Chapter 5 Development in Primary School Age for Children with Disabilities

School as an institution and teaching as an activity have a major impact on the life of the school-aged child and his/her family. Not only do activities in school consume a major part of the weekdays, but the school structures parts of life at home (Hedegaard 2012), constitutes a primary arena for social life, friend-making and further independent exploration of and reflection on one's capacities and personal identity.

For many children with disabilities, the beginning of school is a major challenge. Even before school starts, the challenge can be to find a school that match the child's particular needs and is able to support the child's learning and development in relevant ways. Sometimes parents have to make a crucial choice between mainstream schooling and special schooling; at other times, the choice has been made for them at an administrational level. Regardless of how the decision about school placement is made, schools are social settings of development that do not fit the child with one or more impairments as readily as it does for the child's peers without impairments. The beginning of school often prompts an increase in the incongruence between the child and the demands and expectations on the child in terms of social practices, which in turn calls for local adaptations in order for the child to be able to participate, learn and develop. This chapter will discuss some of these challenges, how they emerge from the incongruence and how intervention can take form within a cultural-historical understanding of disability.

Learning as the Central Value Position in School

The overarching purpose of the school has been and still is to facilitate learning. Moving into the institutional setting of the school, childhood disability thus becomes closely associated with the question of whether the child has special educational needs and how to meet them. The question is by no means straightforward, as shifts

in political and theoretical positions have provided different answers. The twentieth century witnessed a dialectical development between different societal value positions regarding children with disabilities and educational psychology, now continuing into the twenty-first century (see Chap. 2).

One of the main aims of the emerging educational psychology at the beginning of the twentieth century was centred on separating children considered educable from those considered more fit for vocational training (Goodey 2011). The technology of psychometric assessment was developed and improved as a means to fulfil this aim throughout the century. Issues related to psychological testing are a subject to which we will return in Chap. 7. The division of children into those who should be taught in mainstream education and those with *special educational needs* who should be educated in special settings was grounded in the biomedical model. However, the idea that children with disabilities have different needs with regard to teaching and learning conditions is by no means alien to the cultural-historical approach. The main difference to the psychometric and biomedical approach lies in the dialectic conceptualisation of disability and special educational needs. According to Vygotsky, the education of children with disabilities calls for

...the necessity of creating special cultural tools suitable to the psychological make-up of such a child, or of mastering common cultural forms with the help of special pedagogical methods, because the most important and decisive condition of cultural development – precisely the ability to use psychological tools – is preserved in such children. (Vygotsky 1993, p. 47)

Later he stresses that children with disabilities need to achieve the same goals as normal children, only by different means. Thus, from the dialectical point of view, an impairment will almost always affect the child's ability to learn, either directly or through the impact on his/her ability to participate in activities where culture is mediated. Learning activities in school builds on the child's prior foundation of learning and development. The basic incongruence and the way it has been negotiated earlier will affect the child's level of development at the start of school and his/her ability to participate in school activities, even when the child has an impairment that does not directly give rise to cognitive impairments (eg, deafness, motor disabilities of a non-cerebral aetiology or speech difficulties). It is only through the child's active participation in cultural practices that he or she develops higher mental functions. Therefore, earlier incongruence or delay will have affected the child's development as a whole, including aspects of cognitive functioning, unless a thorough supportive practice has been established from early on.

The question of how deaf children learn literacy abilities can be an opening example. The hearing impairment is often a barrier when the child is beginning to learn to read and write and many deaf children experience a delay in the development of literacy skills. However, results do not paint a uniform picture. Some deaf students read and write at the same level as their hearing peers, while others experience severe delay (Dammeyer 2014c). Literacy is neither predicted by a degree of hearing impairment nor solely by phonological skills (the ability to decode and process phonological sounds). Instead, general abilities in language have been

found to be important for the development of literacy abilities, whether they be good abilities in oral language or sign language (Dammeyer 2014c). Early language acquisition is important (as in many other aspects of deaf children's development; see also Chap. 7), and deaf children with deaf parents are in general found to perform better in tests of literacy, although they might still experience some delays in development of language and difficulties with literacy learning compared to hearing children (Knoors and Marschark 2014). From a cultural-historical understanding, this is not surprising, given that the general knowledge base of language – concepts and word meaning – is learned through interaction in different social settings throughout childhood and social participation in a varied range of settings will be more difficult for deaf children, including those with deaf parents. Deaf children of deaf parents will be able to engage in conversations at home similar to children with normal hearing. But with peers and adults at preschool and elsewhere, cultural learning and experiences with language will be reduced and this (minor) deprivation affects their ability to learn to read and write later on (Knoors and Marschark 2014).

