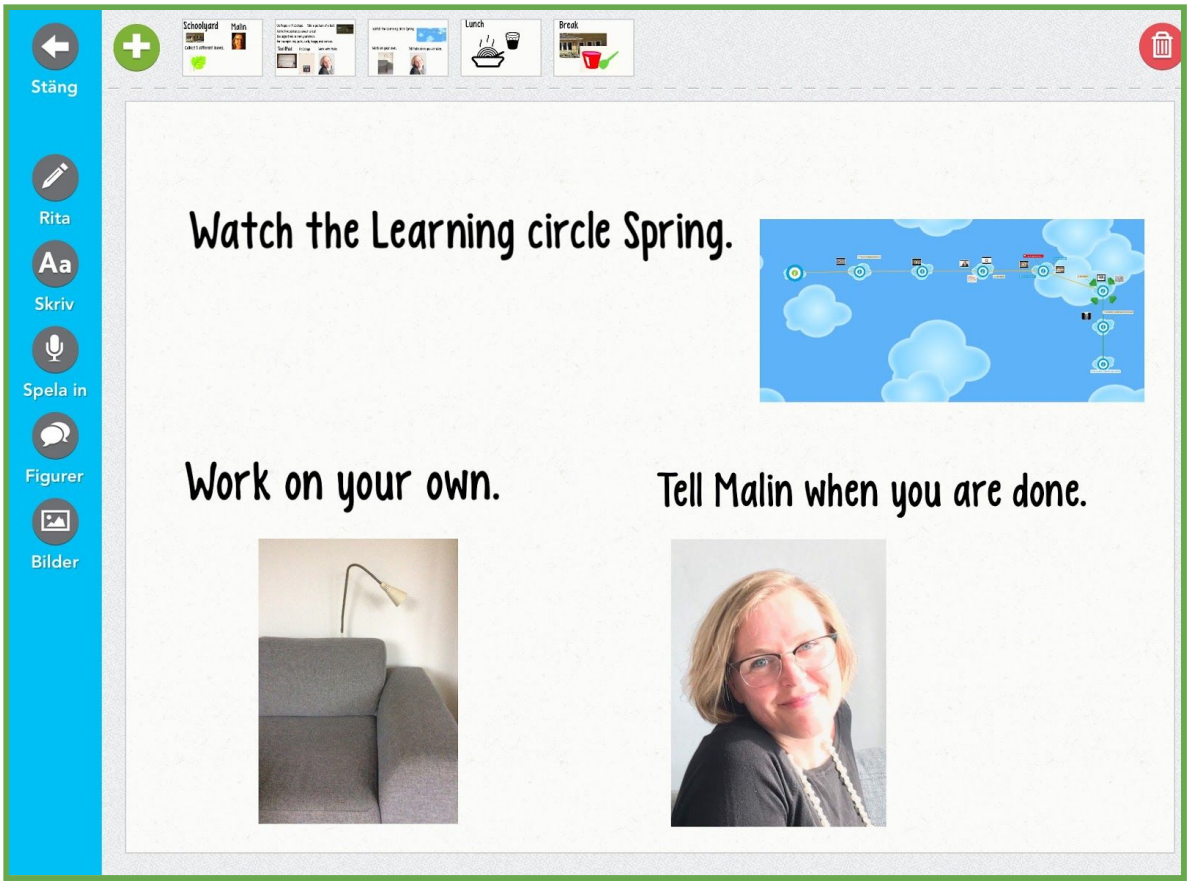
Colour hunt is to practice english talk and name of colours. Everybody stands close up to the hunter. The hunter say´s I want to touch something… red. And then everyone needs to run away. If you find something red, you are safe. And if you don´t, the hunter can get you.

What time is it? It´s a game like The hen and the chickens or Under the eagle´s wing. Everybody stands on the short side of a rectangle area. One hunter stands in the middle of the area. Everybody screams What time is it? The hunter answers`"It´s three o'clock." Then everybody can run/walk/jump three steps. But if the hunter says "It´s lunchtime" everybody needs to run to the opposite short side and can be hunted on the way over.

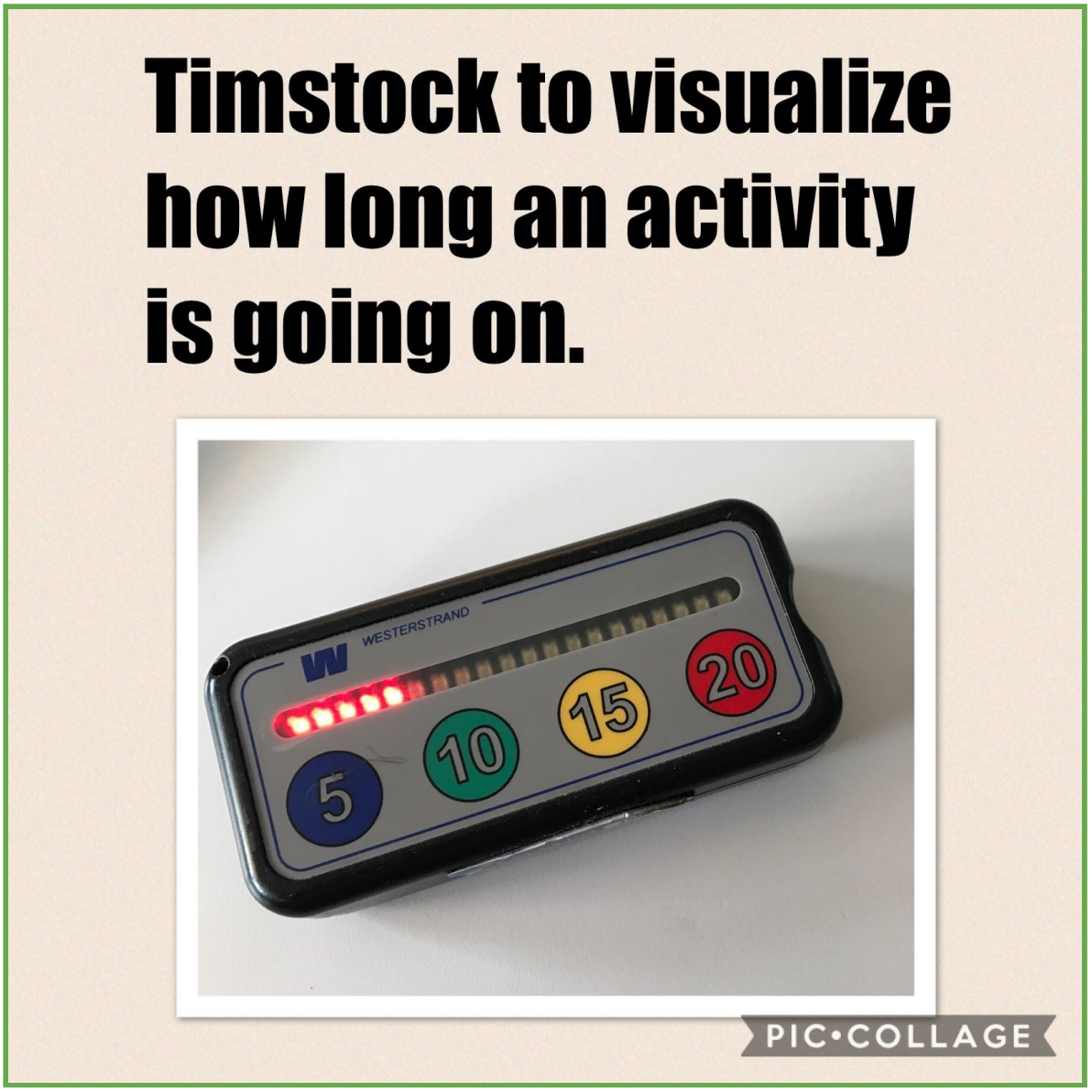
7.3.7 Clarification approach

To calm some students you have to prepare them (and sometimes their parents). Our experience is that if you have an app like Ritprata (Drawtalk) for example, you can show your pupils with pictures, texts, symbols and words what you will do, where you will do it, with who and when. It might make the difference between catastrophe or development.

Some pupils are also helped by structure, for example you can always start the lesson in the same way, stand on the same spot and make movements with the group in the same way every time. Maybe also, have decided spots to sit on for the pupils while you give them instructions.


Stäng
Rita
Aa
Skriv
Spela in
Figurer
Bilder
Schoolyard
Malin
Lunch
Break
Watch the Learning circle Spring.
Work on your own.
Tell Malin when you are done.


Stäng
Rita
Skriv
Spela in
Figurer
Bilder
Schoolyard
Malin
Lunch
Break
Walk with Malin to the playground.
Listen to the instructions.
Play the Ball in a circle with your Class.



7.3.8 Experiences

The best memories are the ones you remember. And you remember easier if you can connect facts and knowledge to your senses. An example of this is the fishing excursion with students from Östergårdsskolan. The students had to help us by planning the excursion; what do we need and how do we get it? (Problem-solving) They had to carry the stuff to the lake (hard work they feel in their bodies). At the lake they were longing to get the fishhook in to the water but not sure what bait would do the best job (curiosity). The ones who used brandling also were a bit scared but at the same time they hoped to get the first fish. It was sunny and a really

nice weather so we all were really relaxed (with open senses). And when we got our first fish we all felt a great joy and success. And we let the fish back into the water so we also felt good. The bought fishes we brought, were dissected and that smell really got stucked into our noses (some say that a smell is our strongest sense with great chances to really remember the best). And finally we had a great time together without any stress and without noise (happiness). A really strong motivator to like and to learn.

Other examples of senses that came to the surface was excitement when we went to the church in our neighbourhood. If we read about history and religion it´s not many of our pupils that really listen and remember what we want them to learn and know. But when we get to visit our old church and see the old headstones that are connected to people who have lived in our village and their stories and climb into chambers that are usually locked to the public, it´s better than a movie. Our students have done other things that are like sugar for their fantasy. For example when they walked the history walk in our immediate area. They got to empathize how it could have been to walk there a hundred years ago and they played they drove home their cows.

Animals are another example that appeals to our senses. When we visit a farm or a stable and get close to the big or cute animals it is like as if our senses are on our skin. Our heart pounds for the little kitten or the little lamb or maybe we get a bit curious or nervous about the huge horse or cow.

According to Peter Gärdenfors, philosopher and professor of cognitive science, knowledge consolidate better the more senses that are involved. (Ute året runt, Titti Olsson, Lärarförlaget, 2015, p. 206). He also gives an example of how knowledge is in our body and not only in our head. When we are at home and should use our code for the cash machine there is no problems. But if we go abroad and the numbers are not in the same order we hardly can remember the code because we can not use our body-memory. (p. 207)

Another thing that we have to have in mind is that we have to give our pupils credit for their work. Not for their results but for their efforts. It´s like the soccer trainer does to the player. She gives credit to the players for thoughts and efforts and not

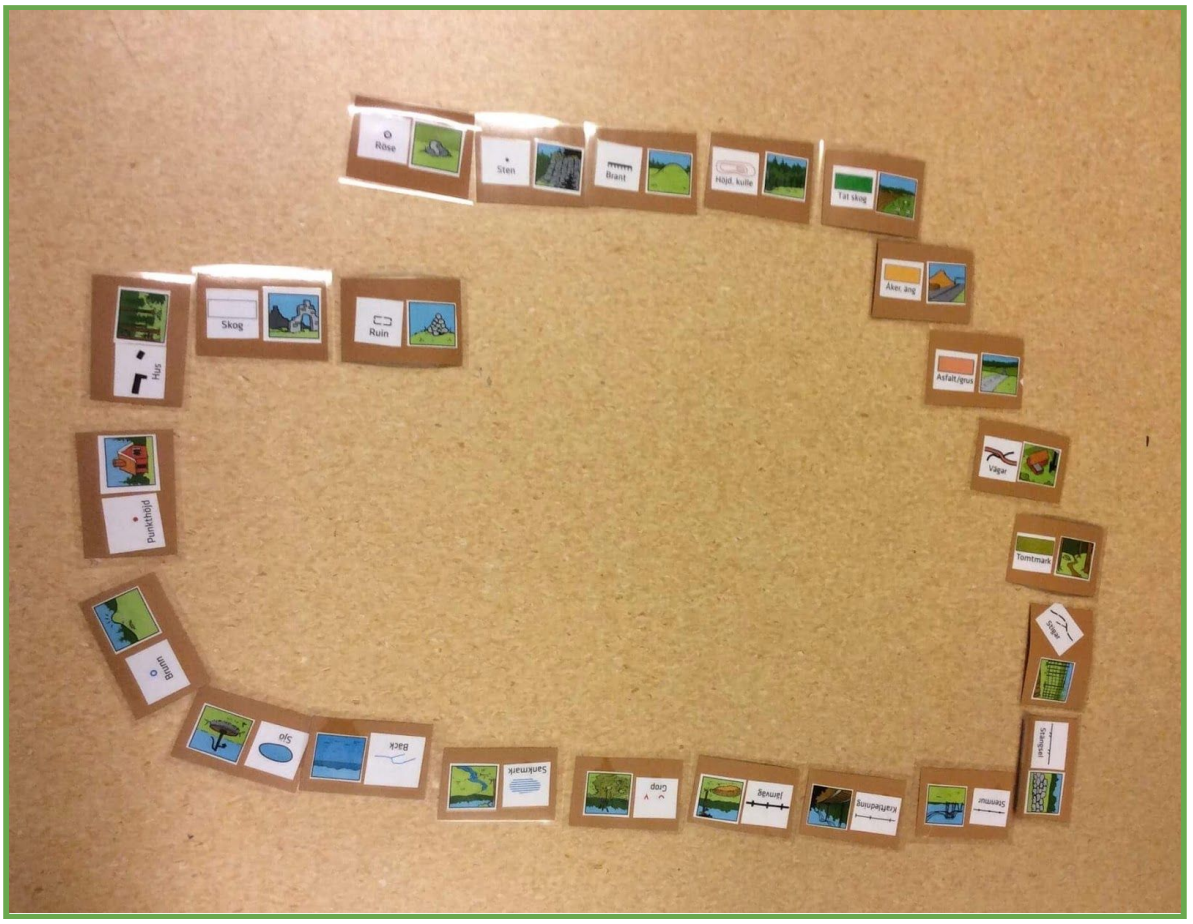
so much for the results and the goals. Because the player can´t be pleased after she and her team has won. She has to keep on practicing and she has to keep on working. Exactly as our pupils in school. A good test result is lovely. But it will not help you the day after. After the test it´s the continued practicing that is important so the pupil has to be proud of the efforts no matter results.

And if you will help pupils to think about their learning and what they could have done in another way it might be a good idea to start with some words about what they have done correct. That might be the difference between a learning conversation or a conversation with quiet negative thoughts. John Hattie and Gregory Yates describe this in their book Hur vi lär (How we learn, 2014,Natur och Kultur, p368)

7.4 Games

7.4.1 Card games

The card-games are also good to use outdoors. You can choose only to use the cards between 5-10 for example. If you get a 6 you will have to do something 6 times. You can decide the activities before the lesson or make an agreement what each colour means with the students. For example the heart can be to jump, the spade can be to crawl, the diamonds can be to balance and the clover can be go backwards. Or the colours can be different arithmetic and the numbers you will combine with 5. Or you can mention different word classes. Or…



7.4.2 Games with a ball

A ball in a circle is a fun game that helps you increase the intellectual speed. You need a ball and about 12 friends in a circle. If you need to repeat capitals of Europe you do like this: The one who holds the ball says a capital and throws the ball to a friend. The friend answers by saying the country of the capital. Then turns around 360 degrees. And says a new capital before passing the ball to another friend in the circle.

You can also choose animals in the forest, 10-friends (for example 3+7, 5+5, 2+8 and so on), multiply with 7, verbs that starts with last letter in the word from the friend before and so on…

7.4.3 Dance

An activity suitable for both lessons or breaks is dance. In many schools you have some students interested in dance. They can lead Röris with the friends.

As a warming up-activity, paus-activity or break-activity. (It´s a moving pass from Friskis och Svettis.)

A good complement for this is Dancehunt. It´s a common hunting game where the ones who get caught have to stand in a hula hoop and dance. The only way to get freed is that a friend copies the dance moves.

For dance activities you need speakers outdoor.


Bluetooth

7.4.4 Other games

- 36-game.

You need a dice and you have to prepare 36 notes with tasks connected to the subject you want to put focus on. It can be to measure different length, guess diameter of a tree, count the triangles you can see and so on, or it can be a short fact note about a historical person and then you connect it to a song you will try to sing or hum. Put the notes fully visible in different parts of the schoolyard or in your play area in the forest, for example. The students might get caught of the competitive spirit and run like never before to find as many notes as fast as possible. If you get a 5 on the dice you will go and search for note number 5. If you get a 3 next time you will search for note number 8 (5+3=8). The activity is described on page 38 in the book Att lära in matematik ute (To learn mathematics on the inside outdoor by Kajsa Molander and more, Outdoor teaching Förlag AB, 2010).

- Create your own nature ABC book.

Go on a nature hunt to your neighborhood, backyard, park, garden, local zoo or aquarium. Look for something to represent each letter of the alphabet. Then take a picture of that image. Print out the photos and place them in a dedicated album to form your very own ABC book. Add letters, words and other facts as desired.

- Blind snake.

  https://youtu.be/BWlNuIzniQw

  https://www.youtube.com/watch?v=zhpD974b3ws&feature=youtu.be

Depending on the amount of people in the group, ask the participants to get into teams of 5-7 people. Ask the participants to stand in a single file line and place their hands on the shoulders of the person in front of them. All participants will be blindfolded except for the person standing in the very back of the line. This is a no-talking activity, but allow the group to take 1-2 minutes to pre-plan. The person in the back of the line will guide the participants around the circle barrier by simply tapping the shoulders of the person in front of them, who will tap the shoulders of the person in front of them, and so on, until the

person in the front of the line will move towards a stone. When a stone is approached, the person in the front will grab the stone and then be guided to the bucket where they will drop the stone. When a participant drops the stone into the bucket, they will then remove their blindfold and move to the back of the line and become the sighted team member. The person who was in the back of the line then puts on a blindfold.

- Hand Game

https://drive.google.com/file/d/0B7qJYqBF0vjrenZxSEFhdklEam8/view?usp=sharing

Energizing brain game. Everyone must sit on their knees with their hands in front of them, in a circle. Once everyone places their hands directly on the ground in front of them, move your right hand in between the person to your right's hands. This create an alternating hand pattern. To start, one person calls out the tapping direction, left or right, and starts slap their hand once on the ground. The hand closest to the first slap, in the named direction, slaps the hand, then the next closest, and so on. A single slap keeps the slap going in the correct direction, a double slap sends the slap in the opposite direction. If someone slaps out of turn, they must remove that hand by putting it on their back. All other hands stay where they are. When both hands are out, that person is out of the game. The game is over when there are two people left.

- **Track shadow**

Shadow experiments are a fun way to learn more about the sun. Place a large piece of paper on the ground in a sunny part of your yard. Place a tall object on top (like a water bottle. Come back an hour later and trace the object's shadow again.

Repeat one more time. What happens to the shadow over time?

- **Zoom**

This engaging group activity helps to develop communication skills, perspective taking, and problem solving skills.

Students work in groups (the number of students in a group depends on the number of pictures we have).

Hand out one picture per person (make sure a continuous sequence is used).

Explain that participants may only look at their own pictures and must keep their pictures hidden from others.

Encourage participants to study their picture, since it contains important information to help solve a problem.

The challenge is for the group to sequence the pictures in the correct order without looking at one another's pictures.

Participants will generally mill around talking to others to see whether their pictures have anything in common. Sometimes leadership efforts will emerge to try to understand the overall story.

When the group believes they have all the pictures in order (usually after ~15 minutes), the pictures can be turned over for everyone to see.

After that students write the whole story/process and send it on teacher’s email address.


Who can help
Holly
Max?

