REVIEWING THE EVIDENCE ON EDUCATIONAL INCLUSION OF STUDENTS WITH DISABILITIES: DIFFERENTIATING IDEOLOGY FROM EVIDENCE

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Abstract: This article draws on a review of literature on inclusion taking into account the different origins of the concept and shedding light on standpoints from some non-English-speaking countries. The analysis shows a lack of coherence in defining inclusion. Ethical principles and scientific considerations about inclusion are often mixed. Finally it is often disregarded that, if the concept of inclusion is subsequently re-thought, this implies a crucial change in education policy. Contrary to the expectations of the experts in inclusion, there is only little reference to empirical research that confirms the expected positive effects of inclusion. This article is based on an oral presentation given at the FICE Congress, “Ways Toward Inclusion – A Challenge for All of Us!”, held at Berne, Switzerland, October 8 to 12, 2013.

Keywords: education policy, evidence-based, heterogeneity, inclusion, integration

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The United Nations Convention on the Rights of Persons with Disabilities (CRPD, 2006) led to inclusion becoming a highly debated topic of research and field of discussion all over the world, in particular in relation to the education of children and young people. The concept of inclusion gave rise to the hope that exclusion would be overcome and everyone would be able to enjoy full participation in mainstream education and society. The objectives of inclusive education and education for all infuse modern education policy. Considering the euphoric state of expectancy, it is important to look at the inherent tensions in the implementation of inclusion that emerge from elements of ambiguity: definitions of inclusion within the field of disability often lack semantic clarity and ignore prior scientific conceptualisations. Embedding inclusion in a human rights approach based on empirical evidence may be misleading. The notion of inclusion is doomed to failure if it does not recognise necessary changes in educational and social systems. To achieve sustainable and successful inclusion, these tensions have to be analysed and adaptations found. It should be understood that this is not a pledge against inclusion, but rather a serious reminder to pay attention to the myths, pitfalls, and tensions involved in its implementation. The CRPD states that, “States Parties shall ensure an inclusive education system at all levels and lifelong learning” (CRPD, 2006, p. 16). This raises the question of how to determine “inclusive” and what an “inclusive education system” actually is, or should be.

Inclusion: Conceptual opacity

Some authors are concerned that inclusion is in danger of degenerating into an empty buzzword. The discourse about inclusion has taken an ominous turn, creating a myth of inclusion that does not enlighten but rather camouflages the reality of students with disabilities. The inflationary use of “inclusion”, the re-labelling of existing approaches as inclusive ones, and the devaluing of “integration” in favour of inclusion are more likely to be a result of popular trends than of substantial changes in scientific analysis or educational practice. Inclusion seems to be a multifaceted term, or a buzzword with widely varying ideas and concepts behind it, remaining nebulous and vague (Aefsky, 1995; Ahrbeck, 2011; Dunne, 2008; Ebersold, 2009; Feuser, 2013; Gillig, 2006; Hinz, 2002; Lindsay, 2003; Michailakis & Reich, 2009; Reiser, 2003; Sander, 2002; Sierk, 2013; Weber, 2004; Wocken, 2009).

Summarising the recent use of the term “inclusion”, doubts arise in relation to a clear and sound comprehension and common basis regarding its meanings (Bernhard, 2012).

Etymology of the terms “inclusion” and “integration”

To reduce opacity and achieve more clarity about the concepts, it is worth taking a look at the etymological roots of the basic terms. “Integration” stems from the Latin “integer”, meaning “untouched”, “unscathed”, and in a wider sense, “honest”. “Integration” depicts a process, dealing with the recovery of intact, healthy conditions. The word “inclusion” can also be traced to Latin: “includere” (includo) originally meant “being within”, but also “imprisonment”, or “to be incarcerated”. This is almost the opposite of its contemporary meaning. Van der Locht (2008) demonstrates the use of inclusion in this sense by noting that in the Middle Ages the term referred to people voluntarily shutting themselves away in abbeys and excluding themselves from the world. With reference to this historical fact, Van der Locht (2008) questions the positive meaning of inclusion today. In any event, both terms have now become an integral part of international discourse (Markowitz, 2007;
Plaisance, 2010) and both are based on a historical and cultural meaning different from contemporary use.

