

VISUAL GUIDE OF NEW METHODOLOGIES

*A practical set of infographics for
teachers who want to join 21st
century education*





21st CENTURY EDUCATION AND SKILLS

The term "21st century" has become an integral part of educational thinking and planning for the future. Educators and administrators are actively searching for ways to prepare students for the future, and the educational system has been evolving faster than ever before.

EDUCATION

Education in the 21st century is most accurately represented as a journey - a journey of exploration! This journey is guided by compasses, rather than maps. We are driven by the belief that in order to prepare today's students for success in life, schools must become "21st century"



SCHOOLS

HOW ?

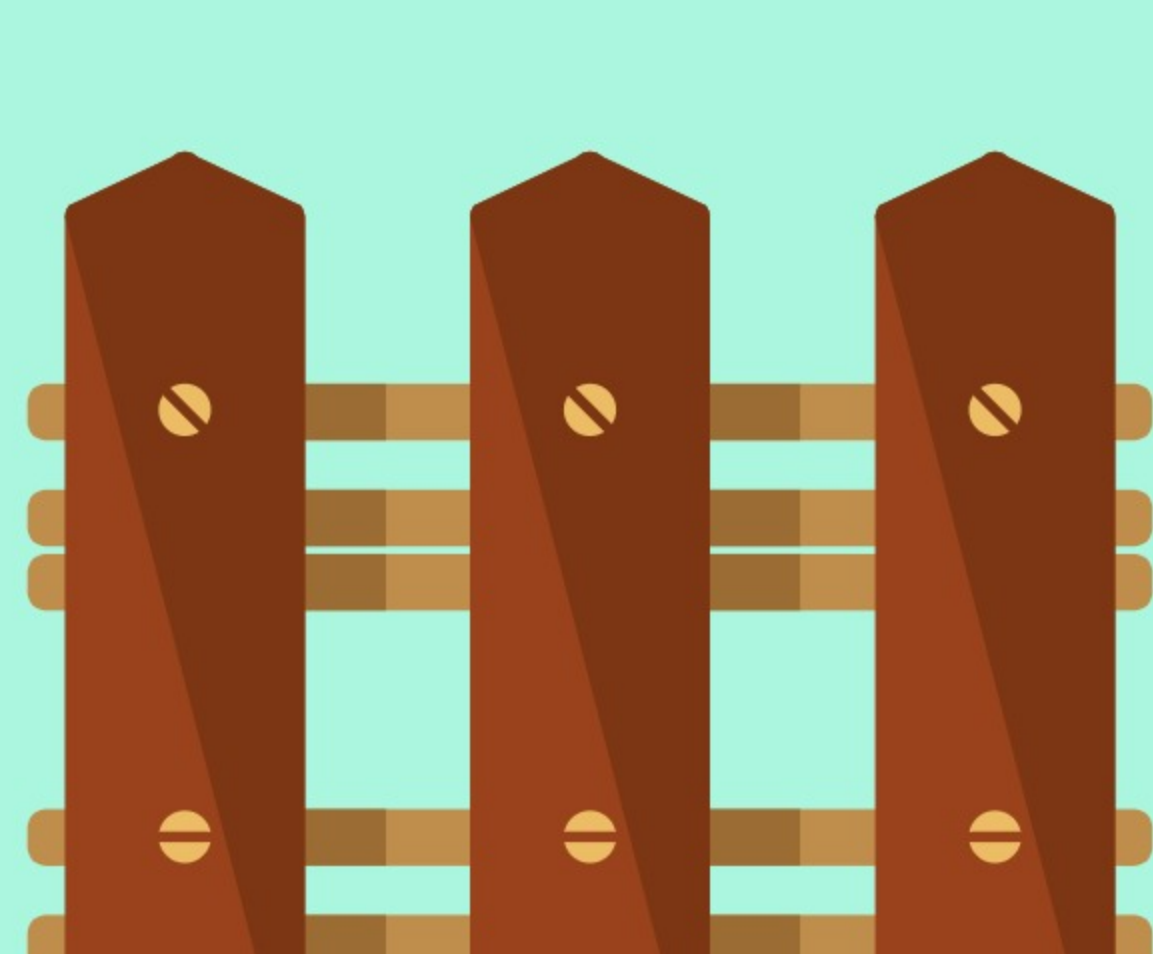


STUDENTS

WHAT ?

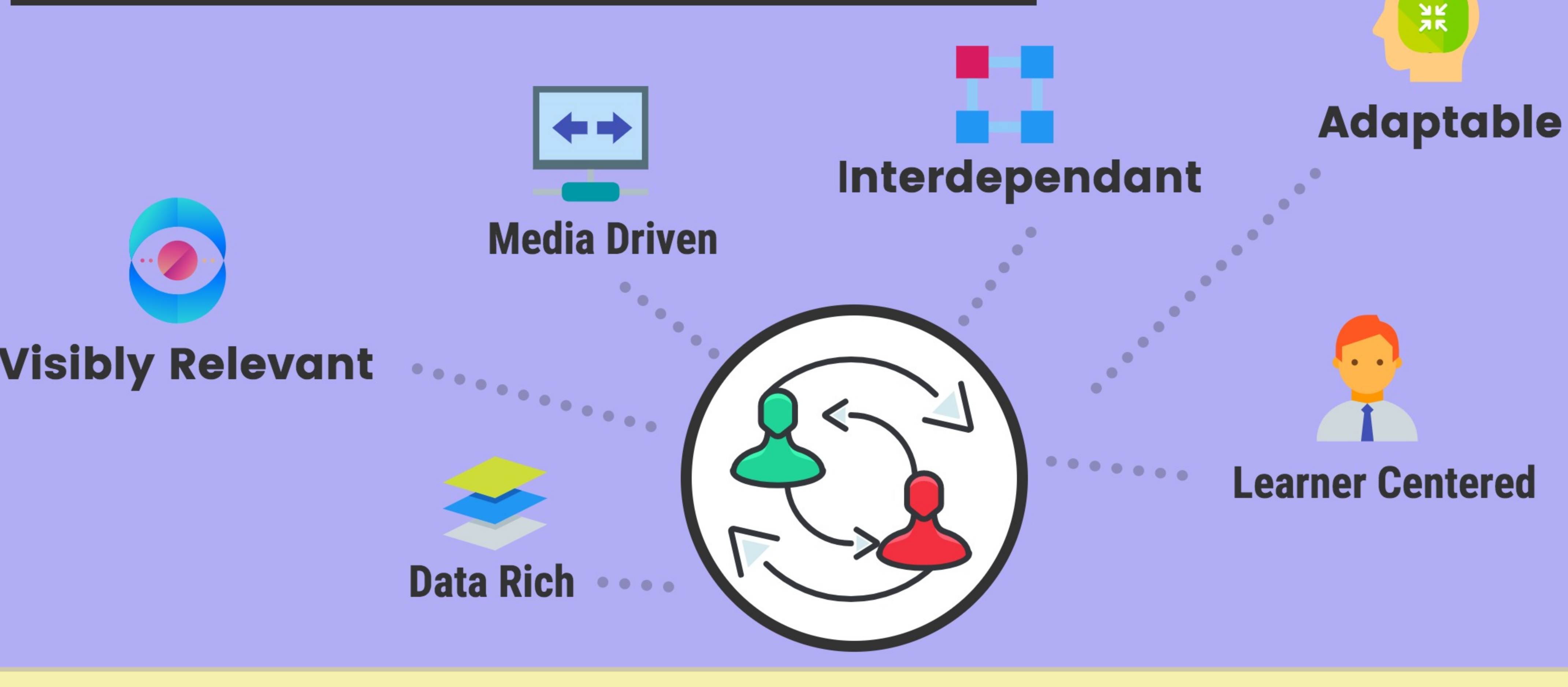
4 Pillars Of 21st Century Education

In order to prepare students to play their role in the 21st century society we are a part of, a few things need to be considered when deciding how education will look in our schools and classrooms.