- **<u>Mobile hide&seek</u>**

One student takes a picture while others close their eyes and count up till 10. He or she shows the others a taken photo. They try to find the real object as fast as they can.

- **Adjective scavenger hunt**

A teacher gives students a list of adjectives. They must find an example of each, take a picture and write a short description.

7.5 Tasks for students

We have decided to ask students to create "challenges" for their peers from the partner country. It was a very good idea because the students were engaged in these tasks. They wondered what the neighborhood of the partner school looked like and what tasks they had to come up with so that their peers could learn something outside of school.

They also wondered what tasks they would receive from peers from the other country and if they would be able to solve them. All the tasks were about learning through practical exercises.

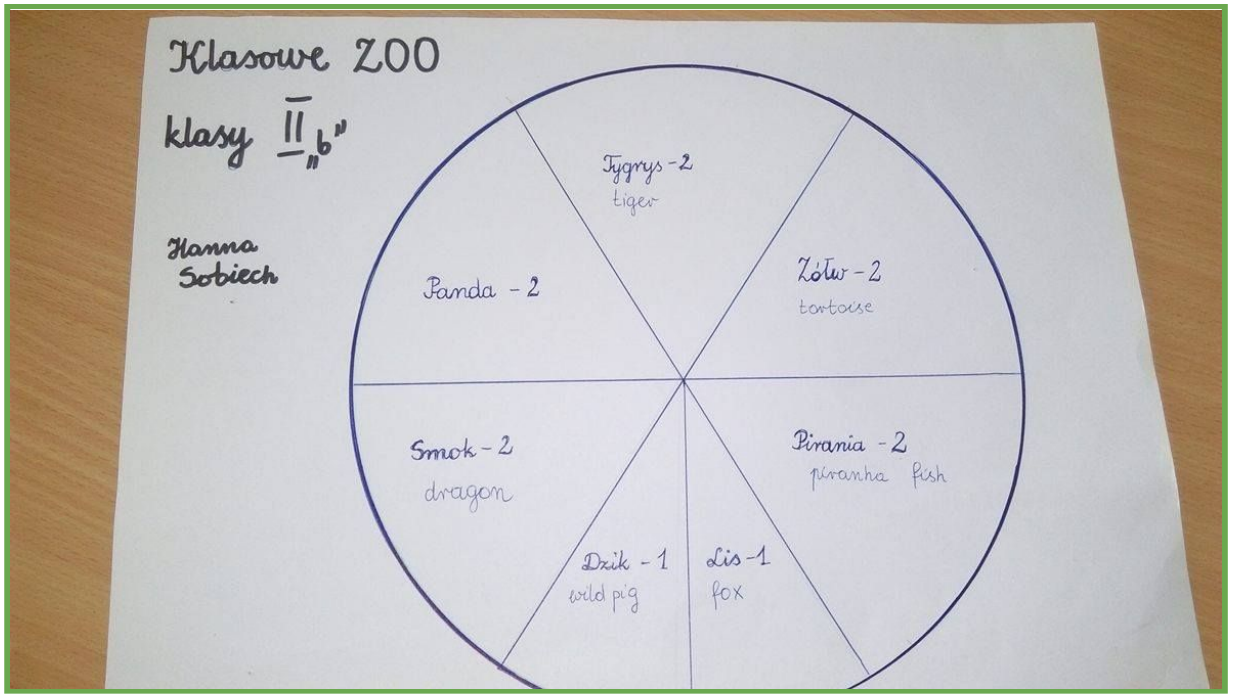
Our students are very good educators. They have interesting ideas that we should use in the teaching and learning process.

Since we were supposed to tell about our experiences from the tasks we also made reflections about our learning through conversation. To do reflections together or sometimes individually about your work and your learning practices, the ability to understand your own responsibility in the learning activities in school.

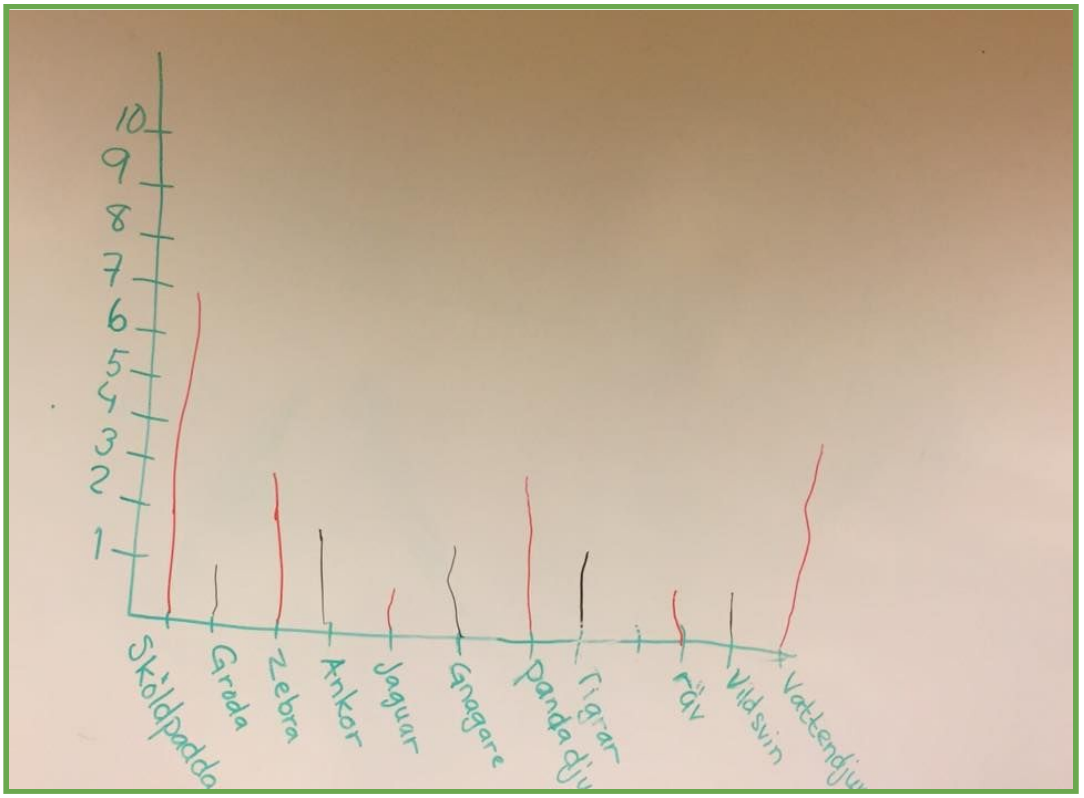
In some classes we tried to translate our thoughts into English which is a way to practice English, of course. When you have a receiver it is more motivated to communicate and use more interesting words and therefore develop the students vocabulary.

7.5.1 **Task number 1 /PL/**

Go for a walk with your teacher. Each of you, collect a stone, please. Bring it to your classroom and paint it like some wild animal. Use all of your animals to create a zoo. Count how many animals of each species is there? Create a circle diagram and upload it here. I wonder what animal is the most popular in Poland and in Sweden?


Klasowe ZOO
klasy II „b"
Hanna Sobiech
Tygrys - 2
tiger
Żółw - 2
tortoise
Panda - 2
Smok - 2
dragon
Piranie - 2
piranha fish
Dzik - 1
wild pig
Lis - 1
fox

Swedish zoo



Task made by Swedish students

<u>Students evaluation</u>

Thumbs up!

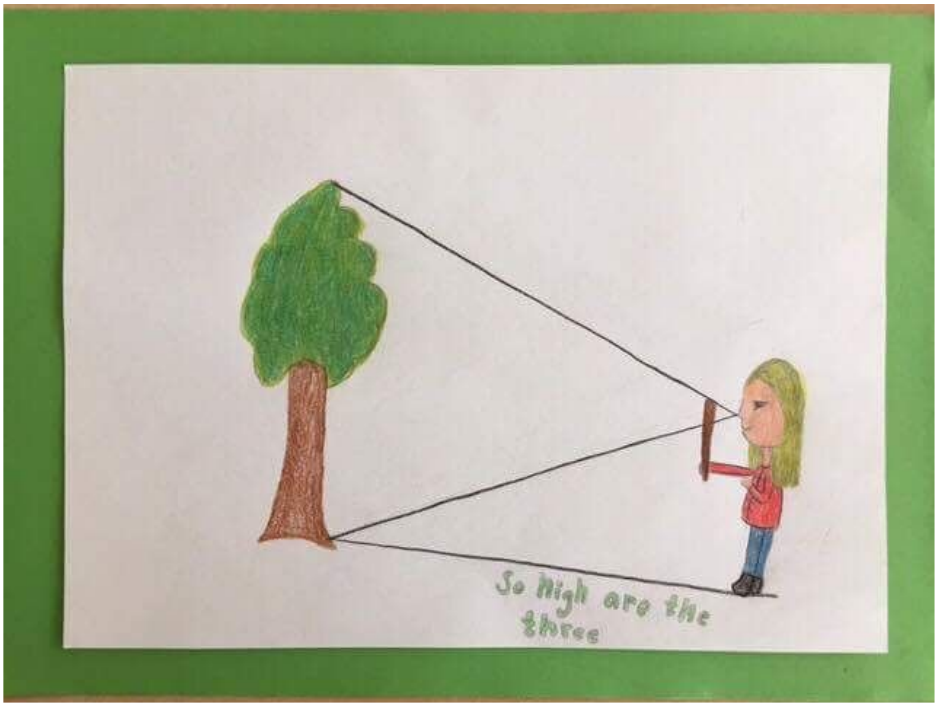
It was fun to paint animals out of the stones.

To build a zoo was very fun. It almost felt like we weren't at school but more like we were playing.

Turtles were the most popular animal in our class.

Task number 2 /PL/

Choose a tree growing near your school. Draw it, write how it is called. Measure it on the height of 20 cm, 50 cm and on the height of your height. Mark all that info on your drawing and show us.



The Swedish students chose to measure the height of the trees. They used a stick of 50

centimetre. They placed themselves so far away from the tree that the tree looked as high as the stick in their perspective. The distance from them to the tree is the height of the tree. They measured the distance by steps. The students thought it was easy and fun.

Task number 3 /PL/

Watch a short film about how to make a paper boat. Make it and go to the nearest river. Let your boat flow and record a short video of your boats' cruise.

Class 2 made paper boats. The class together made paper boats of paper. We did this with YouTube with origami. We painted them nicely and named them by name.

Then we let the boats go down the brook outside the school. The trips we filmed with our Ipads.

The movies we transferred to the IMOVie program where we edited them and added text and music. Last, we uploaded the movies on Facebook.

The pupils thought the task was fun, and after that, many more boats have made a trip down the brook.

https://www.facebook.com/ase.nilsson.54/videos/1599506593395270/

https://www.facebook.com/ase.nilsson.54/videos/1599511893394740/

Task number 4 /PL/

PL Wrap a piece of sticky tape around your wrist with the sticky side on the outside. Go for a walk and make nature bracelets. You can use any 'nature' material that you'll find on your walk like leaves, flowers, seed pods, etc. Take the photo and your teacher will upload it here.

Task number 1 /SE/

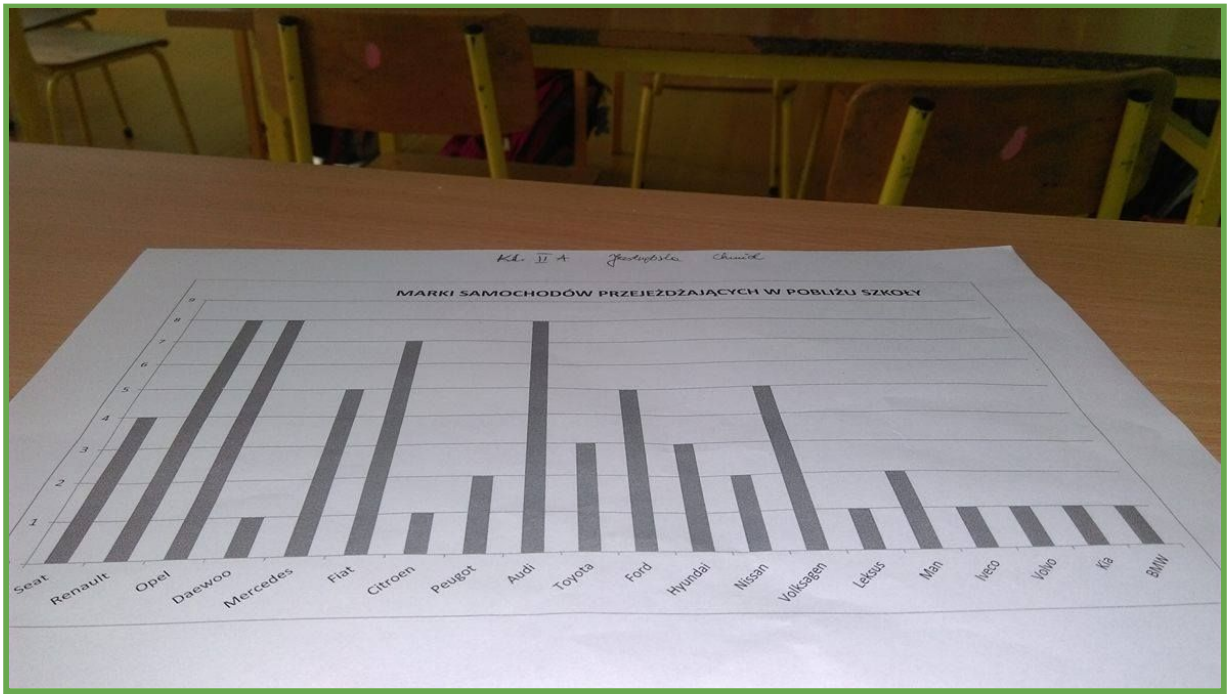
Your task is to make a music video where you will use musical instruments that you made of natural materials. Add music video here in this group.

PL: https://youtu.be/Zk1ck54mOXA

Task number 2 /SE/

Your task is to count and write down what brands you can find. Stand at the nearest road outside the school for some time. Compile then how many cars of each brand you have seen and make a diagram of this.

Add up the chart with brands here in this group so that we can compare to how it is in Sweden.

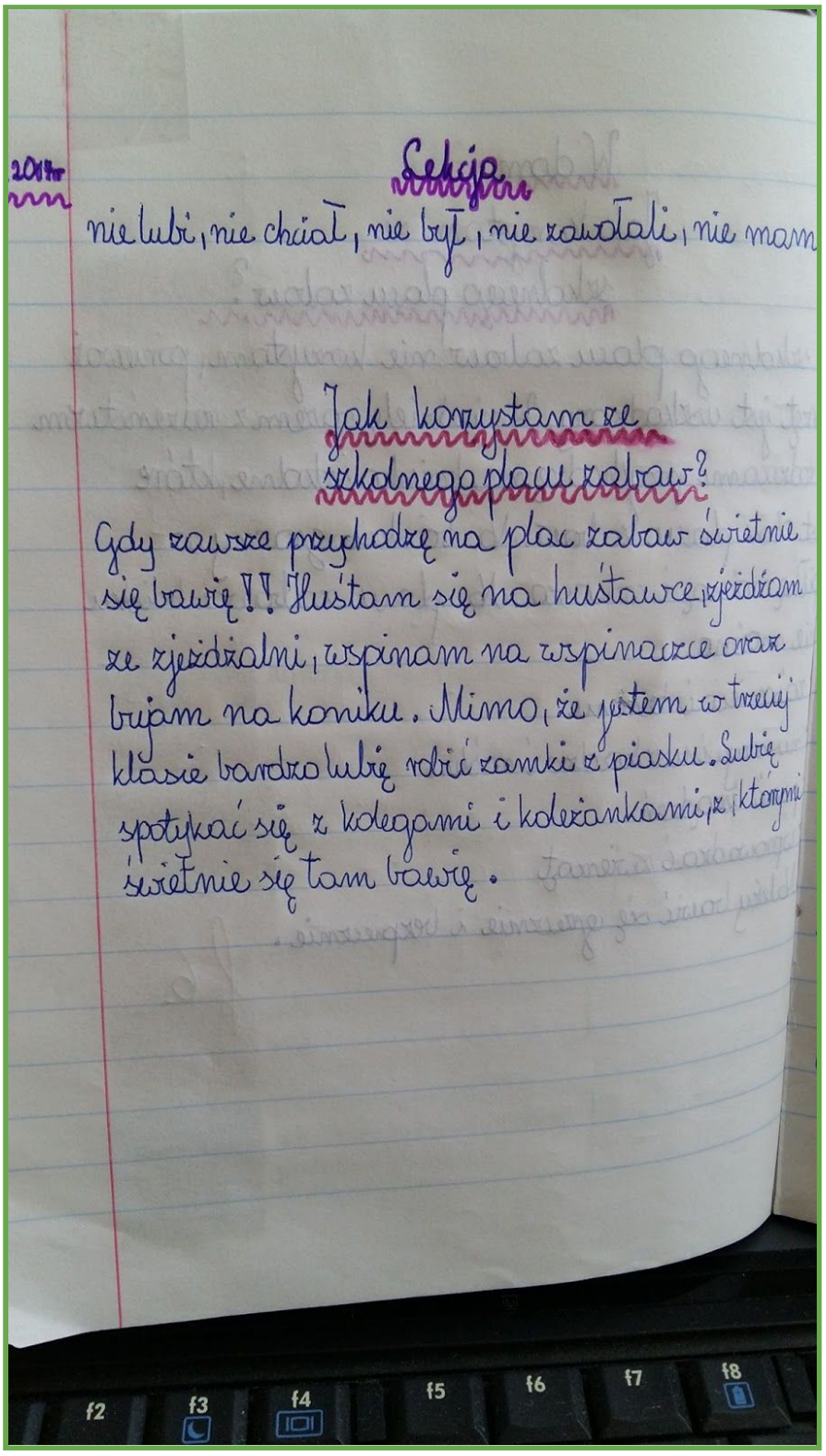


Task number 3 /SE/

Your task is to draw the schoolyard seen from above, like a map. Set out on a map the things that are in the schoolyard such as swings and benches, etc. Then write down how students use the school playground.

Add up the map of the schoolyard and text with how you use the playground here in this group.


adidas



I always have a good fun in our playground. I like swinging, climbing, going on a slide and going on a toy-horse. I like also building the sand castles. The most important is that I can spend time with my friends.

BONUS

For work with values outdoor we recommend these activities

1. Cooperation transfer
2. Quis with a twist
3. Hula hoop circle
4. The square
5. Pentathlon
6. Cross the river

1

Headline:
Teamwork, transportation
Age and activity:
8-11
Material/Preparations:
4 long strings per 4 pupils and 6 plastic cups. 4 wooden planks with grooves along the middle and a ball or ping-pong ball. (About 1 plank per 2 pupils.) A jar.
Season and Time:
Any not windy season. 15 minutes.
Environment:
Schoolyard.
Subject / theme:

All subjects where the ability to cooperate is important.
Adapting to students with special needs:
Colorful mugs with edge. Wider planks. Bag of beans instead of ball. Several chances to try.
Description / planning:
Movement of cup. Place the 6 cups in a pyramid. View a place where they will be moved. Explain to students that they will move the cups and place them in a pyramid without touching the cups. They may use the cords. End with a conversation about what's been trained, how it happened and if anything could be done differently. The movement of the ball. Students should be using the planks to move a ball from the teacher's hand into a jar. The distance to move the ball can be about 8 meters. Each plank is about 1 meter so it is required, among other things movement and communication. End with a conversation about what's been trained, how it happened and if anything could be done differently.
Risks / Be aware of:
It can be exhausting to concentrate and solve problems with others.
LGR 11:

2.3 The students' responsibilities and influence

Goal:

The school's goal is that every student has the knowledge of the principles of democracy and develop their ability to work in a democratic way.

Guidelines:

Teachers should prepare students for participation and co-responsibility and the rights and obligations that characterize a democratic society.

