An Emerging Approach for Education and Care

Implementing a Worldwide Classification of Functioning and Disability

Edited by Susana Castro and Olympia Palikara



An Emerging Approach for Education and Care

An Emerging Approach for Education and Care provides a synthesis of the extensive research that has been conducted worldwide about the International Classification of Functioning, Disability and Health for Children and Youth (ICF-CY) in education and care. The main purpose of the ICF is to provide a classification of functioning for adults and children with difficulties, considering their everyday lives, all the activities they perform and the environments they are embedded in, in addition to their health condition, which has been the traditional focus of special education provision in many countries.

Each chapter presents an evidence-based study describing how the ICF has been used to improve the provision of services for children and young people with special educational needs around the world. Moreover, each chapter is written by an expert on the ICF from a different country, thus providing an overview of how the ICF can be applied in international educational contexts with different educational and health systems and cultural backgrounds. This synthesis of world-leading research focuses on the ICF as a framework to approach assessment, intervention and classification for children and young people with special educational needs (SEN), whilst also providing practical examples of how it can be implemented.

An Emerging Approach for Education and Care will be an essential reading for academics, researchers and practitioners working on SEN provision and rehabilitation. It should also be of great interest to those involved in the study of early childhood education and for postgraduate students aspiring to work in these settings.

Susana Castro is a psychologist and senior lecturer in Education Studies at the University of Roehampton, London. She has a background in early childhood intervention and has an extensive research background on research and professional applications of the ICF/ICF-CY in education and care. She has also conducted extensive training on the use of the ICF-CY for education and care.

Olympia Palikara is a senior lecturer in Educational Psychology at the University of Roehampton, London. She trained as an educational psychologist and her research interest concerns the educational and psychosocial outcomes of children and young people with SEN. She is an Associate Fellow of the British Psychological Society, a Fellow of Royal Society of Arts and a Fellow of the Higher Education Academy.



An Emerging Approach for Education and Care

Implementing a Worldwide Classification of Functioning and Disability

Edited by Susana Castro and Olympia Palikara



First published 2018 by Routledge 2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

and by Routledge 711 Third Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

© 2018 selection and editorial matter, Susana Castro and Olympia Palikara; individual chapters, the contributors

The right of the editors to be identified as the authors of the editorial material, and of the authors for their individual chapters, has been asserted in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Trademark notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

British Library Cataloguing-in-Publication Data A catalogue record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data A catalog record for this book has been requested

ISBN: 978-1-138-69817-8 (hbk) ISBN: 978-1-315-51969-2 (ebk)

Typeset in Bembo by Apex CoVantage, LLC

Contents

	Preface List of contributors	viii x
	Introduction: a classification for functioning: the International Classification of Functioning, Disability and Health SUSANA CASTRO AND OLYMPIA PALIKARA	1
PA Th	RT I neoretical foundations of the ICF	3
1	The International Classification of Functioning, Disability and Health-Children and Youth: a universal resource for education and care of children RUNE J. SIMEONSSON AND ANDREA LEE	5
2	Applying ICF in education and care	23
PA Co and	RT II Intributions of the ICF to policy on education d care	37
3	The education health and care planning process in England susana castro and olympia palikara	39

4	The use of the ICF-CY for supporting inclusive practices in education: Portuguese and Armenian experiences MANUELA SANCHES-FERREIRA, MÓNICA SILVEIRA-MAIA, SÍLVIA ALVES AND RUNE J. SIMEONSSON	53
5	The use of the ICF-CY in special needs education in Japan Akio tokunaga, koji tanaka and yutaka sakai	71
6	Development of the FUNDES-Child and its implications for the education of Taiwanese children HUA-FANG LIAO, AI-WEN HWANG, LIN-JU KANG, YA-TZU LIAO, MATS GRANLUND AND RUNE J. SIMEONSSON	85
PA Co cai	RT III Intribution of the ICF to education and re – applications in professional practice	3
7	The ICF goes to school: contributions to policy and practice in education kirsten ellingsen, eda karacul, meng-ting chen and rune J. Simeonsson	115
8	The ICF-CY and collaborative problem solving in inclusive Early Childhood Education and Care EVA BJÖRCK-ÅKESSON	134
9	ICF-CY in early childhood intervention: a step-by-step model for assessment-intervention processes vera coelho, susana castro, catarina grande and ana isabel pinto	147
10	"Let us be prepared, but wait and see": the use of ICF-CY in early childhood intervention and paediatric social care in Germany and neighbouring countries MANFRED PRETIS	165
11	ICF applications in health care for children with cancer in Sweden LAURA DARCY, MARIA BJÖRK, MATS GRANLUND AND KARIN ENSKÄR	178

