

UFFICIO SCOLASTICO REGIONALE EMILIA ROMAGNA  
SCHULAMT PINNEBERG

# Go Far

Comenius Regio Project for the implementation  
of the European Dimension in Education





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Education and Culture DG

## Lifelong Learning Programme



*Ministero dell'Istruzione,  
dell'Università e della Ricerca  
Ufficio Scolastico Regionale per l'Emilia-Romagna  
- Direzione Generale -*



Schulamt  
des Kreises Pinneberg



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# What it's all about

- *On our way to an inclusive school*
- *To welcome children with an immigration background*
- *To include children with special needs in our schools' communities and find ways of individualized help and support*
- *Promoting mathematical and science – orientated instruction*
- *To know more about school concepts in our partner regions*



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# Working in a mutual European context

With a new crew in the Kreis Pinneberg regional school administration we started the project in August 2010.

USR-ER has already been involved in European projects before, but the regional school administration of Kreis Pinneberg hasn't.

Schools felt short of human resources.

A lack of progress after the so-called PISA-shock.

Results of large scale assessments and nation-wide school tests were not satisfying.

The process of integration within society is requiring more and more awareness about inclusion. The school systems are facing this challenge in different ways

Working together in a European context offers the participants the opportunity to learn and implement good mutual practices.



# The history of the project

Initialized through the Ufficio Scolastico dell'Emilia Romagna and one of the three officials in the regional school administration after a contact seminar.

In 2009 a preparation meeting was organized in Parma which was followed by the writing of a common application for a Regio project.

Different conditions of the two partners:

- In Italy many were the interested partner organisations while in Germany just the school administration, the social care and youth office and one school were ready to undersign the contract
- The official Mr.Struve leaving the administration to take another job in the Ministry of Education
- Under these different starting conditions, some changes have been made in order to better develop the project.



## EUROPE 2020

Europe 2020 is the EU's growth strategy for the coming decade. In a changing world, we want the EU to become a smart, sustainable and inclusive economy. These three mutually reinforcing priorities should help the EU and the Member States deliver high levels of employment, productivity and social cohesion.

Concretely, the Union has set five ambitious objectives - on employment, innovation, education, social inclusion and climate/energy - to be reached by 2020. Each Member State has adopted its own national targets in each of these areas. Concrete actions at EU and national levels underpin the strategy.



# Milestones

## *How mobilities and face-to-face meetings motivate teachers and staff*

■ **Curiosity for the difference** in the two school systems

■ **Curiosity for the people** who like to work in a European project

■ **Curiosity for the partner region** and its culture

- What should we show?
- Who, of our staff in schools and organisations, will be able to add something worthwhile?
- Under which conditions will the first meeting be passed off? Enough local partners and projects to show?
- How could all the tasks be achieved?  
Time-management...

■ **Planning our mobilities** means to involve co-workers and institutions which can contribute with something

■ Preparing a week of common work means to make  
**a choice of different activities**

**Education is indeed necessary for all, and this is evident  
if we consider the different degrees of ability.**

*(Comenius)*



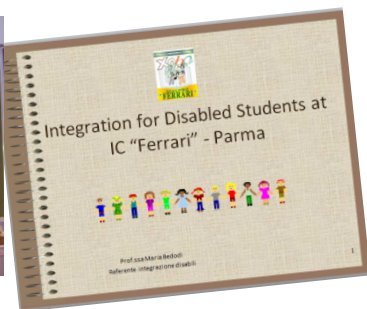
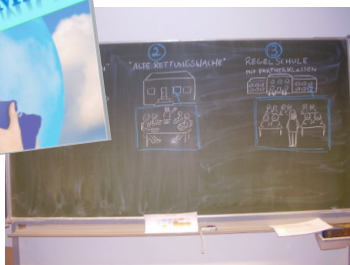
# ★ What has happend ?

Different Educational Organizations met together

Teachers from different school levels worked together

Teachers shared experiences, materials and tools

«Good exercises» and good practices are essential also with students with special needs.



## *What makes our group strong?*

- **RESPECT**
- **FRIENDSHIP**
- **CURIOSITY**
- **WONDER**
- **INCLUSIVE ATTITUDE**
- **ENTHUSIASM**



# Main tasks

- ★ **Boost inclusion**
- ★ **Share interesting projects**
- ★ **Improve the teaching of Maths and Sciences**



# Inclusion



Italy looks back to 30 years of inclusion.