Experience:

Our experience is that these exercises are a good introduction to talk about different situations where a teamwork are helpful.

We talk about people's different circumstances and situations in which we have different strengths and weaknesses. We talk about the different roles.

We compare the importance of cooperation in the group work in theoretical subjects with cooperation in various sports. Whatever the result of the activity is the understanding of what and why we practiced is important.

2

Headline:
Quiz walk
Age and activity:
For everyone
Material/Preparations:
Questions for the quiz and materiel for the answers, depending on your questions.
Season and Time:
Every season
Environment:
Outside where you can walk
Subject / theme:
Get to know each other
Adapting to students with special needs:
Do the walk where everyone can contribute. Use activities that are useful for everyone.
Description / planning:

All children must find out where the quiz will take place. Divide the children into different groups.

When they are divided into groups, pupils start to go out to answer the questions on the quiz. The questions of the quiz consist´of questions on how different students are challenged in various activities.

Examples of the case; Who can throw the most balls in a bucket? The answer will be different challenge between different students. Examples of possible answers; 1. Per X. Anna 2. Lisa

Prepare about 10 questions and answer them.

When all the students have passed the walk and guessed on the various issues, the students then get to do the different challenges.

"Peter, Lisa and Anna" are going to throw the balls in a bucket and see who hits the most. And so do you with all the questions of the quiz. You then determine for yourself what challenges you want to give your students.

Risks / Be aware of:

Plan for which student ends up on which challenge. Think of the constellation of groups. Select the challenges that will not be too much of designation and competition. Remind the students before the activity that it is a game and not a competition. Urge them to "cheer" for all, and not just their best friends.

LGR 11:

Purpose /Ability:

Get to know each other

Central content:

Have fun together

Experience:

Fun game, where everyone is involved and gets to know the others. The dispute of the matter is that it is not possible to know the answers, but it's like a lottery at the end when everyone should carry their challenges. Very fun activity during holidays or camps.

3

Headline:
Hula hoop circle
Age and activity:
All ages
Material/Preparations:
A group of students 1-2 Hula hoops
Season and Time:
All year around
Environment:
Outdoors or indoors, space where you fit with your group
Subject / theme:
Social studies, PE, cooperation
Adapting to students with special needs:
Have someone nearby for support Choose which student who stands next to...
Description / planning:

Gather the group and ask them to stand in a circle holding hands.

Put a hula hoop through two students hands.

Their goal is to get the hula hoop all the way around without letting their hands go.

To make it more difficult you can give them two hula hoops that travel in each direction.

You can also have several hula hoops and do it on time.

Risks / Be aware of:

Some students may not want to hold hands. For this you can use gloves.

LGR 11:

Purpose /Ability:

The school should strive to provide all pupils with daily physical activity within the framework of the entire school day.

Teaching in civics should aim at helping the pupils to develop knowledge about how the individual and society influence each other.

Teaching in Physical Education and Health should aim at pupils developing all-round movement capacity and an interest in being physically active and spending time outdoors in nature.

Through teaching, pupils should be given the opportunity to develop their interpersonal skills and respect for others.

Central content:

Basic physical movements such as running, jumping and climbing. Combinations of these in exercises using equipment, games, dance and movement to music, both indoors and outdoors. 1-3

Different games and sports, indoors and outdoors, 4-6

Knowledge requirements

Pupils can participate in games and sports involving sequences of basic movements in different settings, and vary and adapt their movements to some extent to different activities.

Experience:

This is a highly valued cooperation-exercise. Students find it very fun. There is a benefit that everybody is involved. No individual performance matters.

Since the game can be played with talk or without it developes the importance of communication skills.

5

Title:
Pentathlon
Age and activities:
6-11, leisure time centre or activity day
Materials / Preparation:
Each department is planning a task. The teachers divide the students into mixed age groups (mentoring). Branches: Throw the boot. Throw the stick through a hula hoop. Clothing Race Obstacle. The entire group will get through the obstacle course as quickly as possible. Build a tower of different things you can find in nature. All have five minutes on it. Material: Boots, hoops, sticks, ropes, clothing, cones, jump rope, natural materials.
Season and Time:
Autumn. Start-up of the autumn term.
Environment:
Outdoor
Topic / Theme:
Sports / Values
Adapting to students with special needs:
Prepare students for the activities that will be done. Explain the rules before.

Description / Planning:
Each department is planning a task. The teachers divide the students into mixed age groups (mentoring). <u>Branches:</u> Throw the boot. Throw the stick through a hula hoop. Clothing Race Obstacle. The entire group will get through the obstacle course as quickly as possible. Build a tower of different things you can find in nature. All have five minutes for it. <u>Material:</u> Boots, hoops, sticks, ropes, clothing, cones, jump rope, natural materials.
Risk / Remember:
Explain the rules before. Moderate the competitive aspect.
LGR 11:

Purpose / capacity:

Cooperation. Practice motor skills.

Purpose / capacity:

- move balanced in various physical contexts (Sports).
- Instruction in Physical Education shall be for the students to develop comprehensive business skills and interest in being physically active and staying in nature (Sports).
- Through education, students are given the opportunity to develop their interpersonal skills and respect for others (Sports).
- People have always been addicted to cooperate in the creation and development communities (Social Studies).

Central content:

Gross motor basic shapes, such as running, jumping and climbing. Their complex shapes in tool exercises, games, dances and movements to music, indoors or outdoors (Sports). Various games, games and sports, indoor and outdoor, as well as dances and movements to music (Sports).

Knowledge requirements

Students can participate in games, games and sports that include composite basic motor activities in different environments vary and adapt their movements ... to the activity (Sports).

Experience:

This is a very much appreciated cooperation exercise. Students find it very fun. There is a benefit to all involved. No single individual performance matters.

6

Headline:
Cross the river
Age and activity:
Preschool class - grade 9
Materiel/Preparations:
Hula hoop
Season and Time:
All year
Environment:
Flat ground
Subject / Theme:
Team building
Adapting to students with special needs:
Several hula hoops, shorter distance, less participants
Description / planning:

For this game we need a number of hoops or similar. How many is hard to say, it depends on how hard you want to do the challenge and how many people join in the fun. You can try things out. The challenge is to move the group from one point to another, but you can only tread the rock rings.

To make the game a bit more exciting, you can pretend that we have to cross a river in the jungle. The river is full of both sharks and crocodiles, maybe even some piranhas and the occasional goldfish swimming around in it. The hula hoops are rafts and two jump rope can serve as shorelines.

Participants line up in rows at one jump rope. The mentioned first holding hula hoops and when the game starts put the rings down the "river" in line to the other shore. As the rings are laid down the team steps out of them. You have to step carefully because you do not want to end up in the river!

There should be as many rings in the race to manage the river directly, but when the hula hoops outsourced team may huddle together so that you can lift the last hula hoop and send up the stage so that it can be added first. Then the team can move one step forward in order to lift even a hula hoop and so on until you come to the second shoreline.

When all team members are happy over the other side of the river and all the hula hoop floats are collected the game is over!

Risks / Be aware of:

Slippery ground, students can fall if the cooperation doesn't work

LGR 11:

<u>Purpose / capacity:</u>

The school´s goal is for every student

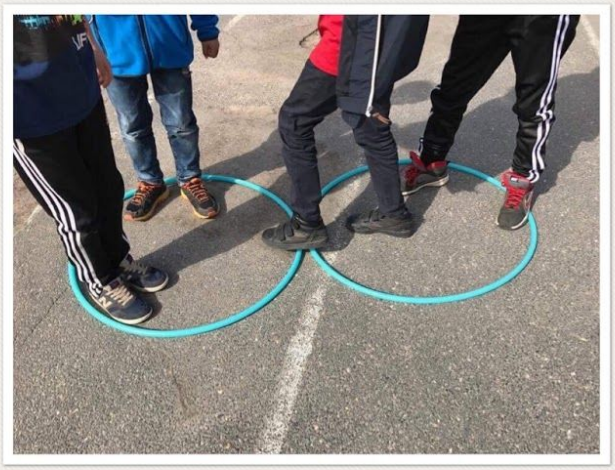
to respect other people's self-worth, takes away from the people subjected to repression and degrading treatment, and to contribute to helping other people, empathize with understand other people's situation and develop a willingness to act with their best interests at heart….

<u>Central content:</u>

life issues affecting students, such as good and evil, right and wrong, friendship, gender

roles, gender and relationships. Norms and rules in the student´s living environment, for example in school and in sports.
Experience: The students like it. This activity is exciting since it´s necessary to cooperate and solve problems to succeed. For older students this activity works with smaller areas to stand on, for example bags, rocks or anything you find in the area.

MOVE BUT DON'T TOUCH THE GROUND.



MOVE FROM ONE SPOT TO ANOTHER.

HULA HOOPS

TARPAULIN

TURN IT UP SIDE DOWN.

PIC•COLLAGE

For work with games or breaks outdoor we recommend these activities

1. The winter wheel
2. Play by the beach
3. Rabbit parent
4. The pirate or the Detective
5. Clap hunt
6. Catch the flag
7. Game with balls
8. Squirrel nest
9. Gingerbread game
10. Pokeymons

1

Headline:
Winter wheel
Age and activity:
All ages, running
Material/Preparations:
Create a wheel in the snow.
Time:
20 minutes
Environment:
Area with untouched snow.

Subject / theme:
Physical education, running in breaks, leisure time centre or as a warming up.
Adapting to students with special needs:
Work in pairs
Description / planning:
Everybody walks or runs after the leader. Create a big wheel with spokes in the snow. When the wheel is created play a hunting game. You change hunter when someone is taken.
Risks / Be aware of:
The leader changes hunter if it takes to long.
LGR 11:
<u>Purpose</u> Develop the ability to move in different ways in different environments to understand what can affects health and well-being. <u>Central content</u> Games, physical activities and outdoor exercise. Indoor and outdoor sports in different seasons and in different weather.
<u>Experiences:</u> This game will only work in the snow, or possibly in the sand. Younger students may have difficulty walking right behind the leader which is required to form lines. As in all hunting games the teacher needs to change hunter sometimes. It is good idea if the hunter is marked with a vest.

Creating the wheel

Hunting in the wheel

2

Headline:
Play by the beach
Age and activity:
7-10, play and fun
Material/Preparations:
Something to carry things. Travel bag with first aid, water, food, magnifiers, magnifying cans, Ipads with network access and knives and more. Blanket, buckets and spades. Sun protection. Telephone list to the guardians.
Time:
3 hours depending on the distance and the weather.
Environment:
Beach with sand to dig in and bushes.
Subject / theme:
Fantasy and creativity.
Adapting to students with special needs:
Support while you walk. Picture schedule to give structure and the feeling of safety. Extra check.
Description / planning:

Prepare in school with rules at the displacement by the water.

When you arrive to the water start with a gathering to talk about and show the borders for activity.

Specify how to act if the students need to go to the toilet, get upset or if they want to play with the water.

Inform about the “come-immediately”- signal.

Let the students choose activity. For example games with balls, jump ropes, games in the bushes or build sandcastles.

Risks / Be aware of:

Water is dangerous. Think before!

Extra clothes.

To build in sand can practice the cooperation skills, construction skills and creativity. Some pupils’ fantasy might get activated. Maybe they can have the opportunity to take pictures and write stories about their castles.

LGR 11:

Purpose:

Creativity and aesthetic expression

Create and express by aesthetic expressions…

Central content:

Creation through various aesthetic forms of expression, such as play, pictures...

Nature and society

Building and constructions using different materials, tools and techniques…

Local community… places for recreation.

Orient in the nearby environment and how to behave safely in the traffic.

Games, physical activities and outdoor exercise.

Outdoor exercise during different time of the year, the nearby environment and the possibility to be in the nature and in other places for physical activities and nature experiences.

Experiences:

If it´s good weather the activity level is high. In bad weather too if you have proper clothes. Everybody moves, there are movements in the activities and during the displacement. The change of environment activates the imagination, creativity and play. It is important that staff members know the pupils and have a clear division of responsibilities.

Sandcastles

What’s in the water?

3

Headline:
Rabbit parent
Age and activity:
6-9, play during a walk.
Material/Preparations:
Know about the area you´ll walk in.
Time:
1 hour for a common 20-minutes walk.
Environment:
A path in the forest.
Subject / theme:
Walks and Hide and seek-game.
Adapting to students with special needs:
Walk and play in pairs. Prepare with picture schedule.
Description / planning:

Instructions of the game:

One Rabbit Parent walks first.

RP stops and hold it´s hands as ears (and closes it´s eyes) and counts to 10 (or 30).

All rabbit babies should hide then.

RP stands still in its place. Can twist around but not move it´s feet.

RP shouts out name and place of the babies he/she finds.

The baby who manage to hide closest to RP without being detected is the next RP.

The teacher decides for how long the RP can keep looking.

The teacher decides if everybody should be able to be RP. (Recommend this).

Some students prefer to be Pokemon parent, Crocodile parent or Dinosaur parent. It´s alright!

Risks / Be aware of:

Do not lose students in the forest.

Before the game starts the students should know what distance is alright to move away from the teacher.

And how to act if you get lost.

LGR 11:

Purpose:

Move in all ways in different environments and understand what can affect the health and wellbeing.

Central content:

Local community places for recreation.

Orient themselves in the environment and how to behave in a safe manner.

Outdoor exercise during the different seasons, as well as the local environment

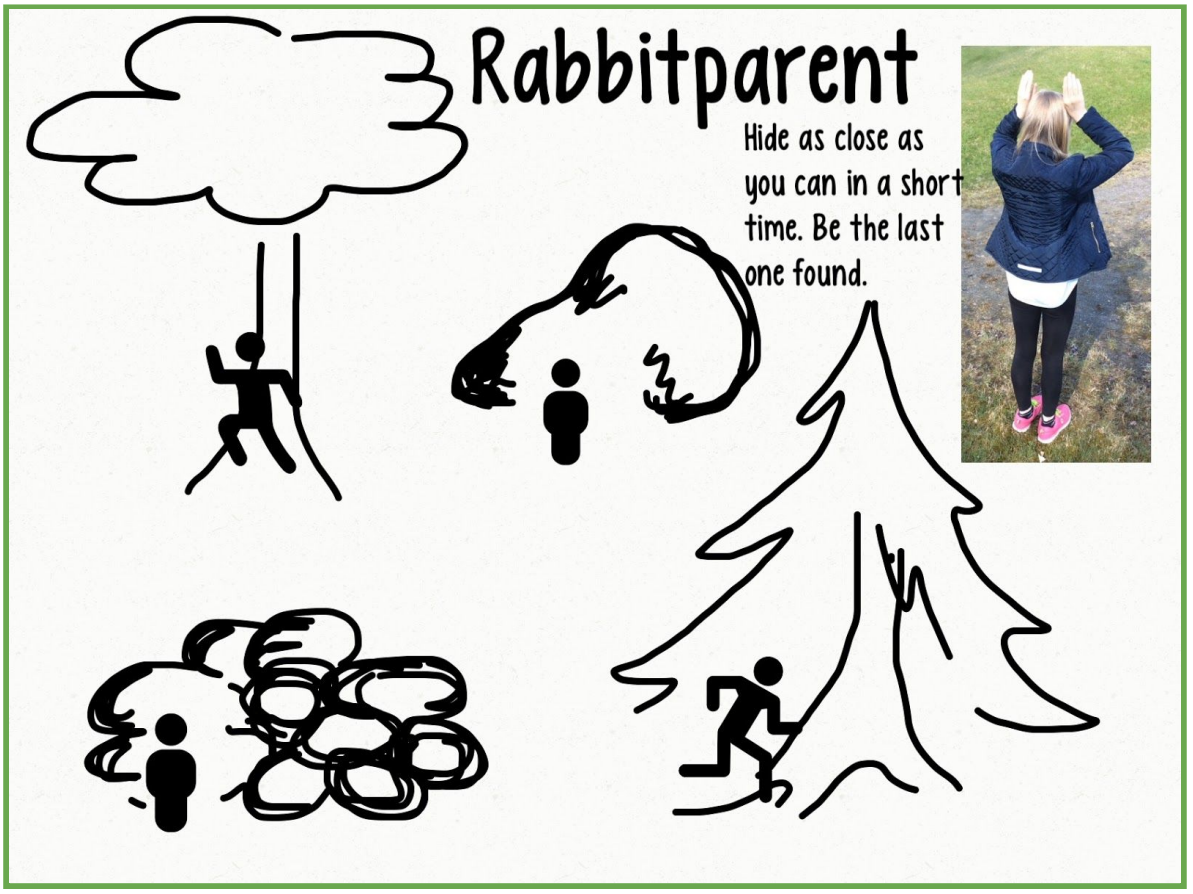
Opportunities to stay in the countryside and in other places for physical activities and nature experiences.

Experiences:

Positive, the kids think it's great fun to hide in the woods. Good play during movement, children do not find it hard to walk.

This is an activity that works well since the competitive element is not strong.

Some students prefer to be Pokemon parent, Crocodile parent or Dinosaur parent. It´s alright!



4

Headline:
The pirate or the Detective
Age and activity:
6-11, Treasure hunt with any chosen subject.
Material/Preparations:
Ipads, mobiles, gpses or paper. Create 5-10 activities, missions or problems to solve. Create qr-codes, coordinates or maps with clues.
Time:
Prepare: 2 hours Activity: 1 hour
Environment:
Schoolyard or nearby area.
Subject / theme:
Treasure hunt can be with songs, games, motoric challenges, mathematical problems, cooperation activities or something else.
Adapting to students with special needs:
Work in pairs or with an adult. Prepare by a pictures schedule, maybe even show them what problems will appear.
Description / planning:

You can create qr-codes with an app you download on your Ipad or mobile.

Coordinates for a gps can be placed in the mobile or gps by hand or with some help by connecting to a computer.

You can draw a map on your own or download from google maps, for example. Make your own marks on it.

Choose what is the best for your students.

You choose problems depending on what your students need to practice.

For mathematic we recommend matchstick problems, in language you can give them missions on rhyme or something to create, in cooperation activities you can carry something without touching it or find something out.

Use your imagination!

Risks / Be aware of:

Mobiles can break. Have protection on.

Agree on what will happen if technical equipment breaks. Agree if you will use the supply of the school or private ones.

The battery may run out. Have a mobile charger with you.

A gps can work less well in environments with tall buildings or if the students turn around to much.

A map can get wet.

The students competitive instinct can be brought out. How do you make the groups of students stick together?

The students must know how to act if they get lost.

LGR 11:

Purpose:

Move in all ways in different environments and understand what can affect the health and wellbeing.

Central content:

Local community places for recreation.

Orient themselves in the environment and how to behave in a safe manner.