**The neglected sociological viewpoints**

The starting point for the development of “inclusion” as a scientific term, however, lay in sociology. Talcott Parsons’ (1951) structural functionalist approach indicates that inclusion is a process inherent in modern societies. In reference to theoretical work by Durkheim, Marshall, Pareto, Weber, and others, he considers inclusion to be the dynamic developmental process of incorporating groups or individuals into a given social system. Driven by an evolutionary tendency towards ever-improving adjustment and growth, social systems tend to include formerly marginalised individuals or groups, provided they have developed skills that contribute to the functioning of the system. “Upgrading processes may require the inclusion in a status of full membership in the relevant general community system of previously excluded groups which have developed legitimate capacities to ‘contribute’ to the functioning of the system” (Parsons, 1966, p. 22). Here, inclusion refers to the historical assignment of basic civil rights to more and more sections of the population (“Full citizenship for negro Americans”, Parsons, 1965), irrespective of race, gender, or ethnicity. Within his model, Parsons did not embrace the question of disability or handicap. Herbert Striebeck (2001, p. 85) concluded his analysis of disability within the approach of Parsons: “It is evident that Parsons faces a lot of problems in finding a place for disabled persons in his functionalist model. In particular, deviant behaviour is basically an unwanted incident. ... actually, disabled or deviant persons do not fulfil any function in sustaining the system.” (translation by the author).

**Luhmann’s theory of society and inclusion**

In line with the sociological conceptualisation of inclusion, Luhmann embraced a distinct theory of society and functional differentiation. Following Luhmann, contemporary societies are structured by functional subsystems that fulfil particular roles in society. Recently, Schirmer and Michailakis (2013) have portrayed an exhaustive discussion of the Luhmannian approach, so I will limit myself here to the core assumptions about inclusion. In Luhmannian terminology, exclusion and inclusion are not normative concepts per se, with exclusion always bad and inclusion always good. A value judgement on inclusion or exclusion strongly depends on the functional subsystem and its performance role. Being included in a functional subsystem such as the economy, education, law, science, etc., means being recognised as a communicative address, that is, a bearer of a role in this functional system.

Such systems have their own operative codes (payment versus no payment in the economy, grades versus no grades in education, lawful versus not lawful in justice, true versus false in science, etc.). Subsystems follow their own particular routines regarding decision procedures on membership, based on specific behavioural expectations or capabilities. Inclusion, according to Luhmann, does not apply to the individual as a whole person. Nobody is fully included as a person, but rather inclusion refers to those parts of his or her psychic system considered relevant to the system. Following the Luhmannian theory of inclusion, a student is included in the educational subsystem in regard to his or her academic capacity, learning behaviour, and progress in passing exams. To stay in (inclusion) or to drop out (exclusion) of the educational subsystem depends first and foremost on school-related performances seen as essential in maths, language, and other relevant subjects. Disability (lack of academic capacity) may consequently lead to exclusion. Exclusion from one system accompanies inclusion in another. Being included in the functional subsystem of the economy implies being excluded from the educational system by passing compulsory school age.
Prisoners are included in the legal system (as a detainee) and excluded from the political system (on the electoral roll). Exclusion from the mainstream educational system (regular schools) may result in inclusion in special educational needs schools.

**Sociological versus educational viewpoints**

Inclusion in the educational system does not determine participation in mainstream schools or in special educational units (see the broad sense of inclusion in the World Health Organisation’s *World Report on Disability*, 2011). Moreover, inclusion in Luhmann’s terms has no direct link to non-discrimination, equality, or full and equal enjoyment of all human rights. Despite being included in the educational system, only those students with high grades (versus low grades) are given the opportunity to begin higher education. Schirmer and Michailakis (2013) conclude their consideration of the Luhmannian approach: “Neither can one simply assume that exclusion is bad and inclusion good nor is exclusion per se the problem and inclusion the solution” (p. 17). Most destructive to inclusion terminology in education is the societal function that emerges from Luhmann’s system theory: the societal function of the educational system is to allocate and select students as human resources for further education and to provide highly employable persons for the labour market. Inclusion may help some students with disabilities by offering them reasonable accommodation in the hope that they will then fulfil the needed performance indicators and achieve good grades. On the other hand, an inclusive educational system that merely recognises individual developmental reports and abolishes all grades and common educational standards is in danger of being downgraded, with subsequent institutions inventing new selection criteria or procedures according to their own interests and objectives.

Summarising the sociological understanding of inclusion, it becomes obvious that the conception according to Parsons and Luhmann is far removed from the notion of inclusion in education or inclusive education. Disability is only mentioned briefly, but in general does not really matter. Both Parsons’ and Luhmann’s approaches do not support the idea of educative inclusion or education for all in the sense of the pedagogical view of inclusion. Apparently there is only little exchange of ideas between sociology and educational sciences (Weber, 2009, p. 4; Dammer, 2012, p. 365). The sociological perspective depicts inclusion as being dependent on societal factors, which are challenged by implementing inclusive education. “Social inclusion” (2002) and “active inclusion” (2008) concepts developed by the European Union in accordance with neo-liberal economic policy stress first and foremost the individual adaptations demanded within the labour market (Euzeby, 2010). The individual has to be more “flexible” and “employable” in order to be included. The ultimate purpose of programmes on inclusion for disadvantaged or disabled persons is to turn them from tax user to tax payer.