A doyen or dinosaur of a politically motivated and influenced pedagogy of inclusion of the “red” Bologna talks about his ideals and experiences and the actual developments in Italy.

The interesting and inspiring meeting with Dott. Raffaele Iosa of MIUR in Emilia Romagna, who worked as a school inspector and former representative of the Ministry of Education in Rome.

Controversial discussions in partner teams afterwards.

How can schools of both partner regions develop their conditions and school concepts to build an inclusive school system?

Whereas the Italian partners have a long history (more than 30 years) of inclusive schools, in Schleswig-Holstein there is only a recent political movement discussing this topic and finding new solutions for schools. The UN convention (2009) for the rights of people with special needs in an inclusive society has to be used in daily life. So all German institutions have to provide the conditions for inclusion. This has to be worked out for buildings, for learning opportunities, for professional opportunities and social activities for people with different needs.





# Interesting projects

## PROGETTO STRATEGICO

Il progetto SeiPiù ha l'obiettivo di **contrastare l'insuccesso scolastico delle seconde generazioni di immigrati**, attraverso il **coinvolgimento delle famiglie**, delle comunità e delle Scuole, puntando alla costruzione di **"reti di fiducia"**.


Al progetto partecipano **quindici Istituti Tecnici e Professionali** della Provincia di Bologna.



**"W" AS TO WELCOME**

**"INTERCULTURAE" AS OPPORTUNITY, NO LIMIT**

Prof. Anna Bandini  
Docente Referente integrazione alunni stranieri



### AIMS

- Defining shared practices inside schools about the reception of students coming from a foreign country;
- Facilitating the entry of children and young people of other nationalities into the school and the social territory;
- Promoting a favourable welcome climate relations in order to prevent and remove integration;
- To promote communication and collaboration about the themes of welcome and integration in the perspective of an integrated learning;
- Ensuring full and effective exercise of the rights of the students;
- Encouraging the acquisition and / or consolidation of skills in everyday situations.

**Time:** By the arrival of a new student

### "A.Ferrari"

involves these plans for students with disabilities, students with DSA:

1. Tutor for disabled students and students reported for DSA
2. No more "mad and desperate study"
3. Mixed path from school to work

Schools in Schleswig-Holstein have to deal with different new laws, the right of any child to be a member of the school in the neighborhood, without regards of his special needs, the right to be supported and promoted individually within his learning processes, the changing structures within the school system itself.

A study of Prof. em. Dr. Klaus Klemm in 2010 discussed the German situation about inclusion.

( Prof. em. Dr. Klaus Klemm: Gemeinsam lernen. Inklusion leben. Status Quo und Herausforderungen inklusiver Bildung in Deutschland. Bertelsmann Stiftung 2010).

In Germany, early childhood institutions like kindergarten have now got 60 % of children with special needs included in regular institutions, in primary schools, Pinneberg has got 34% of inclusion of kids with special needs, in secondary schools only 15 %.

But Schleswig-Holstein made important steps to change the situation. The former centres for disabled students are in a process of developing into competence centres for support teaching. Support teachers leave their competence centre to work within the regular school system. This means travelling around for the teacher, working at different places, losing their attachment to just one school they work in. But for the students with special needs this could mean to get the opportunity to model themselves on to other kids (without learning disabilities), to work together and to accept that we're all of a kind. Social competencies can be worked out for the benefit of everyone in school. And the big aim "No child left behind" will be pursued in a consequent way.





The big task we talked about is to work out good concepts with very limited human and financial resources.

The Italian schools are much better off with their amount of teacher lessons per disabled student. In Italy each student with special needs gets one half of a support teacher's lessons.

In Germany an average of just two lessons a week is given for a child with special needs of any kind.

Children with dyslexia or maths deficiency are not regarded as kids with special needs in Germany, so they need help in their everyday school life but the school has to provide help without a special teacher for the kid.



Look at our document on the Comenius internet site and find out about “Including a special child”.

An Italian support teacher showed a very creative idea for including an autistic child in his class. Because this child doesn't talk, the teacher invented a Quiz for his classmates. His big challenge to get in touch with people was solved this way. He was part of the group afterwards. Whereas this was a special idea for a special child, schools in a whole have to work on their programs and concepts.