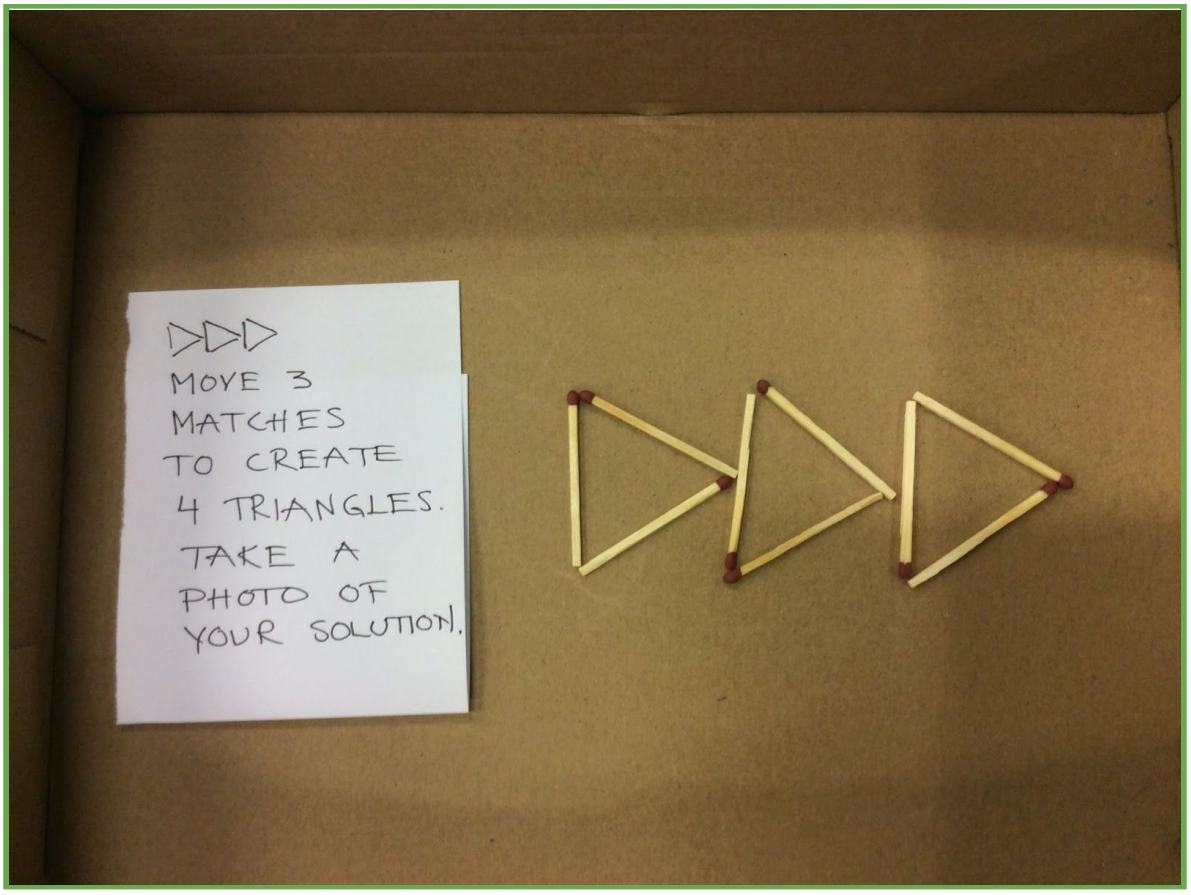
Outdoor exercise during the different seasons, as well as the local environment opportunities to stay in the countryside and in other places for physical activities and nature experiences.

You can also make connections to any subject in school depending on how you create your treasure hunt.

Experiences:

This activity can be done individually, in small groups or as a whole class. It works well as a practical outdoor lesson both in school and in leisure time centre.

The activity is exciting. Possible to adapt to individual conditions which usually makes both competitive and more cautious students motivated. They can choose their own pace.


MOVE 3
MATCHES
TO CREATE
4 TRIANGLES.
TAKE A
PHOTO OF
YOUR SOLUTION.

5

Headline:
Hunting games
Age and activity:
All ages. Leisure time centre and breaks
Materiel/Preparations:
Vests, cones, hoops, and music depending on what activity.
Time:
20 minutes.
Environment:
Schoolyard
Subject / theme:
Breaks or leisure time centre. Hunting games.
Adapting to students with special needs:
Work in pairs or with support. Picture schedule to explain rules.
Description / planning:

Clap hunt:

All participants are divided into two teams. One team hunts the other team. If someone is caught you go to jail (an area of 3X3 metres), where you stay until a friend in your team claps your hand without being caught.

The teacher decides when it is time to change the mission.

Ice hunt:

Mark the playground (25X15 metres) depending on the number of participants. 2 persons are the hunters and wear blue vests.

All the others can be touched by the hunters and then turns to ice. Anyone can melt a friend by a little touch.

It´s possible to choose only 2 friends as sun and if so only they can warm up their friends who are ice. They wear red vests.

The Ice-hunters and the suns are changed by the teacher.

Crawl hunt:

Mark the playground (25X15 metres) depending on the number of participants. 1- 2 persons is the hunters and wear blue wests. The hunters are changed by the teacher.

When the hunter touches someone this one stands still with the legs like a tunnel. You are free when a friend crawls through your legs.

Mirror dance hunt:

Mark the playground (25X15 metres with 5 hula hoops on the area) depending on the number of participants. 1- 2 persons are the hunters and wear blue vests. The hunters are changed by the teacher.

When the hunter touches someone that stands in one of the hoola hoops and makes a dance move. You get free when a friend "looks in the mirror" and mimics the movement. The one who mimics can´t get caught.

Risks / Be aware of:

The leader changes hunter regularly.

Clarify with a vest who chases.

Specify the area of the game.

The teacher is the one who is responsible of the activity. The students don´t need to argument about who´s right or wrong if there is a disagreement.

If a student often pretends that he/she was not caught he/she is probably immature and the teacher's job is to tell that student it is observed and they can practice together to develop the skill to accept the rules.

LGR 11:

Leisure time centre

Purpose:

Develop the ability to move comprehensively in different environments and understand what can affect the health and well-being.

Central content:

Games, physical activities and outdoor Initiating

Organizing and participating in games of various kinds.

Sports and other physical activities indoors and in different seasons and in different weather.

Experiences:

Children often find hunting games very fun, but for a while. It easily gets out of hand. For example, someone gets a little too rough, or someone feels that it is always the same one that gets taken. This is the reason why the teacher should be the one who decides when to change the hunter.

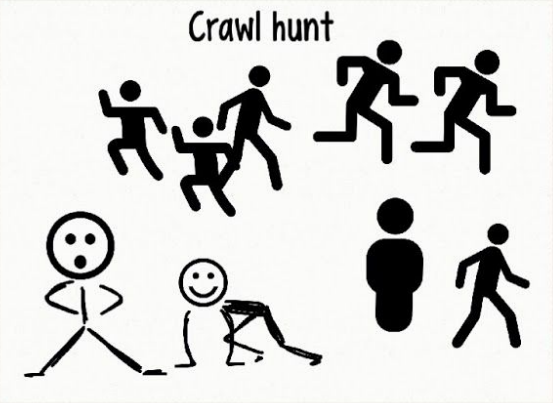
All raise their pulse.

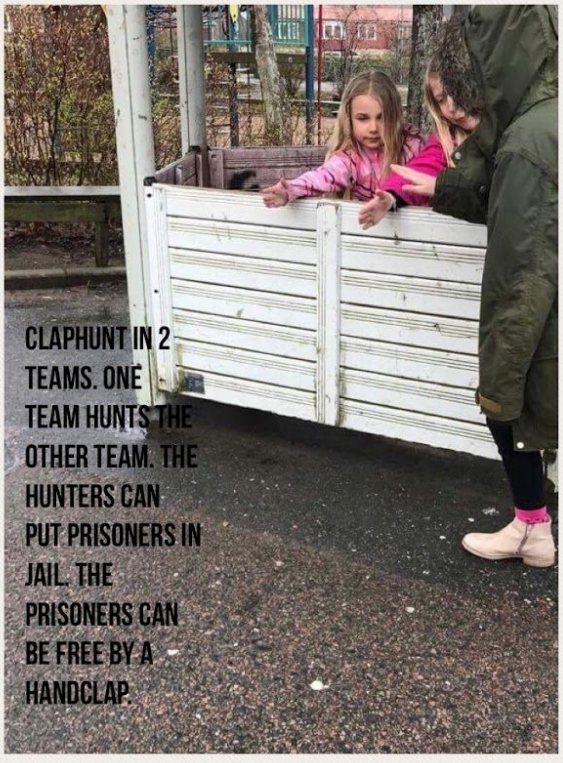
Clap hunt: Here students work in groups. Very popular activity at breaks. Ice hunt: Because the game can be played in different ways, it is important to be clear about the rules before you start the activity. Younger students like it. The rules are easy to understand.

Crawl hunt: All students do not like to touch the ground or getting close to friends. This game does not fit all groups. But is very popular in the groups in which it operates.

Mirror Dance Hunt: Music and hula hoops needed for this game which means that it must be prepared. Very popular activity. It can introduce movement to music for the students who would otherwise not like to dance.

HUNTINGGAMES





6

Headline:
Catch the flag
Age and activity:
8-11, breaks and leisure time centre
Materiel/Preparations:
Large play surface (flat or other terrain), a mark of the border in the center (stream, hedge, jump rope for example), about 10-30 treasures (ropes for example), 2 "prison" (clearly marked area) and vests to mark the team.
Time:
30-60 minutes
Environment:
Schoolyard or nearby area
Subject / theme:
Breaks or leisure time centre
Adapting to students with special needs:
Play in pairs or with support to those in need. Strong colors of vests and ropes. Picture schedule describing the rules, and the beginning and end.
Description / planning:

Student group (15-30 students) is divided into two teams by the teachers.

Each team belongs to one side of the area. They move in pairs or individually and must make his/hers way over to the other team's side to collect a treasure at a time. Are they taken on the "wrong" side, they end up in prison, where they stay until they are liberated by the friend who comes to pick them one at a time. The friends risk themselves to be taken on the way there, but when someone is rescued from prison, you are free to return without tax to your “own" side. The teacher can also decide that you become free after a certain time in prison or that everybody are released now and then on the teacher's signal. The team wins that still has treasures left on its side when the other team doesn't. Collected treasures are handed over to the teacher.

Risks / Be aware of:

This is a very speedy activity. If it´s rainy there is a certain risk to slip.
It might be necessary to drink water in between.

LGR 11:

Leisure time centre

Purpose:

Develop the ability to move comprehensively in different environments and understand what can affect the health and well-being.

Central content:

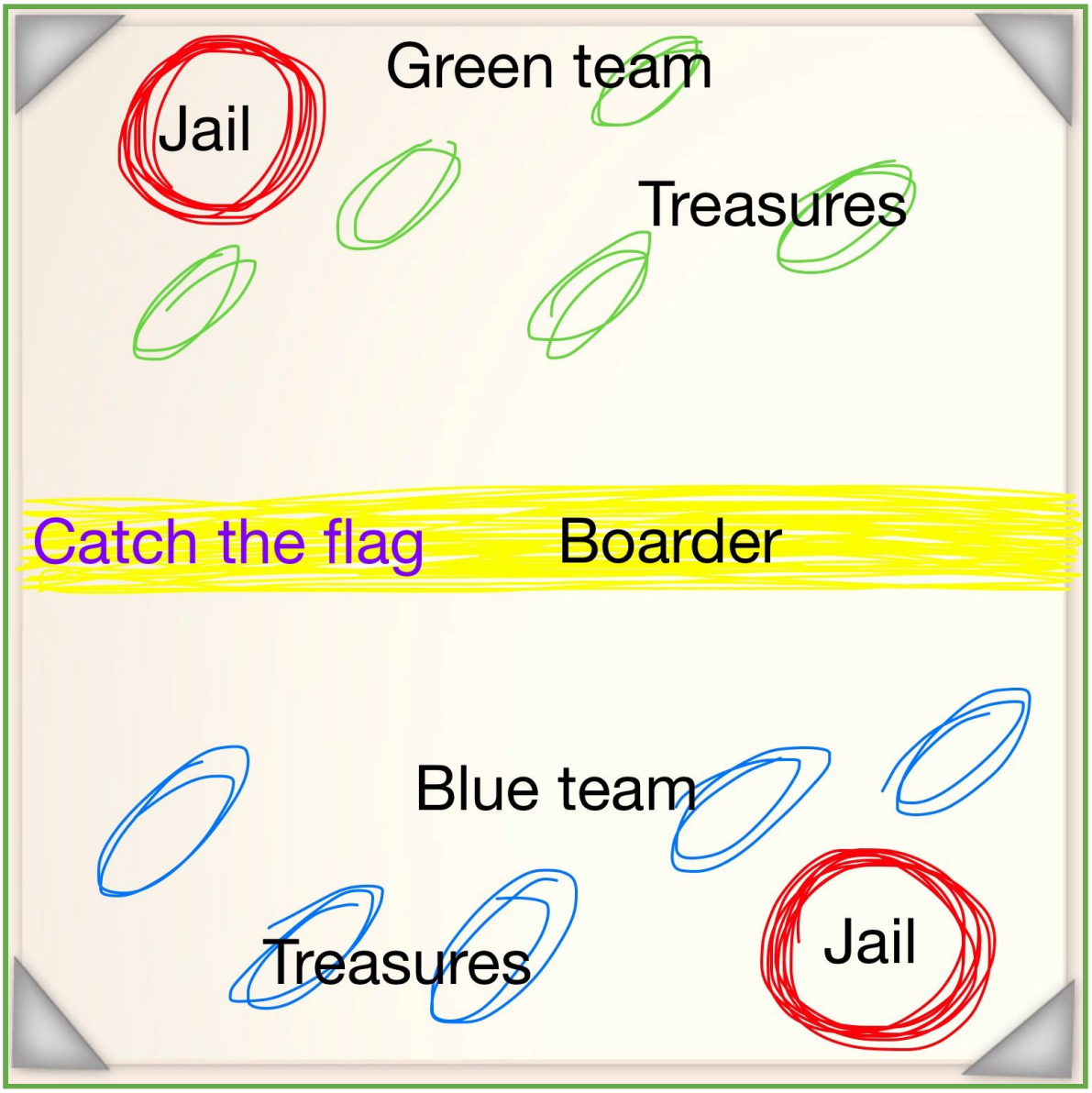
Games, physical activities and outdoor Initiating

Organizing and participating in games of various kinds.

Sports and other physical activities indoors and in different seasons and in different weather.

Experiences:

This is a game that younger students should play on a smooth schoolyard while it is more challenging for older students to play in the hilly terrain. Very popular activity that really raises the pulse.


Green team
Jail
Treasures
Catch the flag
Boarder
Blue team
Treasures
Jail

7

Headline:
Game with balls
Age and activity:
All ages, coordination
Materiel/Preparations:
Different kind of balls.
Season and Time:
All seasons, 20-40 minutes.
Environment:
Schoolyard or nearby area.
Subject / theme:
Coordination, condition and cooperation.
Adapting to students with special needs:
Larger, softer and slower ball. Play with peers who are prepared to practice. Or adults who support the game. Picture schedule with rules. Maybe prepare the game by trying the game first or observe.
Description / planning:

Ball in the circle

To repeat skills. Stand in the circle. One says four and throws to another who then will respond with 6 (“tenfriend”). Rotating one lap to mark the difference between the answers and questions.

One can also say English and Swedish vocable, or country and the capital, etc.

Ball snake (relay)

To practice cooperation and coordination. Two lines with children where everyone has a ball between the back and the stomach. The teams will move a certain distance without using their hands and without dropping the balls.

You can also stand in line with legs spread as a tunnel. The ball should be sent from front to back through the tunnel. Whoever rolled the ball backward should then run and stand as the last one. When everyone has moved the ball and swapped position the´re done.

Rounders (as classical rounders)

A team "inside" and a team "out there". Inside team standing in a line, and in turn, all shoot alternatively throw a tennis ball, play ball or frisbee.

Then the bowler trying to run a lap around the exercise area or at least get to one of the plan's corner cones that are also waiting point till the next through. If the “out team” takes the ball and passes it to the burner who shouts burned are those in the “in team” who is out between cones burned and must go back to an earlier cone.

Dipball

2 teams play all over the pitch. One team scores a goal on a short side and the other team scores a goal on the other short side. Goals are made by standing on the goal area, receive a pass and dunk the ball on the ground. Goal= the opponents back to the centre line of the exercise area. The ball is moved through the passes, but have to be dipped to the ground before it can be passed on. Otherwise, turn the ball over to the other team.

Play it on time and count goals or just have fun.

Bottle Ball

All participants set their water bottles or cones on the exercise area. This game can be played in different ways. One way is that one team should try to shoot down the cones with the ball played only with the feet in a limited time. The other team protects the bottles but can not set them up as they fall.

The other way is colour-coded bottles. Red team shoots down the blue bottles and blue team shoots down the red bottles. Then you should both protect and shoot. This game should be played in short sequences of about 3 minutes.

Risks / Be aware of:

Students who are afraid of balls should be able to practice with soft and slow balls if you want to develope their courage.

Ask students to be try-out-friends for students with special needs. The one who knows the game is given an important task and the one who needs extra practice grows in all possible ways. It is always important to have a teacher nearby who is responsible for the the rules and for how the students act.

LGR 11:

Leisure time centre

Purpose and developing the ability to:

Take into account the personal needs of the balance between activity and rest…

Move comprehensively in different environments and understand what can affect the health and well-being.

Central content:

Nature and Society

Norms and rules of the pupils everyday life, such as games and gaming, and why the rules may be needed.

Games, physical activities and spending time outdoor.

Organizing and participating in games of various kinds.

Sports and other physical activities indoors and in different seasons and in different weather...

Experience:

Ball games are appreciated. Important with clarity in the rules. It is also important for the younger kids to have simple rules so they do not have too much to take in. Good to train team spirit and take into account of each other.

Ball in the circle

This is a game that allows the students to be involved in adjusting the game and its rules. Works longer if students can be involved in selecting the theme of the game and what to train.

Ball snake (as relay)

This activity is difficult for everyone, almost impossible for young people. But much fun and students train communicating and interacting with others.

Rounders

Very popular but it is important to choose the ball for the students to feel confident and competent.

Dip balls

This game is a bit advanced. It is important that an adult is responsible for who gets the ball.

Bottle Ball

Fun game that trains soccer without the close contact that occurs in the normal soccer. It increases the sense of security.

All ball games practice eye-hand or eye-foot-coordination and attention. Many ball games also practice perception and endurance, explosiveness and cooperation.

Students practices capitals of different European countries.

Relay.

DIPBALL

DIP ON THE GROUND BEFORE YOU THROW.
AND DIP WHEN YOU GET THE BALL IN THE "GOAL".

PIC•COLLAGE

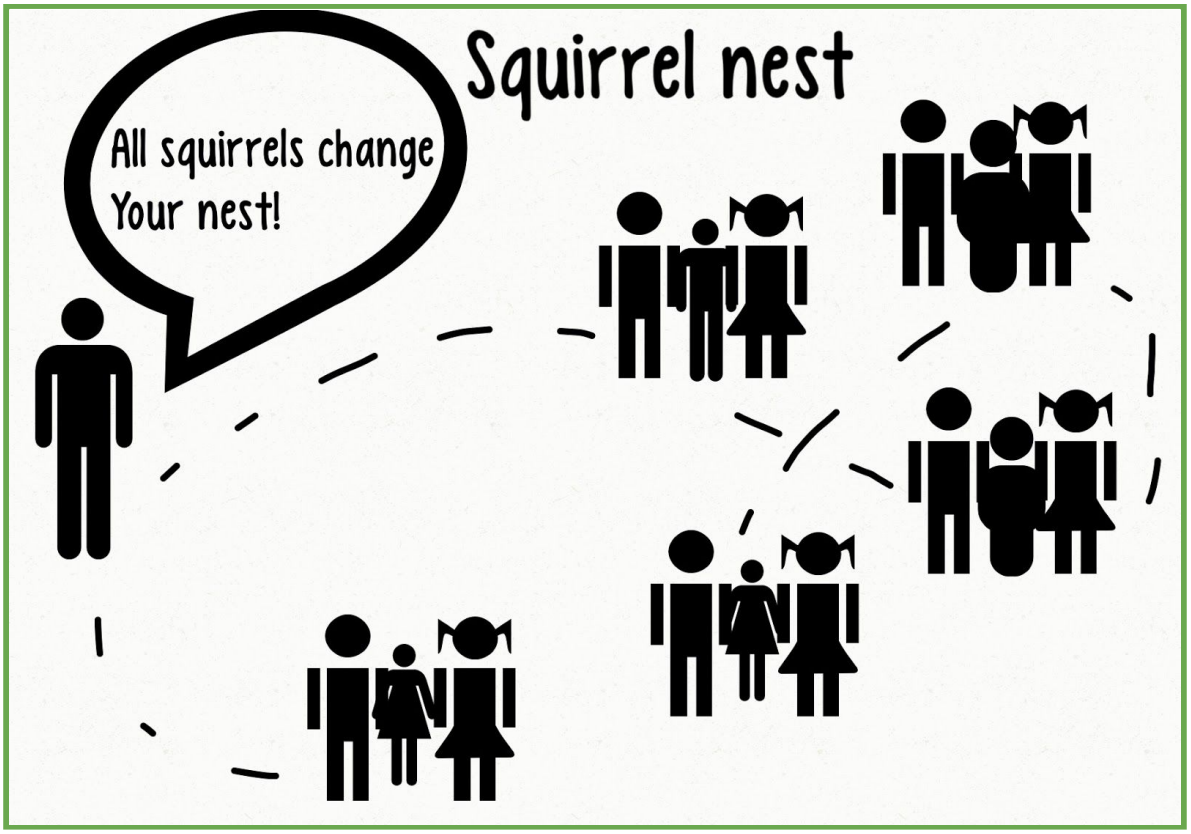
Teachers from Poland and Sweden practicing The Ballgame Earth around.