- Instruction should be student-centered
- Education should be collaborative
- Learning should have context
- Schools should be integrated with society

21st Century Education



21st century Teachers



To be a 21st Century educator, teachers should be ...



21st Century Classrooms

- Learning is designed on the upper lever of Bloom's - Synthesis, analysis and evaluation

A Classroom at school,

- Students learn about rare plants using tecnology in teams
- Time and processed based
- Focus on what students know, can do, are like after all the details are forgotten
- High expectations
- Curriculum and instructions address student diversity

- Students work in collaboration in the classroom and with people all around the world

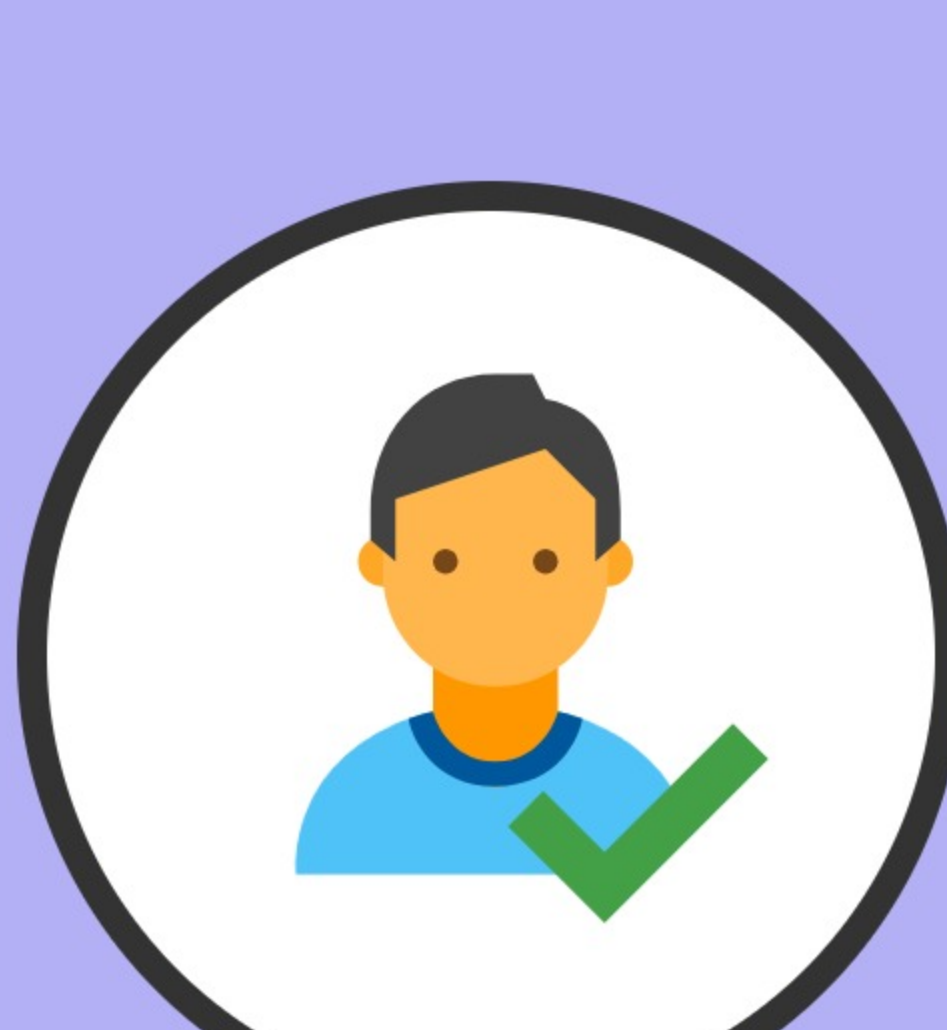
- Research driven
- Active Learning
- Students' Centered
- Great deal of student freedom
- Integrated, interdisciplinary Curriculum
- Authentic assessment
- Multiple literacies of 21st century



21st Century Learners

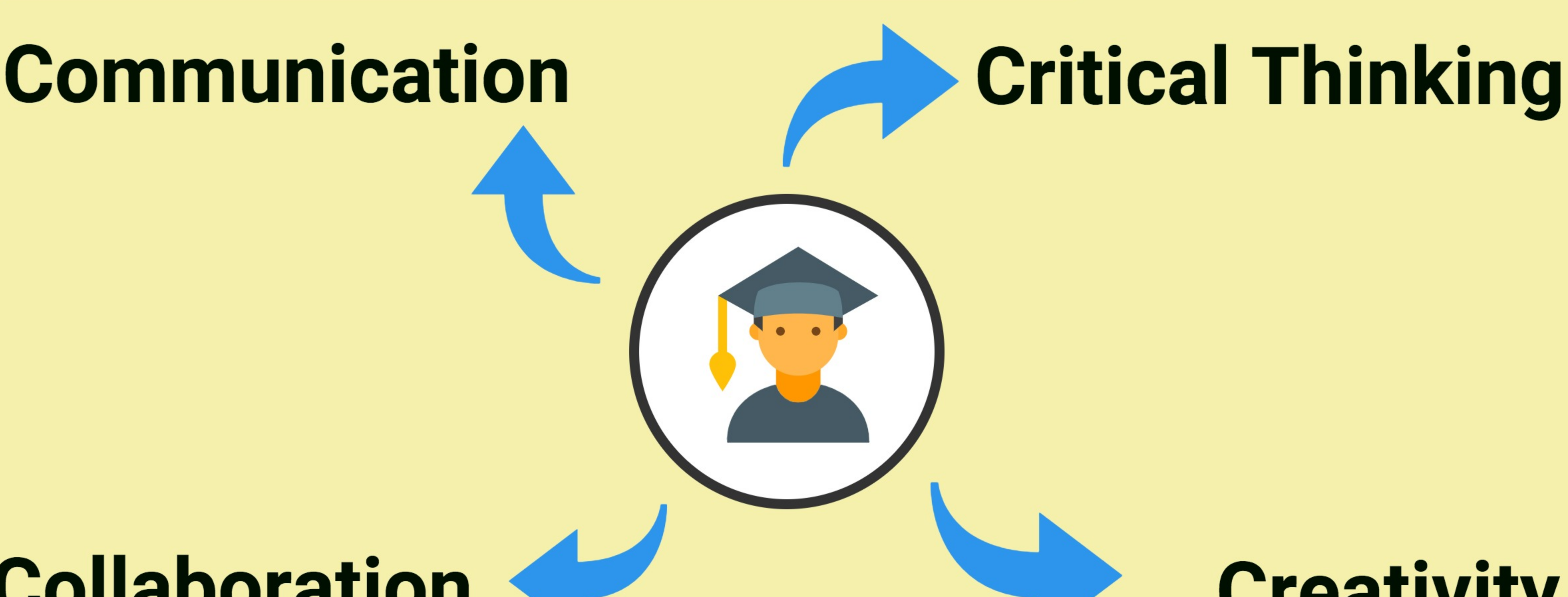
21st Century learner is,

- A self directed learner
- Globally aware
- A Communicator
- A problem solver
- A critical Thinker



- A Collaborator
- Civically engaged
- Information and media literate
- Financially and economically literate
- An innovator

21st Century Skills



21st Century Literacies

21st century literacy is about adapting learning to individual and social needs, with a focus on multi-literacies.