The Question of Special Educational Needs

The need for different learning means of children with disabilities might sometimes translate into special learning goals. The threshold for when special educational needs emerges depends on both the organisation of the learning setting, the particular impairments of the child and the change in support and demands within the setting through time. Therefore, disability will never be interchangeable with special educational needs, as is also pointed out by Porter et al. (2008). The point of separating disability from special educational needs translates into a twofold question: (1) To what extent does the child have learning needs that are not met by the present organisation of the teaching/learning activity? (2) To what extent does the child have other needs for accommodation of his/her activity settings at the school due to the incongruence between the child and the cultural forms of the environment? For example, does the child with disabilities experience problems with peer interaction at school arising from his/her impairment? Special needs beside those strictly related to learning could arise during break time, lunch time or, as pointed out by Porter et al. (2008), from lower school attendance due to medical treatment or more fragile health.

This chapter will concentre on themes in relation to the second question, while we in Chap. 7 will return to learning and learning needs of children with disabilities.

The Transition to School

In the cultural-historical perspective, the transition to school is first and foremost about the transition to an institutional setting organised around a practice of teaching. Considering the child's social situation of development, the transition to school takes on importance, because (1) the school presents the child and the family with a whole new set of activity settings and related demands (Hedegaard 2014) and (2) the change is experienced by the child as a relocation that calls for new social and cognitive form of knowledge and skills (Zittoun 2008). Of course, learning will have figured as a motive in the child's earlier practices, but the transition to school marks a move to a practice with learning as the dominant motive (and for the teachers, teaching). Understanding the transition to school for children with disabilities thus involves their conditions for developing a motive for learning in a dynamic relationship with the institutional demands and structure and support expressed by their teachers, their parents and other important adults (and finally peers, as we will see later in this chapter). As children participate as social agents in the activities at school, they engage with societal expectations for their development (acquiring knowledge and skills considered necessary for children to participate in society later on) and the appropriate motive of the school: the motive for learning (Hedegaard 2008).

Cooperation surrounding how to support the child's learning and school participation rests on a mutual understanding of the activities at school, that is to say, what they are about and how the child is supposed to participate in them. In order to ensure the mutual cooperation, a flow of information is necessary. Parents need to be informed about the school: the content of the different learning subjects, expectations of them and to their child, how the school day is organised, etc. When parents are well-informed about the school, the transition has been found to function better (Margetts 2002). And vice versa, when teachers have information about their new pupils' prior development and experience, this has been found to help the transition to school (Margetts 2002).

Parents of children with disabilities often raise the issue of information as a major difficulty in the transition to school. They lack knowledge about how their child's impairment might impact on his/her ability to learn, as well as information about available supportive resources at the school (Hanson et al. 2001; Janus et al. 2008). On their side, schools and teachers report that they lack information about the children they are asked to include (Janus et al. 2008). The mutual complaints about lack of information mirror a concrete instance of the incongruence associated with development with impairments. For typically developing children, the organisation of the information flow between parents and school can rely on routines and well-established practices for information. It is easier for the school to provide information to mainstream parents where they can rely on already established material and routines. The same information will be valid for most parents. In their meeting with typical children, teachers can draw on a large and easy accessible cultural-historical knowledge base about typical development of children in the

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current cultural-historical situation when they set up tasks and demands, even though minor support or adaptations might be needed to accommodate the practice to the actual children starting class. In contrast, their knowledge about the child with disabilities, his/her previous experiences and present developmental level will be more limited. The available cultural-historical knowledge base will only partly be useful and relevant for the child with disability. Thus, the teacher is often placed in a vacuum of knowledge about development, support and best practice.

Studies have reported that teachers with previous experience with inclusion of children with disabilities express more positive attitudes towards inclusion (Avramidis and Norwich 2002). Through the prior practice the teachers have built a knowledge base about how to teach particular children with disabilities and thus experience themselves as more capable in relating to and working to overcome the incongruence. If the school and the teacher held a dynamic view of the special educational needs of children with disabilities, experience with children with disabilities contributed to the development of their teaching methods (Avramidis and Norwich 2002). Whereas the opposite view, in which children's learning problems were understood as inherent to the individual child, was found to impede the necessary development of teaching methods and thus potentially counteract the circumvention of the incongruence, especially for children with disabilities included in a mainstream school environment.

