

## Chapter 3

# Technology of Education and Music Teaching: New Responses to Old Issues

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### ABSTRACT

*This chapter discusses the relationship between education technologies and music teaching with reference to four activities developed in an Italian middle school as part of the project of experimentation “Classi2.0.” This project aimed to enhance the ability to perform songs in ensemble and offer experience in the practice of arranging. It also sought to strengthen rhythmic competences, and offer experience in composing rhythms using digital sequencers while also stimulating critical reflections on the musical taste of the class. Furthermore the project sought to provoke critical reflection on media and youth consumption practices.*

### INTRODUCTION

For some years now a widespread debate has been taking place in Italy concerning the use of ICT (Information and Communications Technologies) in the school. Classrooms are gradually being filled with digital equipment, and the terms ‘interactive whiteboard’ and ‘digital school’ have become slogans around which a great deal of money is being spent on equipment and training. Yet it seems that the idea of introducing the everyday use of ICT in the school by increasing the teachers’ digital competencies and giving them access to a large

variety of devices is misleading. This has spawned the “Classroom 2.0”, which has its roots in the Digital Classroom of Tomorrow (DCOT) Project in Wales (Bishop 2004, 2007), which saw using these digital technologies over a wider network as a way to increase access to curricula and reduce the barriers to using ICT. This chapter discuss some didactic experiences in music education carried out within the Italian equivalent of this project, “Classi 2.0”. Other equivalents across the world include “Escuela 2.0” in Spain, and “CAPITAL” (Curriculum and Pedagogy in Technology Assisted Learning) in England.

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This chapter presents four didactic experiences in music education carried out in the First Level Secondary School ‘Guercino’ (Bologna, Italy), a three-year compulsory school attended by pupils ranging in age from eleven to thirteen. The school is situated in a working/middle class district of Bologna with an increasing proportion of immigrants. The experiences were conceived as part of Cl@ssi2.0, a project aimed at spreading ICT in Italian schools supported by the Italian Ministry of Education, Universities and Research (Marcato 2012). Cl@ssi2.0 involves a sample class in each school chosen for experimentation, but it also triggers ‘contagious’ processes between experimental classes and other classes of the same school. This is why of the four experiences, two were carried out in the ‘2.0 class’ and two in other classes.

The general aim of the experiences is to experiment and explore the use of new technologies of education in music teaching from a constructivist point of view or, more precisely, to explore the potentiality of ICT in setting up constructivist educational environments.

In addition the following specific objectives were pursued:

1. To enhance the ability to perform songs in ensemble and offer experience in the practice of arranging.
2. To strengthen rhythmic competences, and offer experience in composing rhythms using digital sequencers.
3. To stimulate critical reflections on the musical taste of the class.
4. To provoke critical reflection on media and youth consumption practices.

Use was made of an IWB (Interactive Whiteboard; see Higgins, Beauchamp & Miller, 2007) and individual desktop computers or netbooks with Internet connection, software (MuseScore, IHMCCMapTool, Jackbeat), web-based resources (digital sequencers), and the e-learning platform Moodle. Besides ITC, musical instruments and

music books were used. The monitoring and assessment tools and means used were e-learning tools, individual and group assignments, and structured observation based on a checklist of indicators.

The first three experiences were implemented by the music teacher, while the fourth was an interdisciplinary project made in collaboration with the Maths and Science teacher. Each experience was realized in weekly one-hour lessons over five months.

## **BACKGROUND**

The starting point for the Classroom 2.0 initiative is the assumption that the value of technology lies in its usefulness in setting up socio-constructivist learning environments focused on experience. This approach helps to overcome two dualisms still at the basis of music education but problematic from a constructivist perspective: theory vs. making music, and formal music teaching vs. informal learning practices. The activities presented show how this approach can find applications in different areas. They have the following aims: to enhance the ability to perform songs in ensemble and offer experience in the practice of arranging; to strengthen rhythmic competences, and offer experience in composing rhythms using digital sequencers; to stimulate critical reflections on musical taste; to provoke critical reflection on media and consumption practices.

As Guerra (Ed., 2010: 17-18) maintains, what is needed is to engender a wider reflection based on the fact that the ‘digital revolution’ envisaged by the DCOT Project has radically changed the modes and the places of construction and distribution of knowledge and then try to understand what effect this may have on planning education strategies. In this perspective teachers do not simply need to update their digital competences, but to rethink their whole daily teaching routines and align them with new theoretic-methodological

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