- Media Literacy
- Digital Literacy
- Tool Literacy
- Critical Literacy



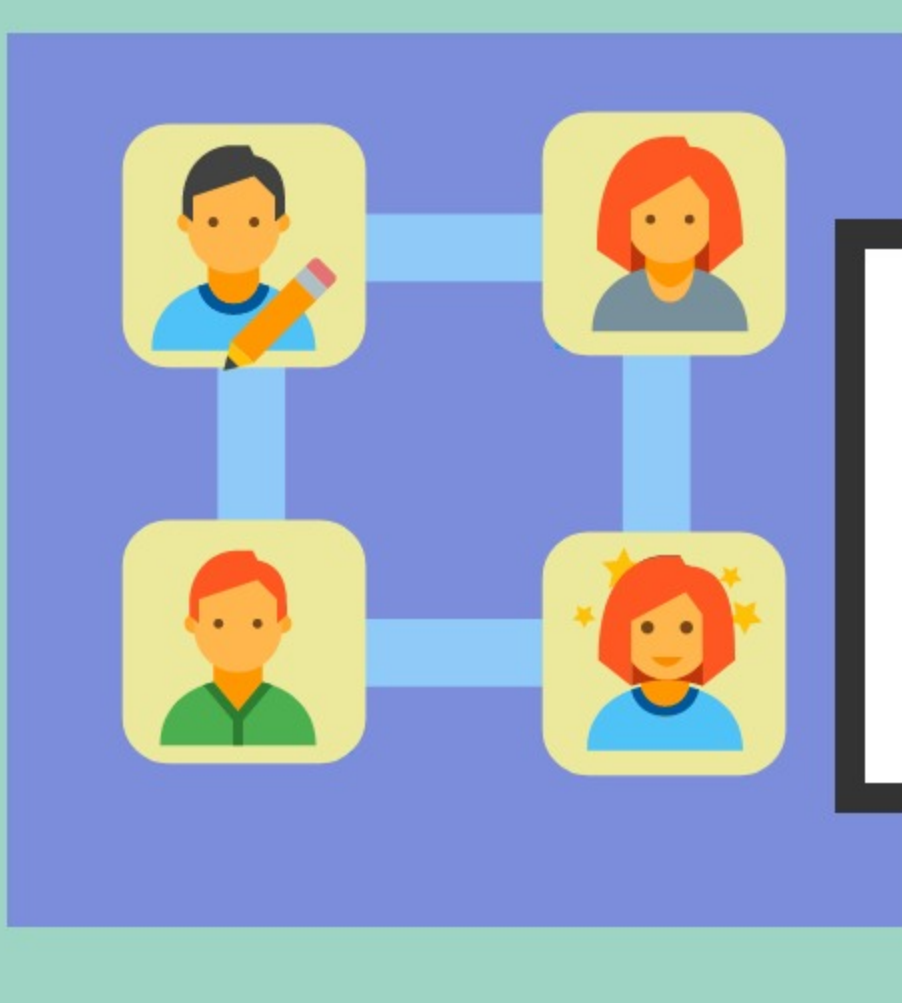
- Visual Literacy
- Information Literacy
- Traditional Literacy
- Cultural Literacy

Learn more about 21st Century Education at:

<https://twinspace.etwinning.net/7706/home>

<https://methodology21.wikispaces.com/>





COOPERATIVE LEARNING

Are you a considerate teacher to all of your students? Are you worried about their skills? Have you ever thought to teach in a different way? Cooperative Learning is what you are looking for. Here you have a guide so that you initiate Cooperative Learning in your class.

Today's Education needs.

Education has an important role in social skills acquisitions of students but curricular contents can't be put to one side.



a. Content Curricular Learning.



b. Develop Social Abilities.

1. How to do it.

Changes don't come alone.

This new methodology involves in some changes:

Changing the view, being open minded.



Changing the technical- pedagogical teaching and assessment.

Changing the classrooms structures and organizations.



Setting new rules.

2. How it works.

STUDENTS



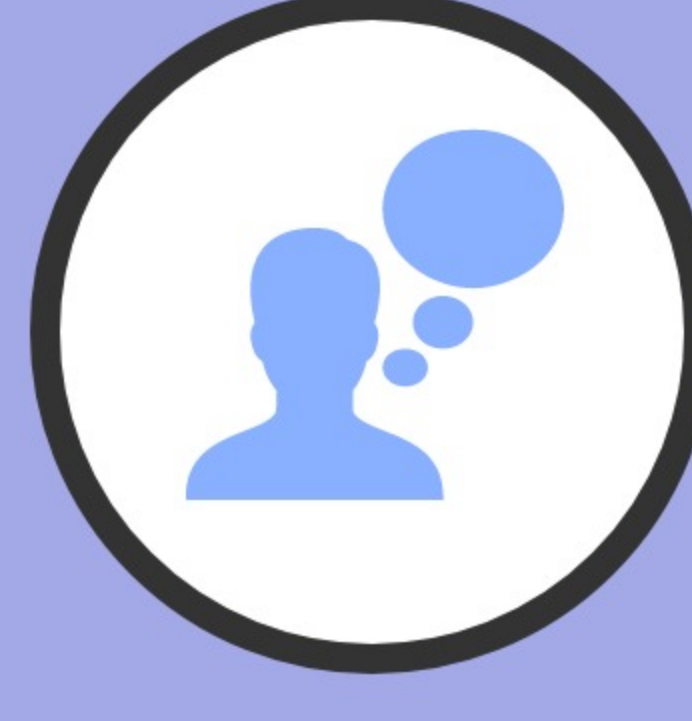
Have to work together



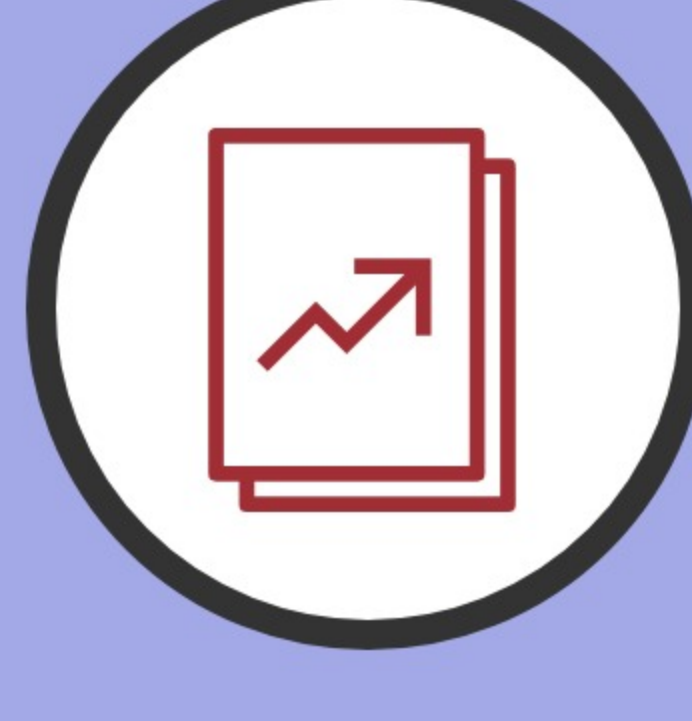
Share their goals



Success for everybody.



Active role



Self-assessment

3. Different structures.

The are three different ways to organize students:

Core group

Students belong to a group of reference in which they feel comfortable and have the feeling of being a part of it.



Formal group

Students work on a topic during a long time. For example being involved in a project during one unit.



Informal group

Students work in different groups. For example working together in one activity.



4. Advantages.

Thanks to Cooperative Learning:



Increasing of personal autonomy



Encourage critical thoughts



Develop interpersonal skills and some strategies to solve problems.