The positive impact of teachers' previous experience with inclusion is supplemented by the experience of the child and the family with inclusion. Prior placement in inclusive settings has been found to facilitate the transition to a full-inclusion school setting (Hanson et al. 2001). Several mechanisms might act together to explain this trajectory. During the transition process, engagement as positive adjustment is promoted when the child has some familiarity with the situation (Margetts 2002). Carrying relevant skills and competences enables the child to participate in the new setting, even though the setting will contain new demands and tasks for the child. This is a basic condition for all children at the transition to school. Coming from a previous, inclusive setting will have provided both the parents and the child with knowledge and experience with mainstream supports and demands, knowledge that can be used to promote local adaptations aimed at the incongruence and thus provide the child with better conditions for engaging in school activities. Although parents often report that resources and support from the earlier practice are commenced, changed, or require reassessment (Dockett et al. 2011; Janus et al. 2008), the former experience of setting up a supportive network in an inclusive practice will still be of use. Moving from an inclusive preschool setting to inclusive school also enables the child to move together with his or her social network/friends, which has been shown to ease the transition to school for children at large (Margetts 2002). Because of the lack of cultural-historical knowledge and practice available, a platform for development for each child with disabilities has to be built, by establishing a set-up of cooperation and resources grounded in the local social settings.

Thus the transition presents with particular challenges when the child has a disability. Two reasons are in front from a cultural-historical approach: First, the transition experience of moving to a practice with new demands of the child and his/her

family is often more pronounced compared to children without disability due to the incongruence between the child and the demands met in school. Secondly, the cultural elements available in the setting (teachers' supportive practices, organisation of first days at school, organisation of teaching/learning activities in the first month and year of school) is fitted to typical children, while their fit with children with disabilities will be less good. Some or more of the demands and expectations will be beyond the zone of proximal development of the child with disabilities or the usual support for learning will not address the child's need for support. The need for building up platforms for educators and parents in cooperation to help the child to engage with the demands in school is obvious. It is both needed with regard to the creation of supportive practices and at times, through accommodation of the demands, to be within the child's proximal zone of development. (These perspectives on support are elaborated upon in Chaps. 7 and 9).

Last, but not least, the nature and severity of the disability have been found to impact on both the transition (Janus 2011) and the following trajectory in school, including social participation. We will follow this important lead throughout the rest of the chapter and discuss the role of impairments in relation to the demands associated with the life as a schoolchild with disabilities.

Motives for Learning

A motive for learning: what does it really mean? The budding learning motive can be expressed in a readiness to engage in the activities at school, often identified by the child's interest in participation in learning activities – often related to letters, numbers and academic knowledge – offered at home and in school. The development of a motive for learning is thus not an isolated trait in the child but is mediated by the child's activity settings. This means that the basic developmental incongruence might impact on the child's conditions for developing a motive for learning. Similar to other developmental challenges, the development of a learning motive might be less optimally supported when the child has a disability.

The development of motives is part of the child's social situation of development, disability or no disability. The former dominant motive of play begins to be replaced by an orientation towards the activity of learning. That is when the child begins to understand the social difference between playing as-if and the actual activity (eg, between pretending to read and the actual activity of reading) and subsequently develops an interest in reading for real (Hedegaard 2002). For some children, the development of a learning motive begins before school entry. The child in preschool is introduced to and begins to develop an interest for the activities associated with school and school learning and anticipates the transition to school. The child's cognitive, emotional and motivational preparation for the transition to school is often supplemented or promoted by parents and other adults, who talk about the transition to school, arrange visits to school or invite the child to participate in activities with school-like content. The child might experience a longing for the

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prestigious social identity as a schoolchild rather than the former identity as a childat-play (Winther-Lindqvist 2012). These feelings are often mixed with fears or anxiety about the transition to school, eg, the loss of time to play, best friends and the well-known preschool environment. Thus, either way, the development of a learning motive builds on the child's social situation of development, on earlier development of motives and participation in activities and the child's present cognitive and emotional level of development. Similarly in the case of a child with disabilities, the incongruence and developmental delays that have emerged in earlier age periods impact on the child's development of "school readiness" in several ways.

First of all, children build on their previous knowledge, experiences and interests when they try to understand the subjects and activities in school (Hedegaard 2002). Many children with disabilities come to school with a more limited knowledge about the world due to their barriers in exploring the environment and the cultural meaning of objects and activities. These barriers easily cause a delay in conceptual knowledge and development in higher mental functions. The subject matter presented in the school curriculum thus becomes more difficult and abstract to grasp and seem more distant from the interests of many children with disabilities.

