



An Introduction to CLIL (Content & Language Integrating Learning)

**KONFeT 2009
Comenius & eTwinning
Conference**

Fiorenza Congedo, An Introduction to CLIL, KONFeT 2009



What is CLIL?

“The acronym CLIL is used as a generic term to describe all types of provision in which a second language (a foreign, regional or minority language and/or another official state language) is used to teach certain subjects in the curriculum other than the language lessons themselves”

Eurydice 2006



How does CLIL work?

“CLIL refers to situations where subjects, or parts of subjects, are taught through a foreign language with dual-focused aims, namely the learning of content, and the simultaneous learning of a foreign language”

D. Marsh, Content and Language Integrated Learning: The European Dimension - Actions, Trends and Foresight Potential

CLIL Features

- **C**ontent – the topic or subject
- **L**anguage – the language learning / the practice goals
- **I**ntegration – the new fusion of both content and language learning goals
- **L**earning – the thinking skills required / developed to manage this fusion



CLIL at School

- **A dual focused education**
- **Team teaching and teamwork**
- **Subject teachers work through the medium of a foreign language**
- **Language teachers bring content into their language classes**

Aims

- **CLIL prepares pupils for life in an internationalised society**
- **CLIL enables pupils to develop language skills that emphasise effective communication**
- **CLIL gives pupils the opportunity to develop subject - related knowledge and learning ability**



Benefits of CLIL

- **Increase pupils motivation**
- **Improve overall and specific language competence**
- **Develop intercultural communication skills**
- **Introduce a wider cultural context**
- **Diversify methods and forms of classroom teaching and learning**
- **Prepare pupils for future studies and/or working life**



Results

- **Content subjects are taught and learnt in a language which is not the mother tongue of the learners**
- **Pupils develop fluency in English by using English to communicate**
- **Pupils feel motivated to learn languages by using them for real practical purposes**
- **Language is seen in real-life situations**



CLIL and TKT

TKT(Teaching Knowledge Test) tests a candidate's knowledge of Content and Language Integrated Learning (CLIL) and the practice of planning, teaching and assessing curriculum subjects taught in English



A CLIL Comenius Assistant

Schools can apply to host a Comenius Assistant, a future teacher of any subject... the school gets additional support for activities like: introducing or reinforcing the European dimension, implementing CLIL by teaching a subject in a foreign language, ...



CLIL Experience at ITIS Marconi, Verona, Italy

CLIL was born in our school in order to promote and to test the vehicular use of a foreign language in teaching scientific and technical subjects (Electronics, Computer Science, Maths, System Programming, Calculus & Statistics) and encourage transnational cooperation across CLIL

EU Projects and CLIL



SCIENCECLIL - CLIL FOR SCIENCE AND ENGINEERING

Descrizione: un progetto CLIL di lingua e contenuto che coinvolge alunni e docenti di due istituti gemellati nell'apprendimento della lingua straniera e nella contemporanea acquisizione di contenuti di materie tecnico-scientifiche.



EU Community

Home > CompuLingua - Talking Technology Across the Borders

A Content and Language project integrated to the school curriculum. Firenzeza Congedo, Technical High School "G. Marconi", Verona, Italy and Andreas Bärnthaler, HTL Leonding, Austria

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ICT students share CLIL lessons

Comenius - eTwinning Project

Home Austrian students Belgian students

ICT tools in my life.

April 8, 2009

Hi, I am Thomas

In my opinion, technology in the life of everyone don't know anybody who doesn't have at least a computer I do everything, for example with it I study, play with online video-games. Every day I chat with my friends and we decide. At school, especially during the lessons of information System Programming, we use computers to understand teachers explain us. Finally, I think that technology is the life of us.

Goodbye,

Tom F.

No Comments | ICT, ITIS Marconi, Italy, Verona | Posted by frakky12

European eMagazine

Opening page - CLIL

String, by Simone D.

2006-2008 Time 07:31, 331

STRING A string is a sequence of characters. The type of date in Java is represented by the class java.util.Date.

