Erasmus+

Guidelines on how to develop CLIL materials and lesson plans in primary schools

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c4c clil for children

CONTENTS

1 C4C – CLIL FOR CHILDREN PROJECT

The C4C – CLIL for Children Project is an educational international project launched under the Erasmus+ Programme, Key Action 2: Strategic Partnership, Cooperation for Innovation and the Exchange of Good Practices for School Education (project number: 2015-1-IT02-KA201-015017; realization time: September 2015 – September 2018) and coordinated by the Language Center Srl in Todi, Italy. The Project Consortium consists of ten partners from four EU countries: Italy, Poland, Portugal and Romania. It includes both institutions active in research and teacher training, as well as primary schools:

- P1 The Language Centre, Italy (Coordinator)
- P2 Direzione Didattica Todi, Italy
- P3 Direzione Didattica Aldo Moro Terni, Italy
- P4 Giunti O.S. Organizzazioni Speciali S.r.l., Italy
- P5 Instituto Politécnico de Castelo Branco, Portugal
- P6 Universitatea Din Pitesti, Romania
- P7 University of Lodz, Poland
- P8 Agrupamento de Escolas Gardunha e Xisto, Portugal
- P9 Scoala Gimnaziala Alexandru Davila, Romania
- P10 Szkola Podstawowa nr 199 im. Juliana Tuwima, Poland

The C4C – CLIL for Children aims to support primary school teachers and develop a full teacher training programme, including a package of 15 complete lesson plans. The Project addresses primary school teachers who would like to improve their CLIL expertise, schools that intend to improve the quality and broaden their educational offer, teacher-training institutions, as well as other parties taking interest in primary education and FL teaching and learning, such as pre-service teachers, parents, publishers and institutions involved in production of educational materials, decision makers and academic researchers.

The C4C Project aims to develop a number of Intellectual Outputs (IOs), namely:

- IO1 State of the art report about use of CLIL Methodology in Primary Schools (1/A4)
- IO2 Census of OER (Open Educational Resources) to be used for CLIL in Primary Schools (2/A4)
- **IO3 Guidelines for Teachers on How to Develop CLIL Materials and Lesson Plans in Primary Schools (1/A5)**
- IO4 Guidelines on how to use CLIL in Primary Schools (2/A5)
- IO5 Guide addressed to teachers on how to use CLIL Methodology in Primary Schools (3/A5)
- IO6 E-course addressed to teachers on how to use CLIL Methodology in Primary School (4/A5)
- IO7 CLIL Materials for Teaching (Teaching Science, Mathematics, Geography) (1/A6)

The C4C Project has been launched with three major objectives in mind. It's priorities are to support teachers to deliver high quality teaching, to enhance digital integration in learning and teaching, as required by the 2013 Communication on Opening Up Education, and to improve FL mastering at EU level.

2 CLIL: ADVANTAGES AND CHALLENGES IN PRIMARY SCHOOLS

As knowledge is a collection of skills, there seems to be no reason why they should be applied individually to particular fields of experience only. If knowledge is understood as the ability to investigate and experiment it is potentially applicable to all school subjects. Mathematical skills for instance are used not only in scientific subjects but also in art and music. Such an understanding of certain universality of skills reflects a *holistic* concept of knowledge where "different techniques of human inquiry are brought together or integrated for the investigation of this or that aspect of experience precisely in the interests of more vital and meaningful learning"(Carr, 2003: 126). Promoting the integrated approach and practical problem solving, Dewey was not in favour of the traditional, largely subject-centred schooling.

The underlying principle of holistic learning is the constructivist theory. Supporters of this concept see learning as a discovery and construction of mental schema by learners interacting with their environment on multiple levels. Taylor and MacKenney explain that this approach sees all knowledge as a web of interrelated phenomena, and thus "if education is broken up into segments, which are then taught independently of one another, then concepts become disconnected and disjointed" (2008: 144). Meaningful learning results from getting the big picture rather than from decomposing reality into pieces of separate information.

