



## Global crisis and local solidarity

### Project in Citizenship and Maths PiCaM

#### Project Kit description

The activity supports a discussion amongst children and teachers about the meaning of crisis and solidarity in the local setting and how it relates to economic societal crisis. The risk of debt and the consequences for people who borrow money with interest are considered. In addition, the children explore how money can be conceived in terms of an alternative economy and reflect on how mathematics may function both to produce debt but also to reorganise money as a common good. The activity is grounded in group work as a collaborative project that critically explores the use of mathematics.

This toolkit includes two tasks:

#### **Explore 'crisis' & 'solidarity' in global and local contexts with children and Can we reconsider money as a common good?**

It provides opportunities for students to examine the use of mathematics in global and local economy contexts and to explore how life can be reorganised around a different conception of money-use in the local economy.

#### Difficulty level

Intermediate

#### Key competences

Mathematical, personal, social, digital, languages

#### Subjects

Mathematics/ Geometry, Social sciences, Geography, Economy, Ethics, History, Social studies/Sociology

#### Level

10-13

The activities in this toolkit are from the Erasmus+ Project in Citizenship and Mathematics (PiCaM). This project provides resources to support teachers and teacher educators to develop critical global learning through the learning and teaching of mathematics, opening up spaces for learners to come together in meaningful mathematical inquiry. Resources for classroom activity, together with guides for teacher professional development, initial teacher education and further eTwinning kits are freely downloadable from the project website: <http://www.citizenship-and-mathematics.eu/>

#### Pedagogical objectives

- to create curricular spaces where children can realise their responsibilities as critical global citizens
- to engage a diverse population of children with mathematics in their school settings and communities, supporting and reinforcing their self-image as inquiring mathematicians
- to enact ideas derived from Philosophy for Children (P4C) that create opportunities for critical thinking, communication, collaboration and creativity
- to help build classroom relationships which work towards creating a participatory, caring and inquiring learning community
- to understand the use of mathematics in global and local economy contexts
- to recognize the political and ethical dimensions of questioning the uses of mathematics in specific world experiences

*This activity is adapted from 'Global crisis and local solidarity: Debt vs money as a common good', one of 7 classroom activities from the Project in Citizenship and Mathematics (PiCaM). The complete resource for "Global crisis and local solidarity: Debt vs money as a common good" is available in the resources section of the PiCaM website <http://www.citizenship-and-mathematics.eu/>*



## Orientation

## Introduction

### Explore 'crisis' & 'solidarity' in global and local contexts with children

A core question to start with can be: What is meant by 'crisis'? Children in small groups discuss what 'crisis' might mean for them. In order to move into exploring how crisis is being represented in the media, we can provide them with some print or digital newspaper articles. The children can also search for data such as images, phrases or statistics that denote issues of crisis around the world. In addition, they can explore specific periods of crisis in their community by visiting a local history museum or undertaking a focused internet search for local history using Wikipedia sources.

Allow time for children to ask questions and explore specific terms, as well as to problematize data, but also to question about income, debt, poverty and so on. Some questions to start a conversation here could be: What happens when we need to borrow money from a bank or a pawnshop? How debt is being produced?

Children can move into exploring what solidarity is and how acts of solidarity are often organised at times of crisis. They can rely on personal experiences or search specific sources. One may need to distinguish here amongst institutional bodies such as NGOs and/or community based or individual solidarity acts. What are the groups of people who suffer the most in any crisis? What is the difference amongst the notions of charity and solidarity? How do they become materialised in our action?

## Communication

## Collaboration

Use eTwinning to support children in articulating and sharing what they have learnt about their local context. Each group of children can now complete a poster or produce a concept map displaying how words, phrases, images or graphs may relate to issues and effects of a crisis. By sharing and comparing work amongst groups in the same classroom but also across schools in different countries through the eTwinning platform children will start appreciating these issues as a global phenomenon affecting all people in their communities.

### Can we reconsider money as a common good?

What can people do when they have no job, no money and fear the risk of a loan? How might people still be able to cover basic needs through access to common resources? Children work in small groups and discuss what are basic or common resources for them by preparing lists. Help the children reflect on how irresponsible uses of common resources can easily lead to local and global crisis.

Children will be asked to view the example of two communities in southern Europe who approach money as a common good. Ask children to find more examples from their local context and share them through the eTwinning platform.



## Evaluation & Assessment

Children are asked to work in small groups and reflect on what they have learnt. Every group should write about, draw or photograph something they have learnt. What conceptions of money do we have? How are they constructed based on algorithms? How can we change these algorithms for people? How can algorithms, rules and values fit the idea of money as a common good? In what ways can we see their communities being organised around money and economy as a common good?

Alternatively, you may choose to have a whole class discussion using a philosophy for children approach where the session is built upon the questions children themselves pose.

## Follow up

For young children: An informal monetary unit could be introduced as a means to mediate the notion of buying and selling –this informal unit could be small cubes or pebbles. The pedagogic process would be based on role playing techniques discussing the roles of shop owner, customer with money and with no money, people who are in need etc. At the same time, the children need to experience the democratic classroom atmosphere of a community where children can make their own decisions of how they want to run their shop, how they decide to deal with local crisis as an issue that might arise in their classroom community (e.g. a classmate who cannot buy chocolate or books, the organisation of a library etc.), what is the meaning of solidarity for them in their own particular case, how they deal with issues of justice and injustice in their community etc.

For older children: Children in higher grades of primary school or at the elementary school can approach historically the evolution of money, borrowing money and banking. For example, they can see examples of Public Banks (e.g. the Bank of North Dakota, the Bank of Canada) with low-interest loans, the Sambruket community in Sweden which establishes a network between natural resources and commons-based finance working together, complementary LETS currencies in many countries, the platform My.Empiral that allows for a collective to use their own internal banking system and solidarity economy models in Italy, Quebec, Canada and New York city. And, crucially, they can also search for examples in their local communities.

In this context, they can explore how mathematics can function towards reorganising the grassroots economy by providing the potential to create adequate algorithms for them to use in face-to-face or digital platforms and cryptography in order to protect personal data through appropriate encryption codes.

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