		Contents	vii
12	The ICF-CY in habilitation services for children MARGARETA ADOLFSSON		187
13	Implementation of the International Classification of Functioning, Disability and Health (ICF) in the Turkish education system MEHMET YANARDAĞ AND İBRAHIM H. DIKEN		204
14	Human rights of children with disability: exploring the role of the ICF-CY JUAN BORNMAN		216
	Conclusion: a compendium of worldwide application of the ICF SUSANA CASTRO AND OLYMPIA PALIKARA	15	230
	Index		233

Preface

I am delighted to write this preface and welcome this edited book about the use of the International Classification of Functioning (ICF) in relation to children and young people's education, health and care services.

This book brings together leading researchers who have promoted and developed the use of the ICF in different countries in different service settings to illustrate the potential and prospects of this framework. Contributors come from Europe (Sweden, Portugal, Germany, Switzerland and the United Kingdom); the East Asia (Japan and Taiwan); from Africa, Middle East and Western Asia (Turkey, South Africa and Armenia); and the USA.

This is a timely bringing together of these diverse contributions about the ICF framework. It will be a unique source for anyone interested in seeing how the ICF can inform thinking, research, practice and policy and how it can be further used and developed. It will be relevant to those who are unfamiliar with ICF informed perspectives and approaches as well as those already with some knowledge, but wanting to finding out more about its scope and flexibility, on one hand, and its international use, on the other.

This scope and flexibility covers its use in the health and education services, for rehabilitation and individual education programme planning, at different phases in education and as a resource for interagency and inter-professional collaboration.

From my perspective, the ICF is a framework about functioning based on a particular set of causal assumptions about the interactions between social, psychological and biological factors. Its use needs to be informed by a values framework, such as the Convention on the Rights of Disabled People. Its use has also to take account of the purposes of assessment and the goals of the varied kind of programmes that set its context of use.

The potential of the ICF to bridge between different agencies, professional groups and between policy makers, practitioners, parents, children and young people is central to its continued use. But there are risks in its uncritical adoption and over-blown promotion in the current political and economic context of services for disabled children and young people. There are also technical problems to be solved in the development of quality assessment methods. The ICF framework and language has also to be responsive to the changing demands that will be placed on it.

The editors of this book are to be commended for bringing together these contributions as well as for their own research work in the United Kingdom, which is the first UK use of the ICF in the special needs and inclusive education system. I hope this book contributes further to continuing international interest in the framework, encouraging researchers to share their approaches, insights and set up future collaborations.

Brahm Norwich Professor of Educational Psychology and Special Education Needs Graduate School of Education, University of Exeter

Contributors

Margareta Adolfsson, Jönköping University, Sweden Sílvia Alves, School of Education, Porto Polytechnic, Portugal Eva Björck-Åkesson, Jönköping University, Sweden Maria Björk, Jönköping University, Sweden Juan Bornman, University of Pretoria, South Africa Susana Castro, University of Roehampton, United Kingdom Meng-Ting Chen, University of North Carolina at Chapel Hill, USA Vera Coelho, Porto University, Portugal Laura Darcy, Jönköping University, Sweden Ibrahim H. Diken, Anadolu University, Turkey Kirsten Ellingsen, Parent and Child Psychological Services, USA Karin Enskär, Jönköping University, Sweden Catarina Grande, Porto University, Portugal Mats Granlund, Jönköping University, Sweden Judith Hollenweger, Zurich University of Teacher Education, Switzerland Ai-Wen Hwang, Chang Gung University, Taiwan