Since holism is based on constructivism, it also rests upon the same principles identified by Brooks and Brooks (1993: ix):

- Teachers seek and value students' points of view. This allows them to design lessons that correspond with students' interest and individual needs.
- Teachers structure lessons to challenge students' suppositions. Even the youngest students come to the classroom with some prior experience and beliefs. In order to learn they need to identify them and confront with new knowledge.
- Teachers recognize that students must attach relevance to the curriculum. If the content is relevant to the students, their motivation to learn will be sustained
- Teachers structure lessons around big ideas, not small bits of information. As a result they can see the point in learning the particular elements of the big picture

- Teachers assess student learning in the context of daily classroom investigations, not as separate events. Students' developing competence can be observed along with the task they are striving to complete. Therefore, their performance should be assessed as a sum of efforts made during the whole process rather than on the basis of a singular test.

These principles sound particularly reasonable in the case of young learners who eagerly undertake challenges to gain new skills or knowledge if their interest is properly evoked. The structure of early primary education allows for creating conditions in which the classes are spun around big ideas to which all subjects can relate.

Adopting a holistic concept in teaching requires designing a method of formal instruction that refers to all subject areas and aims at supporting the child in his social, psychological, physical and cognitive development. To address all these diverse needs the CLIL approach to teaching has been proposed. It is characterized by sensitivity to, and a synthesis of, knowledge, skills and ideas from various subject areas. This attitude towards content of education enriches pedagogical activity and promotes exploration of wider sensitivity through a diversity of methods. Jonathan Savage (2011) lists the purposes of CLIL teaching and learning which are to:

- motivate and encourage pupils' learning in a sympathetic way in conjunction with their wider life experiences;
- draw on similarities in and between individual subjects (in terms of subject content, pedagogical devices and learning processes) and make these links explicit in various ways;
- provide active and experiential learning for pupils;
- develop meaningful co-operation and collaboration between staff leading to the dual benefits of curriculum and professional development;
- contribute towards a broad range of teaching and learning opportunities located within individual subject teaching, across subjects and in relation to specific external curriculum themes or dimensions;
- promote pupils' cognitive, personal and social development in an integrated way;

- allow teachers the opportunity to evaluate and reflect on their teaching and to be imaginative and innovative in their curriculum planning;
- facilitate a shared vision amongst teachers and managers through meaningful collaborations at all levels of curriculum design (42).

In terms of teaching an additional language the purposes above determine the structure of subject curriculum in a number of ways. Firstly, students no matter how small, are not empty vessels, which are waiting to be filled with knowledge. They come to the classroom with prior experience in many spheres of life which they are eager to share with others. In terms of early formal language education this approach would advocate using the students' emotions, experiences and ideas to teach the language on content that is truly interesting for them and thus motivating enough to enhance learning. Secondly, since life is not a sequence of separate events that happen one after another but rather a complex mix of stimuli from all fields of knowledge bombarding a child all the time, it is justified to use this accidentally acquired knowledge of the world in formal education. This approach shifts the focus from teaching facts specific for a given subject to a deeper understanding of the phenomena and experiences that are shared between different fields of knowledge. Furthermore, it stresses the need to make these links explicit and thus make children aware of the multitude of interdependencies between subject areas. Language becomes, thus, a vehicle for delivering content knowledge from a variety of subjects and learning the principles of its structure and use becomes incidental. CLIL approach also puts emphasis on active acquisition of knowledge through experimenting, forming hypotheses, checking them out and drawing conclusions rather than getting ready-made solutions. Therefore, inductive teaching of additional language is preferred over deductive and implicit techniques over explicit ones. One of the most important principles of this approach is collaboration between specialist teachers of various subjects. Since knowledge is a shared commodity and largely does not belong specifically to one subject area, teachers representing different academic disciplines need to cooperate to help their students understand the links between subjects and their interdependencies to see the coherent nature of knowledge.