The less developed motive for learning and school readiness at the time of school start might thus arise from both the impairment in itself (biological developmental delay) and experiences (or lack thereof) from their participation in previous social practices. Research has shown that many children with disabilities allocated to segregated classrooms or special schools participate in practices with a different set of aims than characterise inclusive practices (Jenks et al. 2009; Mike 1995). In more severe cases, the disability-related aims may be those of child safety, taking care of basic needs of nutrition and hygiene, basic living skills, social behaviour skills, and communication skills. The aims may function in addition to mainstream school aims or they may substitute aims for learning of academic skills and curriculum found in mainstream classrooms (Jenks et al. 2009). The substitution of academic aims with daily living skills is based in the value position that (1) the skills and curriculum of mainstream learning practices are beyond the cognitive developmental potential and the learning abilities of the child and (2) the child with disability has no real interest in learning basic academic skills as they will be of no use for the type of life trajectory open to the child. Both assumptions are based in an individual biomedical understanding of cognitive potential. Cognitive skills are assumed to be the unfolding of a biologically fixed potential: The constrained potential of the child with disability opens up for a much more limited set of life trajectories compared to children with typical biological possibilities. From a cultural-historical point of view, this approach lacks an understanding of the role of culture in the development of motives and higher mental skills and the feed-forward processes of cognitive abilities. The learning of academic conceptual thinking and skills such as counting, basic calculation and reading transforms the child's thinking processes even if the child only ever comes to master them at a basic level without further development into the skilled level necessary for using them in a vocation. The full curriculum of typical children may be beyond what is attainable for the (severely) disabled child.

However, holding back important subject matter is holding back what could develop the child and thus fulfil the second assumption that the child is moving towards a particular and constrained trajectory. Eliminating or minimising subject matter learning of central importance from an adapted curriculum is to ignore the right side of Figure 1 presented in Chap. 2: The child's participation in learning activities affords and develops his or her cognitive activities and processes, which in turn furthers the development of the neural systems and processes in the left spiral of the figure. The relation between the child's cognitive functioning and the child's environment functions with a spiral-like dynamic, in which the child's cognition is constrained by the practice framework of cognition and the learning activities in the child's activity settings. A focus only on the limited potential of the child and withdrawal of basic academic subject matter from the child contributes to a further constraint of the child's development of individual cognitive abilities – and the child's development of a learning motive similar to typically developing children. Only a practice aimed at academic subject matter learning, alone or together with other aims, will invite the child into activities that require it to explore academic subjects and then the possibilities for new academic competences. Both aims are of crucial importance in the organisation of activities that will further support the child's understanding of everyday matters and everyday problem-solving.

The central point is that the development of a motive for learning is not given at a certain age. Even though we expect children around the time of the transition to school to have a budding learning motive or the cognitive and social precedents, the age-appropriateness of children at the transition to school - "being mature for school" - is a socially mediated development. Developmental delay, either as a primary biological delay (slower biological development) or a secondary delay because of the impact of the biological defect on development as a whole, can impede the child's development of a motive for learning. Some children just need a little extra time and might benefit from an extra year in preschool before they begin school. In other cases, children have impairments that will continually impede their development and abilities to take part in traditional school activities. In this case, the solution is not to wait for a learning motive to emerge before providing the child with schooling and academic challenges. This would represent a passive maturation approach and not an understanding of learning and development as arising from the child's active participation in cultural-historical activities. No matter what motives dominate the child's hierarchy of motives, the child will learn from his/her activity at all times of their development. However, to get the child to engage and participate, their learning activities will need to be organised in accordance with their dominating motives and for some children with disabilities and delayed development, motives typical of earlier age-periods will still be dominant. It could be the close relation to a known adult, own exploration of the physical world or play. The consideration of the child's level of motivational development is part of a wholeness of adaptations of the learning material and learning activities to the child's present level of development. The child's motives function as the engine of his/her social agency in relation to all the different areas of development: motor, perceptual,

communicative, emotional and/or cognitive. The role of motives in learning will be elaborated upon in Chap. 8.