Lin-Ju Kang, Chang Gung University, Taiwan

Eda Karacul, University of North Carolina at Chapel Hill, USA

Andrea Lee, Licensed Clinical Psychologist, USA

Hua-Fang Liao, National Taiwan University, Taiwan

Ya-Tzu Liao, Chang Gung University, Taiwan

Olympia Palikara, University of Roehampton, United Kingdom

Ana Isabel Pinto, Porto University, Portugal

Manfred Pretis, Medical School of Hamburg, Germany

Yutaka Sakai, Teikyo University, Japan

Manuela Sanches-Ferreira, School of Education, Porto Polytechnic, Portugal

Mónica Silveira-Maia, School of Education, Porto Polytechnic, Portugal

Rune J. Simeonsson, University of North Carolina at Chapel Hill, USA

Koji Tanaka, Tokyo Seitoku College, Japan

Akio Tokunaga, Yokohama National University, Japan

Mehmet Yanardağ, Anadolu University, Turkey



A classification for functioning

The International Classification of Functioning, Disability and Health

Susana Castro and Olympia Palikara

The ICF – International Classification of Functioning, Disability and Health – was published in 2001 and 2007 (children and youth version) by the World Health Organization (WHO) and since then, a considerable body of research has been developed worldwide on its applications in a variety of fields (education, health, rehabilitation, early childhood, etc.). Its main purpose is to provide a classification of functioning for adults and children with disabilities, considering their everyday lives, all the activities they perform and the environments they are embedded in, in addition to their health condition, which has been the traditional approach to disability in many countries. In fact, if we think of any two children with the same diagnosis, often they present different functioning profiles/general behaviours; this individual functioning is what the ICF classification system aims to help documenting (WHO, 2007). The ICF provides a holistic approach to special educational needs (SEN), considering each individual child from the point of view of the activities they perform, their participation and the environments they grow up in, in addition to body functions and structures.

The book An Emerging Approach for Education and Care: Implementing a World-Wide Classification of Functioning and Disability provides a synthesis of the extensive research that has been conducted worldwide about the International Classification of Functioning, Disability and Health for Children and Youth (ICF-CY; WHO, 2007) in education and care of children and young people. This synthesis of world-leading research in the ICF is presented in a way that is suitable for professionals working in special educational needs provision, rehabilitation, early childhood and students aspiring to work in these settings. Each chapter presents an evidence-based study or project describing how the ICF has been used to improve the provision of services for children and/or young people with SEN in a given context. Moreover, each chapter/evidence-based study is written by an expert on the ICF from a different country, thus providing an overview of how the ICF can be applied in educational contexts with different policy systems and cultural backgrounds.

The book is divided into three sections: 1) the theoretical foundations of the ICF, 2) contributions of the ICF to policy and 3) contributions of the ICF to

education and care – applications in professional practice. These three sections reflect three of the ways by which the ICF has been implemented: a theoretical model that helps to rethink disability and special needs, a model that can be applied to support policy decision making about service provision for disabilities and special needs and a tool to support the work of professionals who directly intervene with children with disabilities and special needs.

The chapters included in these three sections were written by colleagues, world-leading experts in the field of education and care that have either been involved in the development of the ICF (children and youth version) or have been consistently engaged in its application at any of the mentioned levels (theory, policy or practice). It is an honour to be able to reunite all this expertise in one single publication, which we hope will make a significant contribution to the field of education and care.

Reference

World Health Organization. (2007). International classification of functioning, disability and health for children and youth. Genève: WHO.

Theoretical foundations of the ICF



The International Classification of Functioning, Disability and Health-Children and Youth

A universal resource for education and care of children

Rune J. Simeonsson and Andrea Lee

The development of every nation state is paralleled by the nation's responsibility to promote the development of children and youth as healthy and educated citizens. These responsibilities are typically assumed by national agencies of public health and public education with shared mandates, to promote health and a knowledgeable and informed citizenry, and to prevent disease and illiteracy, respectively. Although the nature and level of implementation of these responsibilities varies in nations around the world, the underlying premise for promoting the health and education of citizens rests on universal human rights. Viewed within the perspective of the child as the developing citizen, these rights correspond to representative universal rights of all children to the highest attainable state of health (Article 24) and to education (Article 28) as defined by the UN Convention on the Rights of the Child (UNICEF, 1989).

The mandate for public health and public education to address these universal rights of children in a systematic manner rests on a common framework and language to define and implement policies and programs. In public health, this approach takes the form of an epidemiological framework of the causes and distribution of disease and the taxonomic language of the International Classification of Diseases, ICD-10 (WHO, 1992). These complementary resources serve to define policies and an array of public health prevention and promotion initiatives such as vaccination, eradicating vectors of disease, insuring a potable water supply and sanitation.