Since young children in many educational systems in Europe follow an integrated teaching curriculum in the first years of formal instruction where learning is organized in topical units with elements of various subjects intertwining, there seems to be no reason why foreign language teaching should be excluded from this format. Language is the natural medium of expression in teaching all other subjects. If students use their mother tongue in the classroom they could also be encouraged to use elements of an additional language to perform the same tasks involving non-linguistic subject knowledge. CLIL approach also assumes that individual subject knowledge will benefit from the contact with other fields through becoming enriched by elements traditionally belonging to a different school subject. Children, if encouraged and trained, will naturally transfer their knowledge gained from one experience to another one crossing the borders of subject classification. Additional language may enrich students' understanding of physical phenomena by reflecting elements of subject knowledge in a different way than the mother tongue, hence adding additional information.

This approach, promoting active quest for knowledge and integrated subjects instruction, will naturally involve extensive cooperation between students working on various projects through which whey not only gain experience and understanding of the world but also develop critical thinking and reasoning skills. Additionally, they learn how to cooperate with each other and because no activity is focused on one particular subject, all students participating feel competent and expert in at least one part of the task.

CLIL teaching obviously requires a lot of planning and involvement of all subject teachers. Although it is a rather demanding and challenging endeavour for the school staff, it also allows them to avoid professional burn out through constant learning of facts which, being elements of different subject areas than their own, may be totally new to them and through widening the scope help them create more innovative and creative tasks and thus lead to both personal and professional development.

Apart from evident advantages there are of course a few challenges of CLIL application in a primary school context. This approach typically assumes that the subject teacher, with some

linguistic competence in the second language, delivers his expert knowledge enriching it with elements of the additional language. The challenge here is to ensure that the students acquire the content knowledge and the linguistic goals are achieved. It seems inevitable that the subject teacher will lean heavily towards content attainment leaving the student's linguistic development behind and a language teacher will do the opposite. Therefore, a close cooperation between content and language teachers is essential for an effective CLIL program in a primary school environment.

Another viable obstacles hampering the introduction of CLIL methodology into common primary school practice include scarcity of material, inadequate teacher training in the area of practical techniques of preparing CLIL lessons and formal teachers' qualifications to deliver content subject knowledge in L2. With proper provision, however, the benefits significantly outweigh disadvantages and thus, early formal English instruction in the form of CLIL should be promoted in primary school contexts.

3 RESULTS OF PRELIMINARY ANALYSIS (1/A4 REPORT AND 2/A4 CENSUS)

The State-of-the-Art Report on the use of CLIL methodology in primary schools (IO1, 1/A4) has been compiled on the basis of four national reports from Italy, Poland, Portugal, and Romania. It integrates two desk researches on CLIL, the results of a survey carried out primarily in partner countries and other EU countries, as well as examples of good practice pertaining to European experience in implementing CLIL in primary education. These results have showed a great need for both CLIL training and CLIL teaching materials among primary school teachers and other parties interested. C4C Questionnaire respondents indicated that they would appreciate being provided with an easily accessible course on CLIL methodology that would offer comprehensive training in how to develop primary school CLIL materials and lesson plans effectively. They expressed their interest in participating in online courses and workshops.

The Guide to OERs for CLIL in Primary Schools (IO2, 2/A4) is a result of collaborative efforts by four C4C partners from Italy, Poland, Portugal and Romania, all of whom compiled 90 OER (Open Educational Resources) CLIL lesson plans and teaching materials for Science, Geography and Mathematics from a number of EU countries, namely: the Czech Republic, Germany, Italy, Poland, Portugal, Romania, and Spain. The document includes guidelines on how to use CLIL, assesses the collected lesson plans and teaching materials according to a number of criteria and provides classified and labelled links to all the OERs in question. The Census of OERs in the countries enumerated above identified and selected several types of resources and materials for teachers to be adapted and implemented in their lesson plans. These include useful resources for training and professional development of the CLIL teacher.Primary education content and language teachers working within the CLIL framework frequently complain about a scarcity of materials, including lesson plans, visual aids, worksheets, tutorials, etc., which has been one of major challenges in the implementation of CLIL methodology in the school context. For this reason,

Therefore, appropriate teaching materials, also such that are accompanied by detailed teacher guidance is of primary importance in order to facilitate teachers' work and promote CLIL implementation. The C4C Census of OERs is a result of an online-based research conducted for the purposes of this Project and thus constitutes a material bank of materials for teaching Science, Geography and Mathematics, which can be readily used for creating lesson plans in these subjects.