Teachers in Sweden practicing ballgames.

8

Headline:
Squirrel nest
Age and activity:
F-2
Materiel/Preparations:
Season and Time:
All seasons, 20 minutes.
Environment:
Outside
Subject / theme:
Play and cooperate
Adapting to students with special needs:
Prepare with picture schedule.
Description / planning:
Half of the students, plus a student are squirrels. The others form nests, two and two holding hands. All squirrels are looking for a free stay when the homeless squirrel shouts "All Squirrels change nests". Students raise their hands and release squirrels running to a new nest. A squirrel that doesn´t find a nest is allowed to stand in the middle and shout.
Risks / Be aware of:

The students only choose a nest where their friends are.
LGR 11:
Purpose /Ability: Get to know each other Central content: values
Experience: Very easy and appreciated game. Young students really like it. Does not need any preparations. Works good while waiting for something else. It´s a bit similar to the game Change tree, where 10 students will stay by separate trees. The eleventh student shouts Change tree and then tries to take a tree and another student will be the one who shouts out.


Squirrel nest
All squirrels change
Your nest!

9

Headline:
Gingerbread game
Age and activity:
6-7, game and breaks
Materiel/Preparations:
Season and Time:
All seasons, 30 minutes
Environment:
Schoolyard
Subject / theme:
Running
Adapting to students with special needs:
Limited area to play on and support from adults.
Description / planning:
All students have linked arms in pairs. One student is alone and when that student will link arms with another student, the third one will have to let go and go and find a new friend. The game is without any end and without winners or losers.
Risks / Be aware of:

LGR 11:
Physical Education Purpose / Ability: Move balanced in various physical context Central contents 1-3: Movement Simple games and dances and their rules. Knowledge requirements in the end of year 6: Students can participate in games ... including composite basic motor activities in different environments vary and adapt their movements ... to the activity.
Experience: Stand random deployed in the exercise area or in a circle. The speed of the game can be increased by having a couple beyond those that have linked arms. One of them is chasing the other. The person being chased can be put to the rest by linking arms with one of the friends who are linked in pairs. Then the third friend lets go and become the new one being chased. If the hunted is taken exchanged roles.

When the hunted grabs a friend, the next one in the pair is the hunted instead.

10

Title:
Pokemons
Age and activities:
All ages, lesson, any chosen topic, sport or play.
Materials / Preparations:
Approximately 30 flat cones with different pokemons below. There may also be letters, words, or else you want to work with. Bingo ticket with pokemons, letters or anything else you want to focus on in the activity. Cards with descriptions of activities (suggested physical) for those who have completed a bingo liner / bingo card. Pens Scores of cords.
Season and Time:
All seasons 30-40 minutes.
Environment:
Schoolyard
Subject / Theme:
Optional, this sports, fitness
Adapts for students with special needs:
Possible aid of an adult. Prepared by picture schedule. Obvious play area.
Description / planning:

Pokeymonbingo

All cones with pokemons on the bottom are placed on a playing surface of about 25x15 meters.

Students are grouped in pairs. Each couple receives a bingo card that will be located about 5 meters off the surface with cones. Each pair must also have a pen.

The couple takes turns to run onto the surface to lift a cone per round. They must remember what pokemons they find and mark this on the bingo card as they are back.

Once a group gets a completely filled row it may take one of five task cards, and perform a physical activity. When the whole tray is completed, all five activities will be done.

The activities suggested: 25 frog jump, 25 squat, 25 Indian jump, 25-second standing plank and 25 one-leg hops.

Pokelevel Pichu and Pikachu

In this game the exercise area must be marked as if it is a hunting-game in some way.

The teacher is the leader and distributes cords illustrating whether a student has reached a new level.

Everyone starts at level 1 (= Pichu). In order to level up the student must challenge another student. It´s possible after the student has touched another student who then has to set up the stone, scissors or bag-challenge. The winner gets a playstripe of the leader.

One band is level 2 (Pikachu). Then you can just challenge others who are at level 2. If the student of any level 2 wins, that student gets all the cords from the loser.

When a student has received many cords the leader can appoint the student to Superpikachu. Then all chase that student.

If Superpikachu is caught, she must hand over all her ties to the leader.

Each time a student loses his cords she starts all over again at level 1.

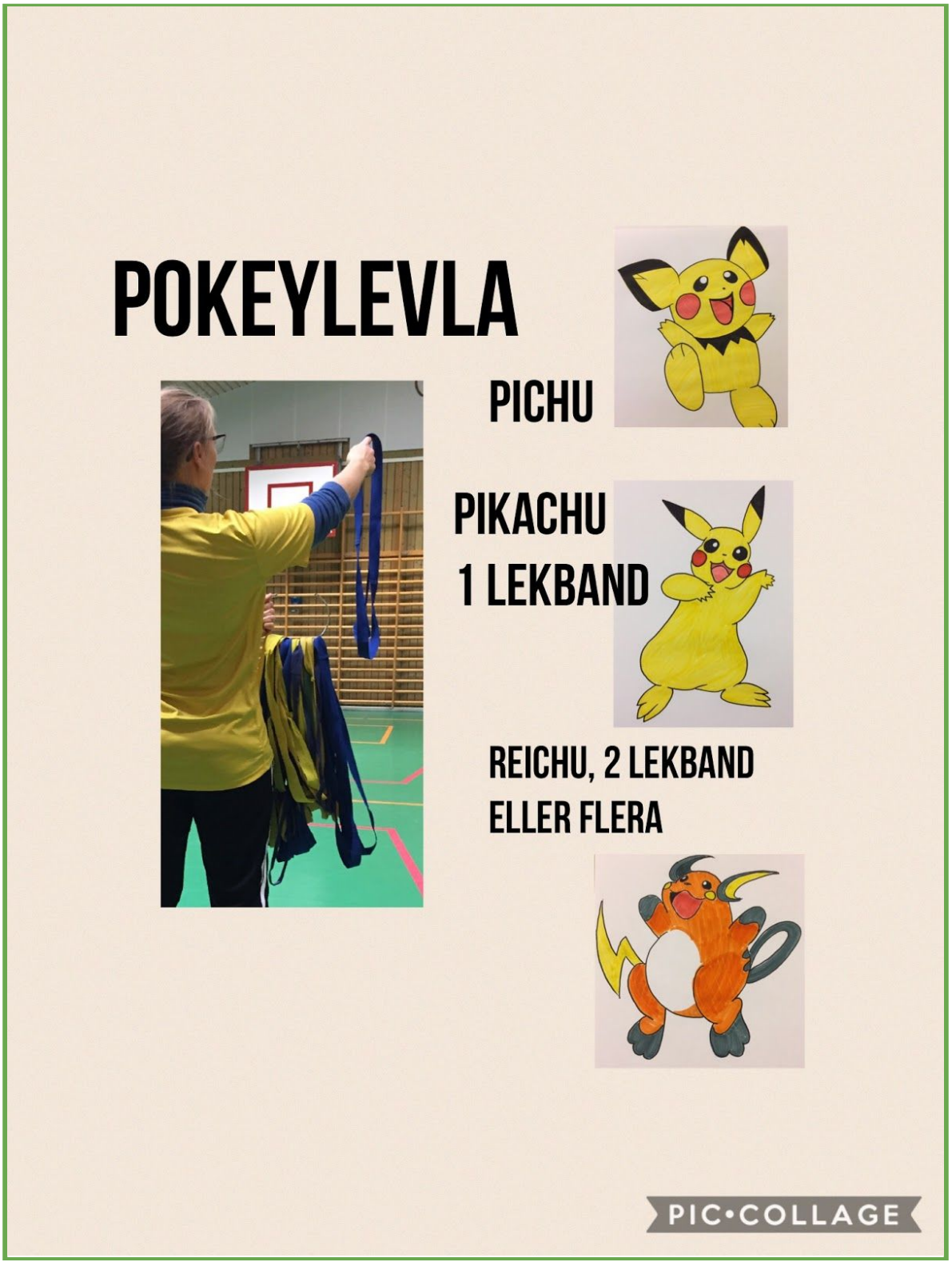
This is an eternity-game with high speed.

Risk / remember:

These are activities with a high tempo. Students may need water.

LGR 11:
Physical Education Purpose / capacity: Move balanced in various physical contexts, Central contents 1-3: Simple games and ... their rules. Central contents 4-6: Different games ... outdoors ... Knowledge requirements in late 6: Students can participate in games, games and sports that include composite basic motoric activities in different environments vary and adapt their movements ... the activity .
Experience: Students give all thumbs up for this activity. It is very popular to use popular phenomenon in games. Both bingo activity and Poke level practise endurance. In Poke level there may be students who can not manage to level up or that never reach the level 2. The leader can choose to hand out cords based on good fighting spirit.

Raise the pulse by “collecting” letters one at a time.



Poke level

Simple instructions. Pichu has got no cord. Pikachu has got one cord. Superpikachu / Reichu has got several.

For work with lessons outdoor we recommend these activities.

1. Plants in the initial
2. The right of common
3. Outdoor education on schedule
4. Safety by the water
5. Art outdoor
6. The 36-game
7. The shapes of water
8. 3 in a row
9. Mimic
10. The English snake
10. Dance
11. Mathematics
12. English circle
13. Quiz
14. Concepts relay/Mathematics

1

Headline:
Spring. Plants in the initial.
Age and activity:
All ages in school or leisure time centre.
Materiel/Preparations:
Different places to grow plants in. Different seeds, beans and tubers to plant. Maybe something to cover it with. Maybe a template to fill in theories about what´s going to happen and then what really happens.

Time:
1 hour practical work. 30 minutes theories. Follow ups.
Environment:
Classroom and different places to put the plants in.
Subject / theme:
Biology.
Adapting to students with special needs:
Picture schedule. Documentation with pictures.
Description / planning:
Instructions what to do. The students write what they think will happen. Plant for example a sunflower seed, a runner bean and a potato. Both indoor and outdoor. In a pot and in the ground with some kind of protection. Maybe also put a seed, a bean and a potato on a damp surface both in light and in dark. Follow it up with watering, observations and notes. Sum up your conclusions.
Risks / Be aware of:
It does not always go the planned way.
LGR 11:

Purpose / ability: Develop the ability to do systematic investigations in biology. Central content: ...plants life cycles and adaptations to different time of the year… Knowledge requirements in the end of year 3: ...in conversations about the year the students tell about changes in nature and give examples of life cycles for some different… plants.
Experience: Our experience of similar activities is that it is usable in several subjects as math, science, Swedish, Arts and environmental studies. The students were interested and inspired to learn more. There is a difficulty to plant in the playground where everyone has access to the plantation.

Acorn

Peas in cd-boxes


PIC•COLLAGE

Try nature's own nutrition. Put the nettles in water.

2

Headline:
All seasons, Right of common
Age and activity:
All ages. School or leisure time centre.
Materiel/Preparations:
Prepare yourself so you know the right of common. There are easy texts on the internet (different languages) if you like to read about it with the students. Have a walk with a good distance. Prepare facts and questions about the right of common. A projector in a classroom if you like to see a film about it. Questions for a quiz.
Time:
1 hour walk. 15-30 minutes valuation exercise. Maybe 15 minutes reading. Maybe 25 minutes film. 1 hour quiz.
Environment:
Nearby area.
Subject / theme:
Physical education and The right of common
Adapting to students with special needs:

Walks that are available.

Maybe work in pairs.

Picture schedule.

Easier text and questions.

Description / planning:

Go for walks in the nature.

Right of common, what is that in practice?

Give examples of picking flowers and berries, swim, play with wild or tame animals.

Valuation task on a line. Ask questions and let the students stand to the right if they agree and to the left if they disagree. If they don´t know or think in another way stand somewhere in between.

Discuss the similar and different opinions.

Watch a movie about the right of common.

Finish with a quiz walk.

Risks / Be aware of:

You can get lost.

LGR 11:

Physical education

Purpose / ability:

Implement and customize outdoor occasions and outdoor activities for different conditions and environments...

Central content year 1-3:

Outdoor recreation

The grounds of the right of common.

Central content year 4-6:

Outdoor recreation

Rights and obligations in the nature according to the right of common.

Knowledge requirements in the end of year 6

The student can implement different kind of activities in nature and outdoor environment with a good adaption to different conditions and to the Right of common.
Experience: The younger students can work with some parts of it so it's not too heavy information and the older students from grade 4 and up will do the quiz walk. This is an important activity to do because children of today don't know the difference between mine and yours. The students have to learn how to look after the environment.

FOR INFORMATION:

NATURVARDSVERKET.SE

ONLINE INFORMATION IN DIFFERENT LANGUGAGES

3

Headline:
All seasons, Outdoor education on schedule
Age and activity:
All ages, school and leisure time centre.
Materiel/Preparations:
Depending on the activity, subject and focus.
Time:
One lesson per week per class or 50% in a subject.
Environment:
Schoolyard or nearby areas.
Subject / theme:
Optional subject and theme.
Adapting to students with special needs:
Picture Schedule. Adult support or peer support. (Vary the basis of need and opportunity.)
Description / planning:
Then rough plan put thought into the outdoor lessons. In physical education, we intend outdoors week 34-43 and 15-22 as well as in ice skating and tobogganing. In the image facilitated lessons outdoors when it is not raining. In science subjects and mathematics, it is possible to add about 50% of the teaching outdoors. In language and social science the outdoor teaching can function as variety and inspiration. In Crafts, parts of teaching outdoors.

Risks / Be aware of:
Research says that the heart rate increases during some part of the day. The ability to understand and remember more and for longer increases as well. The research also says that creativity increases in good condition. Working with pulse raising and improved fitness is easier to do outdoors. It can be done as part of tuition or activity break. To truly implement meaningful and heart-pounding activities during breaks, they should have a length of a minimum of 30 minutes. It is for the students important moment where trained recreation or physical education teacher can be responsible for the activities if they are not included in other school subjects. It is important that as an educator to lead by example and dress appropriately depending on the weather and the activity.
LGR 11:
The curriculum Part 1 <u>The goal of:</u> The school will be responsible for all pupils completing primary school has gained knowledge and understanding of the importance of lifestyle for health, environment and society. The curriculum has been since the fall of 2016 expanded to Chapter 4 for leisure time centre. It describes among other purpose that students will develop their ability to move comprehensively in different environments and to understand what can affect the health and well-being. <u>Central content:</u> Nature and Society Local community and voluntary sector range of activities and places of culture, leisure and recreation. Orient themselves in the environment and how to behave in traffic safely. Games, physical activities and outdoor Initiating, organizing and participating in games of various kinds. Sports and other physical activities indoors and in different seasons and in different weather.

Outdoors during the different seasons, as well as the local environment opportunities to stay in different natural environments. Rights and obligations of nature according to roam.
Experience: We work with social studies outdoors three times per week where the students play and learn how to include others. It's difficult to have a lecture outdoors, easier to have it inside and the practical parts of the lesson outside. It works with all subjects. Easier with science, math or art for longer lessons outdoor. Math Stations (clock, ten buddies, multiplication, collecting rocks, pine cones and sticks that are different worth, different stations, practice mathematics concepts, build geometric shapes, problem solving). Science can be done outside when working with force, motion, friction, gravity. In this subjects we needed a playground for teaching and the students got to try it and experience it with their whole body. It is easier to be outside when working with animals and nature. They can experience with all their senses, such as smell, feel, sight and hearing. Recycling can be done outdoors, pick garbage in nature and then go through each of the different materials and sort them. Outdoor education does not mean that you have to go to the forest, you can be in the school yard or in the nearby surroundings.

4

Headline:
Summer, Safety by the water
Age and activity:
All ages. School and leisure time centre.
Materiel/Preparations:
Film and conversation about safety by the water and in the water. Maybe theory material. Maybe colourful weights or a heavy doll (sandbag) to dive for.
Time:
The ultimate situation is 1-2 times a week during the swimming-season.
Environment:
Classroom and lake/sea.
Subject / theme:
Physical Education and leisure time centre. Safety by the water.
Adapting to students with special needs:
Picture schedule. Support from an adult. Individual support in the water.
Description / planning:

Film and conversation about safety by the water.

Conversation about the long arm, first aid, recovery position, oxygen to the lungs and the heart-function.

Conversation about the purpose by the ability to swim and what is practised when you move in water.

Maybe theory-material.

Maybe colourful weights or a heavy doll to dive for.

Small groups in the water can be alternated with games on the beach, in the water and with theory.

In the water following abilities can be processed:

“Boil coffee” with your mouth.

Jump or “dive” for things that don´t sink.

Try different ways to move in the water.

Walk on all four, dive through hula hoops, lay on the back, combine ice cream sticks, frog and ice cream cone or kick with straight legs and crawling arms. Breath.

Put most of the time on games. For example Come all chickens, Cat and mouse and common Hunt-games.

Risks / Be aware of:

Safety is the first and the last! To be by the water must be safe.

In a group you do not have the same rules as when your are with the family.

It is better to be a few students in the water and long for it than many and it goes wrong.

Have a “come-immediately”signal that the students are familiar with. Only use it when it is necessary.

Have motivating conversations about the purpose with the ability to swim.

It´s a good idea to observe each student and give individual feedback if they are ready to develop their technique.

Are the student ready to swim or even afraid of the water put the time on having fun nearby the water or in the water.

The habit to be in water can be processed both at home, at leisure time centre and in school.

LGR 11:
Physical education Purpose / ability: Move in different ways in different situations …prevent risks during physical activity and handle emergencies on land and in water. Central content 1-3: Movement Games and movements in water. To balance, float, and swim in the stomach and the back mode. Outdoor recreation Safety and consideration in games and in activities outdoor. Central content 4-6: Movement Swim in the stomach and the back mode. Outdoor recreation Safety by the water… emergency management with tools. Knowledge requirements in the end of year 6: The student can swim 200 metres including 50 metre in the back mode.
Experience: When visiting the beach, students were first told about the rules and how to behave in such an excursion. We talked much before the visit but also at the beach. Something to consider is that you can get help from parents so that there will be many adults who can watch the students. Visit the sea, a teacher stands as the limit in the water, and the students must stay in front of the teacher. Valid from 1 - 3 (until the students can swim). Important that you pay attention! It can be a bit scary to be responsible for a group of students even if you are many adults. In a lake or at sea you can't see the bottom, much better at the pool. Good for the students to practice their skills at the public pool a few times per year.

5

Headline:
All seasons, Arts
Age and activity:
All ages, Arts in school or leisure time centre
Materiel/Preparations:
Optional but for example, linen, lace, Ipad, paint and brushes.
Season and Time:
Different seasons, 1 lesson
Environment:
Schoolyard or nearby area.
Subject / theme:
Arts, creating.
Adapting to students with special needs:
Support during movement. Picture schedule.
Description / planning:

Tapestry

Can be created in branch crotch or on the fence. If the creations stays outdoor it might be necessary to clean it up after some time.

Paint

Can be done on snow or on the ground.