Affordances and Social Agency in School

Development of social agency continues from preschool to school practice where the child seeks to participate based on his/her previous skills and understanding of the world. Purposeful transformation of the activities becomes increasingly tied with teaching/learning, the overall aim of the school. Participating in learning activities constitutes a substantial part of school-life, both in regard to how time is spent and in relation to what type of skills and characteristics are valued by the other participants. The development of a learning motive will be part of the social affordance, "ready for school", as seen by others and will thus be a prerequisite for being able to participate in learning activities in ways considered valid by the teacher. The concept of social affordance is here used to cover an institutional position that describes the child's experience of his/her own social agency in relation to social others within the social setting (Bang 2009). Thus, social affordance describes a kind of "social identity" within a social group. The social affordance of the child develops through the child's agency and motives for agency that are related to particular social expectations and values within a social group. It is therefore significantly attached to the evaluation of the child's contribution by others and by the child's evaluation of his/her own contribution. The social affordance opens and closes possibilities for the members to contribute to and transform the group over time, and thus feed forward into the member's development of social agency and possibilities for contributing to the aim and content of the group. Social agency and a social affordance of feeling and seeming capable in areas valued by teachers and peers are both central to the development of a sense of belonging in school. Social participation and development of a social agency, characterised by an active stance in school, hinges on the child's experience of being a capable participant and by being recognised as a capable pupil by teachers and peers.

Even though the feelings of inadequacy created by the incongruence according to Vygotsky's concept (1993) could be stimulating in their creation of a motive to overcome the disability, he also stresses the necessity of a teacher and a school environment that give the child opportunities to achieve common goals by alternative means if necessary. Otherwise, Vygotsky describes the social consequences of an impairment as the development of a personality characterised by feelings of inadequacy and inferiority in relation to the majority (Vygotsky 1993). This description fits with research findings of learned helplessness in different groups of children with disabilities, for example children with motor impairments (Butler 1986) and children with learning disabilities (Valås 2001). Vygotsky's description is also substantiated by studies of self-perception in children with learning difficulties (Kelly and Norwich 2004), which repeatedly find negative self-perceptions in young schoolchildren with learning disabilities. Kelly and Norwich (2004) found that

children going to special school had a higher level of positive self-perceptions compared to children with learning impairments in mainstream schools. Similar results have been found with regard to deaf children in mainstream schools compared to hearing impaired units or deaf schools (Hindley et al. 1994). Reinterpreting these results within a cultural-historical understanding of disability, the children placed in special schools might experience a better fit with the demands and support in the learning activities and thus a smaller incongruence within the school setting and in relation to learning activities (Bøttcher 2011) (See also Chap. 6). Another reason for the more positive self-perception of children going to special schools was that their immediate reference group was also other children with similar learning needs (Kelly and Norwich 2004; Hindled et al. 1994), which contributed to their feeling of being socially adequate.

Social Life

Making friends and participating in social life at school and within peer groups is of course beyond learning and learning motives. The learning motive, although important in the development of social agency, faces serious competition throughout school from another dominating motive: the motive to interact with and belong to a social group (Winther-Lindqvist 2012).

Turning to the research literature, it quickly becomes apparent that children with disabilities often are met with difficulties in participating in peer groups and making friends. A few empirical examples can be given: Children with intellectual disability, in inclusive settings, do have friends, but are found to hold below average social status (Vaughn et al. 2001). Children with autism spectrum disorders, but high functioning, are more often in the periphery of the social networks. While this might not be surprising, given that one of the diagnostic criteria for autism spectrum disorders consists of deficits in understanding, developing and maintaining relationships (Diagnosis and Statistical Manual of Mental Disorders (DSM-5)), the consequence is that many children with high-functioning autism spectrum disorders report feelings of loneliness and express a desire for companionship (Bauminger and Kasari 2000). Children with cerebral palsy in mainstream classes have fewer reciprocated friendships, are more isolated and more often victimised (Yude et al. 1998; Nadeau and Tessier 2006). While underlining a cultural-historical understanding of disability, these studies also report that the problems are not directly related to degree of physical impairment (Nadeau and Tessier 2006), IQ or behaviour problems (Yude et al. 1998). (For further discussion of this point see Chap. 6 on development of mental health problems.)