Teach values like generosity, solidarity and cooperation.



Promote collaborative attitudes

5. Disadvantages.



Students can be authoritarian.

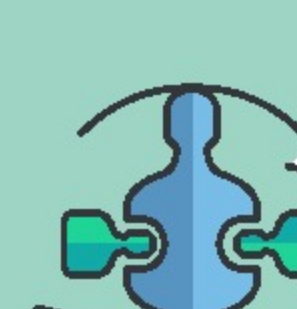


Stowaway effect.

Uninterested students take the advantage of the situation.



Increasing of the noise.



The organization of the classroom must change.



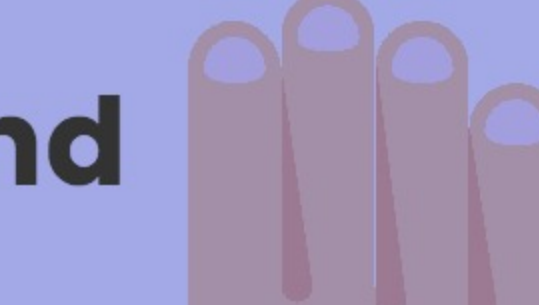
Students can be lost belonging to different groups in different subjects.

6. Some tips.



Control the time and make them aware of it.

Raise your hand in order to control the noise



Set roles to students (they may alternate.)



Rules have to be decided between students and teacher.



Teacher must have an active role.



7. Different Techniques.

Pencils to the centre

The word game

Revolving sheet

Chain of questions

Mind maps for bands

Bag of doubts



The substance

Shared reading

A three minute stop

Aronson's Puzzle

The four wises

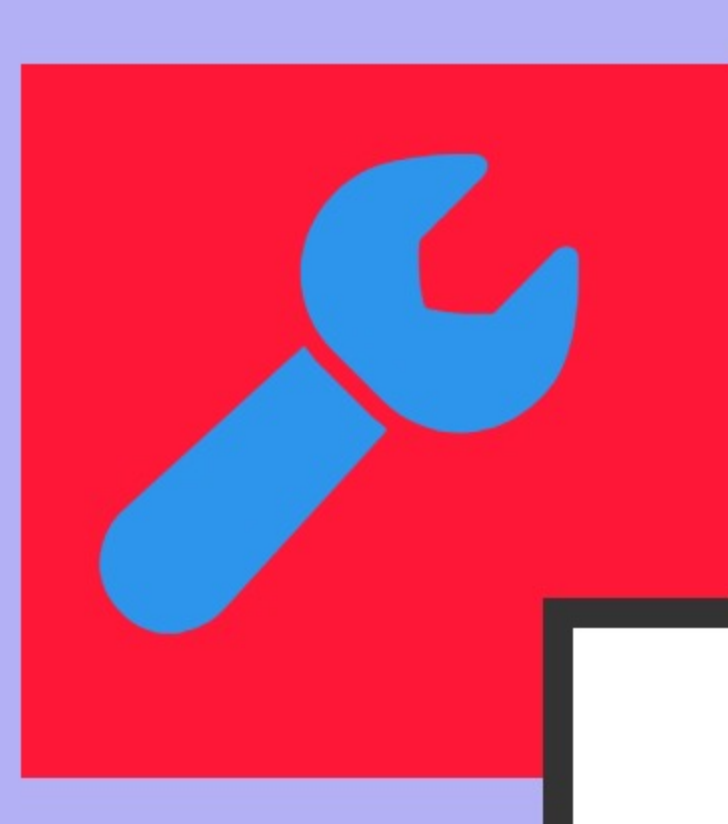
1-2-4

Learn more about Cooperative Learning at:

<https://twinspace.etwinning.net/7706/home>

<https://methodology21.wikispaces.com/>





Web 2.0 Tools in Education

Web 2.0 is about revolutionary new ways of creating, collaborating, editing and sharing user-generated content online. It's also about ease of use. There's no need to download, and teachers and students can master many of these tools in minutes. Technology has never been easier or more accessible to all.

What are Web 2.0 Tools ?

A collective term for certain applications of the Internet and the World Wide Web, including blogs, wikis, video sharing services, and social media websites such as Facebook and MySpace, which focus on interactive sharing and participatory collaboration rather than simple content delivery. The term "Web 2.0" was introduced by the O'Reilly Media Web 2.0 conference in 2004, which focused on social uses of the Web.



Web 2.0 is about



People - Digital Natives, Digital Immigrants



Process - Internet



Technology - Read and Write Web



What are they used for ?

Search For Information

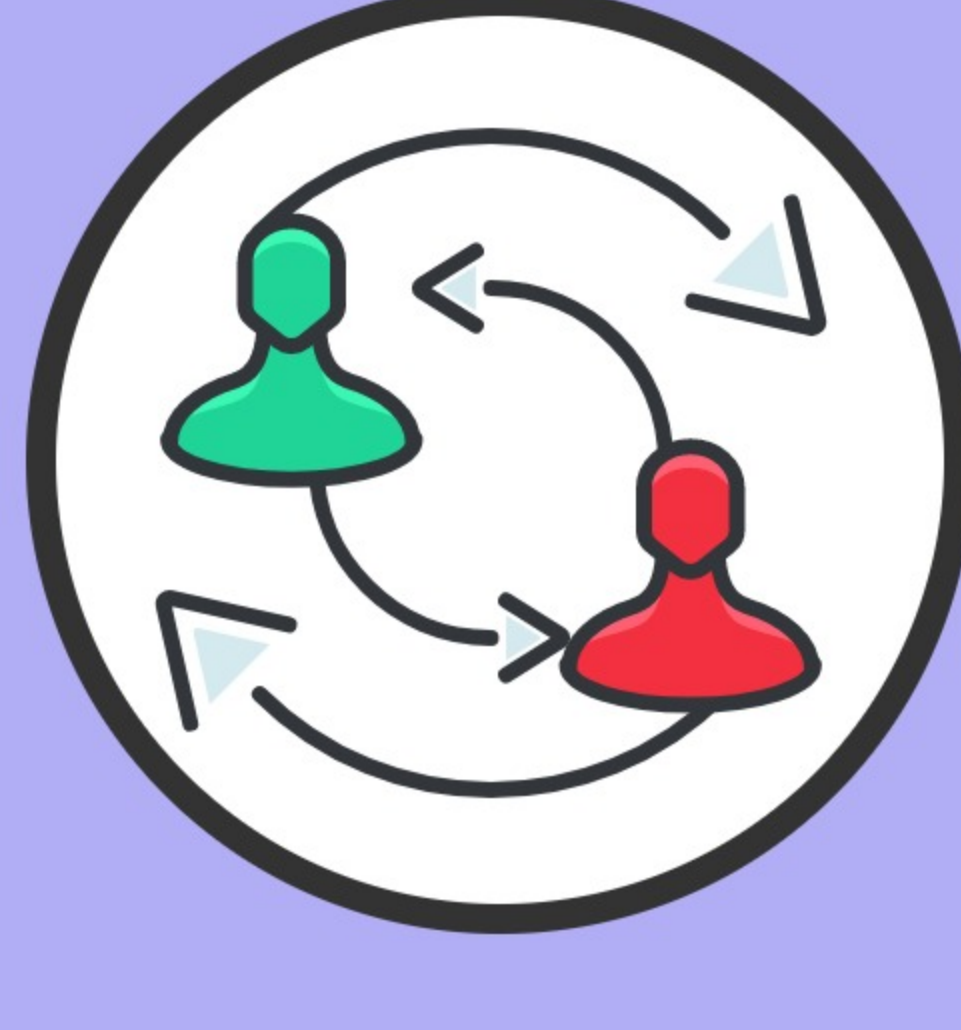
Create and Develop Content

Assess the work

Collaborate with other people

Communicate with other people

Creativity - Skill building



Web 2.0 - Search for Information

InstaGork - To search for photos videos articles

Wolfram Afa - A calculator and an Ancylopedia for STEM studies

MyMunka - A safe search engine for students

Google Knowledge Graf - Online lessons and class materials

Infotopia - Art, Social studies, Social issues, Social problems, History

KidRex - A save search emgine for kids



Create and Develop Content

Emaze - Create. share . Beautiful designed presentations, websites, blogs, ecards & photo albums

GoConqr - Create compelling learning resources with our free Mind Map, Flashcard, Note, Slide & Quiz Making Tools.

