

ISSN 2240-2950



Rivista interdisciplinare  
di tecnologia  
cultura e formazione

*Special issue*  
Collaborative Face-to-Face  
and Computer Supported  
Problem Solving in Classroom

Edited by  
*Luca Tateo*  
and *Vittorio Scarano*

*Editor*

**M. Beatrice Ligorio** (University of Bari "Aldo Moro")

*Associate Editors*

**Carl Bereiter** (University of Toronto)

**Bruno Bonu** (University of Montpellier 3)

**Stefano Cacciamani** (University of Valle d'Aosta)

**Donatella Cesareni** (University of Rome "Sapienza")

**Michael Cole** (University of San Diego)

**Valentina Grion** (University of Padua)

**Roger Salijo** (University of Gothenburg)

**Marlene Scardamalia** (University of Toronto)

*Guest Editors for this issue*

**Luca Vanin** (University of Milan – Bicocca)

**Stefania Cucchiara** (University of Rome "Tor Vergata")

*Scientific Committee*

**Ottavia Albanese** (University of Milan – Bicocca)

**Alessandro Antonietti** (University of Milan – Cattolica)

**Pietro Boscolo** (University of Padua)

**Lorenzo Cantoni** (University of Lugano)

**Felice Carugati** (University of Bologna – Alma Mater)

**Cristiano Castelfranchi** (ISTC-CNR)

**Carol Chan** (University of Hong Kong)

**Roberto Cordeschi** (University of Rome "Sapienza")

**Cesare Cornoldi** (University of Padua)

**Ola Erstad** (University of Oslo)

**Paolo Ferri** (University of Milan – Bicocca)

**Carlo Galimberti** (University of Milan – Cattolica)

**Begona Gros** (University of Barcelona)

**Kai Hakkarainen** (University of Helsinki)

**Jim Hewitt** (University of Toronto)

**Antonio Iannaccone** (University of Neuchâtel)

**Richard Joiner** (University of Bath)

**Mary Lamon** (University of Toronto)

**Lelia Lax** (University of Toronto)

**Marcia Linn** (University of Berkeley)

**Giuseppe Mantovani** (University of Padua)

**Giuseppe Mininni** (University of Bari "Aldo Moro")

**Donatella Persico** (ITD-CNR, Genoa)

**Clotilde Pontecorvo** (University of Rome "Sapienza")

**Vittorio Scarano** (University of Salerno)

**Neil Schwartz** (California State University of Chico)

**Pirita Seitamaa-Hakkarainen** (University of Joensuu)

**Patrizia Selleri** (University of Bologna)

**Robert-Jan Simons** (IVLOS, NL)

**Andrea Smorti** (University of Florence)

**Jean Underwood** (Nottingham Trent University)

**Jan van Aalst** (University of Hong Kong)

**Allan Yuen** (University of Hong Kong)

**Cristina Zucchermaglio** (University of Rome "Sapienza")

*Editorial Staff*

**Paola Spadaro** – head of staff **Luca Tateo** – deputy

head of staff **Wilma Clark**, **Stefania Cucchiara**,

**Nobuko Fujita**, **Lorella Giannandrea**, **Mariella**

**Luciani**, **Audrey Mazur Palandre**.



*Publisher*

Progedit, via De Cesare, 15  
70122, Bari (Italy)  
tel. 080.5230627  
fax 080.5237648  
info@progedit.com  
www.progedit.com

*Subscriptions*

Annual (2 numbers): regular 20  
Euro  
Single issue: 13 Euro  
Single Article: 5 Euro

qwerty.ckbg@gmail.com

<http://www.ckbg.org/qwerty>

*Payment*

Subscriptions could be submitted  
by Bank account  
43/000000003609

Header: Associazione CKBG

Bank address:

Banca Credito Artigiano  
Agenzia n. 5 Via Vaglia, 39/43  
CAP 00139 – ROMA  
IBAN:  
IT59N0351203205000000003609

BIC SWIFT: ARTIITM2

04010 IBAN IT89K03067040100

Specifying: Qwerty (Issue number),  
(type of subscription)

Or by Paypal: see [www.ckbg.org/qwerty](http://www.ckbg.org/qwerty)  
for information

Registrazione del Tribunale di Bari  
n. 29 del 18/7/2005

© 2012 by Progedit  
ISSN 2240-2950

---

# Indice

---

## *Editoriale*

Luca Tateo, Vittorio Scarano 5

## *Guidelines for a Computer-mediated Discussion in the Classroom*

Wouter van Diggelen, Maarten Overdijk 26

## *Appropriazione di un software: un'insegnante un anno dopo*

Maria Beatrice Ligorio, Mauro Dell'Olio, Giuseppe Ritella 39

## *A Framework to Support Web-Based Inquiry-Learning Activities with WebQuests*

Ilaria Manno, Delfina Malandrino, Giuseppina Palmieri 57

## *Gender e computer: effetti del contesto in una attività in classe supportata dal computer*

Silvia Serena Fornarelli, Maria Beatrice Ligorio 77



## Summary

---

This special issue of Qwerty presents some educational experiences involving a new software CoFFEE (Collaborative Face-to-Face Educational Environment) and a new approach to collaborative problem solving in education. The four articles and the editorial of the issue provide several experiences and reflections, both theoretical and methodological, that emerged during years of experimentation with CoFFEE.

The editorial is written in the form of a dialogue between a psychologist and a computer scientist in an attempt to represent through the text the very dialogical and collaborative nature of working with CoFFEE. It also reflects the thinking that developed over several years of design and experimentation aimed at drawing new ideas and teaching practices.

In the first paper, "Guidelines for a computer-mediated discussion in the classroom" by the project LEAD authors, van Diggelen and Overdijk, the theoretical framework of the CoFFEE project that blends the design of tools and the pedagogical goals to

obtain actual improvements in classroom collaboration is discussed.

The article "Software appropriation: A teacher one year after" by Ligorio, Dell'Olio and Ritella describes the development of teacher competence in using CoFFEE, underlying how the process of appropriation of a powerful software like CoFFEE is an important resource for teaching.

In "A Framework to support web-based inquiry-learning activities with WebQuests" by Malandrino, Manno and Palmieri, the versatility of CoFFEE is discussed. The software is fully featured to support an inquiry-learning activity, the WebQuest. Even if it was not designed for this purpose, CoFFEE can support this activity from design to assessment.

Finally, Fornarelli and Ligorio's article "Gender and computer: Effects of the context in a computer-supported classroom activity" develops the idea of gender differences, using CoFFEE as a research tool. By analyzing the software logs, it describes how the virtual space of interaction can be used to study the group dynamics with respect to gender.