

## **A systematic literature review of the situation of the ICF and the ICF-CY in education: a useful tool or a flight of fantasy?**

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### **Abstract**

The International Classification of Functioning Disability and Health (ICF) is meant to be a universal language for professionals working with functioning and health in children and adults. So far most applications of ICF have been in the field of health sciences. Is it also applicable to education? This paper aims to present the outcome of a systematic literature review in the fields of education, more specifically education of children with disabilities or special educational needs and the ICF. Devised as a complementary classification of health and functioning by the World Health Organisation (WHO) in 2001 with a child and youth version (ICF-CY) published in 2007, the ICF appears to be mostly used in the medical field with reviews highlighting its use and applications (Bruyère, Van Looy, & Peterson, 2005). Thus, this literature review intends to situate the current debates in education which relate to the ICF and its concepts, and also to report the extent to which it is being used. The major interest is to explore how the ICF/ICF-CY, are currently situated in the field of education.

This study uses a systematic review of the literature using database keyword searches. The keywords used to search in the databases were applied after qualitative test searches were carried out to establish the suitability of the terms. The selection of studies was then refined further using inclusion and exclusion protocols. The protocols investigated the paper contents at different levels: abstract, full -text, and full-text quality level. In addition an extraction protocol is also used on the included documents to draw on the points which arise from the research questions and provide the basis for the main discussion. Studies exploring the relationship between education, the ICF and its related concepts: participation, environment, and personal factors were reviewed.

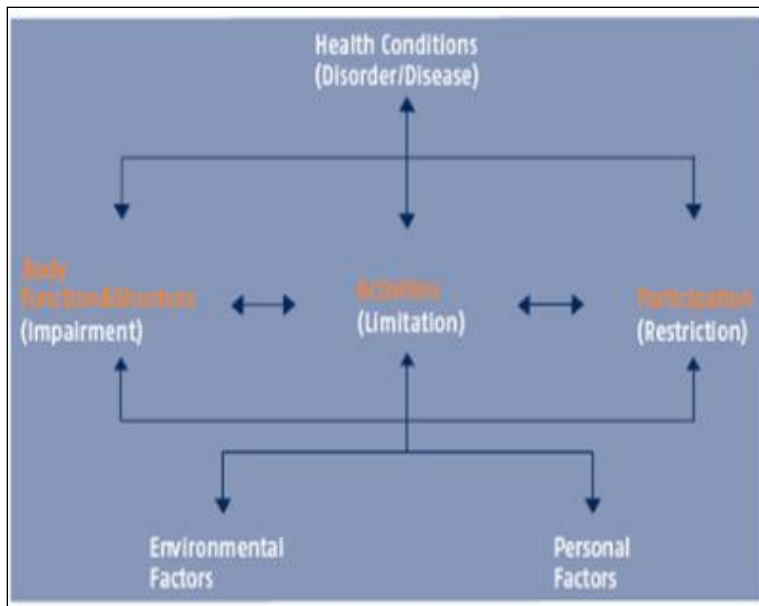
### **Keywords**

*ICF, education, disability*

### **Introduction & background**

"Classification systems are the result of a consensus process to ensure a common conceptualization of life domains relevant for the individual and for the society" (Hollenweger, 2008, p. 11). Until now disability classifications tended to be based on a mono-dimensional concept of the problem mostly related to impairment. The ICF emerged in 2001 as a classification of functioning disability and health related status, based on a biopsychosocial model (Fig. 1). Disability is understood as a complex interaction between health condition and contextual factors and not as an attribute of a person (Leonardi et al., 2006). In 2007 a child and youth version, ICF-CY (WHO, 2007), was published to address child-specific needs.

The ICF appears to be mostly used in the medical field (Bruyère, Van Looy, & Peterson, 2005) and it is unknown how well received or known the ICF is in the educational field.



**Figure 1: The ICF model**

## Research questions

The major interest of this literature review is to explore how the ICF/ICF-CY are currently situated in the field of education:

- First, we aim to explore the ways in which the ICF/ ICF-CY is used in educational context today.
- Secondly, this paper will focus on the critical points that arise when using the ICF/ ICF-CY in educational settings,
- Finally, the review will explore the presence of ICF/ ICF-CY components in the reviewed articles, and given an insight in to how the environment is described, which personal factors are mentioned, and how the concept of participation used.

## Method

### Design

This study uses a systematic review of the literature using database keyword searches. The selection of studies was then refined further using inclusion and exclusion protocols. Studies exploring the relationship between education, the ICF and it's related domains: participation, the environment, and personal factors. An extraction protocol was used to relate the studies back to the original research questions and so ensure valid findings.

### Data collection

The keywords searches in the databases were applied after qualitative test searches were carried out to establish the suitability of the terms. The different search words were applied in the following databases: ERIC (Educational Resources Information Centre), PsycINFO, PsycINDEX, Social Sciences Citation Index (SSCI), SocINDEX, and FRANCIS. Rigour was further validated by ensuring that studies of researchers known to be working in the area were present among the search results. The relevance of the chosen search words were explored using the search sources and the theoretical and practical relevance was confirmed after discussions among the three authors, experts in the field, and research librarians at two of the authors' institutions.

Results were exported and sorted using inclusion and exclusion criteria on two levels: Abstract, and full-text level. A protocol for each level was developed with the theoretical and practical aspects of each being discussed and tested amongst the three authors. Included documents were reviewed

using the quality protocol which reviewed the studies' purpose, reference to the literature, design, sampling, procedural and analytical rigour for data collection and analysis, its audit-ability, and its relevant conclusions and implications. From these a protocol based around trustworthiness, appropriateness, and relevance was devised. This used an adaptation of Auperin's rating scale (Auperin, Pignon, & Poynard, 1997) which provided an assessment of studies' quality criteria and rated each one suitably on a scale of low, medium, and high. Finally, the included documents were reviewed with an extraction protocol which drew on the points which arise from the research questions. The main points for discussion are drawn from this.

## Results

The final search returned 423 abstracts and books. Works focusing on rehabilitation and clinical work were excluded. All of the authors examined the first 100 abstracts and a check for inter-rater reliability was made, this was 80%. Approximately 150 further abstracts were examined by each of the authors ensuring that the majority of the abstracts were reviewed by more than one author. Overall inter-rater reliability was calculated at 81%. 70 abstracts met the inclusion criteria for the review at full-text level.

The secondary-stage of the review is currently under-way so exact results can not yet be reported. The main features of the secondary-step protocol are that factors relating to disability, ICF, and education were present and can be documented. The works found in this stage will be subjected to both the quality and the extraction protocol as outlined previously.

## Discussion

Preliminary results would suggest that there is little application of the ICF/ICF-CY at different levels and dimensions of education systems. Whether the framework itself will be of direct use for different education purposes remains to be decided. It is the view of the authors, in light of having undertaken this review, that the concepts ICF/ICF-CY introduces – especially those of disability and participation – will have a long-lasting and positive effect on the field of education.

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