Tackk - Create, connect + chat with friends.

Tackk is a place to connect with friends, be creative and have fun conversation

Magisto - Make a Movie. Tell Your Story



Assessing the work

SurveyMonkey - Make Better Decisions with Survey Platform. Get answers to all your questions

Tricider- Collect ideas and vote

Mentimeter- Real-time voting to engage your audience

Kahoot - Kahoot! is a free game-based learning platform that makes it fun to learn.

StickyMoose - DecidingTogether What do you want to decide.

Padlet - A place where everyone can participate. An easy, intuitive workspace for making and sharing content.



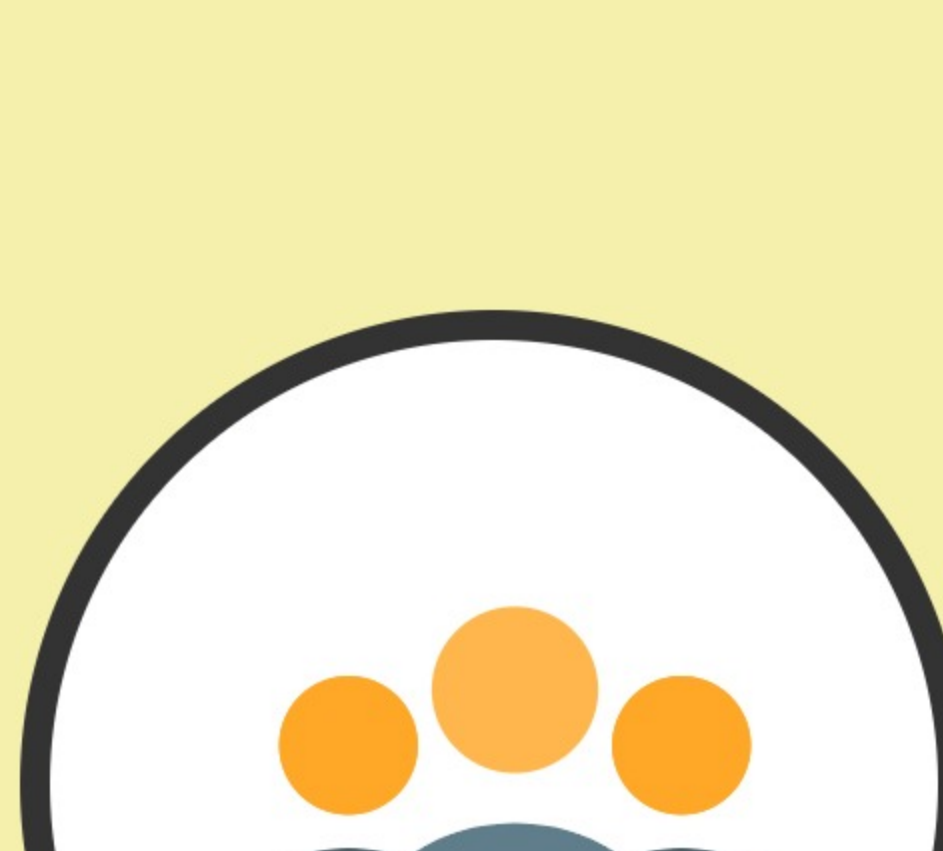
Collaborate With Other People

Box - Manage all your files, access them from anywhere, and share them with anyone securely towork in collaboration.

AnswerGarden - AnswerGardenis a new minimalistic feedback tool. Use it for real time audience participation, online brainstorming and classroom feedback.

TodayMeet - Enhance classrooms. Enable discussions. Empower students.TodayMeet gives everyone a voice

TitanPad - TitanPadlets people work on one document simultaneously



Communicate With Other People

Pen.io -- Very bare-bones, plain-and-simple site creation tool. Create a title, a password (no email), add text and images, embed videos.

Skype - web based telephony

MailDiary -- A very easy and simple blog platform--only requires email and a page name. Post directly via email.

Gmail - web based email application

Facebook - a cross-over social networking/communication tool

Linked In - a cross-over social networking/communication tool

Ning - a cross-over social networking/communication tool

TokBox - web-based video chat

Adobe Connect - web-based video, audio chat and presentation tool



Learn more about Web 2.0 Tools at:

<https://twinspace.etwinning.net/7706/home>

<https://methodology21.wikispaces.com/>

DIGITAL GAMES BASED LEARNING

Games have turned to be a great way to allow students to acquire 21st century skills and also subject contents.

Here we explain you how to use them and where you can find some ready to use digital games

1. TYPES OF GAME

There are different types of games that will allow you to get the contents to your students in different ways and with different goals. One of the most important games division is games and "serious games"



Games

You can develop skills such as alternative thinking, creativity, communication, cooperative work ...



Serious games

With serious games you can also deepen content and help students to learn significantly

2. DIGITAL GAME-BASED LEARNING

Digital game-based learning (DGBL) is an instructional method that incorporates educational content or learning principles into video games with the goal of engaging learners.



Applications of digital game-based learning draw upon the constructivist theory of education.



It provides learning opportunities that engage students in interactive instruction and helps prepare them to participate in the globalized, technological society of the 21st Century.

3. GAMIFICATION

Gamification is not the same as game-based learning. Gamification consists of taking to the classroom strategies and mechanics of the game to motivate and make learning more dynamic and participatory.

Introducing teams, points, awards, badges, characters and skills ... are some of the strategies that allow us to gamify the classroom.

The main result of this gamification is to increase the motivation of the students and with it, they improve their academic results and the significance of what has been learned.