Collage

Photographing nature, portraits and beautiful details. Assemble it digitally.

Sculpture

Build sand castles, animals of sticks, fantasy inventions or body sculpture in natural size.

Risks / Be aware of:

Art can be converted to junk.

Color of clothes.

Some of the students who work in group might need support to be activated.

LGR 11:

Picture

<u>Purpose / ability:</u>

Develop the ability to create images with digital and artisanal techniques and tools as well as with various materials ...

<u>Central content:</u>

Image Processing ... three dimensional work. Reusing images in its own image creation, such as collage and photomontage.

Photographing ... and editing software.

<u>Knowledge requirements:</u>

Students can in the artwork develop their own ideas within different subjects by reusing contemporary or historical images and process other ideas and inspiration materials.

Experience:

The students like to be outdoors doing art, painting in the snow, painting on trees or making sculptures. Important to use colour that is environmental. Making sculptures of sand, snow or other materials. Graffiti by using spray bottles where you mix water and watercolour.

Very positive when everyone becomes active. There are no right or wrong. New "leaders" might emerge who usually are not so prominent in the classroom. Appreciated and fun information.

Use street-crayons, you could paint Rangoli which combines art and math. Grid where you connect dots with lines and make a pattern

Tapestry

To create paintings in the fence in the autumn is very much appreciated. Students show their imagination by creating all possible motives with leaves.

Paint

To paint outdoors on walls or on the ground reduces students' performance claims. Large brushes used and details are avoided.

Collage

Students are very involved and their creativity flows. Very positive and learning if you follow up with discussions on interpretations of students' creations and the effect of different backgrounds, for example.

Sculpture

Very good activity for cooperation. All students are usually involved. Very positive.

199

6

Headline:
36
Age and activity:
Reading age, any lessons
Materiel/Preparations:
One dice, 36 notes and laces
Time:
All seasons To prepare:2 hours Activity: 1 hour
Environment:
Schoolyard
Subject / Theme:
Any topic
Adapting to students with special needs:
Support how to use the dice and sum it up. Less notes. Bigger text and adapted tasks.
Description / planning:

Prepare 36 numbered patches with tasks or problems to solve in any subject. For example, Mathematics, cooperation exercises, language or song. Set up the patches visible within a limited area. Place the dice visible a bit from all the patches.
Let the students work in small groups.
Each group should now roll the dice and if the group gets a 4, look for patch 4. Perform the task or solve the problem there. Then the group will re-roll the dice and if they get 3, they look up patching 4 + 3, that is 7. Etc.
Decide together what comes after 30. For example, each dice role is worth 1. No matter what number that shows.

Risks / Be aware of:

Hidden patches are impossible to find.
A big area for the activity gives a very long time of activity.
A distance between the dice and the patches gives a high level of activity.

LGR 11:

Purpose and abilities:
Pupils should be able to use the expression of mathematic to discuss, argue and explain the issues, calculations and conclusions.
<u>Central contents 4-6 years:</u>
Problem solving
Strategies for mathematical problem solving in everyday situations.
<u>Knowledge requirements in the end of year 6:</u>
Students can select and use appropriate and effective mathematical methods with ... adaptation to the context to make simple calculations and solve simple tasks in arithmetic, algebra, geometry, probability, statistics and connection and change ...

Experience:

Fun game where the students have to cooperate. Easy to adapt according to age. Can be a bit messy for students with special needs. Some can be a bit disappointed when they haven't had time to do all the stations. Makes most of the group involved.

Positive that you can mix activities from different subjects in one lesson. Appreciated of students and everyone gets the feeling that they can. Good collaborative exercise where they must be active. It may be perceived negatively as some students may make it a contest instead of a game.

Read about risks.

Some students run to the next task and their friends don´t come along. Inform before the activity how important it is to stay together.


VOKOL

7

Headline:
The shapes of water.
Age and activity:
7-9.
Material/Preparations:
Ipads. Teaching about the different forms of water; gas, solid and liquid. How does the water molecules work?
Season and Time:
Winter, 1 hour.
Environment:
Schoolyard or nearby area.
Subject / Theme:
Science subjects and Arts. The shapes of water.
Adapting to students with special needs:
Focus on the photos and the most important words to know. Describe the molecules with drawings and games.
Description / planning:

Play the game The molecules.

The leader calls out "gas". Then all the students run and spin around far apart.

The leader calls out "firm", all students hug each other and stand still.

The leader shouts out "liquid", all students hold each other's hands but still walk around.

Go out and photograph / illustrate the different forms of water. Create a collage with photos and facts about the text, how the different molecules behave at different temperatures. Make an exhibition.

Risks / Be aware of:

The ultimate lesson is winter with running water and clouds in the sky. Discuss the risk of getting wet or fall into the water.

LGR 11:

Science subjects

Purpose / ability:

Use of biology concepts, models and theories to describe and explain the biological relationship of ... nature ...

Central content:

Water forms:

solid, liquid and gas.

Knowledge requirements in the end of year 3:

The student document additionally their studies using different forms of expression ...

Art

Purpose and abilities:

Explore and present different topics with images ...

Central content:

Image analysis Informative images ... how they are designed and function.

Knowledge requirements in the end of year 6:

In addition, students can present their photos with ... adaptation to purpose and context.

Experience: A fun game where the students learn with their own bodies. Good to have a supportive lecture about water molecules and how they behave.
Great way to consolidate knowledge about water if you have worked with it before. Students get involved much in the creative work. Students are very positive about the activity.

8

Headline:
Three in a row
Age and activity:
All ages, confirm knowledge
Material/Preparations:
13 hula hoops, 3 red vests and 3 yellow vests.
Season and Time:
All seasons, 15 minutes
Environment:
Schoolyard
Subject / theme:
Swedish
Adapting to students with special needs:
Work in pairs or prepare comrades on adapting to the conditions without contest.
Description / planning:
2 teams are on the spot, each with a hula hoop as a start. About 15 meters away are 9 hoops placed. Beyond these 9 hoops is further second. Each team has three vests or something else colourful. One at a time from each team must run to the 9 hoola hoops and place or move a vest. Once this is done you should ask in the farthest hoola hoop and illustrate a verb. The friends of their team will call which verbs before you can run back and the next person on the team can run. The team who first gets three vests in a row wins.

It's fun to proceed directly on the new round for three in a row.

Risks / Be aware of:

Students with strong competitive instinct may need to be prepared for what is important in the activity; To repeat the verb and increase heart rate.
One can also choose to call out a letter and his team will answer the letter that comes before the alphabet in order to get the running back.

LGR 11:

Swedish

Purpose / ability:

Formulate and communicate in speech ...

Central content 4-6:

Structure of the language with parts of speech ....

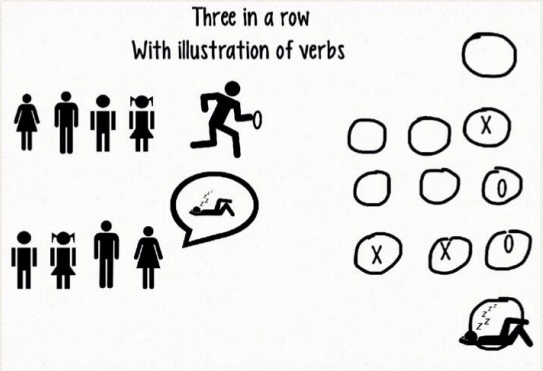
Knowledge requirements in the end of grade 6:

Students can write different kinds of texts with ... functioning structure ...

The student using the texts basic rules for linguistic correctness ... ...

Experience:

Fun activity where everyone gets involved. Can be used in various subjects. Everyone gets up and moves, and gets activated in the exercise. A little bit of a stressful game, and can get too much competition-oriented.
Fun to do, you can do it on brakes. You can practice, grammar, geography, mathematical terms and so on. Good for practicing cooperation.
Consolidates knowledge of word class verbs in an obvious way.
Students experience the activity as much fun.



THE ONE WHO PUTS SOMETHING IN A CIRCLE WILL ALSO ILLUSTRATE SOMETHING.

THE FRIENDS WAITING HAVE TO TELL WHAT THE ILLUSTRATION REPRESENTS.

IT CAN ALSO BE COUNTRY WITH CITY AS ANSWER.

9

Headline:
The English snake
Age and activity:
10-11, language lesson
Materiel/Preparations:
Chalks, sand or snow. Work with word classes before this moment.
Season and Time:
All seasons, 20 minutes.
Environment:
Schoolyard
Subject / theme:
English, word-classes
Adapting to students with special needs:
Adult support or another activity. For example jump 1-10 and back, say the numbers out loud. Colour some numbers in different colours. When you jump on these say the colour.
Description / planning:

Divide the group in smaller groups (2-6). Let them stand in queues next to each others. The teacher stands in front of them and ask: What is an octopus? The students answer with a translation or an explanation and then the teacher says “If an octopus is a verb raise your hand”. The small groups have to answer all together.
Then the teacher says “The one who doesn’t have hand raised may draw a bubble/square in front of you and take one step forwards since the octopus is not a verb but a noun. Will someone tell me what a noun is?”
The alternatives in the game are verbs, nouns and adjectives.
The activity stops when the teacher says so.

Risks / Be aware of:

The students can draw very big bubbles. Decide how big the bubbles should be.
If a group really does not know the answers they might be able to get clues if so is decided by the teacher.

LGR 11:

English
Purpose / ability:
Understand and interpret the content of spoken English and in different kinds of texts,
Central content 4-6:
Speak, write and conservation -production and interaction
Linguistic strategies to understand and make themselves understood in the language is not enough, such reformulations. ... and grammatical structures.
Knowledge requirements in the end of year 6:
Pupils show their understanding by ... acting on messages and instructions in the content.

Experience:
This is an activity that gets the thumbs up by the students.
It is a fun break from language lessons that are often done sitting in the classroom. It is a good repetition of verbs, nouns and adjectives.
For some students, this form is easier when the students get the chance to stand up and

move instead of sitting.

The activity is also relatively safe when students work in groups instead of lonely.

10

Headline:
Dance
Age and activity:
All ages, physical education or games.
Material/Preparations:
Season and Time:
All seasons, 40 minutes.
Environment:
Schoolyard
Subject / theme:
Physical education or leisure time centre
Adapting to students with special needs:
Might be good to have a supportive person nearby.
Description / planning:

The squeeze

Stand in a circle and hold hands. Adult or designated student makes a squeeze of the hand. This squeeze should be passed on until it comes back to the person who first created it. Is it still the same?

The clap

Stand in a circle. A person begins to clap both hands with the next. This clap will be passed along at the same pace all the way around the circle. Develop multi-claps. Do you manage to keep pace?

Mirror

Work in pairs, reflecting and leading the movement slowly. The second will be the mirror and make the same movements at the same time.

The detective

A student stands with his back to the other students standing in circle. A student in the circle is appointed movement-leader. It will slowly make the movement as the other mimics. The student who stood with his back to the others must now turn around and try to find out who leads the movements.

Risks / Be aware of:

There are some students who don´t have the ability to feel and convey a pinch.
In the Detective it can be difficult to find the leader of the movements.

LGR 11:

Physical education

Purpose / ability:

Move balanced in various physical connection,

Central contents 1-3:

Simple games and dances and their rules.

Pace and rhythm of games, dances and movements to music.

Central contents 4-6:

Different games ... indoor and outdoor, as well as dances and movements to music.

Pace and rhythm of games, dances and movements to music.

Knowledge requirements in the end of year 6:

The movements to music and dances adapts learner their movements ... the pace and rhythm.

Experience:

The above games are a good introduction to the topic Movement to music in physical education. It practices concentration, pace and to coordinate movements with others. The clap-game can be used in combination with the names of those beats. Then there will be a get-to-know-game.

Students are very satisfied with things to do.

Teachers from Poland and Sweden are practicing different dance activities

11

Title:
Mathematics
Age and activities:
8-11, lesson in Mathematics
Material / Preparation:
Calculator Dice Small groups of students, 4-5 students in each group. Animals vocalization to each group. 100 notes with math problems. Cords to put up the patches. The same number of cards that you have students x2. On the cards should be numbers with addition, subtraction, division or multiplication. On each card is also a question, such as "who has the division with the ratio 3?"
Season and Time:
All seasons, one lesson
Environment:
Schoolyard
Subject / Theme:
Mathematics, repeat
Adjustment for students with special needs:

Less cards

Groupings of students who support students

Adult support

Well-defined activity area

Calculator

Description / design:

100 cards

Students are grouped in 4-5 students and get an animal sound per group, for example, meow.

Each group will strike a blow with the dice.

The group spreads out to look for card 5.

When a student finds card 5, the student meows until the group are gathered. Then solve the task on the card together before returning to the dice. If they get four, they add 5 + 4 and look for card 9.

You have to come first to 100.

Math Circle

Learners stand in a circle.

The teacher hands out one or two cards to each student.

The teacher begins by using his card and says, "I have an addition to the sum 2, who has a division ratio of 5?"

Then the student who has the card division and the ratio of 5 to answers and so on, until all the cards are used.

Risk / remember:

In 100 card, it is important to instruct that the problem may not be resolved before the whole group gathered.

In math circle, some students have difficulties if they can not the concepts.

LGR 11:

Mathematics

Purpose / ability:

... solve problemsby using maths ...

Use and analyze mathematical concepts and relationships between concepts,
select and use appropriate mathematical methods to perform calculations and solve routine tasks.

Central contents 1-3:

Speech and voice usage

...

The four calculations and relationships and use in different situations.

Central methods of calculations using natural numbers, the arithmetic and rough estimate by calculations ... calculator. The method used in different situations.

Plausibility evaluation by simple calculations and estimates.

Problem Solving

Strategies for mathematical problem solving in simple situations.

Central contents 4-6:

Speech and voice usage

Feasibility. Assessment on estimates and calculations in everyday situations.

Problem Solving

Strategies for mathematical problem solving in simple situations.

Knowledge requirements in the end of year 3:

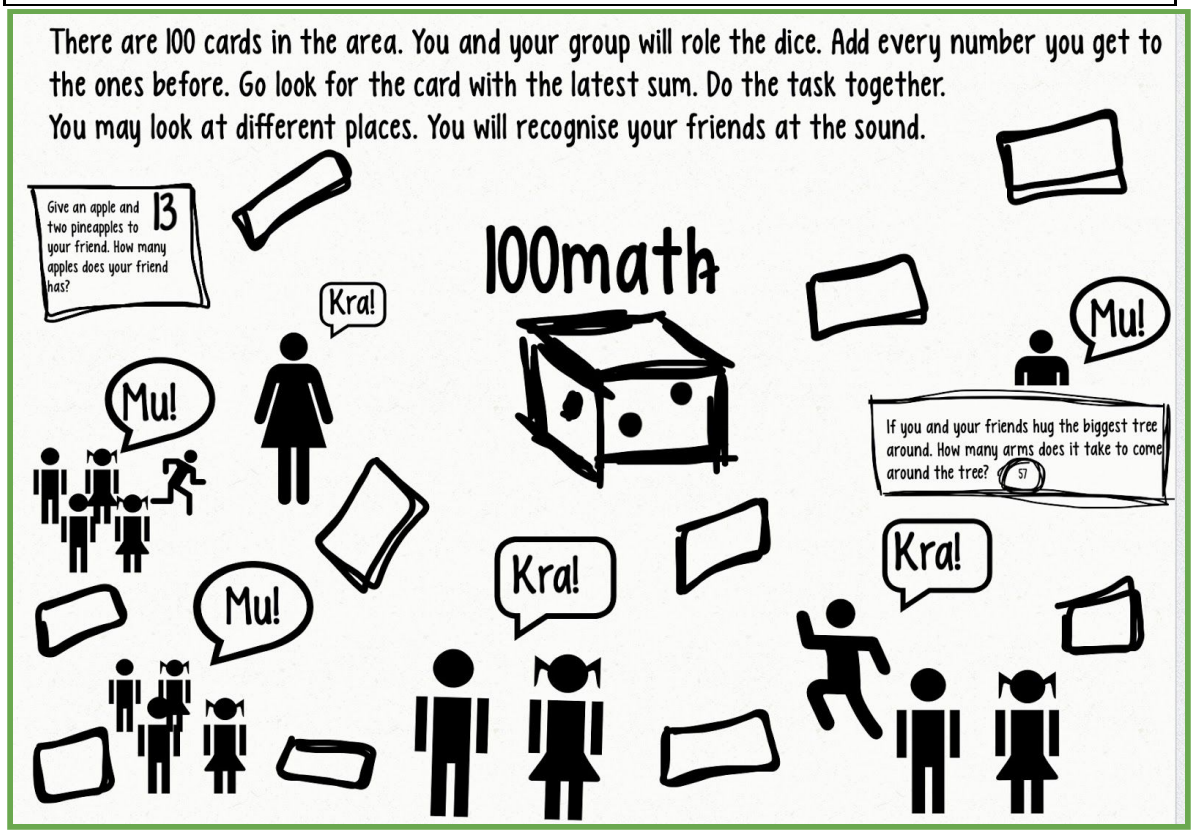
... Students can select and use essentially functioning mathematical methods with some adaptation to the context to make simple calculations with natural numbers and solve simple tasks with satisfying results. Students can use mental arithmetic to perform calculations using the four operations when the speeches and the answers are within integers 0-20, and for calculations of simple speech in a wider range of numbers ....

Knowledge requirements in the end of year 6:

Student can solve simple problems in student close situations in an ... effective way by selecting and using strategies and methods with ... adaptation to the nature of the problem ...

Student has ... knowledge of mathematical concepts and shows that by using them ... the

student can also describe different concepts using mathematical expressions in an ... effective way.
Experience: It's fun to work with mathematics in motion. Only mention the competition first to 100 if the group can handle it. For some students the calculator is necessary because they can not sort the various tasks without support. The teacher must be a support in the circle to ensure that all students succeed with the concepts.



12

Title:
English circle
Age and activities:
8-11, English Lesson
Material / Preparation:
The same number of cards that you have students x2. On the cards there should be a picture and text, such as "I have a red blouse, who has blue shoes?"
Season and Time:
All seasons, 25 minutes.
Environment:
The schoolyard
Subject / Theme:
English, clothing
Adjustment for students with special needs:
Less cards. Students who support students. Adult support. Prepare with picture schedule.
Description / design:

English circle. Students stand in a circle.

The teacher hands out one or two cards to each student.

The teacher begins by using his card and says, "I have a red blouse, who has blue shoes?"

Then the student who has the card with the blue shoes responds and so on, until all the cards are used.

Risk / remember:

Some students have difficulty remembering vocabulary.

LGR 11:

English

Purpose / ability:

Understand and interpret the content of spoken English ...

Central contents 4-6:

Speak … - production and interaction

Linguistic strategies to understand and make themselves understood in the language is not enough, such reformulations.

... and grammatical structures.

Knowledge requirements in the end of year 6:

Pupils show their understanding by ... acting on messages and instructions in the content.

Experience:

It's fun to work with English outside.

If the wind blows, it can be difficult to hear.