The EU strategy between 2010 and 2020 for people with disabilities highlights the elimination of legal and organisational barriers that exist for people with disabilities and proposes timely support and special screening for the early identification of special needs. But behind the proposed adaptations lies the expectation that afterwards the person with disabilities will be able to sell his or her capacity to work in the same way as a non-disabled worker. Thus unfair conditions, enduring discrimination, persisting unemployment, and exclusion from the mainstream labour market will fall almost exclusively under the responsibility of the individual.

**Inclusion enters education**

Within recent international discourse, inclusion is understood solely in the sense of acceptance, participation, and integration. The issue of educational inclusion can first be
identified in the work of Comenius (1592-1670). In his *DIDACTICA MAGNA* (Great Didactic), he demanded that everything should be taught in-depth to everyone (*omnes omnia omnino*). In contemporary language, his approach implies inclusive and integrative thoughts. Zimpel (2008) demonstrates how this command became diluted over time, with “everyone” coming to mean “every normal or standard student”, “everything” becoming “socially useful matter” and “teaching” meaning any form of instructing or reinforcement. Feuser (1999, 2002) returns to Comenius’ postulate and relates it to the domain of disability, reformulating his approach to inclusive education: inclusive education is a framework of learning that attempts to teach everything to everyone and within which everyone is invited to learn supported by the help he or she needs.

**Inclusive Education**

Educational definitions of inclusion can be traced back to the Canadian context. Stainback and Stainback’s (1988) conception of an “inclusive school” is often cited: “An inclusive school is one that educates all students in the mainstream... every student is in regular education and regular classes... providing all students within the mainstream appropriate educational programs... any support and assistance they and/or their teachers may need.... An inclusive school is a place where everyone belongs, is accepted and supports and is supported by his or her peers and other members of the school community in the course of having his or her educational needs met” (Stainback & Stainback, 1990, p. 3). Saloviita (2005) captured the three key principles of inclusion in a nutshell: the education of all students in mainstream, regular classes with appropriate educational programmes, and acceptance and support for everyone.

Initiated by the UNESCO Conference 1990 in Jomtien (Thailand), inclusion became well known internationally and spread quickly following the Salamanca statement (United Nations Educational, Scientific and Cultural Organisation [UNESCO], 1994), which introduced the term “inclusion” in rethinking special needs education. The Charter of Luxembourg (1996) stated that inclusive education adapts to the needs of the individual. Even within the Salamanca framework for action on special needs education (UNESCO, 1994) there is no precise definition of inclusion, but several assertions are highlighted as guiding principles: “Schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions. This should include disabled and gifted children, street and working children, children from remote or nomadic populations, children from linguistic, ethnic or cultural minorities and children from other disadvantaged or marginalized areas or groups” (p. 6). Pupils with special educational needs should have access to regular schools providing a child-centred pedagogy meeting their needs: “Regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all; moreover, they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system” (UNESCO, 1994, p. ix).

In contrast to the international acceptance and adoption of inclusive education, the concepts remain unclear. “However, in the same way that Jomtien provided a broad framework with little guidance on implementation but failed to adequately spell out the mechanics of how to achieve education for all children, Salamanca has led to a divergence of views and a lack of clarity on implementation” (Miles & Singal, 2010, p. 8).
Inclusion: the climax of a developmental process

Inclusion is frequently presented using intuitive pictures or figures, with coloured points highlighting the dynamic process of inclusion (Kastl, 2012). Originating in preliminary studies by Bürli (1997) and Sander (2004), inclusion emerges within a developmental process in the education of pupils and students with disabilities.

Starting with exclusion, children with disabilities are refused by the educational system. They are not covered by any educational system and they are not permitted to participate in compulsory education. Separation is characterised by the fact that children with disabilities are now obliged to go to school but are placed in a separate or special system without links to mainstream education. Integration permits pupils and students with disabilities to participate in mainstream education within the conditions and regulations of the regular school. They have to adapt more or less to the existing system. Support and assistance should enable them to perform like non-disabled classmates. Bürli defines inclusion as the unconditional participation of all children in the educational system, which has to be changed dramatically in order to be able to meet the needs of all children in one school for all (Bürli, 2009, p. 28). An exemplary depiction of this phased model in the case of Luxembourg was published by Limbach-Reich (2009a, 2009b).