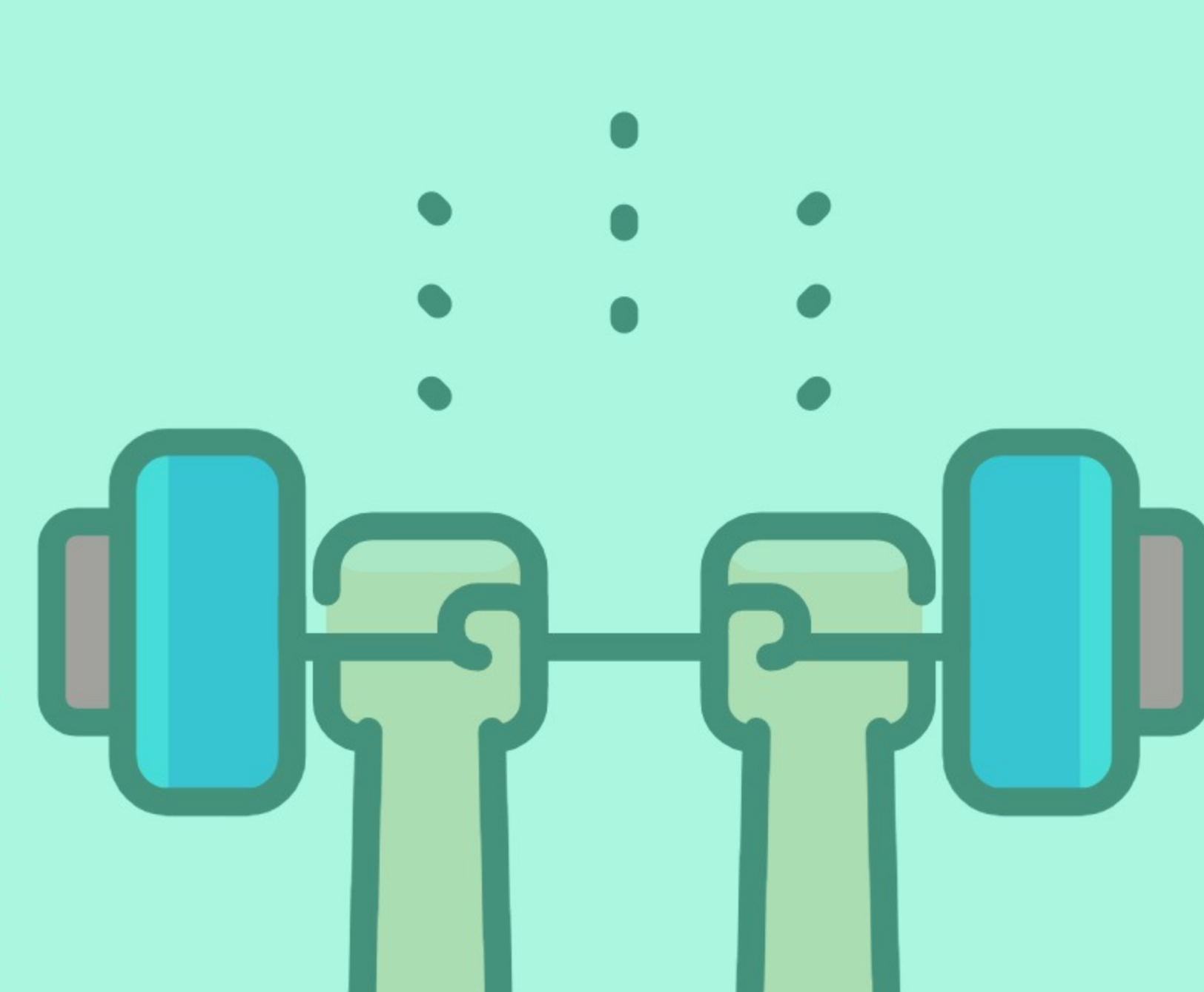
4. GAME BASED LEARNING RESULTS

Games help children think strategically, solve problems creatively and develop social skills, such as following rules, playing with others and taking turns.

- Students develop abstract imaginative thinking and skills
- Improve their critical thinking
- Gain self confidence
- Work in teams,
- Practice School Subjects
- Acquire computer skills
- Develop creativity, alternative thinking and imagination
- Depict real life situations

5. DGBL ADVANTAGES

- Potential to engage and motivate students
- Promote long-term memory
- Provide practical experience
- Facilitate planning and problem-solving
- Enhancement of mental quickness
- Help students set and work towards achievement of goals,
- Develop technologically



6. DISADVANTAGES

- Not all games are effective nor educational.
- Assess a game and evaluate students improvement and work is difficult and no rubrics are ready for it.
- Finding Suitable games for specific contents is not easy.
- Children need to feed bak and think about what they are learning in order to not to believe that what we are doing is a lost of time.

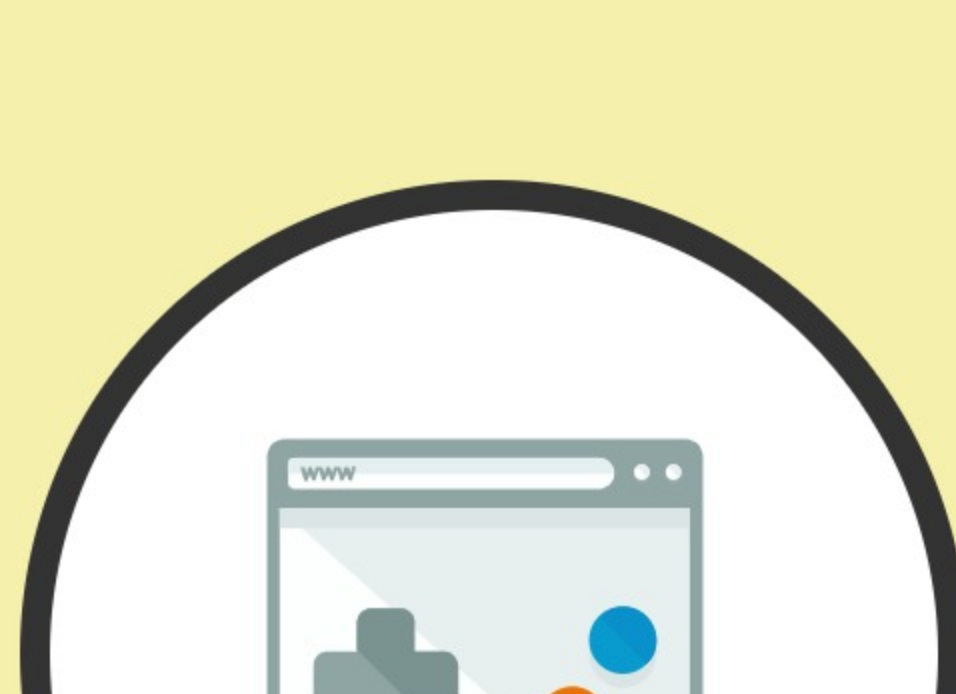
7. DGBL RESOURCES

Ready to play games:

- Pbs Kids
- Fun brain
- ABCYa.com
- Arcademic Skill Builders

To create your games:

- Kahoot
- Cerebriti
- Quizizz
- Gamemakery.com



8. RESOURCES TO GAMIFICATE

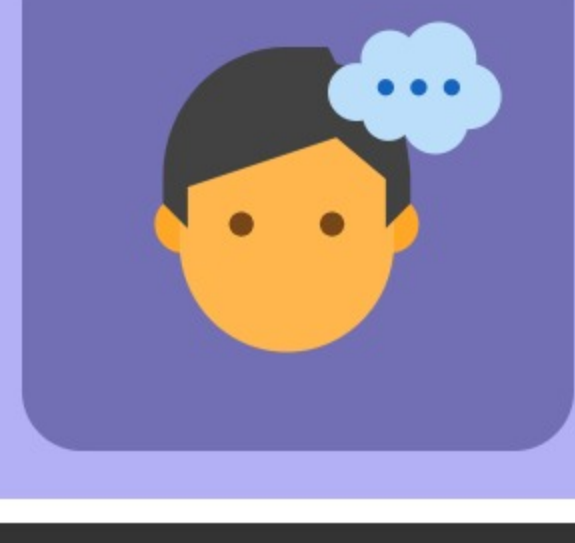
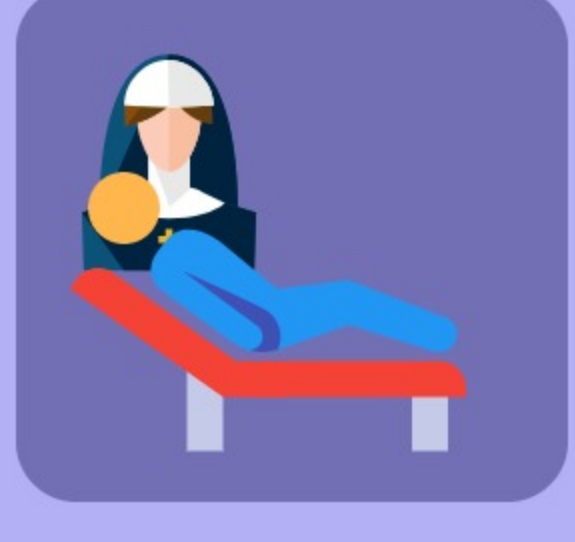
- Makebadges.com
- Class Craft
- ClassDojo
- Chore wars
- Fluky



Learn more about DGBL and Gamification at:

<https://twinspace.etwinning.net/7706/home>

<https://methodology21.wikispaces.com/>



MULTIPLE INTELLIGENCES

Multiple intelligences have proven to be a truly valuable methodology to help students acquire significantly both competencies and content. Do you want to know more? Keep reading and transform your classroom.