The general higher risk of social problems cloaks a mixed picture both across groups and within a group of children with the same type of disability. Some children experience massive problems while others enjoy friendships, social status and a position as a capable person at the same level as their peers without disability/impairments. The impairment in itself or degree of impairment seems not to be able

to explain the variance found. Analysing possible sources of these problems is extremely important. The ability to participate in social activities, evolving around a social affordance as a capable person in relation to valued peer group activities, is central for many aspects of social agency, including the learning of social skills, cognitive development, emotional development, communicative development, becoming independent and thus the development of a positive trajectory in the early school years and beyond (Ladd 1990). Research using the sociometric approach unequivocally points to more problems in peer relations for children with disabilities compared to children without disabilities. And it has been argued that mainstreaming does not automatically solve this problem and create positive peer relations because children with disabilities often lack the necessary social skills (Gresham 1982). From this perspective, the origin of social problems across particular impairments or diagnoses is considered to be individual deficits in social skill or social cognition. One example is the study by McIntyre et al. (2006), where the development of a positive school trajectory was found to be associated with social skills development. During the first year of inclusion, dual cognitive and behavioural problems were found to have a negative effect on the child's adaptation to the school demands. The social skills deficit framework has been very influential in research on peer relations; however, the problem with this approach is that it views peer relations and social competences from a mainly individualistic approach while overlooking social factors (Farmer et al. 1996). From a cultural-historical perspective, this means that only one side of a dialectic relation is considered. Social skills in the early school years build on social cognition such as moral sensibility, ability to pretend play, ability to understand emotions, ability to share and develop a shared imaginative world and communicative skills. As outlined in the previous chapter, the child's skills as a social agent develop through activities and negotiations between friends and playmates in the preschool years (Dunn et al. 2002) and later on. The individual social cognitive abilities impact on the child's ability to act and be recognised as a valuable play partner and through this develop a positive social affordance in relation to peers. Differences in social standing are not dependent on the child's social cognitive skills alone. Social cognition is anchored in processes in the peer group and the ability of the child to impact on the social group culture, as well as influencing what type of identifications and activities that are considered important and popular within the peer group. The child's skills in social agency can be a help or a constraint in his/her participation in social activities. A passive stance or developmental delay in one or more areas of development impedes the child's capability for collaborative participation, as the child does not see himor herself as able to contribute and be acknowledged as a contributor. It is a developmental dynamic, where influential children are able to impact on the types of activities that are popular, to participate in them, and thus reconfirm themselves as socially appropriate. Furthermore, the development of social agency relies on the child's continued development of higher mental functions through participation and appropriation of sociocultural skills, values and activities within his/her activity settings. Influential children are able to create better conditions for their participation and their own further development than less influential children.

Supporting Peer Interaction

Popularity and high and low social standing are not specific to children with and without disabilities, but are distributed throughout the whole peer group. Thus the question becomes: do different types of impairment or developmental delay differentially impact on the child's opportunities for participation, development of social cognitive skills and establishment of social affordances associated with a positive social identity?

One aspect of building a social affordance of being a capable social agent is the accommodation of the school to the particular needs of the child in relation to his/her impairments, such as getting around, adapted lavatories and space for and general acceptance of necessary aids. Lack of practical adaptations – or lack of acceptance of the child's needs for adaptations and aids – creates social and environmental barriers to participation that makes the child with disability stand out as less able to meet school demands. A small incongruence at school starts, and if not handled, interferes with the child's ability to participate across different activity settings, for instance from school to leisure settings.

The accommodation of the school also regards how the school has chosen to (re) organise their practice to accommodate the child with disabilities. In a mainstream setting, this involves the schools' organisation of inclusion. Inclusion without any accommodation of the institutional setting will create incongruence as outlined in the first part of the book. Teachers' development of negative attitudes towards inclusion of children with disabilities is related to particular types of disability that are considered to demand extra teaching competences, such as mild intellectual disability, moderate hearing loss, visual disability, severe physical disability, hyperactivity or disabilities that together create complex needs (Avramidis and Norwich 2002). The different ways of organising inclusion within the institutional practice also impacts on the child's possibilities for developing social agency. One widespread way of organising inclusion is by providing the child with disability with an assistant that follows the child during the school day, either full-time or part-time (Egilson and Traustadottir 2009; Giangreco 2010). The inclusion practice with an assistant in the mainstream class is used in relation to children with different types of disabilities; for example, physical disability or learning impairments (Egilson and Traustadottir 2009). However, a general finding across the different types of disability is that the social agency of the child becomes tied up with the teacher assistant, making the child dependent on his or her personal "grown-up" and setting the child apart from the social group (Giangreco and Edelman 1997; Hemmingsson et al. 2003). The ability to develop independent agency will depend on the extent of the incongruence and the child's affordance within the setting as dependent/independent of the assistant. Some children are still able to act on their own when their assistant is not present and thus develop a sense of independent social agency in themselves and in relation to peers. The presence of the assistant has been found in some studies to counteract the teacher's need to accommodate the teaching to the children with disability included in the class (Giangreco and Edelman 1997), which maintains the incongruence. The teacher might even address his or her teaching instructions to the assistant rather than to the children with disabilities (Hemmingsson et al. 2003) and thus reinforce the social affordance of the child with disability as only being able to participate when assisted by his or her helper. Some of the children participating in the study by Hemmingsson et al. (2003) actively refused to receive help because it made them stand out from their peers. Bøttcher (2011) found in her case study—based in interviews with the teacher assistant and the participating boy, Peter – that Peter became passive when his assistant was not around, both due to the development of a passive stance towards the environment and because the incongruence between his cognitive impairments and the demands in the class activity setting constrained his possibilities for active agency.