Diagrams using symbolised disabled and non-disabled students to demonstrate the progression within the model are very popular. Such diagrams can be found on the German Wikipedia site and are replicated widely in scientific articles and popular presentations as “Smarties Diagrams” (Kastl, 2010). The red points in the diagram represent non-disabled pupils while the blue, green, and yellow points stand for disabled pupils. Exclusion could be seen as a situation in which some pupils have no access to the school system at all. Separation stands for two different school systems (the mainstream and special needs systems). Integration opens mainstream schools for pupils with disabilities, creating special units or classes.

Figure 1. Inclusion Smarties, (see Kastl, 2010)
Following the Organisation for Economic Co-operation and Development (OECD) standard, a school system is integrative if 40% of all children with disabilities participate in regular schools (Ahrbeck, 2011; Lindmeier, 2009). The OECD criteria for inclusion are fulfilled if 80% of disabled children go to regular schools. But one may well ask, what about the other 20%? The 80% definition denies the philosophy of inclusion that states: All pupils are different and all pupils are equal. Inclusive education facilitates individual support for everybody and everybody is warmly welcome in the classroom (Booth & Ainscow, 2002; Feuser, 2002; Hinz, 2002; Stainback & Stainback, 1988, 1990).

Major doubts arise in the case of disability. Some differences such as gender, colour of skin (race), or religion do not have the same degree of impact on school organisation or pedagogical programmes as intellectual disability or severe disorders; they do not need curricular modifications or reasonable adaptations and are not linked to the same undesirability as intellectual disability or behavioural and emotional disorders. Kastl (2012) makes the criticism that the figurative illustrations (“inclusione theme con variazoni ‘Smarties Model’”) of inclusion seem to eliminate disabilities immediately by putting students together. The figures neglect impairments as a persistent condition and give false hope for the remediation of disability by inclusion.

Inclusion: a school for all

Building up an inclusive educational system and establishing inclusive schools requires schools to be organised and function in favour of inclusion. Benchmarks of inclusion, which are frequently picked up and drawn on for implementation in education, have been published by Booth and Ainscow (2002). Ainscow and César (2006) focus on improving schools and developing inclusion based on experience with inclusion policy in the United Kingdom. They enfold a typology of ways of thinking about inclusion. Starting with the common assumption that inclusion is primarily about educating disabled students, they plead for a rejection of the special educational view of inclusion and the categorisation of disabled or not disabled, having special educational needs or not having such needs. In their view, all categorisation undermines inclusion by identifying groups eligible for special educational support outside mainstream classes. Picking up the notions from the U.K. context, Boban and Hinz (2003) reject the so-called two groups theory (disabled and non-disabled students) and call for a diversity approach that perceives all differences as equal (see also Prengel, 2001).

Developing the “school for all” and “education for all” refers to special schools existing in the U.K. and elsewhere, which select students by religion, gender, or disability, for instance. Inclusion underpins a comprehensive school approach and encourages global efforts to enhance the participation of vulnerable groups in education. Finally, the authors allude to inclusion as a value-driven, principled approach, afflicted by tensions arising from efforts to develop inclusive practices in schools (Ainscow, Booth, & Dyson 2006).

Inclusion is often discussed with regard to learning disabilities, but less so against the background of severe disabilities or behavioural disorders. Michailakis and Reich (2009) emphasise the barriers and contradictions of the concept “one school for all”, considering severe cognitive, emotional, or behavioural disabilities in the context of the Swedish school system. Drawing on sociological system theory, organisational rationalities, and individual classroom interactions, they indicate several dilemmas that cannot be resolved. “The real problem with the idea behind – one school for all – is not that it is difficult to implement, but it contains a false promise” (Michailakis & Reich, 2009, p. 37). The false promises concern the expected cascade of inclusion, which is anticipated to follow the placement of children with disabilities in one school in one classroom. “One school for all and the vision of a cascade of inclusion are illusionary” (p. 41). Being in the same classroom does not guarantee
being warmly accepted; the performance-related grade system impedes full inclusion, as students with disabilities are not included in the same way as their classmates without disabilities; and in the context of school organisation, inclusion requires more and more differentiation to provide the needed support, meaning that labelling processes persist.

Finally, as discussed above, the societal role of the education system forces schools to deliver grades. Without a change to the importance attached to grades, the “one school for all” approach encourages more and more efforts to help students. Experiences from the Luxembourg context indicate that included pupils lose more and more leisure time to educational support or remedial education. They are at risk of being overburdened and overextended (Ramponi, 2010). In spite of all efforts, some children with disabilities who have been included in regular primary schools drop out later on and restart in special educational schools, while not all children with disabilities who remain in regular primary education over the whole programme acquire the intended competences (Limbach-Reich, 2013; Marx, 2009).