4 C4C LESSON PLAN PACKAGE

The aim of the package is to provide guidelines to help the planners in designing CLIL lessons. The first section outlines the general design and topic distribution within the C4C project. The second section constitutes a set of rules and principles to follow while designing the lessons. The final part is a template to use for lesson planning and an example of one lesson with all external materials' references.

The objective of the project is to design 15 lesson plans (90min each) in accordance with the layout presented in Figure 1. The lessons are designed for the following content subject areas:

- Science
- Geography
- Mathematics

The subject areas have further been divided into modules as follows:

- Science:
    o The world of plants
    o The world of animals

- Geography
    o The world around us

- Mathematics:
    o The world of numbers
    o The world of shapes and units

Each module consists of three lessons that can be taught separately but form a logical sequence form the most general, introductory class through one focusing on more specific, detailed information to the least controlled one containing complex language production in the form of a project, presentation or performance.

Each lesson includes both linguistic and content objectives. Within linguistic objectives, vocabulary, skills and functions are identified. Each lesson contains at least one other element of the 4Cs of CLIL besides Content (Communication, Culture, Cognition). In their base form, all activities are planned for <u>age range 8-9.</u> For each activity there is an extra option for fast finishers, stronger groups or older students that is cognitively more challenging.
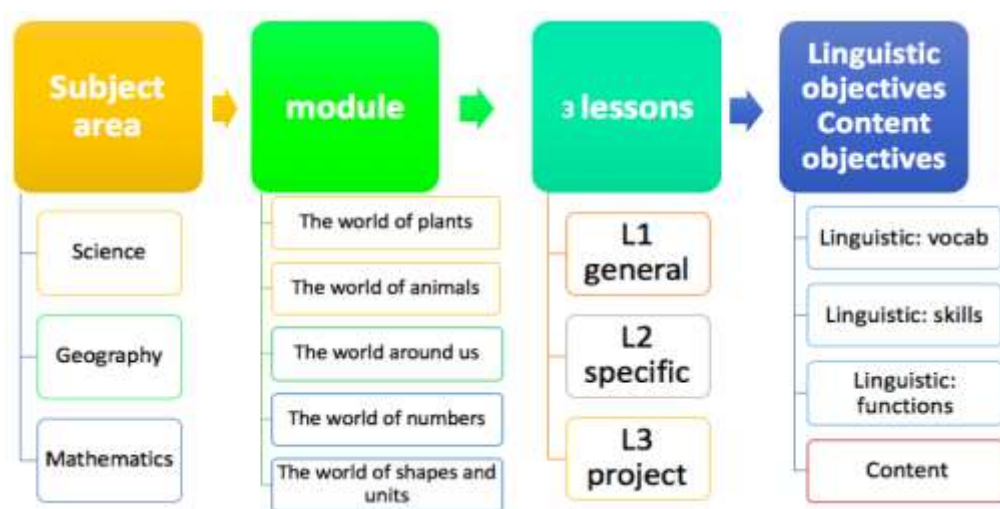

Fig. 1. Content map of CLIL lessons

Lesson planning principles:

- Visuals are used to introduce the topic
- Any materials linked to the lesson plans need to be described and accompanied by a thumbnail print screen in case the link expires
- Each lesson has an interactive element in the form of pair- group work
- Each lesson includes an element of authentic material – video/text/song, etc.
- Each lesson contains at least one of the 4Cs of CLIL besides Content (Communication, Culture or Cognition)
- Lesson 3 in each module contains a productive element in the form of a presentation/performance/project, etc.
- Information about the duration of each activity is provided
- Any visual/audio/video materials that are linked to the lesson must be OERs or original productions of the authors of this lesson plan

5 C4C LESSON PLAN TEMPLATE FOR TEACHERS

<div align="center">

Subject area

</div>

Module

<div align="center">

Photo

</div>

Lesson 1 topic –

Lesson 2 topic –

Lesson 3 topic –

Lesson X

Linguistic objectives:

Vocabulary:

Skills:

Functions:

4Cs

Content objective(s):

Introduction: visuals/regalia + time

Lead-in: vocabulary/story flashcards; story + time

Activity 1: story/video/song + time

Activity 2: TPR/mini-drama/group, pair work/miming/arts and crafts/pen and paper activity/worksheet + time

Activity 3: mini production/presentation/description + time

Each activity accompanied with an additional *fast finisher task.