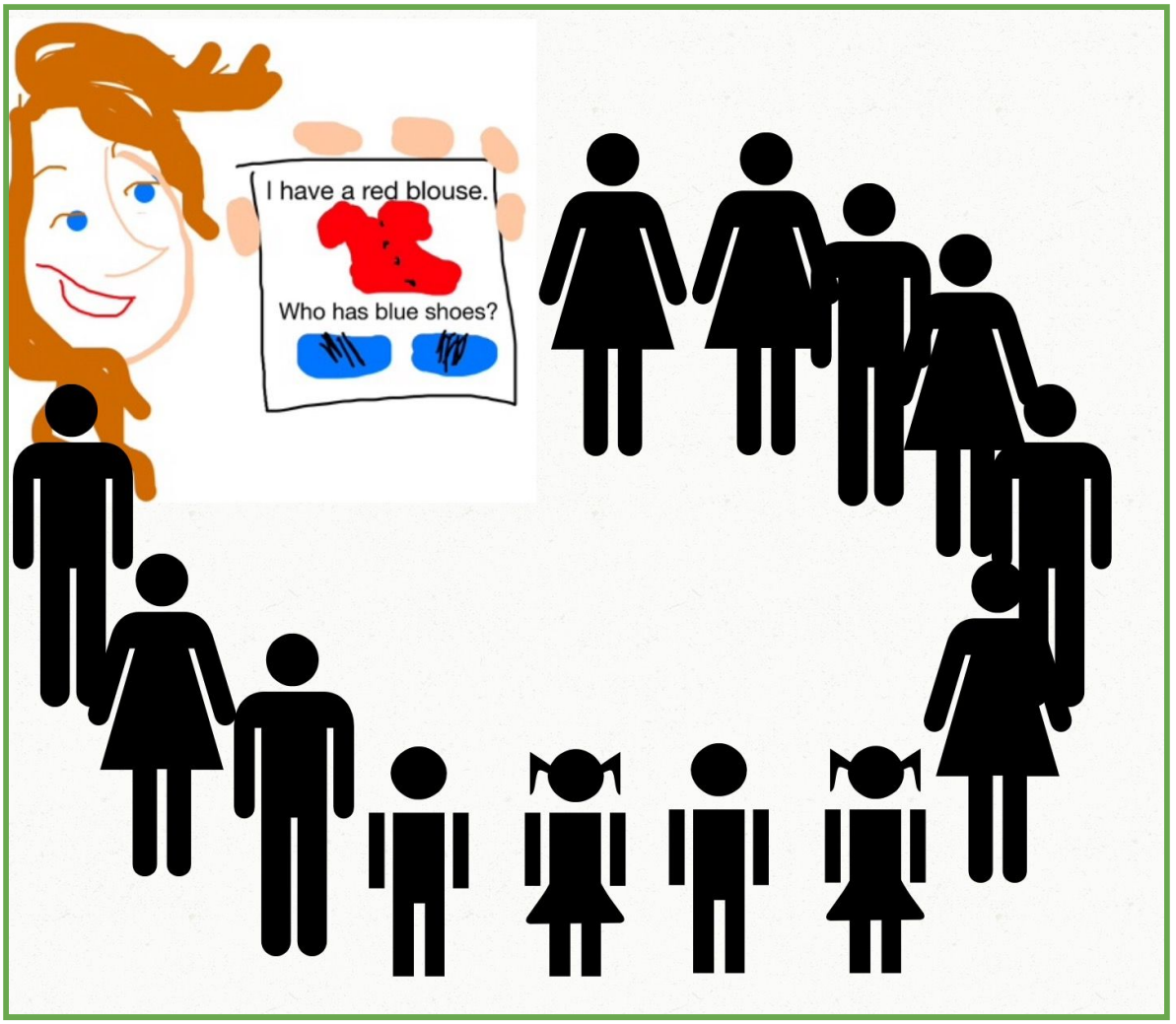
The circle can be made into a relay when students understand how the activity is done.

In this way it creates more movement which research recommends.

In this case, the cards may be needed in several sets.

For many students, it is easier to concentrate when they get the opportunity to move.

This activity can be done with cards connected to any chosen topic, for example food or verbs.


I have a red blouse.
Who has blue shoes?

13

Title:
Scavenger hunt / quiz
Age and activities:
All ages
Material / Preparation:
Ready-made pieces with questions (preferably laminated), a number of ready stations where the groups will perform various exercises to get a question. For example, put a certain number of basketballs in net per person, running a distance interlinked, hopscotch while counting in English, throw a ball and practice multiplication, balance linked and so on.
Season and Time:
Works in all seasons and takes one lesson.
Environment:
Outdoors on a fairly large area, there should be a possibility for different types of activities.
Subject / Theme:
Can be used in all subjects.
Adapting to students with special needs:
Adaptation of things to do. Obvious questions. A review of the various stations in advance with the image map.
Description / planning:

Select a subject for your trivia / quiz and create questions.

Divide the class into good-sized and equally strong teams.

Prepare all stations.

Go through all the stations with the groups before the start and then place the groups and start the activity.

Risk / remember:

Think carefully about group division.

Keep in mind that you should have at least one station more than there are groups, so that the groups always have a station to move to. Some are more time-consuming than others.

LGR 11:

Swedish

Purpose / capacity:

The teaching of the subject of Swedish students should collectively be given the opportunity to develop their ability to:

Express themselves and communicate in speech and writing.

Central content year 4-6:

Arguing in different call situations and decision-making.

Knowledge requirements in the end of year 6:

Pupils can talk about familiar topics, ask questions and express their own opinions in a way that partially maintains the call.

Mathematics

Objective:

Teaching, students are given opportunities to develop familiarity with the basic concepts and methods and their usability.

Central content year 4-6:

Strategies for mathematical problem solving in everyday situations.

Knowledge requirements in the end of year 6:

Student can solve simple problems in student close situations in an essentially practical

way by selecting and using strategies and methods with some adaptation to the nature of the problem.
Experience: It was great having a clear briefing indoors before so everyone knows what to do. It was a fun kind of scavenger hunt. Demanded effective cooperation, so it's important to be sensitive as a teacher. One got up the pulse much while you had to repeat the moment we have been working on for a while. More sets of questions may be needed as well as additional stations.

14

Title:
Mathematics - Concepts Relay
Age and activities:
3-5
Material / Preparation:
Copy and laminate a set of concepts / words per group. Divide the class into groups, maximum 4 / group is recommended. One ball / group Either street crayons or five hoops per team
Season and Time:
Works in all seasons and takes one lesson.
Environment:
Outdoors on a fairly large area, on a paved surface it works with street crayons otherwise it's fine to use hoops.
Subject / Theme:
Mathematics.
Adapting to students with special needs:
Reduce the number of concepts. A review of the exercise in advance with the image map. Large ball so that it becomes easier to catch.
Description / Planning:

Prepare material, overlap with the concept, crayons / rock circles and teams.
Select a highlighted area. Lay out all the teams. They'll draw four circles and write the mathematical operations in separate circle. This can be replaced by four hoops.
On the opposite side a short or long distance away, the teacher places an additional circle for each team and puts a pile of concepts / words in each circle.
Step 1: Throw the ball between all members of the group and repeat the multiplication tables up to 10. Take a table at a time, then a team member runs to pick a note with the concept that you place in the right circle. So: 1,2,3,4,5,6,7,8,9,10 and run and fetch.
Step 2: Repeat with the next table, thus: 2,4,6,8,10,12,14,16,18,20 and run and fetch a concept.
When you have gone through all the tables up to 10 and there are concepts remaining one starts on the Table 1.
The first team that has placed all its concepts / words sits down and shows thus that it is complete. Educator will come and correct.

Risk / remember:

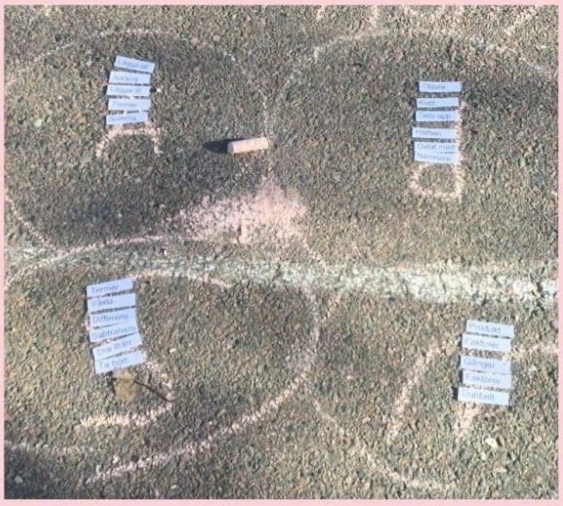
Think carefully about group division.
The number of concepts / words should increase with age. Thus, if the exercise is carried out in year 3, it has fewer concepts than if you carry out the exercise in year 5.

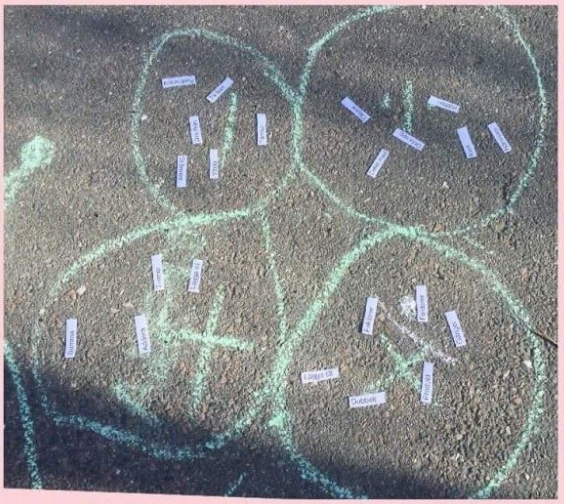
LGR 11:

Mathematics
Purpose / ability:
teaching, students are given opportunities to develop familiarity with the basic concepts and methods and their usability.
And use and analyze mathematical concepts and relationships between concepts.
Central content year 3:
The four elementary arithmetic operations properties and relationships and use in different situations.
Central content year 4-6:
Strategies for mathematical problem solving in everyday situations.

Knowledge requirements in the end of year 3: Student has a basic understanding of math concepts and shows it by using them in the common context of a predominantly functional way. The student describes concepts properties using symbols and concrete material or images. The student can also give examples of how some concepts relate to each other. Knowledge requirements in the end of year 6: Student can solve simple problems in student close situations in an essentially practical way by selecting and using strategies and methods with some adaptation to the nature of the problem.
Experience: It was great having a clear briefing indoors before so everyone knows what to do. It was a little difficult with certain concepts, a clear follow-up after the exercise can be good. The distance between a team's stay and the circle where they will get a concept can be extended, which increases heart rate further, which research shows is positive. Better with a larger ball so that it becomes easier to catch.

MATHEMATICS – CONCEPTS RELAY





ICT sources useful in outdoor education

- http://circletool.pariktigt.com

- QR Code (en. QR Code - Quick Response Code) - this is a bar code that allows you to store large amounts of data. The use of QR codes is limited only by our imagination. Due to the fact that every phone has the ability to install code reading applications, it is safe to say that the range of opportunities offered by the use of QR codes is enormous.Codes may contain any text or data.

  PL Generator: http://www.qr-online.pl/

  PL Scanner: http://www.qr-online.pl/programy.html

- Nature Soundmap, an enjoyable and interactive way of exploring the nature's most beautiful, interesting and inspiring sounds of our planet.
- Pixton - one of the most interesting programs for creating online comics. You create our picture stories, add balloons, clouds and then we can easily upload work on your blog or website.
- Voki - animated avatars that say any text and recorded lyrics. Application introducing the topic or summarizing activities in an unusual way, and also a great tool for speaking practice, especially among younger students.
- Quizlet - a tool for creating interactive fiches that work well for example when learning a foreign language. It is not only possible to check knowledge. We have the ability to use photos from the Flickr portal, built-in games, various tests and to print.
- Google Earth - You can zoom around the earth, select layers and submit eye-level photos served up.
- Google, INC*, Google maps. (2017)*
- Niklasson, M A, *Aves Vox, bird songs*. (2016) "Aves Vox means the sound of birds in Latin and it is exactly what this app is all about."
- Jordbruksverket, *LärKvitter*. (2014)"quiz-function where you can try your knowledge about birds"

- SMHI, *SMHI. (2016) "An app that contains reports of weather prognoses…"*
- Quidbit, *Runbit. (2016)* "...Pick stars… escape from monsters...catch animals…."
- Andrimon, *Turf. (2017)*..."in TURF there are thousands of ZONES spread out in cities and villages around the world. You compete for these zones against others in order to play the game."
- *Groundspeak Inc, Geocaching. (2017)* "Be a part of the world's largest treasure hunts community with the official geocaching app."...
- Sanville, E, *Stjärna 3D+*. (2016) "Explore the universe. Stjärna 3D+ is a portable atlas of stars to astronomes both as beginners and as experienced."...
- Adobe systems, Inc, *Spark Video.* (2017) "Spark video helps anyone create compelling animated videos in minutes."...
- Apple Distribution International, *Imovie. (2016)* "...tell your stories in a totally new way."...
- Cardinal Blue software, Inc, *Pic Collage. (2017)* "picCollage has everything you need to create an amazing photo collage…"
- Hansen, L, *Viltspår. (2017)* "Identify animals by their track."...
- Demichelli, Y, *Flaggor, huvudstäder…* (2016) "...learn the English name of the country… cities...population"...
- Galstyan, A, *Compass by iVogel. (2017)* "...shows device´s real-time orientation to magnetic fields."...
- Boren, D, *Knots 3D (Knopar). (2017)*
- ProtoGeo Oy, *Moves.* (2017) "*Automatic tracking: Registers walk, cycling and running every day."...*
- Solbu, T T, *eFlora. (2016) "... more than 500 species of nordic plants."...*

Appendixes

Appendix no 1

Polish curriculum of primary schools

Education in the 6-year primary school is divided into 2 stages.

- Stage I – grades 1 to 3, called integrated teaching (ages 6,7,8)
- Stage II – grades 4-6 (ages 9,10,11)

Stage I - grades 1,2,3

The teaching at Stage 1 is meant to provide a smooth transition from pre-primary to school education. Educational activities are conducted according to a flexible timetable prepared by the teacher, in which the duration of lessons and breaks is influenced by the pupils' activity.

Education in primary school is based on the core curriculum which defines the learning outcomes and some general requirements for the organization of teaching at this level of education. Core curricula have to be respected by each school, but school curricula are determined at the school level. Teachers are free to follow curricula chosen or developed by them independently and approved by the school head. The curriculum proposed by the teacher should be adjusted to the needs and abilities of the pupils concerned. Teachers may also use textbooks selected from the list approved by the Minister of National Education. The new core curriculum has been defined in terms of general and detailed learning outcomes regarding knowledge and skills to be acquired by each pupil by the end of a given educational stage. This way the core curriculum determines the scope of knowledge and skills tested by external examination bodies. Pupils at the end of grade 6 sit an external test during the last year of their primary school education.

STAGE I (GRADES 1 TO 3 – EARLY SCHOOL EDUCATION)

Education in grades 1–3 of primary school is implemented in a form of integrated teaching provided by a generalist teacher. Music education, Art education, Physical education,

Computer classes and modern foreign language classes can be taught by a specialist teacher with relevant qualifications. Early school education aims to support children in their intellectual, emotional, social, ethical, physical and aesthetic development. The new curriculum defines the scope of knowledge and skills to be acquired, separately for pupils completing education in grade 1 and for pupils completing education in grade 3. The scope of knowledge and skills for pupils completing education in grade 3 is defined in the form of requirements. A separate curriculum for grade 1 has been designed in order to underline the continuity of the education process which begins in the kindergarten and continues in the primary school. Early school education is a process spread over three years of school education. This means that the knowledge and skills acquired by the pupil in grade 1 will be repeated and developed in grades 2 and 3. The scope of knowledge and skills which pupils should have gained by the end of education in grades 1 and 3 is defined in such a way as to enable teachers to work with children of average-level abilities.

1 teaching hour equals 45 minutes

The most important skills acquired by a student in the course of general education at primary school include:

1) mathematical thinking - ability to use the basic tools of mathematics in everyday life (...)

2) scientific thinking - the ability to draw conclusions based on empirical observations of nature and society ...

An important task of the primary school is also health education, its aim is to develop students' habit of caring of their own and other people's health and the ability to create an healthy environment.

The purpose of early childhood education is to assist the child in developing intellectual, emotional, social, ethical, physical and aesthetic skills. It is also to prepare children to live in harmony with themselves, people and nature.

Polish language education:

A student:

1. Uses information:

a) carefully listens to speech and uses the information provided,

b) understands the meaning of encoding and decoding information; reads the simplified drawings, pictograms, signs, knows all the letters of the alphabet; reads and understands texts for children and draws conclusions from them

2) forms of expression:

a) oral and written: creates few sentences speech, a short story, a brief description, a personal letter, greetings, invitation,

b) chooses the appropriate forms of communication in different social situations.

3. speaks in small theatrical forms:

a) participates in the fun of theater, illustrates mime, gesture, movement behavior literary hero or imagined,

b) understands the props and knows how to use it in a cut scene played.

Foreign language education (English at our school):

A student:

1. reacts verbally and non-verbally to simple teacher's;

2. understands listened texts:

a. recognizes the every day phrases and is able to use them,

b. understands the general meaning of short stories also presented through images, gestures,

3. reads and understands words and simple sentences;

4. asks the questions and answers them in the context of learned phrases, recites poems, rhymes and sings songs, calls objects in the surrounding and describes them

5. cooperates with peers while learning.

Music Education

A student:

a) sings simple rhythms,

b) plays the simple percussion, copies the rhythms and rhythmic patterns,

c) carries out simple rhythms and rhythmic patterns using his gestures and movement; reacts using movement on the pulse of rhythmic its changes, changes tempo, meter and dynamics (marches, runs, jumps);

d) implement simple rhythmic patterns (the movement of the whole body)

e) expresses the mood and character of the music; knows basic dance steps and figures Krakowiak, polkas and other, simple folk dance.

Art education

A student:

in terms of the perception of art:

a) defines his cultural identity through contact with selected works of art, monuments and tradition in the family, school and local environments;

b) participates in the cultural life of the community, knows about the existence of cultural institutions,

in terms of the expression through art:

a) illustrates scenes and situations (real and fantastic) inspired by imagination, fairy tale, story, music;

b) takes creative activity, using such means of artistic expression as shape, color, texture composition on the plane and in space (using certain materials, tools and plastic techniques;

in terms of the reception of art:

a) distinguishes different fields of human creative activities as architecture, visual arts and other specific art disciplines (photography, film) and media reports (television, Internet), as well as arts and crafts and folk art

Social Education

A student:

a) distinguishes what is good and what is bad in dealing with peers and adults;

b) cooperates with others in plays, at school and in life situations; obeys the rules in the community of children and the adult world; He knows how to behave towards adults and peers (good manners); understands the need to maintain good relations with its neighbors;

is willing to help, respects others' the right of work and rest;

c) knows the local surrounding, its major buildings, traditions; is able to name the administrative status of their town (village, city); He knows in which region lives; participates in events organized by the local community;

d) knows where he can and can't organize safe fun and why;

e) knows how important is work in human life; He knows what profession have his relatives and friends; he knows what does, for example. pharmacist, police officer, veterinarian;

Environmental education

A student:

1. observes and leads a simple experiments connected to nature, analyzes them and knows cause and effect;

2. describes life in selected ecosystems: the forest, the garden, the park, a meadow and water tanks; knows what conditions are necessary for the development of plants and animals in the household, in schools crops and farms, etc .; he knows what are pets' profits for environment, and provides simple examples;

3. explains the relationship between natural phenomena and seasons of the year; knows how to behave appropriately for weather conditions;

4. takes ecological actions in his community; knows that we should recycle waste, understands the need of using ecological packaging; knows how to save water;

5. knows what destruction causes a man (burning of meadows, forests littering, excessive noise, poaching); protects wildlife: do not drop litter, respects plants, keeps silence, helps animals.

Recommended:

Scientific knowledge should be developed mainly by using activating teaching methods and different sources of information available and based on observation, researches and children's experiments.

Environmental education should be implemented mainly in the natural environment outside of school. (…) If the school has no conditions for growing plants and breeding animals, school need organize classes in the botanical garden, a farm...