**Inclusion in non-English-speaking areas**

The use of the term “inclusion” was relatively unknown in non-English-speaking Europe until the 1990s. The official French and German versions of the CRPD (2006) use “insertion” and “Integration” respectively for “inclusion”. In France, the act on equity and the human rights of persons with disabilities (2005) did not mention the term “inclusion” (Plaisance, Belmont, Vérillon, & Schneider, 2007). Ebersold reported in 2009 that the term “inclusion” has gradually come to replace the former French terms “insertion” and “intégration”. In Germany, early attempts to open mainstream schools for children with disabilities came under the political banner of “integration” (Deutscher Bildungsrat, 1973, p. 15). The evaluation of an important programme on the inclusion of pupils with disabilities in mainstream primary schools in Hamburg at the end of the 1980s continually used the term “Integration” (Wocken, Antor, & Hinz, 1988). In the German-speaking countries the first definitions in relation to pupils with disabilities in education indicated that “integrative pedagogy” was the “general education of all children, playing, learning and working together with a common aim in joint activities at their respective levels of development, in accordance with their current perceptual thinking, cognitive skills and competences within the zone of proximal development” (Feuser, 1995, p. 168, translation by the author).

This definition of the term “integration”, published by Georg Feuser, anticipates contemporary conceptualisations of inclusion. The essence of Feuser’s conception is the need for adaptations and changes in the educational system. Inclusion that does not acknowledge this awareness of integration is referred to by Feuser as the “inclusion lie”; he calls the neglect of necessary changes to existing structures in school organisation and policy “inclusionism” (Feuser, 2013). Integration is not seen as a one-dimensional mission to make the student suitable for the school but as a multi-dimensional undertaking by the whole educational system to meet the needs of all students, even those with disabilities, in one classroom. Other authors (e.g., Hinz, 2002, 2011) assume that inclusion is a substantial advancement, resolving the problems integration could not fulfil. Inclusion focuses on the termination of the two groups theory (disabled versus non-disabled pupils) and advocates the perspective that all are different and all are equal. All forms of separation or selection should be abolished. Within the German-speaking scientific community, inclusion/integration terminology and its implications are a vibrant bone of contention (Ahrbeck, 2012; Biewer, 2001; Boban & Hinz, 2003; Bonfranchi, 2011; Eberwein, 1970; Feuser, 2012, 2013, Frühauf, 2011; Hinz, 2002; Jantzen, 2012; Sander, 2002, 2006; Wocken, 2009, 2010). Wocken distinguishes ten different
relationships between integration and inclusion and finally pleads for a synonymous use and understanding of both terms, visible in the “inclusion/integration” notation (Wocken, 2009).

**Inclusion and disability definition**

Inclusion and inclusive education as presented by the Salamanca statement do not exclusively deal with disabilities, but refer to the whole spectrum of diversity. In contrast, inclusion research focuses on disabilities and disorders. In a similar way to inclusion terminology, it is worth taking a look at disability in the context of inclusion. In 1973 the American Act on Rehabilitation, which was a guiding principle for many national and international views on disability, defined a person with disability as “any Person who:

1. has a physical or mental impairment which substantially limits one or more major life activities,
2. has a record of such an impairment, or
3. is regarded as having such an impairment. (as cited in Palley, 2009, p. 42)

The first WHO model of disability – International Classification of Impairments, Disabilities and Handicaps (ICDIH), 1998 – referred to the same linear biological-based perspective. Terminological modifications and a new definition arise from the ICDIH II or ICF model (WHO, 2001), which explains disability as a complex situation depending on health conditions, functioning, activity, and participation in interactions with each other and with individual personal and environmental factors. The UN-CRPD (2006) fosters a new paradigm on disability without providing an explicit definition, referring to the so-called social model of disability. Disability is seen as depending less on individual impairment than on environmental factors, including social situations that hinder the person from participating in all parts of society and enjoying their civil rights. Despite the social view on disability, the model does not constructively define health conditions, disorders, or disability. According to the criticism of DSM-5 by Allan Frances (2013), the arbitrariness increasingly appears to define health conditions, psychosocial idiosyncrasy, or challenging behaviour as a disability. In line with both the social model and the inclusion perspective on disability, the ICF model should show the following characteristics.