Networks, by Forapan and Tommasi

19-02-2008 Time 05:41, 331

Computers can be connected by Local network: LAN (Local Area Network). They can also be connected by Geographical network: WAN (Wide Area Network). This network is public and is used for share information and resources (as Hard Disk, Print). In our school we use it for share information and resources.

The Web, by Federico S.

20-02-2008 Time 05:10, 331

Internet is the network that connects all the computers in the world. It allows everyone to share information and resources. With the technological revolution it has become easier to make this network.

Comedy of the Art

20-02-2008 Time 05:09, 431

COMEDY OF THE ART Commedia dell'arte (Italian: "comedy of professional actors") is a form of improvisational theatre which began in the 16th century and maintained its popularity through to the 18th century, although it is still performed today.

Integrating ICT into the Curriculum: Teaching and Learning Computer Science and L2

Monday, January 18, 2009

European Quality Label

Five easy steps to Post to Blogger

Graphics tablet



CLIL Worksheets

open-sourced project platform(2) applications (2) environment versions software file module companies Java

NetBeans refers to both a _____ for the development of _____ desktop _____, and an integrated development _____ (IDE) using the NetBeans Platform.

The NetBeans Platform allows applications to be developed from a set of modular _____ components called *modules*. A module is a Java archive _____ that contains Java classes written to interact with the NetBeans Open APIs and a manifest file that identifies it as a _____. Applications built on modules can be extended by adding new modules. Since modules can be developed independently, _____ based on the NetBeans _____ can be easily and powerfully extended by third party developers.

NetBeans began in 1997 as Xelfi, a student _____ under the guidance of the Faculty of Mathematics and Physics at Charles University in Prague. A company was later formed around the project and produced commercial _____ of the NetBeans IDE until it was bought by Sun Microsystems in 1999. Sun _____ the NetBeans IDE in June of the following year. The NetBeans community has since continued to grow, thanks to individuals and _____ using and contributing to the project.

Choose the correct word from the list to complete the text:

kill fire situations software heart assist made types places sensors used humans person react ways shape

By combining _____ engineers are trying to make computers think and behave like _____. By combining artificial intelligence and engineering techniques, they're building different _____ of robots and androids.

_____ robots are devices that move and _____ to sensory input. They usually contain _____ that runs automatically without the intervention of a _____. Today, they are used in all sorts of _____ from factories to space exploration. We drive cars that have been welded by industrial robots. We buy products that have been _____ and packaged by robots in assembly lines. We use machines that have been _____ by robots.

Our life is affected by robotics in many other _____. Just think about medicine and the health system. Tiny computers are _____ to monitor the heart rate and blood pressure. Micro-machines and insect-sized robots help doctors in _____ operations and other complicated surgery. Robots are used in dangerous _____, for example in repairing nuclear plants, cleaning toxic wastes, and defusing bombs.

Robotics has also been incorporated into the first 'intelligent homes'. There are gadgets that regulate the central heating, _____ that control the solar panels, etc.

Some research centres are building androids-robots that have the _____ and capabilities of a human being. In the near future, androids will guide the blind and _____ elderly people at home; they will be a 24-hour security guard for your home, sound the alarm in case of _____ and phone the police if there is a burglary. In short, androids will become _____.

A matrix is a rectangular array of elements which are operated on a single object. The elements are often numbers but could be any mathematical object provided that it can be added and multiplied with acceptable properties, for example, we could have a matrix whose elements are complex.

