

Substituting ICT as a Lever for Inclusion of Children with Reading and Writing Difficulties

Karin Tweddell Levinsen, Aarhus University, Denmark

EXECUTIVE SUMMARY

This paper presents research findings from a 3-year development and research project named Project IT-folder (PIF) that aimed at the inclusion of young children with potential reading and writing difficulties into normal classes in a suburb of the Danish capital. The project ran from 2007 to June 2010 as collaboration between the Danish University School of Education, the local municipality government, the Pedagogic Development Centre and two primary schools in the municipality. The aim of the project was to produce research-based knowledge that grounds and consolidates a future-oriented and sustainable implementation strategy and practice for all schools in the municipality regarding ICT as a change agent. The project's methodology was designed as research-based interventions into everyday practice, while data was collected through qualitative and anthropological methods, collection of student work and school assessment measures. PIF has succeeded in producing a series of interventions ranging from everyday practices over competence building for teachers to organisational changes in the single school and at the municipality level. These interventions are at present being implemented in the municipality.

Keywords: Action Research, Future-Oriented, Inclusion, Integration, Reading Disabilities, Salamanca Statement

BACKGROUND

Since the UN World Conference on Special Needs Education in Salamanca 1994, inclusion has slowly become an issue. The Salamanca Statement (Inclusion Network, 1994) addressed the problems and rights of all kind of learners who for different reasons are excluded or segregated from normal education. Salamanca coined the concept *the inclusive school* which has become widely accepted throughout Europe. International organisations as UNESCO's Institute for Information Technologies in Education (IITE) and the independent Centre for Studies on Inclusive Education (CSIE) work politically to promote inclusion and support initiatives related to research and development of everyday practice in educational institutions. In the same period, the European countries have become increasingly e-permeated and in a paper from the First

DOI: 10.4018/jcit.2010070105

International Conference on ICT & Accessibility, Kotsik and Tokereva (2007) groups ICT into the following main categories of use:

- *ICTs for compensation uses*: Technology can recoup or substitute the lack of natural functions and allow students to take active part in the process of learning and interacting with others
- *ICTs for didactic uses*: The use of ICTs as a learning tool has prompted a new dimension of education and has launched the transformation of the educational approaches (first strand)
- *ICTs for communication uses*: Technologies can improve communication of people suffering from functional limitations with others both in their immediate environment and around the world.

In the educational system the categories are represented by two major strands of ICT-implementation that are both tied up with international agreed visions and goals. The first strand encompasses the implementation of ICT for didactic and communication uses into general education at all levels regarding normal learners and the development has inspired international organisations such as the G8, OECD and the EU to identify profound challenges stemming from the transition from industry to knowledge society and to formulate frameworks for key competences and educational development (Castells, 2000, G8, OECD). Since the mid 90s ICT and education has been promoted through plans of action, development programmes, research programmes and substantial economic resources in the EU as well as national. The second strand encompasses implementation of ICT for compensation uses regarding learners with identified or diagnosed learning disabilities and the main discourse addresses the appropriateness of segregating from rather than integrating or including these learners into normal classes. This strand has to a large degree become an ethical vision that has not been met to the same degree by resources for development and implementation.

Due to the different time-trajectories the two strands have only slowly converged since the mid 90s. Therefore, normal class education and special needs education have not yet become a shared, inclusive practice and the implementation of ICT within the two stands has evolved rather differently. These aspects are important factors regarding the design and undertaking of Project IT-Folder and will be addressed in the following when discussing the Danish implementation process. But at first *inclusion* as a concept has to be explored.

UNDERSTANDING INCLUSION

The Salamanca Statement aimed to produce a framework and conceptual tools to promote inclusion. However, according to Dyson (1999) the statement did not define inclusion but left *inclusion* and *the inclusive school* open for interpretation within at least four main discourses: politics, ethics, economics and pragmatics. Dyson groups the main discourses into two meta-discourses which are mutually incompatible because they are based on entirely different grounds and target-groups (Table 1).

In the UK, the government tried to embrace the ambiguity by declaring "...inclusion as the 'keystone' of its education policy" (Rustemier, 2002, ch. 2). In Denmark *the inclusive school* was substituted by *the spacious school* around 2000 but the original ambiguity was not taken into account in the new concept (Holmgaard, 2004). Therefore it is difficult in the Danish discourse to distinguish between segregation, integration and inclusion. In some contexts inclusion means the same as in the CSCI definition based on the political-ethical discourse: "... disabled and non-disabled children and young people learning together in normal pre-school provision,

13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/article/substituting-ict-lever-inclusion-children/46040

Related Content

Guide Manifold Alignment by Relative Comparisons

Liang Xiong (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 957-963).

www.irma-international.org/chapter/guide-manifold-alignment-relative-comparisons/10936

Projected Clustering for Biological Data Analysis

Ping Deng, Qingkai Maand Weili Wu (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 1617-1622).

www.irma-international.org/chapter/projected-clustering-biological-data-analysis/11035

Using Prior Knowledge in Data Mining

Francesca A. Lisi (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 2019-2023).

www.irma-international.org/chapter/using-prior-knowledge-data-mining/11096

Hybrid Genetic Algorithms in Data Mining Applications

Sancho Salcedo-Sanz, Gustavo Camps-Vallsand Carlos Bousoño-Calzón (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 993-998).

www.irma-international.org/chapter/hybrid-genetic-algorithms-data-mining/10942

Multidimensional Modeling of Complex Data

Omar Boussaidand Doulkifli Boukraa (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 1358-1364).

www.irma-international.org/chapter/multidimensional-modeling-complex-data/10998