1. INTELLIGENCES

In the 80s Howard Gardner reformulated what we understand as intelligence. In 21st century education it is not understood anymore as a talent (something innate) but as a "CAPACITY for SOLVING problems or for CREATING products which are VALUABLE in some cultures". For this last paradigm intelligence is something we can develop.



TALENT



INTELLIGENCE

2. SPATIAL AND MUSICAL.



SPATIAL INTELLIGENCE

The ability to produce and to process information in 3 dimensions to obtain a mental model of the world, to perceive and to create relations among colours, images, spaces, figures... and to visualize and interpret graphic representations or to visually organize.

MUSICAL INTELLIGENCE

The ability to express music and to perceive musical forms, to play a musical instrument, to compose melodies, to distinguish among different pitches, timbres and rhythms and to communicate emotions through musical language.

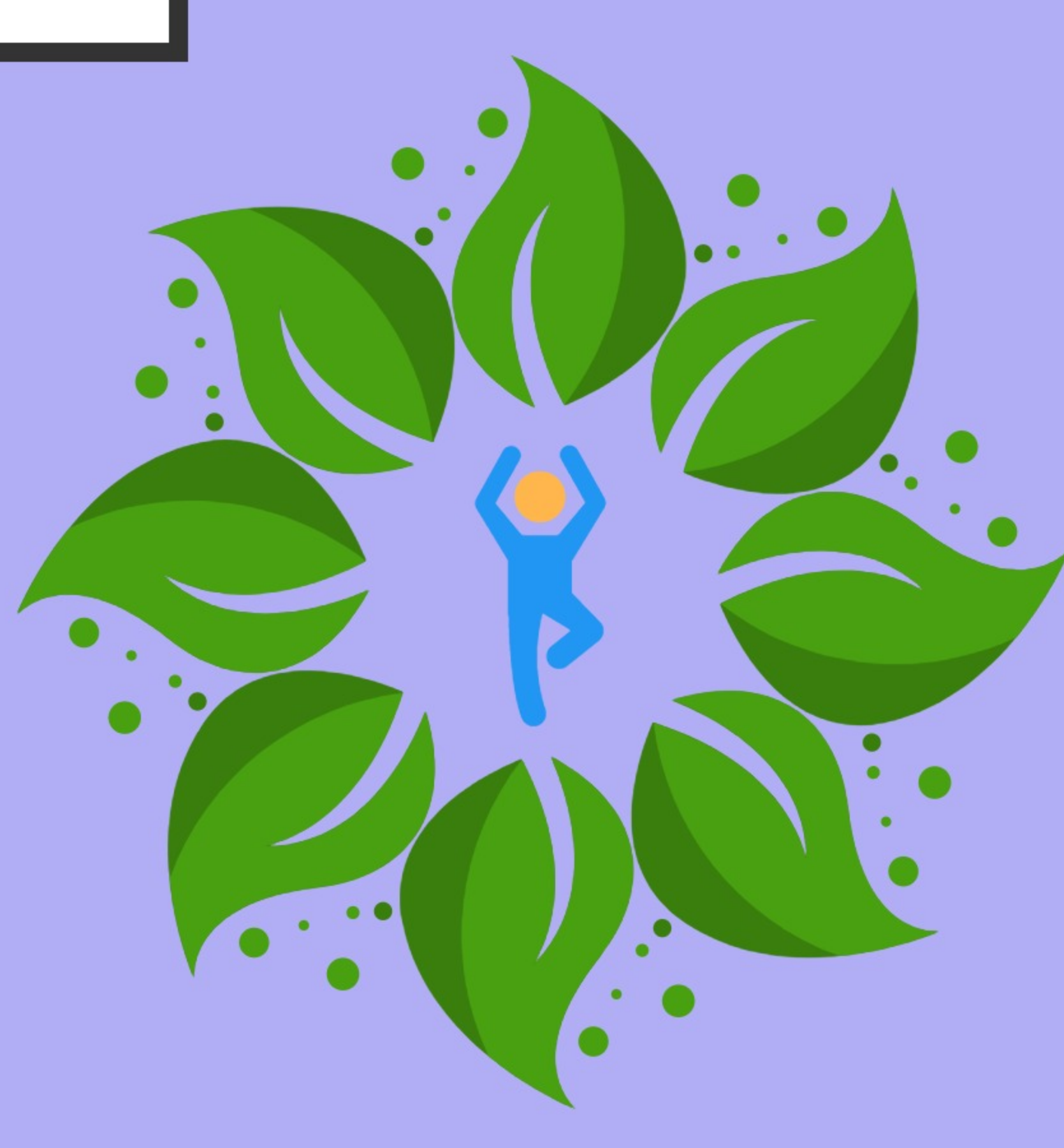
3. NATURALISTIC AND Y KINESTHETIC

NATURALISTIC INTELLIGENCE

The ability to understand the relationships among animals, plants, the environment and the people. It implies a scientific process in order to understand the natural world. In brief, it is the ability to identify, analyze and classify species and elements in the nature.

BODILY-KINESTHETIC INTELLIGENCE

The ability to make your mind and body work together, to express feelings, ideas and thoughts. It allows people to develop the control of their posture to a high level of physical specialization.



4. LOGICAL-MATHEMATICAL AND LINGUISTIC.



LOGICAL-MATHEMATICAL INTELLIGENCE

The ability to use proper logical reasoning, numbers correctly, as well as mathematical and arithmetical strategies and theories. It represents the aptitude for inductive and deductive reasoning, for solving problems and managing scientific processes

LINGUISTIC INTELLIGENCE

The ability to think in words, to use language to express and appreciate complex meanings and to create an efficient communication when speaking and when writing



5. INTERPERSONAL, INTRAPERSONAL AND SPIRITUAL.

INTERPERSONAL INTELLIGENCE

The ability to establish proper relationships with others, to understand others opinions, moods, and to keep relationships long term. Social skills like empathy, good negotiator and good listener.



INTRAPERSONAL INTELLIGENCE

The ability to know your own, to identify and to express emotions and feelings and to apply these emotions to their behaviour. The ability to define their own goals, beliefs and thoughts.