*The States Parties to the present Convention, have agreed [...] Recognizing the valued existing and potential contributions made by persons with disabilities to the overall well-being and diversity of their communities, and that the promotion of the full enjoyment by persons with disabilities of their human rights and fundamental freedoms and of full participation by persons with disabilities will result in their enhanced sense of belonging.*  
(from Convention on the Rights of Persons with Disabilities)



The two partners resources are much different, but the pedagogical ideas how to organize inclusion get close to each other.

The Italian partners have got impressive school concepts for the integration of children with special needs or for children with migration background.

It's all about the political decision to realize an inclusive school and to win different partners for a supporting atmosphere in society.

The most important Italian projects for the German partners were: "A tutor as a friend" "Sei più +" or "W as to welcome".

Schools working with these concepts involve the whole school community and are prepared to help students either with migration background (to learn the language, to get in touch with the different culture) or with special needs (physical and technical needed support, learning support, special learning projects). The personal growth of the students and their integration into the Italian society is the big aim. Schools, parents, private societies, communities, local and regional authorities work together for this aim. Inclusion becomes a task for all. This is very impressive for the German partners.

In the region of Kreis Pinneberg all schools have to work out their own concepts for inclusion and promote students individually. A big conference prepared all school directors for this work.

# Improving the teaching of maths and sciences

## *a difficult task for our project*

**We have to deal with difficulties and differences:**

- The long lasting traditions in each country
- The values and emotions of the teachers involved
- The gap between the theoretical knowledge in the matter itself and the subjective theories of teachers about successful teaching
- The reconstruction of what we can call the state of didactical discussion
- The experience of reflected practice  
(seen through the eyes of our partners)



**Planning instruction for our students means talking about 5 didactical dimensions (Kees Vreugdenhil, Netherlands):**

■ ***The subjective dimension*** – which aims are important for me, what are my leading ideas, which values count for me?

■ ***The dimension as regards content:*** What has to be taught? Is there a connection between school subjects which should be respected? What do our school-internal curricula say?

■ ***The methodological dimension:*** Strategies and methods of teaching and learning in the classroom, group involving, work with partners

■ ***The organizational dimension:*** The order in the classroom, where to place material, how to organize different phases of the lesson?

■ ***The evaluating dimension:*** How to involve the students in a reflexive process about their learning and also about teaching?

We opened our schools and classrooms to get into communication about our typical instructions in maths (and other subjects) and we tried to think about good exercises, mathematical competences of the students, interesting learning problems to solve.

But we were limited in the way, that we couldn't always reflect all these dimensions in advance. So we made the experience that good ideas didn't always lead to good practice and reflecting theories didn't always mean to expand the daily confidence in doing a good job.

We have to admit: The implementation of theoretical knowledge for a good practice is hard to do.

We are all limited by our working conditions and the several tasks we have to take over. Life as a teacher or a headmaster has become more difficult in the last years, in Germany and in Italy.

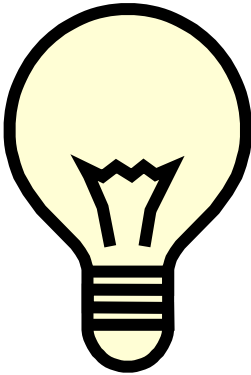
*"The everyday practice in school is not always the right field of action for an elaborated theory, as instructed in teacher education."*

(Vreugdenhil: The bridge between theory and practice.  
Internet, found 3.06.2012)



But we could discuss or agree on important insights:

*Main predictors for successful learning are  
personal conditions of the learners as:*



- ★ *Intelligence*
- ★ *Knowledge*
- ★ *Motivation*
- ★ *Making an effort on difficult tasks*
- ★ *Self-concept*

*No surprise? So how can schools/teachers make a difference at all?*

(Referring to John A. C. Hattie: Visible learning. A synthesis of over 800 meta-analyses relating to achievement. London& New York: 2009)

- Feedback for students: information about learning opportunities, personal success, learning processes, reasons for learning something
- Classroom management: structures, rules, direct instruction, presentation of materials
- Activating strategies: problem-solving, cooperative learning, peer tutoring, self-verbalization
- Early intervention for those with learning problems/disabilities – special curricula
- Counting as a useful discipline in everyday life





## *Maths can be looked upon as a matter of general education*

Modeling with mathematical operations, working with general ideas (velocity and acceleration, exponential growing), examples of the outer world

The inner order of maths: world of numbers, mathematical vocabulary, rules, formula, equations etc.

Problem solving abilities: asking, thinking, supposing, referring to known topics, debating, using methods of proving  
Maths on school kids' levels doesn't provide unsolved problems. „Mathematical problems“ have always clear solutions on this level.