Teachers' Role

Teachers' behaviour, attitudes towards and recognition of the child in school is an important theme. The teacher enacts feedback on how particular children perform as social agents in relation to institutional demands and possibilities (Winther-Lindqvist 2012). The size of incongruence between the child's impairments and the school's demands (natural and cultural line of development) plays a role. Often, teachers find children with, for example, severe physical impairments easier to include in their classroom than children with moderate attention and conduct disorders or intellectual disability (Avramidis and Norwich 2002). Some inabilities may be more at odds with the structure of the school activities than others. Teachers' attitudes contribute to the child's opportunities to develop a social affordance as an appropriate social agent in the school setting by the way they act in relation to children with disability included in their classrooms. This could take effect by not including the child with disability in the learning activities, by excluding the child with disability from the classroom, or by continuously placing the blame from conflicts within a group of children on the child with disability (Davies and Watson 2001). Each of these examples would contribute to the development of the child's affordance of not belonging in the school. On the contrary, a teacher who does include a child with disability in the activities contributes to the child's building of a social affordance as a relevant and contributing member of the activity setting, setting off a positive developmental pathway.

The teachers' support of potential friendships is another aspect. The child's developmental level of social cognition and ability to participate as age-appropriate in the peer group builds on his/her former experiences as a toddler and preschool child (Dunn et al. 2002). As outlined in the previous section, research with children with intellectual disability has shown that although they were able to participate in play and leisure activities with their typical peers, they often did so in a marginalised position; however, playtime together with age-mates with similar functional prerequisites opened up for equal and active contribution of both children (Nordström 2011), with a positive impact on the child's experience of him- or herself as a

competent, capable and valuable person. Another study (Raghavendra et al. 2012) found that while children with physical disability alone participated actively in social activities in school, children with physical *and* communicational disability had difficulties with the establishment of social relations in school. The more complex needs for support of the last group meant that the children had fewer opportunities for communication in school and came to rely on family members for social activities. An explanation could be that their communicational skills required support from the interlocutor to support expression and co-construct the message beyond what peers could offer. Inclusion of children with disabilities in mainstream school can render it more difficult for the child to find playmates with similar functional prerequisites of the kind relevant to the interests and pursuits of the child.

Developing Positive and Negative Social Affordances

The central role of participation – from a cultural-historical perspective – in the wholeness of the development of the child places the question about social agency at the centre. For a child with disabilities the analytic question becomes: What will it take for this child to be recognised as socially appropriate, with relevant and unique contributions to the social setting? The concept of social stigma by Goffman (1963) introduced the idea that the social identity and participation of individuals who divert from the majority is heavily impacted by the attitudes of other social participants. This has led to a line of research looking into the attitudes of children without disabilities in relation to children with disabilities. In the present context, this research is interesting in relation to how it sheds light on how the societal-level value position of inclusion is associated with development in children's understanding and acceptance of their peers with disabilities. A study by Cairns and McClatchey (2013) compared children's attitudes towards peers with disabilities at two different primary schools: school A with an inclusive practice and a high number of students with disabilities (8%) and school B with only a few students with disabilities (<2%). The students with disabilities in the inclusive school covered a wide range of disabilities, including children with physical and medical needs and children with severe learning disability. Children from the two schools were shown various video clips of children with a range of disabilities and asked what they noticed about the child and if there were ways they could help this child. To take one example, they were presented with a video clip of Paul, who was deaf. Children at school A made more comments about his academic characteristic than expected while children from school B mostly noticed how his communication differed from communication in general. However, when asked about proposals for help for Paul, children from the inclusive school A suggested that they could help with communication, whereas children from the less inclusive school B in general suggested academic help only. Thus, children from school A, who had had more experience with peers with different types of disabilities, expressed more appropriate ideas about what types of needs children with different types of disability might have.