Relationship to other mathematical quantities

We could think of matrix in other ways, for instance:

- As a two dimensional vector
- As a subset of a hypermatrix

Vectors are strongly related to matrices, they can be considered as a one directional matrix, or conversely, we could construct a matrix from a vector (drawn as a column) whose elements are themselves vectors (drawn as a row):

6	1	7	5
8	4	4	2
2	0	6	9
1	3	0	3

Matrices

A Matrix is an array of numbers such as:

$$\begin{bmatrix} 0 & 2 \\ 1 & -1 \end{bmatrix}; \begin{bmatrix} 1 & 2 & 3 \\ 0 & 1 & 2 \\ 1 & 1 & 0 \end{bmatrix} \text{ and } \begin{bmatrix} 1 & 2 & 1 \\ 0 & -1 & 2 \end{bmatrix}$$

Because the first matrix has 2 rows and 2 columns we call it a 2 x 2 (2 by 2) matrix.
The second one is a 3 x 3 matrix, the third one is a 2 x 3 matrix. The description 2 x 2, 3 x 3, 2 x 3 and so on is called the ORDER of the matrix.
Now we have to learn how it is possible to add and to subtract two matrices if and

Complete the following text with the missing information:

_____ users changes second coined become experts beginnings communities

2.0, a phrase _____ by O'Reilly Media in 2004, refers to _____-generation of Web based _____ such as social networking sites, wikis and folksonomies _____ and sharing between _____. O'Reilly Media _____ around the phrase, and it has since _____ with _____ the term suggests a new _____ of the Web, it does _____ to World Wide Web technical specifications, but to _____ systems developers have used the web platform. According to _____ the business revolution in the computer industry _____ as platform, and an attempt to understand the rules for _____ technology _____, notably Tim Berners-Lee, _____ one can use the term in a meaningful way, since many _____ of "Web 2.0" have existed since the _____.

Did you know...?

The history of matrices goes back to ancient times! But the term "matrix" was not applied to the concept until 1850.

$$A = \begin{pmatrix} 0 & 1 & -1 & 3 \\ 0 & 2 & 3 & 1 \\ -1 & 0 & 2 & -3 \end{pmatrix}$$

"Matrix" is a Latin word and it generally any place in which something is formed or produced.

The origins of mathematical matrices lie with the study of systems of simultaneous linear equations. An important Chinese text from between 300 BC and AD 200, *Nine Chapters of Mathematical Art* (Chiu Chang Suai Suan), gives the first known example of the use of matrix methods to solve simultaneous equations.

In the treatise's seventh chapter, "Too much and not enough," the concept of a determinant first appears, nearly two millennia before its supposed invention by the Japanese mathematician Seki Kowa in 1683 or his German contemporary Gottfried Leibniz (who is also credited with the invention of differential calculus, separately from but simultaneously with Isaac Newton).

More uses of matrix-like arrangements of numbers appear in chapter eight, "Methods of rectangular arrays", in which a method is given for solving simultaneous equations using a Goussuobai board that is mathematically identical to the modern matrix method of solution outlined by Carl Gauss (1777-1855), also known as Gaussian elimination.

The term *matrix* for such arrangements was introduced in 1850 by James Joseph Sylvester. Sylvester, incidentally, had a (very) brief career at the University of Virginia, which came to an abrupt end after an enraged Sylvester hit a newspaper-reading student with a sword stick and fled country, believing he had killed the student!

Since their first appearance in ancient China, matrices have remained important mathematical tools. Today, they are used not simply for solving systems of simultaneous linear equations, but also for describing quantum mechanics of atomic structure, designing computer game graphics, analyzing relationships, and even plotting complicated dance steps!

The elevation of the matrix from mere tool to important mathematical theory owes a lot to the work of female mathematician Olga Taussky Todd (1906-1995), who began by using matrices to analyze vibrations on airplanes during World War II and became the torchbearer for matrix theory.

CLIL - Useful Links

- **CLIL Compendium** www.clilcompendium.com
- **European Commission - Languages**
www.europa.eu.int
- **EuroCLIC** www.euroclic.net
- **CLIL Debate** www.guardian.co.uk/guardianweekly
- **CLILCOM** <http://clilcom.stadia.fi/>
- **TKT: Content and Language Integrated Learning**
<http://www.cambridgeesol.org/exams/teaching-awards/clil.html>
- **CLIL – AXIS** <http://www.clil-axis.net/index.htm>
- **CLIL Matrix**
<http://www.ecml.at/mtp2/CLILmatrix/EN/qMain.html>



Thank you!

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