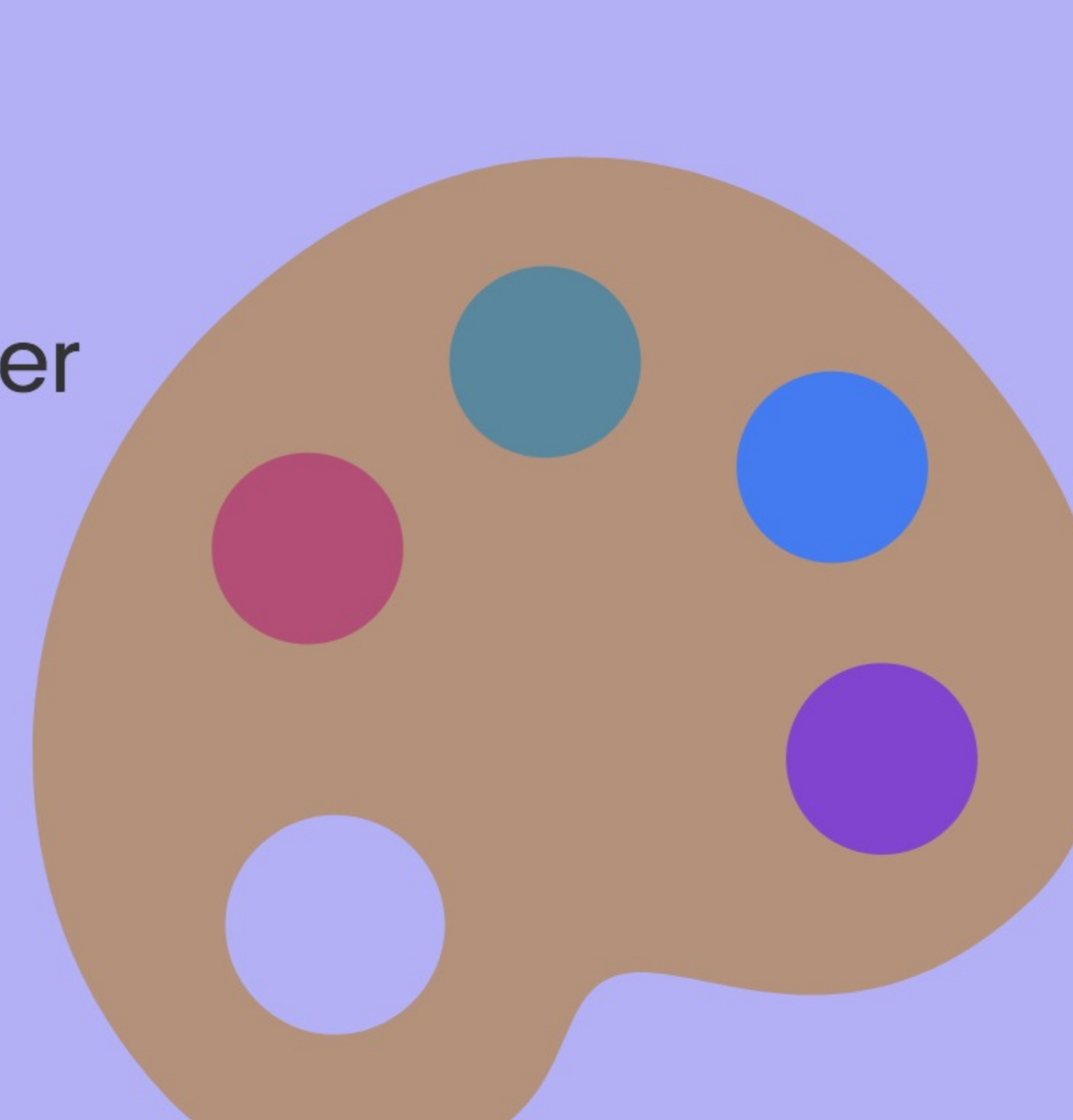
SPIRITUAL INTELLIGENCE

The ability to transcend, to find the sacred sense in daily activities, to compromise their lives living according to the values of pardon, gratitude, humility, compassion and wisdom.



6. PALETTES.

Palettes are a set of activities that try to approach a certain content through the different intelligences in which our students can destabilize. In addition to facilitating learning through the use of intelligence predominant in the student, allow to improve the other intelligences.



7. ADVICES FOR SETTING UP YOUR PALETTE.

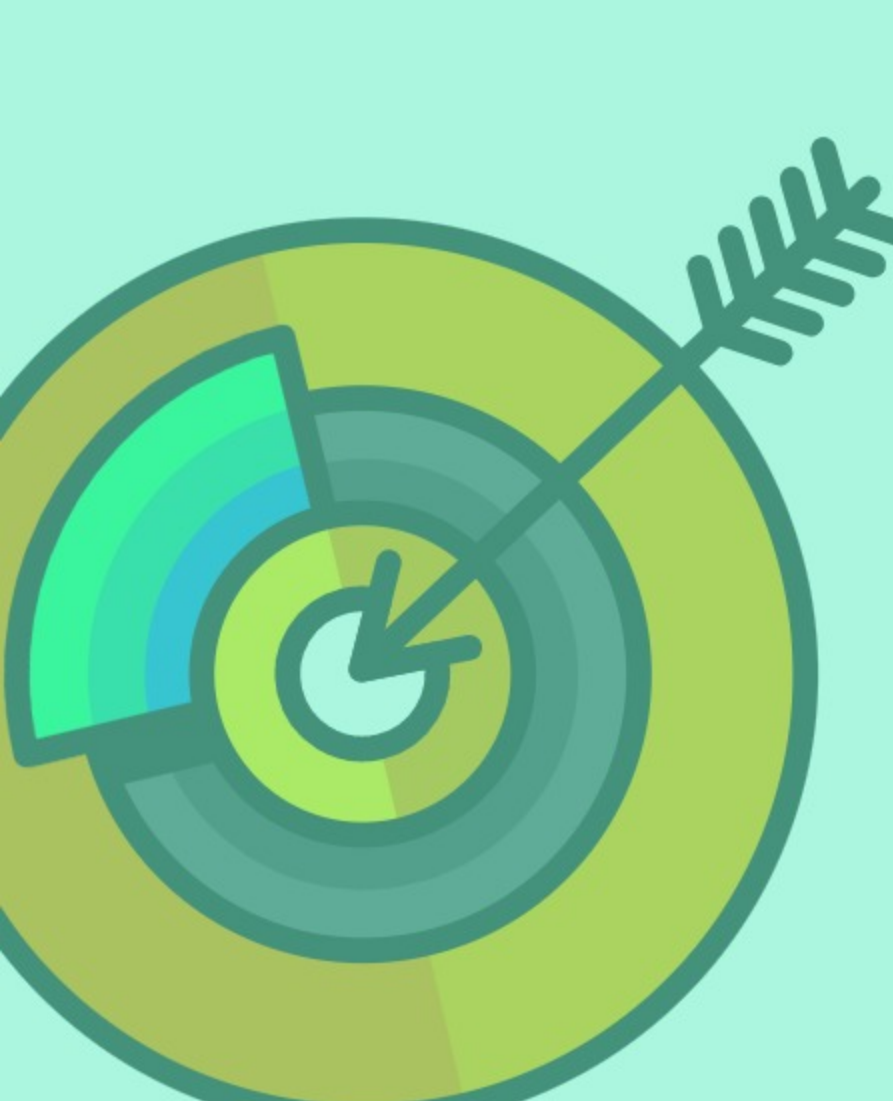
You can follow these steps to create your wonderful palette:

1. Think which are the contents you want to work out.
2. Go on with the objectives and evaluation criteria for those contents.
3. Continue with the achievement of each competence.
4. Take timing into account.
5. Prepare your evaluation (rubric, portfolio and diana).
6. It is time to introduce it to the students.
7. Do not forget to evaluate from the beginning.



8. Self-evaluation target.

Although there are different ways to evaluate students' work through multiple intelligences (especially rubrics and portfolios), we would like to highlight this tool because of its ability to allow students to become aware of their own learning and how to focus on their studies. Through an evaluation target, the student reflects on the accomplished activities, so that they obtain a visual result of which is their predominant intelligence.



Learn more about Multiple Intelligences at:

- <https://twinspace.etwinning.net/7706/home>
- <https://methodology21.wikispaces.com/>