6 C4C LESSON PLAN EXAMPLE

Science

The world of animals

[Year 2/3]

Lesson 1 topic – Animals at home and in the jungle

Lesson 2 topic – Scales, fur and feathers

Lesson 3 topic – Animals in our care

Lesson 1

Linguistic objectives:

Vocabulary: Students know the names of domestic, wild animals and pets; students know verbs to describe different abilities (e.g. swim, jump, run, etc.)

Skills: Students understand simple information from authentic video

Functions: Students say where animals live, what they eat and what they can do

Content objective(s):

Introduction: 10min

The teacher shows students a big picture of a jungle and asks what animals can live there. (e.g.

http://www.mariposajunglelodge.com/images/bg-page.jpg)

[What's this? What animals live in the jungle?]

farm (e.g. http://thequakerquill.org/wp-content/uploads/2014/02/Farm-Barn.jpg)

[What's this? What animals live on a farm?]

and house (e.g. http://documentone.ca/wp-content/uploads/2015/05/inside-home-good-design-1-on-others.jpg)

[What's this? What animals live in a house?]

- The teacher holds up a picture of a tiger
  (e.g. http://science-all.com/image.php?pic=/images/tiger/tiger-06.jpg)

  [What's this? Where does the tiger live?]

  and elicits the name. The teacher asks where the tiger lives and places the picture on the image

  of the jungle.

- The teacher does the same with a cow and a cat
  (e.g. https://www.tes.com/lessons/P4OuQfle3soq7Q/cows)

  [What's this? Where does the cow live?]

  http://animaliaz-life.com/image.php?pic=data_images/cat/cat5.jpg

  [What's this? Where does the cat live?]

Lead-in: 20min

- The teacher shows cards and elicits names of other animals: elephant, monkey, crocodile, parrot, snake, pig, horse, sheep, hen, duck, dog, hamster, rabbit, turtle, gold fish
  [Look at these animals. What's this?]
- Students come to the board draw flashcards and decide together with the class where each animal lives – if they can live in more than one place, they are placed on the board on the border of the environments
  [Come to the board… Draw one card… What animal is this? Where does it live? Put it in the right place.]

Activity 1:   15min

- Students watch the videos and name the animals they recognise.
  - https://www.youtube.com/watch?v=0e1mXp8BNEY&list=PLSqpW8v_H6iYQGJtR01lY7z vEMVQmYXWB

[the film provides basic information on rabbits, dogs and cats]

[Let's watch a video about pets. What animals can you see?]

https://www.youtube.com/watch?v=dCii-DS6t1A&list=PLSqpW8v_H6iYAFnq0-Gj_hJhPAfeIuUv7

  - https://www.youtube.com/watch?v=96LRW_knWMU

[Let's watch a video about farm animals. What animals can you see?]

[the film provides basic information on pigs, goats, horses]

  - https://www.youtube.com/watch?v=lSsD1GfChEM&spfreload=10

[Let's watch a video about wild animals. What animals can you see?]

[the film provides basic information on lion, zebra, elephant, rhino, hippo, leopard & giraffe]

- The teacher plays the video again stopping after each animal and asks questions:
  [Where does it live? What does it eat? What can it do?]
- The teacher writes the questions on the board and elicits possible answers. The teacher writes the possible answers on the board.

* Students do a specific questions quiz (Appendix A) based on the videos

[Watch the film and answer these questions.]

Activity 2:   25min

- Students work in 4 groups/pairs – each group gets pictures of 3 animals (wild, domestic and pet), each cut into five pieces – each group gets a different set of pictures and 3 cardboard sheets to stick the puzzles on.