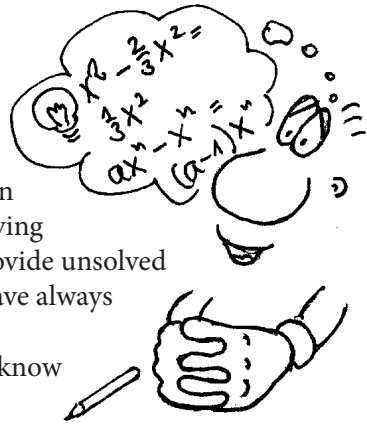
Teachers know the solutions. Students know the teacher knows...

Teachers tend to shorten the ways to logical solutions by teaching in very small steps – this is not a real challenge!

Teachers tend to train the simple ways of counting – no question: Training is necessary!

It is an aim to make sure that all students know about the cultural techniques of counting, but this is only one part of the cookie

Teaching in a question and answer mode is not always interesting, and it's not even encouraging because mostly it's a talk of very few in the class



*Mathematics is one of the essential emanations of the human spirit, a thing to be valued in and for itself, like art or poetry.*

(Oswald Veblen, 1924)



## *What might be interesting for kids? – An example!*

*Collecting data and working with it!*

Preparing surveys, like:

- Which are our most favorite pets in the class?
- Hobbies of all forth graders
- Months of birthdays of classmates

The students ask each other, count with strokes, build up diagrams. Bringing forward communication in this subject is a difficult task for a teacher:

- Don't be shy to present mathematical vocab!
- Choose interesting mathematical problems for a common discussion in the class! Individual promotion is not the same as working individually on work sheets (often badly misunderstood)

*Design diagrams of frequency, compare, discuss*

Steps like:

- Forming groups of people (practise)
- Giving each person maybe a small square sheet of paper, putting all papers for a group in a line (iconic illustration)
- Compare the lines without papers, vertical or horizontal order, (abstract)



# Good exercises



In our partner schools we worked on good exercises and tried to find out general difficulties for students. Some results of studies at the university of Parma went along with the German study Coaktiv about young teachers and teacher students. The lack of basic mathematical ideas in school instruction cannot be counterbalanced by motivation of teachers and enthusiastic pedagogy. A lack of basic mathematical ideas remains a problem even for older students. So our task would be to combine intelligent exercises with basic mathematical ideas with good methods of involving all students.

In our partner school G. Ferrari, for example, the colleagues Bedodi and Carpi tried some good exercises about proportion. They divided their classes, total 56 students, into 14 groups, and let them work on three “problems”.

### 1) *The marmalade problem:*

Grandma cooks cherry jam for family and friends. Her rich harvest has to be worked on within a week.

On Monday she cooks 8 kg with 5 kg of sugar, on Tuesday 10 kg of cherries with 7 kg of sugar, Thursday, the day of the biggest harvest, 16 kg were cooked with 10 kg of sugar, on Saturday, end of the harvest period, 5 kg cherries were cooked with 3 kg of sugar. Find out on which day the jam is most sugared. Are there days with jam with the same amount of sugar in it?

Explain your ideas for a solution.



C'è la raccolta delle ciliegie. La nonna prepara la marmellata in un enorme paiolo, per la sua famiglia e i vicini.

Lunedì cuoce 8 Kg di ciliegie con 5 Kg di zucchero.

Martedì cuoce 10 Kg di ciliegie con 7 Kg di zucchero.

Giovedì giorno di maggior raccolta, di zucchero.

Sabato, fine della raccolta, cuoce 5 l



Qual è il giorno in cui la nonna ha preparato la marmellata più zuccherata?

Ci sono giorni in cui le marmellate hanno lo stesso grado di dolcezza?

Spiegate come avete trovato la vostra risposta.

• Eseguito da: 56 alunni

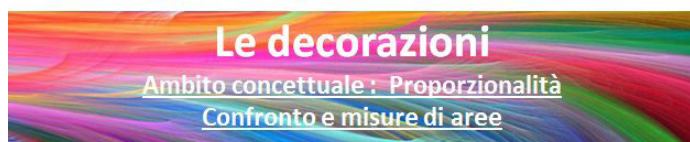
14 gruppi

Students have to work out the main idea of proportion for a right solution, of course. The groups which didn't find out the right solution made errors concerning the idea of a direct comparison of the amount of sugar used by grandma or comparing the difference of cherries and sugar instead of building a proportion or they had mistakes in counting.