The mandate for public education to address the right to education and to prevent illiteracy is informed by policies and programs grounded on a framework of sequenced formal, graded instruction covering the first and second decade of children's lives. A universal framework of education has been codified in the International Standard Classification of Education (ISCED) (UNESCO, 2011), providing a universal basis for defining and classifying the form and sequence of instruction. The sequence typically begins with primary or basic schooling, followed by levels of secondary education and possibly post-secondary education. Increasingly countries are recognizing the importance of beginning the sequence with preschool education – that is, instructional programs

provided prior to the age of entry for formal schooling. Attendance in school is mandatory in most countries, but the actual amount of schooling received by a child varies significantly as a function of the extent of schooling provided by a country and the enforcement of attendance laws in that country. As shown in Table 1.1, ISCED classifies education on the basis of two classification variables, one defining nine fields of education and the other defining nine levels of programmes as well as level of attainment.

Although the ISCED provides a formal system for describing the structure of public education in broad terms, it does not offer a comprehensive system for documentation of what defines population and environmental characteristics of education in a manner paralleling the etiological and population information available in the ICD-10 for public health. Other than the ISCED, there has been no classification unique to the field of education for systematically describing the physical and instructional environment, dimensions of teaching and learning, teacher-student characteristics or education has lacked a common language for describing population and environmental characteristics as well as for evaluating the extent to which schools are fulfilling their responsibility in addressing the universal rights of children.

The historical lack of a classification for education however, may be addressed, at least in part, with the availability of the ICF, published by the World Health Organization (WHO, 2001), The ICF is a universal taxonomy of human

Fields	Programme / Attainment	Level	Duration
0-General programmes	Early childhood	0	2 hours/day/100 days
I-Education	Primary	I	4–7 years
2-Humanities and arts	Lower secondary	2	2-5 years
3-Social sciences, business and law	Upper secondary	3	2–5 years
4-Science	Post-secondary, non-tertiary	4	1/2-2-3 years
5-Engineering, manufacturing and construction	Short-cycle tertiary	5	2-3 years
6-Agriculture	Bachelor/ equivalent	6	3-4 years
7-Health and welfare	Master/ equivalent	7	I-4 years
8-Services	Doctoral Not elsewhere classified	8 9	3 years

Table 1.1 International Standard Classification of Education: fields and programme levels

functioning and associated environmental factors that classifies "them in terms of health domains and health-related domains . . . Examples of health domains include seeing, hearing, walking, learning and remembering, while examples of health-related domains include transportation, education and social interactions" (WHO, 2001, p. 7). As a cross-disciplinary tool, the ICF is increasingly being applied by services and disciplines for the development of a range of measures to assess functioning, disability, environments and intervention outcomes (Mpofu & Oakland, 2010). As such, it covers domains relevant to education and offers a timely resource for systematic documentation of populations across educational settings. However, in that the population served by public education is inclusive of the age range of the child as defined by the UNCRC, this chapter and the other chapters in this book presents the ICF-CY (WHO, 2007), the ICF version for children and youth, as a classification with utility for education.

As the ICF-CY has a descriptive rather than a diagnostic focus, the ICF-CY offers a common language that can serve to document the characteristics of schools and functioning of students in the educational environment. The multifunctional framework and taxonomy of the ICF-CY is applicable to an array of activities which support the education and care of children. A range of applications of the ICF-CY for policy, practice and research in education and care of children have been identified in the literature (Moretti, Alves, & Maxwell, 2012; Bjorck-Akesson et al., 2010). This chapter introduces selected ways in which the common language of the ICF-CY can advance policy as well as practice in education. Specifically, the ICF-CY can inform policy in education by offering (a) a holistic framework, (b) a common language and (c) a standard reference for student rights. With reference to educational practice, the common language of the ICF-CY can serve to document (d) functioning and engagement of students, (e) the nature of their school environments and (f) the outcomes of their education.

Holistic framework

Children served by public education also often receive services from other supportive institutions and agencies. It is common for a nation state to establish separate agencies or departments to manage education and health/human services, even though the child experiences overlapping support from these fields. There is a growing appreciation that separation of these fields is a false dichotomy, but one challenge to their integration, in support of the child, has been the difficulty in identifying a common language and taxonomy to describe the child and the environment in a comprehensive and meaningfully.