![Figure 2. Disability, ICF, and constructivism](image-url)
The triangles indicate that the more severe a health condition is, the more disability diagnoses agree. The less restrictive diagnostic procedures in DSM-5 and, more frequently, diagnosis undertaken as a response to intervention programmes implemented to foster inclusion have the tendency to identify (stigmatise) more and more children as “disabled”, that is, with such learning disabilities as dyslexia, dyscalculia, dysphasia, dyspraxia, sensory integration disorder, problems with motor co-ordination, non-verbal learning disorder, visual perceptual/visual motor deficit, central auditory processing disorder, dysgraphia (Learning Disabilities Association of America, 2014). One of the consequences of these tendencies may be that more severe forms of disability move out of the spotlight of inclusion. With each diagnosis, the level of extra tuition, additional lessons, and special educational offers rises and concerns emerge that pupils will be overloaded and stressed by educational support. A radical resolution of this dilemma would be to stop all categorising or diagnosing in the classroom. Slee (2004) argued that inclusive education grounded its original radical meaning in the rejection of medical and psychological explanations of educational difficulties.

Although this argument is reasonable, it is important to be aware of the impairments of the individual in order to better understand their difficulties and strengths, and to provide effective educational support. In relation to the view on disability, it is also important to clarify the conception and perception of a “normal pupil” in education. Frameworks on inclusion rarely delineate their idea of pupils or students in inclusive schools. Wevelsiep (2012) points to some blind spots in inclusive education when looking at the pupil or student. Inclusive education draws on potential positive developments that could be realised within inclusive schools and assumes that all pupils with or without disabilities are eager to learn and willingly participate in all learning opportunities. They interact, accept, and warmly welcome each other irrespective of any diversity aspects. “Everyone is felt to be welcome at this school” and “students help each other” are the first two items in the Booth and Ainscow (2002) Index on Inclusion. In contrast, empirical findings indicate that disabled pupils in inclusive settings may experience blaming and mobbing (Michailakis & Reich, 2009).

**Inclusion: intermingling of approaches**

In addition to the fuzziness of the concepts “inclusion”, “regular school”, and “disability” there is a problematic rationale for inclusion in combining ethical requirements, human rights issues, cost-effectiveness, and empirical evidence. Each of these pillars for inclusion should be examined thoroughly.

Regarding inclusion as a human right, suggested by both the Salamanca Statement (1994) and the CRPD (2006), raises some questions. As Farrell (2000) argued that the primordial right should be the right to have “good education”, how are human rights affected if the best fit is special education? The second question emerges from the right of parents to decide. If there is no alternative, what can be decided? If inclusive education is a human right, are all special schools (e.g., religious schools) a violation of this human right? If inclusion is a human right, what does that mean at the level of secondary and tertiary education for those students with intellectual disabilities? The right of inclusion for students with intellectual disabilities at universities remains hard to implement. The inherent logic of the educational system with performance-related graduation in modern western societies contradicts the right to be fully included for all students at all levels of education.

The economic argument, that inclusion is more cost-effective, bears the risk of cutting individual support or remedial education programmes by transforming existing two-track systems into an inclusive system. Conflicts in funding and assumption of costs are emerging (Greiner, 2014). Human rights and ethical positions in the implementation of inclusive education may be relegated to second place in times of financial crises and austerity policy.
The ethical dimension sets out the general obligation to open all schools for pupils with disabilities, justified by the assumption that regular schools with an inclusive orientation provide the desired outcomes (abolishing discrimination, providing qualitative education, social inclusion, etc.). What about the ethical rationale if the premises do not apply? The ethical dimension is also problematic as it postulates effective education for the majority of children. This raises the question: What about the minority? In particular, concerns have been expressed for children with severe intellectual disabilities (Speck, 2011). Mainstream education may be reconsidered in light of the fact that almost all included pupils with severe intellectual disabilities drop out of mainstream education (Frühauf, 2011).

**Inclusive education: empirical findings**

The expectation of effectiveness and evidence still lacks empirical data, analyses, and meta-analyses of inclusion and non-inclusive settings. The available data on inclusion does not provide a consistent picture on inclusion outcomes. Results differ between different disabilities and different outcome aspects and do not confirm the “one size fits all hypothesis”. The WHO’s *World Report on Disability* cited controversial findings: “slightly better academic outcomes for students with learning disabilities placed in special education settings; higher dropout rates for students with emotional disturbances who were placed in general education; better social outcomes for students with severe intellectual impairments who were taught in general education classes” (WHO, 2011, pp. 211–212).