Mathematical Education

A student:

1. counts (forward and backward) from a given number,
2. multiplies and divides the numbers (multiplication table),
3. does simple cash calculations (price, quantity, value) and copes in everyday situations that require such skills; recognizes the coins and banknotes;
4. measures and records the result of measuring the length, width and height of objects and distances; uses the units: millimeter, centimeter, meter; performs simple calculations of these measures (without binomial expressions and conversions of units in the calculations); uses the concept of kilometer in different situations, for example we traveled by bus 27 kilometers (without conversion to meters)
5. measures the fluids using different scoops; uses terms liter, half liter, half a pint;
6. reads the temperature (without the use of negative numbers, eg. 5 degrees below zero, 3 degrees below zero);
7. reads and writes numbers in the Roman system from I to XII,
8. knows the order of the days of the week and months;
9. recognizes and calls shapes, wheels, rectangles (including squares) and triangles (also located differently and where figures overlap); draws sections of a given length; calculates circuits triangles and rectangles (without conversion of units);
10. derives directions from yourself and others; specifies the location of objects in relation to the chosen object, uses the terms: up, down, forward, backward, right, left, and their combinations.

technical classes

1. recognizes the types of machines: transport (cars), manufacturing (tools, instruments), computer (laptop, mobile phone); knows different types of buildings (residential, office) and electrical equipment (flashlight, bicycle generator)
2. determines the value of technical equipment from the point of view of the functional characteristics (easy or difficult operation), economic (cheap or expensive to buy and use), aesthetic (eg. A nice or ugly)

3. knows how to move safely on the roads (including by bicycle) and use the means of communication; how you have to behave in case of an accident.

Physical and Health education

A student:

in terms of physical performance:

a) implement walk/run lasting at least 15 minutes,

b) is able to overcome natural obstacles,

in the field of health training:

a) adopts starting positions and settings to exercise and perform forward roll,

b) jumps a rope, pumps on one leg and on both feet over a low obstacle,

in the field of life sports and leisure:

a) uses a ball: throws, grabs, dribbles, reflects and leads it,

b) rides for example. rollerskates; obey the traffic rules on the road,

c) takes part in games, mini-games and field games,

safety and health education

a) can choose a safe place to play and games

Recommended

It is recommended to conduct classes for children on the pitch.

Ethic:

A student:

1. obeys the rules of ethics in children community and in the adult world (politely talks to others, gives a seat to older people, etc.).

2. knows that he is a part of nature, protects and respects it; does not destroy their environment.

Stage II – grades 4 to 6 (ages 9,10,11)

Stage II of the 6-year primary school covers grades 4, 5 and 6. Teaching at this stage is arranged by subjects. According to the new Core Curriculum of 2008 the following subjects are obligatory at the Stage II of primary education: Polish language, History and civics, Modern foreign language, Mathematics, Natural science, Music, Art, Technology, Computer classes, Physical education, Religion/Ethics is not compulsory.

Teachers have the right to choose forms and methods of teaching. Methods depend on the number of pupils per class and on school equipment (e.g. the number of computers, DVD players, etc.).

Polish language

Reading and listening

A student:

1. identifies the statement as informational text, literary, advertising;

2. recognizes the species forms (invitation, greetings and congratulations, notification and publication, user, including recipe

Linguistic awareness.

1. Recognizes in the statements the basic parts of speech (noun, verb, adjective, adverb, numeral, pronoun, preposition, conjunction)

2. Recognizes the importance of non-verbal means of communication (gesture, facial expression, facial expressions, body posture) by taking part in conversation, listening attentively speech of others, says about it;

Analysis and interpretation of cultural texts. A student knows the literary and other cultural texts indicated by the teacher.

1) names his reading reactions (eg. impressions, emotions);

2) confronts the situation of the heroes with his own experiences;

3) recognizes the literary text: a comparison, metaphor, epithet, onomatopoeic word and

explains their roles

III. Creating statement.

Speaking and writing. A student:

1) creates a coherent texts on topics discussed in class, connected with the surrounding reality and known texts of culture;

2) adjusts a way of expressing to the official and unofficial communication situations and for the intended purpose;

3) knowingly uses different forms of language and (in oral expression) facial expressions, gestures, posture;

4) makes written statements in the following genre forms: the story with the dialogue (creative and reconstructive), diary and journal (written from the perspective of literary hero or your own), official letter, simple report (eg. From trips, sport events), description of the character , subject, landscape, announcement, invitation, simple note;

5) draws up a plan of speech (frame and detailed)

Linguistic awareness.

1. The student operates vocabulary from certain themes (at this stage concentrates mainly around the themes: home, family, school and science, environment and society)

A modern foreign language - English

A student:

understands a very simple and short clearly spoken speech. Creates very short, simple and easy to understand speech. Participates in a simple conversation and in typical situations, reacts verbally and adequately to the situation way.

1) The student uses a very basic resource of language: vocabulary, grammar, spelling and phonetic in the following topics:

a) the person (personal data, physical appearance, feelings and emotions, interests);

b) home (place of living, a description of the house, rooms in the home and its equipment);

c) the school (the subjects, school things);

d) job (popular professions);

e) family and social life (family members, colleagues, friends, activities of daily living, ways of spending leisure time);

f) food (groceries, meals);

g) shopping and services (types of shops, goods, selling and buying);

h) travel and tourism (transport, directions of the world);

i) culture (festivals, rituals);

j) sports (popular sports, sports equipment);

k), health (wellness, everyday hygiene);

l) the natural world (weather, plants and animals, landscape)

A student understands heard speech:

a) reacts to commands;

b) understands the meaning of everyday phrases addressed to the student;

c) understands the general meaning of simple text;

d) looks for simple detailed information in the text;

e) understands the intentions of the speakers (eg. providing information, griving the request, joking)

f) recognizes types of communication situations (eg. a doctor, the store, at the station, at school).

A student understands short, simple written statements:

a) understands the general meaning of the text;

b) searches for simple detailed information in the text;

c) recognizes various types of texts (eg. private letter, e - mail, SMS, storytelling, invitation, postcard)

A student creates a few sentences in spoken formula:

a) describes people, objects, and space;

b) tells about the activities of daily living;

c) submits his own tastes and feelings.

A student creates a few sentences in written formula:

a) describes people, objects, and space;

b) describes the activities of daily living;

c) submits his own tastes and feelings.

A student responds verbally in simple everyday situations:

a) introduces himself and members of his family;

b) gives his age and place of living;

c) makes their own appreciations;

d) says what he has and what he can do;

e) asks for information;

f) expresses his emotions;

g) expresses requests and acknowledgments.

A student reacts in the written form in simple everyday situations:

a) provides basic information about themselves;

b) gives thanks.

A student processes the text:

a) understands information from the heard or read text.

Music

Creating music expression.

A student:

1) correctly sings the Polish national anthem and the anthem of the European Union;

2) repeats a pattern or repeats and performs from memory (...) with the accompaniment of the instrument) melodies from the repertoire of children's songs and selected popular, patriotic songs the canons;

3) takes care of the voice (uses breathing exercises, diction and emission);

4) dances the polonaise and Krakowiak folk dances;

5) creates simple rhythmic structures, beeps, free accompaniments, simple duet (burdon, onset), independently and under the guidance of a teacher;

6) creates movement improvisations to music;

7) according to established rules creates vocal and instrumental improvisations, recognizes the features and construction of a piece of music,

8) distinguishes basic human voices (soprano, alto, tenor, bass).

Art

A student:

1) undertake creative activities, using the basic means of artistic expression and other arts (photography, video) in the composition on the plane and in space (using certain materials, tools and techniques appropriate for the arts);

2) carries out art projects, promotes the culture in the school and local community,

History and social studies

A student:

1) obtains information from various sources and selects and arranges them; asks questions about the causes and consequences of analyzed historical and present events,

2) creates a short statement about the characters and historical events, using known terms and definitions; presents his/her opinion and tries to justify it, shows the town on the map, the seat of local authority and its tasks and methods of appointing authorities.

Nature Studies

Respect nature of nature.

1) The student behaves well in the nature and helps to protect natural environment and cultural heritage,

Observations, measurements and experience.

2) The student uses different sources of information (personal observation, research, experiences, (...), photographs, films), makes measurements and uses the instructions (verbal, textual and graphical); documents and presents the results of observations and experiments; uses ICT ,

Orientation in the field.

A student:

1) sets out the directions on the horizon using a compass, the gnomon;

2) observes the apparent journey of the sun during the day - a place of rising, transit or sunset, depending on the season, shows the relationship between the height and length of the shadow of the sun;

3) knows the plan, map in the field, uses the legend;

4) identifies the plan, and topographic map of the place of observation and objects in the environment, determines the relative position of objects in the foreground, a topographical map and in the field;

5) uses a linear scale to determine the distance, compares the distance on the map with the actual distance on the ground;

6) makes measurements, eg. tape measure, estimates distance and height on the ground;

7) distinguishes convex and concave forms on the ground and in the model form, indicates these forms on the map.

The observations, experience nature and modeling.

A student:

1.observes all phases of plant development, describes his/her observations;

2. calles atmospheric phenomena taking place in Poland;

3. observes and distinguishes states of matter of water, examines the experimental phenomena: evaporation, condensation, melting and freezing (freezing) of water

4. observes the weather, measures the air temperature and determines the direction and strength of the wind, rainfall and types of deposits, the degree of cloudiness, runs a calendar of weather;

5. describes and compares the characteristics of weather at different times of the year, sees a relationship between the amount of the Sun, the length of day and air temperature during the year.

The nearest surrounding.

A student:

1) recognizes the inanimate, animate and anthropogenic components of landscape and shows the relationships between them;

2) specifies and characterizes the determinants of life on land;

3) observes and calls typical organisms, forest, grassland, cropland;

4) describes the adaptation organisms to the external and vital terrestrial life, gives examples of observed organisms;

5) indicates autotrophic and heterotrophic organisms and some basic differences in the way their diet;

6) provides simple relationships between land organisms, using a model or scheme;

7) recognizes and calls layers of the forest, characterizes the prevailing abiotic conditions in them;

8) observes phenomena in the watercourse, determines the direction and estimated water flow, distinguishes between right and left bank;

9) distinguishes and describes the type of surface waters;

10) specifies and characterizes the determinants of life in the water;

11) observes and calls typical plants and animals that live in the lake or river, describes

their adaptation to the external and vital environment;

12) shows a simple nutrients relationships in water life, using a model or scheme;

13) recognizes and calls typical rocks typical in neighborhood and other places;

14) describes the soil, as a set of unanimated and animated components, explains the importance of soil organisms and humus in relation to soil fertility.

The man and the environment.

A student:

1) conducts observations and simple experiments showing the pollution of environment (air, water, soil).

Recommended:

The main areas of student activity within the subject should be:

1) observing and measuring;

2) experience;

3) conducting experiments;

4) documentation and presentation;

5) asking questions and seeking answers.

The school should provide conditions for the safe classes and the research, observation and experience field. Part of observations and experiences should be

continuous or periodic, connected to eg. change of seasons or weather conditions.

During classes, it is proposed to use everyday objects and products used in the household.

Maths

A student performs simple memory operation on natural, total numbers.

Operations on natural numbers.

A student:

- Adds and subtracts in the memory of two-digit positive integers.

--Digit number adds to any number of natural and subtracted natural number.

- Multiplies and divides a natural number by a natural number digit, double digits in the memory.

- Applies convenient ways to facilitate calculations.

- Compares differentially natural numbers.

- Estimates results of operations,

- Calculates squares, cubes of natural numbers

Integers.

A student:

- Provides practical examples of the use of negative numbers

- Performs simple mental arithmetic.

- Recognizes and names a square, rectangle, diamond, parallelogram, trapezium.

Practical calculations.

A student:

- Interprets 100% of the size as a whole, 50% - as half, to 25% - as one quarter, 10% - as one tenth and 1% - a hundredth part of the number.

- In a practical context calculates percent of the size of the difficulty of type 50%, 10%, 20%

- Reads the temperature (positive and negative).

- Turns and correctly applies the unit of length, meter, centimeter, decimeter, millimeter, kilometer.

- Counts in the practical situation: the road at a given speed and given time, the speed of a given road and the time period at a given way.

- Used speed units: km / h, m / s

- Makes simple calendar calculations for days, weeks, months, years.

Fractions.

Pupil:

- Describes a part of the whole by a fraction.

- Adds, subtracts, multiplies and divides fractions with denominators one or two-digit and mixed numbers.

- Calculates the fraction of a natural number,

Straight lines and segments.

A student

- Recognizes perpendicular and parallel straight lines and segments.

- Measures the length of the segment in increments of 1 millimeter.

- Knows that to find the distance from a point to a line, you must find the length of an appropriate section perpendicular.

Angles.

A student:

- Recognizes the right, acute and obtuse angle.

- Compares angles.

Polygons.

A student:

- Recognizes and names a square, rectangle, diamond, parallelogram, trapezium.

- Calculates the perimeter of a polygon with edge lengths of data.

- Calculates fields: square, rectangle, diamond, parallelogram, a triangle, a trapezoid shown in the drawing (including its own graphic,) and in practical situations,

- Counts the field: m2 cm2 km2 mm2 dm 2, ar hectare (without replacement units during calculations)

Lumps.

A student:

- Recognizes the simple prisms, pyramids, cylinders, cones and spheres in practical situations, and indicates the body among other solid models.

- Indicates the cubes and justifies the choice.

- Calculates the volume and the surface area of a parallelepiped with edge lengths of data.

- Uses the units from the volume and capacity liter, milliliter, dm3 m3 cm3 mm3.

Technique

Describing technique in the proximal and distal environment.

A student:

1. describes the technical equipment in their environment, distinguishes their functions;

2. gives the advantages and disadvantages of applied solutions in material and workmanship.

Development of concepts solutions to technical problems.

A student:

1.knows the construction materials: paper, wood, metal, plastic; examines and compares basic properties of hardness and strength; defines the possibility of using different materials in the art depending on the properties.

Efficient and safe use of technical equipment.

A student:

1. safely participates in traffic as a pedestrian, passenger and cyclist.

Physical Education

Diagnosis physical fitness and physical development.

A student:

1. does marching - Cooper test speed;

2. performs efficiency tests to assess aerobic endurance, strength and flexibility postural muscles of the lower spine and with the help of a teacher interprets the obtained results;

Health training.

A student:

1. Measures the pulse at rest and after exercise;

2. knows the methods of tempering the body;

3. performs the test consisting of run, jump and throw.

Sports whole life and leisure.

A student:

1. The student organizes among peers physical game, recreational play, following the rules in a simplified form;

Safe physical activity and personal hygiene.

A student:

1. describes how to behave in the emergency;

2. applies the rules of self security;

3. chooses clothes and sports shoes for exercise classes depending on the location and weather conditions.

Sport.

A student:

1. explains why you should follow the established rules during competitive sports;

Recommended:

particularly recommended physical activities outside of the school building, in the natural environment.

Appendix no 2

Swedish curriculum of primary schools

The Swedish national curriculum (Lgr11)

The title knowledge demand in Lgr 11 (the Swedish Compulsory school curriculum) related to subjects such as biology and physics, a link is identified to the local environment as a learning environment (ibid. P. 115, 132):

"The student can describe and give examples of simple connection of nature based experiences and exploration of the local environment".

In Lgr11 guidelines for teaching around a central topic content related to school subjects: English, physics, biology, chemistry, natural sciences and geography grade (1-3) and (4-6) also specifies the terms *immediate environment and field studies* (15 times) respectively (34 times): (ibid. s.31,52,112, 113, 115, 129, 132, 146). The concept of *outdoor* occurs here only in physical education under the core content for grade (1-3), (4-6) and (7-9). *Field studies and observations in the local environment* is fully illuminated by its absence in the guidelines on teaching content subtitle methods and procedures for grade (7-9) in comparison with the guidelines regarding grade (1-3) and grade (4-6).

The National Agency general guidelines with comments, Systematic quality work - the school system (2012) discussed whether learning environments and learning processes could affect the learning objectives. An increased focus on learning environments and teaching methods can be read here.

Headmaster's responsibilities and shortcomings in teachers' commitment to learning environments importance for increased effectiveness reported in the Schools Inspectorate audit reports (2010: 10, 2012: 1). There is thus a margin of interpretation in (Lgr 11) whether the learning objectives can be achieved in terms of teaching and learning with or without an educational session in the outdoor environment.

The Swedish national curriculum, and its interpretation from the Swedish teachers point of view based on Curriculum for the compulsory school system, the preschool class a recreation centre, Lgr11.

Goals, subject and guidelines in this presentation between year (1- 3) and (4-6) in the compulsory school.

When it comes to the overall goals and guidelines under norms and values there are texts *about studies in everyday life*, *knowledge for further studies, in societal and everyday life* (P.14). This means that other learning environments outside the classroom can be used. The responsibility includes the *social, cultural and physical school environments*, which also could be outside the classroom (P. 16). Different working methods and forms used by the teacher could also include *active learning* both indoors and in the out –of – doors (P. 16]. All who works in the school should: act to enrich the school as a learning environment and establishing contacts also with *activities outside* the school… (P. 17).

Then we have the connection to the Syllabus: When it comes to *Art* in years (1-3, 4-6). Through teaching, pupils should gain experience of … architecture and *various environments*. This is also a focus on possible learning environments to explore outside the classroom (P. 22).

The content of communication in *English* in year (1-3, 4-6) could be words and phrases in their local surroundings and daily situations (P. 32).

Physical education and health in years (1-3, 4-6) through teaching pupils will develop ability to spend time in *outdoor setting* different setting of the year and to different conditions and environments (P45).

In the area of *Outdoor life* and activities (year 4-6) it is promoted to using maps to orient oneself in the surrounding nature and *outdoor environment*. To have games and other physical activities in changing natural and *outdoor environments* during different seasons of the year. In this school subject outdoor education have a strong connection!

In *Mathematic* understanding numbers and their use in everyday situation and formulation of questions based on this situation (P 53). Here it is also possible to leave the classroom as the learning point.

Then we have the *Mother tongue* tuition in year (1-3, 4-6). The curriculum talks about culture and society – traditions and festivals which pupil meet in different contexts (P 65). This context could be *other learning environments outside the classroom*.

In *Biology* (P. 86-87) year (1-3, 4-6) the curriculum focuses on the seasons of the year in nature. Methods and way of working in form of *field studies in the local environment.* There is a clear connection to outdoor education.

When it comes to *Physics* (P. 109-110) year (1-3, 4-6) the curriculum tells about to know more about the surrounding world, seasonal changes *in nature* and how to recognize the seasons. When it comes to methods again simple field studies and observation in the local environment are the recommendation.

In *Chemistry* year (1-3, 4 - 6) there is also talk about us and the surrounding world (P. 124 -125). For grade (1-3) as a method the curriculum again talk about simple *field studies and observation in the local environment.*

Geography year (1-3, 4-6) talk about making geographical analyses of the surrounding world. The method and way of working could be *field studies* to examine the natural and cultural landscapes, such as how land is used in the local environment (P. 135 - 139). *History* (P. 154 – 155), year (1-3, 4-6), the *exploring reality could be the neighbouring area and routes to school*. This is also an outdoor perspective.

In *Religion* grade (1-3, 4-6) here is also *exploring reality could be the neighbouring area and routes to school one of the methods that the curriculum point out* (P. 168-169).

Civics (P. 180-181) year (1-3, 4-6) in exploring reality the *neighbouring area* and routs are important.

The *Craft* subject (P. 194-195) year (1-3, 4-6) have a weak connection to the out - of - doors, there is a point about *Craft in society* but nothing about the way of methods. *Swedish* as a language (P. 206) have no direct connection to learning and teaching outside the school.

Swedish as a second language year (1-3, 4-6) there is a talk about different contexts but

there is no explanation in what context and place (P 216-2017).

Technology (P.232 – 234) year (1-3, 4-6) talks about objects in the playground, common technical system at home and everyday life when it comes to be interaction between technologies, man, society and the environment. Here it is possible to find some connection to the extended classroom.

Appendix no 3

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Appendix no 4

Films
https://drive.google.com/file/d/0B7qJYqBF0vjrZWJncVRXSXotSFU/view

https://www.youtube.com/watch?v=habV1qWXgbw&feature=youtu.be

https://www.youtube.com/watch?v=kSGaxLDxhvM&feature=youtu.be