The common language of the ICF-CY builds on a framework of dimensions or components encompassing body functions, body structures, activities and participation and environmental factors as shown in Figure 1.1. The number of two-level classification codes is provided for respective domains, however the total number of higher-level codes is much greater. The diagram illustrates the fact that a child' functioning is reflective of a dynamic relationship of child characteristics and the environment. As such, it provides a conceptual model for public agencies offering a holistic and interdisciplinary approach to services for children (Simeonsson, 2009). This approach is consistent with the mission of public health, education and other helping professions to promote the child's health, development, education and quality of life.

As noted earlier, a central contribution of the ICF-CY is a multidimensional framework defining characteristics and attributes of persons and their environmental contexts. In that the ICF offers a dimensional framework of components, it can integrate multidisciplinary efforts. The components of the ICF-CY model (Figure 1.1) can thus provide the framework for assessment, intervention and monitoring of child progress and outcomes. For assessment, the focus may often involve the components of body functions, body structures and activities. For intervention, the focus will likely be on documentation of the nature of activities and participation and their impact on outcomes. In interdisciplinary programs for young children, the ICF-CY framework has been applied to clarify of the role of biological and environmental factors (Hwang et al., 2014).

The ICF-CY responds to the call for a needed universal framework and shared language, and it has been proposed for use as a common language in education (Hollenweger, 2010), special education (Florian et al., 2006; Sime-onsson, Simeonsson, & Hollenweger, 2008) and a variety of care-related and health fields. Using the ICF-CY, *any* agency, department or institution can use a common code to describe a child's functioning, document the characteristics of the environment serving or hindering a child, and qualify the focus, scope



Figure 1.1 ICF, Disability and Health-Children and Youth (adapted from WHO, 2007)

and outcome of interventions designed to meet a child's needs. In removing the differences in institutional or disciplinary language, there is greater ability to perceive commonality across policies, which allows for greater alignment, and perhaps even streamlining of resources. As a result, the ICF-CY has been proposed and/or used to provide a common language for eligibility determination (D'Alessio, 2008; Simeonsson et al., 2008), discussions on how to modernise policy language (D'Alessio, 2008) and as a tool for policy analysis, evaluation and development (Hollenweger, 2008).

Care providers and other in-service settings are often faced with the frustration of trying to use data on just one aspect of a complex truth in order to "make the case" for improving a situation which in fact consists of interacting variables. The concept of assessment for the purpose of intervention development reflects this need to somehow capture features of an individual in order to inform interventions which involve environmental manipulation (including services). As a framework capable of documenting *all aspects* of individual functioning, activities/participation and the environment, the ICF-CY helps bridge this gap to allow for integration of factors in order to understand the complex whole.

For special education, the ICF-CY can provide a common language bridging between disability-focused determinants and education-related knowledge (Simeonsson, Simeonsson, & Hollenweger, 2008). In the school setting, school nurses, special educators, allied health professionals and psychologists can share the common language of the ICF-CY to document characteristics of the child and to identify needed interventions and environmental supports. This may reduce the problem of discipline-specific languages and promote a holistic and integrated view of the child. In the Swiss context, the ICF-CY has been advanced as a platform or map for a shared understanding of interactive effects providing "an information system to help negotiate between different views on reality and different areas of expertise" (Hollenweger, 2013, p. 1088). In practice, instead of restraining professionals to their field-specific classifications (Bowker & Star, 1999), policies and procedures applying the ICF-CY standardise the approach and language across professions to support sharing of knowledge and identification of supports to address student needs.

Common language

In the ICF-CY, body functions are defined as "physiological functions of body systems (including mental functions)" and body structures are defined as "anatomical parts of the body such as organs, limbs and their components" (WHO, 2007, p. 10) with each component consisting of eight chapters. In the component of activities and participation activities are defined as the "execution of a task or action" and participation as "involvement in a life situation" (WHO, 2007, p. 10), together constituting of nine chapters. The component of environmental factors is defined as "the physical, social and attitudinal environment in which people live and conduct their lives" (WHO, 2007, p. 10) is organised into five chapters. The chapters of the aforementioned four components are listed in Table 1.2; each chapter in turn represents a hierarchical listing of alphanumeric elements defining content specific to body functions, structures, activities, participation and environmental factors, respectively.