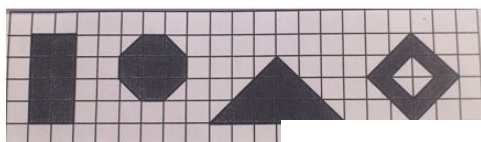
## 2) The painter's problem:

A painter had painted different figures at the wall. He used paintpots of different colours of the same size. 18 in red, 21 in blue, 27 in yellow and black for the last figure. Explain which figure got which colour and how many containers of black were needed for the last figure. Explain your solution.

10 groups found the right solution.

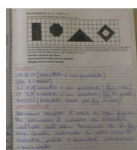


Un pittore ha dipinto quattro figure diverse su un muro.



Ha utilizzato dei barattoli di colore c  
18 barattoli di rosso per una figura,  
figura, 27 barattoli di giallo per u  
barattoli di nero per la figura che  
Alla fine del suo lavoro tutti i baratt

Indicate il colore di ogni figura.  
Quanti barattoli di colore nero ha utilizzato?  
Spiegate come avete trovato la risposta.



Eseguito da: 56 alunni 14 gruppi

The students had to understand that they needed to combine the area of the figures with the amount of colour needed, which is counted in paintpots. The measurement of the areas of the figures and the proportion area / amount of paintpots was to be found.

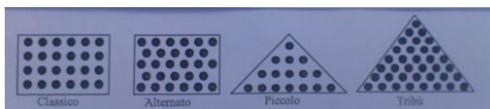
### 3) *The problem of chocolate boxes:*

4 differently sized chocolate boxes of a company contain the same kind of truffles, each truffle of the same size.

Which weight label belongs to which box and which label is missing? As before this problem has to be solved under the premise of proportion.

#### **I tartufi al cioccolato** Ambito concettuale : Proporzionalità e conteggio

Ecco qualche confezione della ditta Tartuffardi contenenti tutte lo stesso tipo di tartufi al cioccolato:



Ed ecco le etichette che indicano il peso del contenuto, da incollare sulle confezioni:

540 g

810 g

630 g

Ma queste etichette non sono in ordine e ne manca una.



**Trovate la confezione per la quale non c'è etichetta ed indicate il suo peso.**

**Spiegate il vostro ragionamento.**

Eseguito da

42 alunni

11 gruppi

## *Some beginners and several followers*



### *U.S.R. Emilia Romagna*

- Ufficio Scolastico Regionale per l' Emilia Romagna
- Università di Parma - Dipartimento di Matematica
- Istituto Comprensivo "Giacomo Ferrari", Parma
- Anne-Frank, Scuola primaria, Parma
- Scuola primaria di Vico Fertile, Parma
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- Convitto Nazionale "Maria Luigia", Parma
- ENAC Emilia Romagna, Fidenza (PR)
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- Liceo Artistico "Toschi", Parma
- Istituto Tecnico Economico "G. B. Bodoni", Parma
- Scuola per l'Europa, Parma
- Ufficio Scolastico Provinciale, Parma
- Comune di Parma
- Provincia di Parma





### *Kreis Pinneberg*

- Schulamt des Kreises
- Jugendamt des Kreises
- Rübekampfschule, Pinneberg, primary school
- GS Bickbargen, Halstenbek, primary school
- Helene-Lange-Schule, Pinneberg, primary school
- Gorch-Fock-Schule, Schenefeld, primary school
- Brüder-Grimm-Schule, Rellingen, primary school
- Anne-Frank-Gemeinschaftsschule, Elmshorn, secondary school
- Johann-Comenius-Schule, Thesdorf, Gemeinschaftsschule, secondary school
- Johannes-Brahms-Schule, Pinneberg, Gymnasium
- Rosenstadtschule Uetersen, secondary school
- Eichendorff-Schule, Kronshagen, primary school
- Berufliche Schule des Kreises Pinneberg, Elmshorn, professional school
- AWO Kooperationsprojekt „Schulverweigerer“
- IQSH
- SINUS Sets Pinneberg

*Progetto grafico:* Andrea Gilberti

*Realizzazione:* Legatoria “L’ Artigiana” di Sergio Scaffardi

Attività realizzate con il sostegno finanziario della Comunità Europea.  
La responsabilità di quanto presentato ricade esclusivamente sugli autori.