The volume of international scientific literature on inclusion based on empirical research has grown since the Salamanca Statement and was recently boosted by the CRPD (2006). An interpretation of the research results is complicated by:

- the opacity of inclusion terminology;
- the very small number of efforts to verify treatment fidelity;
- the divergent measurements of inclusion outcomes (affective: self-efficacy, achievement motivation, social development, academics, reading, mathematics, etc.);
- the examination of pupils with handicaps (different forms and different degrees of disability) or non-disabled pupils in inclusive settings; and
- the fact that only a very small number of studies are based on random controlled trials.

Therefore results should be interpreted with care. The following compilation of empirical evidence about inclusion almost exclusively refers to reviews and meta-analysis from the last decade.

Lindsay (2003) reviewed studies on inclusion dating back to 1990 and did not find enough evidence to confirm the general advantage of inclusion: “There have been a number of studies that have reviewed the evaluation of inclusion. Overall, these reviews cannot be said to be a ringing endorsement. (...) These overviews, reviews, and meta-analyses fail to provide clear evidence for the benefits of inclusion” (Lindsay, 2003, p. 6). Kavale and Mostert (2003) also report mostly mixed results. While some positive outcomes have been found, there is also evidence of negative consequences for students with disabilities, including poor self-concepts, inadequate social skills, and low levels of peer acceptance.

In 2007, Lindsay again reviewed the literature and weighed the overall evidence delivered by more than 1,300 studies published between 2000 and 2005 as not providing a clear statement for the positive effects of inclusion: “The evidence from this review does not provide a clear endorsement for the positive effects of inclusion” (Lindsay, 2007, p. 2). In the same year, Kalambouka, Farrell, Dyson, and Kaplan published their analysis of the effects of
inclusion on non-disabled classmates in the United States, stating that the great majority of the studies found positive or zero effects: “Overall, the findings suggest that there are no adverse effects on pupils without SEN of including pupils with special needs in mainstream schools, with 81% of the outcomes reporting positive or neutral effects” (Kalambouka et al., 2007, p. 356).

Begeny and Martens (2007) carried out a literature review of English-language articles on inclusionary education in Italy based on Italy’s long experience (beginning in the 1970s) of including almost all students with disabilities in regular schools. In their summary based on 19 inclusion studies and intervention trials, they found that very little research has directly scrutinised Italy’s inclusion practices and outcomes: “The general results of the inclusion studies revealed that survey participants tended to view inclusion practices favourably, but the experimental studies demonstrated that educating students either fully or partly outside the general classroom had a positive impact on these students across the majority of dependent measures evaluated” (Begeny & Martens, 2007, p. 89).

Ruijs and Peetsma (2009) reviewed the literature on the effects of inclusion on disabled and non-disabled students over a decade (1999 to 2009) identified by systematic research on digital databases (e.g., PsycInfo, Eric). The researchers found it difficult to draw a clear conclusion from their data. Some studies find positive effects, while others find negative or no effects. Their secondary findings on the factors influencing the results (differences in the support available, the ways students were included, variance within schools, and the differential effects of inclusive education on individuals) are interesting. The authors close their article by sounding a note of warning: when designing inclusive education it is important to avoid negative results for specific groups of students (Ruijs & Peetsma, 2009, p. 78).

Hattie’s (2009) huge meta-meta-analysis of learning outcomes, based on English-speaking publications over more than a decade, rates mainstream education and non-segregation as a mediocre positive factor for learning with an effect size of about .28: a slightly weaker effect than homework (.29), but higher than summer school programmes (.23).

The Mitchell Report (2010) portrayed research evidence on inclusion based on different resources (teachers, principals, parents, students), mostly from English-speaking countries. The report concludes cautiously that “the evidence for inclusive education is mixed but generally positive, the majority of studies reporting either positive effects or no differences for inclusion, compared with more segregated provisions” (Mitchell, 2010, p. 141).

In their review of international experience with the integration and inclusion of children and adolescents with Down syndrome from 1970 to 2010 (53 studies from 12 different countries), de Graaf, von Hove, and Haveman (2012) concluded that in regular education such pupils acquire more academic skills and are fairly accepted by peers in regular classes: “From our review it can be concluded that regular placement of students with Down syndrome, i.e. education in regular classroom with individual support to some extent, yields a better development of language and academic skills, even after the effect of selective placement has been taken into account” (p. 70). However, adolescents with Down syndrome show less peer interaction and are less often seen as a best friend.

One of the first and most famous studies of inclusion in Germany refers to two longitudinal evaluations of integrative primary schools carried out in Hamburg between 1991 and 1996. One of the main findings was that “the variation in children’s achievements and in their emotional-social conditions are determined more strongly by differences effective on the
level of individual classrooms than by the affiliation to a specific system (integrative versus traditional elementary schools)” (Katzenbach, Rauer, Schuck, & Wudtke, 1999, p. 567).