Given the comprehensive scope of education and other disciplines working with children in related settings, many of the chapters and codes of the ICF-CY are applicable to document the populations served and their environments. As the ICF-CY is cross-disciplinary in nature, it should be recognised that specific instructional and academic content is limited. However, focusing on the student's experience in the school, there are specific chapters and accompanying codes that may be particularly relevant. Applicable codes can be identified that correspond to the following questions. What characterises the student's physical and mental functioning (BF Chapters 1-8)? What characterises the students learning and response to instruction (BF 1; A& P 1-3)? How does the student respond to situational demands (A&P 2)? What characterises the student's independence (A&P 4-6)? What is the nature of the student's engagement and participation (A&P 7-9)? What barriers and facilitators impact the student's school functioning (EF 1-5)? Although there is potential utility in documenting these characteristics with all students, they have unique implications for education of children with special needs and disabilities. There is great variability in naming and classification of children with disabilities across countries (Florian & McLaughlin, 2008; Hollenweger, 2008). That variability significantly limits comparison not only of the proportion of children needing special services but also precluding exchange of information on student characteristics

Body Functions	Body Structures	Activities and Participation	Environmental Factors
l Mental	I Nervous	I Learning	l Products/ technology
2 Sensory	2 Eye, ear	2 General tasks and demands	2 Natural environment
3 Voice/speech	3 Voice/speech	3 Communication	3 Support and relationships
4 Cardiovascular	4 Cardiovascular	4 Mobility	4 Attitudes
5 Digestive, metabolic	5 Digestive	5 Self-care	5 Services, systems, policies
6 Genitourinary	6 Genitourinary	6 Domestic life	
7 Neuromuscular	7 Movement	7 Interpersonal interactions	
8 Skin	8 Skin	8 Major life areas9 Community, social and civic life	

Table 1.2 ICF-CY components and associated chapters

and effective interventions. Using the ICF-CY in naming and classification of children with disabilities can provide information about the nature of their conditions in the diagnostic process. Such documentation can serve to influence perceptions of their needs and the design of programs to meet their needs (Florian et al., 2006).

Reference standard for student rights

Although the child's right to education may be recognised in most countries, the extent to which that right is realised varies widely. Realisation of that right requires evidence not only of the availability of public education for all children, but accessibility by the child to a structured learning experience that is appropriate for age without discrimination on the basis of gender, ethnicity or disability status. In this regard, populations for whom accessibility may be abridged in developed countries include children of poverty, children with disabilities, second-language learners, migrant and refugee children. In developing and low-and middle-income LAMI countries, the right to education is often curtailed for girls, for children with disabilities and for children on the basis of ethnic or racial identity. The reality of limitation of these rights for children in many countries of the developing world is evident in the education targets established in the Millennium Goals and the Sustainable Goals (UN, 2015, 2016).

At a universal level, the ICF may serve as standard reference for documenting the rights of children. The rights of children to equality of opportunity, participation and independence have been elaborated in the articles of the UN Convention on the Rights of the Child (UN, 1989). In practice, these rights involve access to education, care and support as well as protection from exploitation in developed and developing countries. Such access can be documented by equal opportunity to engage in activities and to participate in the instructional and social context of education as defined by a variety of codes in the ICF-CY. Specifically, evidence of restricted access to education by an individual child or of groups of children can be documented with ICF-CY codes related to a lack of learning opportunities, providing evidence of the deprivation of their rights. The common language of ICF-CY codes may thus be of particular value in documenting the limited access to education of children in developing countries due to discrimination on the basis of gender or disability (Simeonsson et al., 2003; Simeonsson, Björck-Åkesson, & Bairrao, 2006).

Documentation of student performance and school engagement

For teachers and school professionals providing instruction and care to children, the ICF-CY is a departure from other frequently referenced tools. As the classification of the ICF-CY is descriptive rather than diagnostic in nature, a key contribution is its use to document the nature of the children's functioning,