[Work in groups. Do the puzzles and stick them on the cards.]

e.g.

https://classconnection.s3.amazonaws.com/838/flashcards/510838/jpg/dutch_rabbit1304652

799013.jpg

http://thehappypuppysite.com/wp-content/uploads/2014/12/terrier-group.jpg

http://www.proprofs.com/flashcards/upload/q5813939.jpg

http://kids.nationalgeographic.com/content/dam/kids/photos/animals/Mammals/H-P/pig-

full-body.jpg.adapt.945.1.jpg

https://cdn.superstock.com/4413/Download/4413-204296.jpg

https://www.activityvillage.co.uk/sites/default/files/images/horses_av2.jpg

http://all4desktop.com/data_images/original/4242108-lion.jpg

http://www.cliparthut.com/clip-arts/186/baby-zebra-clip-art-186366.png

http://www.stevescottsite.com/elephant.jpg

http://www.rootingforrhino.org/rhinofiles/image/rhinos/isolated_rhinos_white.png

http://img14.deviantart.net/a206/i/2012/103/d/d/hippo_png_hq_by_gd08-d4w0aet.png

http://s1314.photobucket.com/user/Carnivora2014/media/jaguar_zpse722566f.png.html

http://www.giraffeworlds.com/wp-content/uploads/Baringo-giraffe_624.jpg

- Students stick the images on cards and keep them secret
- One students from each group comes with one of their pictures to the board (but does not show the picture to the class)
  [Come here with your card but don't show it. It's a secret.]
- The rest of the students ask questions and try to guess what animal this is – they get points for their groups
  [Where does it live? What does it eat? What can it do?]

* Students write descriptions of the animals and read them out for the rest of the class to guess the name of the animals

Activity 3:   20min

[Work in groups. Make a poster with animals that live in the jungle/on the farm/in the house. Put the posters on the wall. Describe your poster.]

- Students work in three groups
- Each group is given a big piece of paper labelled Farm Animals, Wild Animals and Pets
- They collect pictures from their category and stick them on their cards
- They put the posters on the wall and present them saying what each of their animals eats and can do

* Students work in two teams. Each team has got two A4 paper divided into 6 numbered squares. On one of them they write the names (or stick pictures) of random animals from the lesson. The teams ask each other questions to determine which animals were placed in the 6 squares of the opposite team. They write the names of the animals on the other paper and then check if the grids are identical.

[Team 1, write names of any animals you want in the table. Team 2, ask questions, guess the animals and write their names in the table. Compare the tables.]

cat	pig	lion
zebra	hippo	goat

APPENDIX A

THE WORLD OF ANIMALS QUIZ

Pets – choose the best answer a, b, or c

1. **Rabbits have got**
   a. Fluffy fur, long whiskers, twitchy noses
   b. Short whiskers, fluffy fur, long ears
   c. Twitchy noses, feathers, short tails

2. **Their legs are great for**
   a. Swimming
   b. Jumping
   c. Running

3. **Guide dogs help**
   a. Tourists
   b. Blind people
   c. The police

4. **Dogs have a good**
   a. Sense of smell
   b. Eyesight
   c. Taste

5. **Cats eat**
   a. Fruit
   b. Plants
   c. Meat

6. **Baby cats are called**
   a. Puppies
   b. Kittens
   c. Kids

Farm animals – Mark the sentences T(true) or F(false)

1. Pigs eat fruit
2. Pigs are dirty
3. Pigs are clever
4. Goats can climb
5. Goats produce milk
6. Goats have horns
7. Goat's eyes have round pupils
8. Horses can run
9. Horses have short noses
10. Horses can sleep standing up

Wild animals – answer the questions

1. What do zebras eat?
2. What can they do?
3. What have all elephants got?
4. How do they use it?
5. What can leopards do?
6. What is a group of lions called?
7. What are giraffes' bodies covered with?
8. Where do rhinos live?
9. What does the word hippopotamus mean?
10. What is a baby hippo called?

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