Klemm (2010) summarises empirical findings about different educational interventions, comparing inclusive and separate settings, based mostly on Germany, Austria, and Switzerland. Inclusive settings score more highly on academic performance for students with learning disabilities. In some studies either no differences could be found between inclusive and separated settings or mixed effects are reported: “The review of the available studies (also comparing the studies of Klemm and Preuss-Lausitz 2008a and 2008b) leads to the conclusion that pupils with special educational needs in inclusive settings show a significant advantage in performance compared with separated settings” (Klemm, 2010, p. 24, translation by the author).

Ellinger and Stein (2012) mostly reviewed studies of students with emotional, behavioural, and learning disabilities. The authors conclude that there is no homogeneous set of results, and criticism emerges about the success of inclusion in general. Martschinke, Kopp, and Ratz (2012) found, contrary to the expectations from prior research, that pupils with intellectual disability in mainstream first grade do not show a significantly lower self-concept, nor are they mentioned last in rank orders on social relationships. Hennemann and colleagues (2012) see benefits for children and adolescents with emotional and behavioural disorders in using an adapted training tool in a general setting. Huber and Wilbert (2012) conclude their empirical trial on 463 children placed in general education classrooms as corroborating an increased risk of social exclusion; however, in some classes exclusion did not follow.

With regard to Luxembourg, only a few studies exist that analyse inclusion and special needs education. In her report for the European Agency for Development in Special Needs Education (EADSNE), Englaro (2001) mentioned only two research studies on inclusion in Luxembourg so far: Pull (1998) and Chapellier (1999). Pull focused on historical, theoretical, and conceptual questions about inclusion in Luxembourg. A discrete empirical investigation was realised by Chapellier in 1999. His mixed method approach focused on the experiences of teachers and special education professionals with inclusion. For both methods, qualitative interviews with focus groups and a quantitative study based on a standardised questionnaire, the majority of statements about inclusion are positive. In 2005, a qualitative study by the Commission Consultative des Droits de l’Homme (CCDH) summarised from expert interviews that there is no common vision on how to realise inclusion in Luxembourg and parents feel disregarded or forced to agree to the recommendation of the school. The national information and consultation office for persons with disabilities (INFO-HANDICAP, 2013) summarises anecdotal statements, evaluation reports and acts on inclusion in Luxembourg. Statistical analyses about inclusion in Luxembourg show that there are notable movements towards inclusion, but some data give cause for serious concern. Despite the ratification of the UN-CRPD in 2009, the number of students educated separately continues to rise in Luxembourg (Ministry of Education, Childhood and Youth, 2014). The exclusion index has remained at the relatively low level (less than 1%) over the last decade, but the years following the signing of the CRPD in Luxembourg have shown exclusion rising slightly, and over 100 pupils with disabilities or special needs are still educated outside the country (see Limbach-Reich, 2013).

However, given the large number of studies with their different scopes and the wide range of findings, it is very hard to summarise evidence for inclusion. The research cannot confirm that inclusion has a dominant and mainly positive effect for all children with disabilities, with positive effects on both academic outcomes and psycho-emotional
dimensions and without negative effects on non-disabled classmates. On the other hand, many positive effects could be found and negative effects are in the minority. Special attention should be devoted to differential effects based on the kind of disability, age, and factors outside the “included - not included” dichotomy. One of the pitfalls of inclusion may be that it works but not for all, not at all times and not in all settings.

**Conclusion**

Differentiating ideology from evidence in the field of inclusion, one of the most striking findings is: Neither conceptualisation nor empirical evidence on inclusion are homogeneous and they do not make a convincing case for the abolishment of all separative approaches in education. Inclusion in a sociological view is not positive per se, and exclusion is not always bad. Implementing inclusion has to take into account the functional role of the educational system. Inclusion in education requires changes in school systems and society. Policy should not include students first and then hope that the system will change. Under the prevailing circumstances, some students with or without disabilities may not profit from inclusive settings. In particular, students with severe learning disabilities may need a pragmatic mixture of inclusive education and special needs education. Jennessen and Wagner (2012) presented a framework on inclusion within an inclusive comprehensive school, involving a large scale of inclusive and separating options. Crucial for the success of education is that beyond the mainstream paradigm the individual situation (needs and strengths) should be decisive for the educational arrangements, and circumstances outside the school should be taken into account. Finally, shared teacher education including disability topics and inclusive education should be guaranteed. If the aim of international human rights approaches and national policies is that all students receive their instruction in general education settings, then the overarching goal should be to develop an inclusive society that redefines the function of education and school and endorses inclusive or non-inclusive education depending on empirical evidence.
References