their activities and engagement with the school environment. It is important to emphasise that the ICF-CY is not an assessment tool; it can be used to identify selected codes for the development of new assessment measures or to "back-code" existing measures to determine their coverage of relevant ICF-CY components. Thus, unlike a diagnostic manual, the use of the ICF-CY is not to derive diagnoses but rather to identify a profile of codes uniquely reflecting problems characterizing the child in the school environment. In fact, the ICF-CY is far more flexible in that it provides a universal taxonomy for documenting the characteristics or the child and the environment to guide assessment and to facilitate intervention planning and delivery. This is specifically different from information obtained from intelligence or achievement tests that do not capture broader aspects of the child's physical, mental and social adaptation to the school environment. For example, consider the value of objectively documenting differences among children in how they manage their behaviour (d250) in response to problem solving (d175) academic tasks. Coding of social skill development in this way, may identify important individual differences across children depending on environmental context (i.e. whether the home, school, community or other environment are being considered) and respondent perceptions (i.e. differences in expectations or conceptualisations across parent, teacher, care provider). In other words, "social skill development" is not a static concept, and it is a child's ability to engage in various social skills across different environments which is actually of interest. When reporting on findings, then, it is of great importance to provide adequate descriptions of the interactional effects in education when capturing data and reporting their implications, a dynamic framework congruent with the ICF-CY and inconsistent with reporting fixed numbers without further context

Compared to a diagnostic manual, the ICF-CY has further merit in its ability to support documentation of the realistic, dynamic interplay between a child and environmental factors that support or inhibit the child's functioning. In order to use ICF-CY codes to document problems that a child may have while engaging in school activities or by experiencing barriers in accessing the physical, instructional or social environment of the school, the concept of the universal qualifier must be applied. Since a major purpose for the ICF and the ICF-CY is to provide a formal classification of disability, the universal qualifier was designed as a metric to quantify the extent of impairment, limitations, restrictions or barriers representing the disability. Thus the universal qualifier provides a systematic basis for defining the level of problem or limitation that may apply to aspects of a child's functioning or the extent to which an environmental factor may be a barrier or facilitator for learning or participation. Within the taxonomic framework of the ICF-CY, the universal qualifier is defined by values of 0, 1, 2, 3 and 4 to reflect no problem or limitation, mild, moderate, severe and extreme limitation, respectively. It should be emphasised that the evidence for assignment of a qualifier value to codes relevant to a child should be based on observation, clinical judgement and/or assessment. Although disability

determination has been a primary application of the universal qualifier in clinical fields, a more general application in the context of education can be to indicate the nature and the degree of difficulty or problem a child may have in an area of functioning without being identified as having a disability. For example, the code for a child with mild difficulty (qualifier level of 1) in the activity of "completing a simple task" would be d2104.1, whereas the designation for another child with a greater difficulty in "completing a simple task" could be d2104.3, with the qualifier of three indicating a severe limitation. In either case, the code and the qualifier provide meaningful information for differentiating intervention for the children.

Existing forms of evaluation in public education typically focus on child performance in the form of grades and tests of achievement. Such evaluation has a narrow focus on single measures and does not address the dynamic aspects of the child's engagement with the demand characteristics of the school. In this regard, it should be recognised that such forms of evaluation capture the academic outcomes of instruction rather than the characteristics of the child in interaction with the environment. The systematic documentation of child functioning using relevant codes from the ICF-CY could significantly expand such evaluation. A valuable contribution of the ICF-CY to educational practice is thus to develop approaches to document characteristics of the child and the school environment in a systematic manner using the universal qualifier with relevant codes. The focus in this regard would be the identification of a selected number of codes that best capture characteristics associated with required performance. As noted earlier, Chapter 1 body functions and Chapters 1, 2, 3 and 7 activities and participation would seem particularly relevant for identifying a set of codes capturing the school experience of children. Reviewing the characteristics of each child could yield a profile reflecting the nature and extent of the child's limitations of functioning in meeting the demands of the school environment. Further, documentation can also be made of environmental factors that represent barriers to child performance of activities and school participation. Profiles of individual children could be aggregated to reflect the problems of students in a class, school or a larger educational entity.

Although the documentation of functioning of students in general is proposed as a valuable application for public education, the use of the ICF-CY in documenting functioning of children with disabilities and in special education practice is well under way. Such applications have focused on documenting eligibility for special education by deriving profiles of impairments, limitations and restrictions of functioning (Sanches-Ferreira, Simeonsson, Silvereia-Maia & Alves, 2014). Parallel identification of significant environmental barriers can be incorporated into the development of individualised education programs.

A useful application of the ICF-CY can be in work with parents of children with disabilities in which they are asked to response to the question "tell me about your child". In this situation, very few parents will respond by giving a diagnostic label. Instead of saying, "He has autism," parents are likely to give