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EFFECTS OF ICT INVESTMENTS IN SCHOOLS IN SOUTHERN ITALY

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Effects of ICT investments in schools in Southern Italy

Abstract

The book presents the results of an evaluation of the investment of regional policy in digital technologies in Southern Italy schools in the seven years 2007-2013. The study had three main purposes: to understand how digital technologies made available to schools were used, to estimate the effects of this policy on students' learning, and to identify the contexts in which digital technologies were best exploited. The research team employed three different techniques to collect data in order to answer these questions: a survey conducted to a large sample of teachers, the visit of 48 schools (randomly selected, but representative for geographical area and type of school), and a statistical analysis of the relationship between increase of technological equipment in schools and pupils learning performances. The results show that on average ICT use in southern Italian school is still a discontinuous activity: only a small share of teachers uses ICT routinely, and several practical and organizational problems hinder the use of new technologies and digital services. Moreover, consistently with recent findings of the literature on this subject, the study does not detect a positive effect of the presence of technology in schools on pupils' average learning levels. However, the research identifies several cases in which technologies were put to good use: ICT contributed positively to the inclusion and motivation of students, as well as to the development of digital competences. The study also identifies some important obstacles to ICT use, and creative solutions employed by school teachers or administrators to overcome them. In the conclusions, the authors suggest that the rationale for promoting ICT use at school does not rest in the aim of improving the students' learning of core curricular subjects. Rather than being helpful for such academic learning, technologies seem to be more suitable for including students with difficulties and supporting the development of digital competences which, in accordance with ministerial guidelines, are to be seen as learning objective in its own right. In addition, the report shows that a gradual and progressive introduction of ICT is more appropriate than an introduction of several devices and digital services in one single step, especially in schools which start from a very limited technological level.

Gli effetti degli investimenti in tecnologie digitali nelle scuole del Mezzogiorno

Sommario

Il volume raccoglie i risultati di un'indagine valutativa sugli investimenti della politica regionale in tecnologie digitali nelle scuole del Sud Italia, nel settennio 2007-2013. L'obiettivo era quello di capire cosa hanno fatto le scuole con le tecnologie di cui si sono dotate, di stimare gli effetti che ha avuto questa politica sui livelli di apprendimento e di fare emergere i contesti in cui le tecnologie sono state meglio utilizzate e sfruttate. Il gruppo di ricerca ha utilizzato tre tecniche per raccogliere dati utili per rispondere a queste domande: una survey su un vasto campione di insegnanti, delle visite a 48 istituti scolastici selezionati in modo casuale ma rappresentativi di diverse aree geografiche e tipologie di scuola, e un'analisi statistica sul rapporto tra incremento della dotazione tecnologica delle scuole e le performance di apprendimento degli alunni. L'indagine rileva che l'utilizzo delle tecnologie dell'informazione e della comunicazione (TIC) è ancora un'attività prevalentemente discontinua: solo una piccola parte dei docenti ne fa un uso abituale, e diversi problemi di ordine pratico e organizzativo ostacolano l'impiego dei nuovi strumenti o servizi digitali. Inoltre, in accordo con molta letteratura, l'indagine non rileva un effetto positivo della presenza delle tecnologie nelle scuole sui livelli di apprendimento medi degli alunni. Tuttavia, si identificano svariati casi di buon utilizzo delle tecnologie, dove esse paiono contribuire positivamente all'inclusione degli studenti e all'aumento della loro motivazione, oltre che allo sviluppo del loro livello di competenza digitale. Vengono identificati, inoltre, i maggiori ostacoli al pieno utilizzo delle TIC e le soluzioni creative messe in campo da docenti e dirigenti. Nelle conclusioni, gli autori invocano la necessità di scindere la promozione dell'uso scolastico delle TIC dagli obiettivi di miglioramento dei livelli di apprendimento nelle principali discipline curriculari. Più che favorire l'assimilazione di queste, le tecnologie appaiono adatte a coinvolgere gli studenti con difficoltà e a sostenere lo sviluppo della competenza digitale critica, vista come obiettivo di apprendimento a sé stante, anche in accordo con le linee guida ministeriali. Inoltre, dal rapporto emerge che l'introduzione graduale e sequenziale delle TIC, lungo alcuni snodi successivi, è una via più appropriata da percorrere per le politiche di introduzione del digitale nelle scuole rispetto all'inserimento, in una sola fase, di svariate infrastrutture e servizi in contesti scolastici in cui non vi è ancora il livello minimo di digitalizzazione.

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