An objection against these studies of attitudes can be the non-linearity between attitudes and actual behaviour. The verbal expression of a positive attitude towards, for example, having a child with disability as a friend might not lead to actual friendship or social invitations to a classmate with disability. Despite this limitation, the study above indicates that prior experience with children with disabilities provides the typically developing peer with more relevant ideas about the challenges children with different types of disabilities experience and might need help with in order to participate.

When peers with disabilities are present in the school environment or classroom, it becomes interesting to consider the interaction between the attitude of peers towards their classmates with disability and the social behaviour of the children with disabilities. Often, research in these two interrelated aspects of development of social affordance has been done separately; either as research in attitude formation of peers without disability (eg, Cairns and McClatchey (2013) from a social model approach) or as research in social cognitive skills in children with disability (eg, Dodge et al. (1986) and Guralnick (1999), according to the medical model approach). Analysis of the being or becoming of social agency requires consideration of the idea that the child with disabilities might have specific impairments and developmental delays that impact on the way the child acts and is perceived as a social agent – by the teacher and by other children.

The concept of "perceived social acceptance" can be used as a proxy measurement for social affordance. Research has found that perceived social acceptance mediates the relation between skills in tests of theory of mind and social adjustment, both in children with intellectual disability and in children following typical developmental trajectories (Fiasse and Nader-Grosbois 2012). The main difference between children with intellectual disability and typically developing children was a developmental delay in both theory of mind and social adaptation in the group with intellectual disability (Fiasse and Nader-Grosbois 2012). Thus, delayed development of theory of mind is associated with lower perceived social acceptance.

The lower social adjustment of children with intellectual disability might both be expressed as externalising behaviour, characterised by a high level of aggression, impulsivity, agitation and/or opposition or internalising behaviour, such as social withdrawal (Guralnick 1999; Nader-Grosbois et al. 2013). For children with externalising problems and less adherence to social rules, a dialectic interpretation would be that the delay in development of social adjustment creates a negative bi-directed effect: The child with, for example, more impulsive behaviour or delayed ability to consider the perspective of others in social negotiations is perceived negatively by his/her peers and is less invited into social activities, play activities, games or other social areas for development of socially mediated skills such as cultural aspects of theory of mind and social regulation, again leading to further delay. Another negative bi-directional effect is children developing internalising behaviour or withdrawal, for example, due to lack of understanding of the demands and social rules due to developmental delay. Withdrawal from peers leads to less participation in the activity settings where the relevant knowledge and skills are learned (Nelson et al. 2003), once more contributing to further delay and incongruence.

Research in cognitive social skills can be used to shed light on why children with disabilities are more vulnerable to developing negative social affordances. Specific basic cognitive skills such as problems with attention, working memory and speed of information processing have been found to be associated with impairments in development of social skills (Guralnick 1999). Basic cognitive skills are important preconditions for the development of higher mental skills that further are a precondition for the development of a positive social affordance. Deficit or delay in executive self-regulation and/or theory of mind – alone or together with, for example, communicative dysfunctions or lower speed of information processing – is prevalent in many types of childhood disability (eg, congenital deafness (Knoors and Marschark 2014) and cerebral palsy (Sandberg and Dahlgren 2012)). Small delays in executive self-regulation and/or development of theory of mind in relation to peers create incongruence, especially with respect to peer expectations to social performance. This incongruence feeds forward though negative social affordances and increases the risk of further maladaptive behavioural development and withdrawal from peers or by peers.

The focus on the child with disability as being, becoming and developing as an appropriate social agent requires acceptance of the idea that the child with disabilities might have specific impairments and developmental delays that require individually tailored support. Repair of the incongruence at practice-level will often be necessary before it is possible for the child with disability to act and contribute as a person with positive social affordances. At the same time, the practice-level perspective needs to be supplemented with a broader societal value-position perspective, with a focus on the identification and possible removal of social barriers that mark the child as less appropriate in the school setting. Importantly, this perspective has to be both in the eyes of the other children and in the child's own experience.

Summing Up: Consequences of 'Cultural Deprivation' in the School Years to Come

Similar to the preschool period, the feed-forward processes of development create possibilities for positive as well as negative developmental trajectories. In the previous chapter, the positive and negative developmental trajectories were associated with the development of active versus passive stances towards the environment. During the early school years, the social agency of the child becomes challenged by the transition to school that often marks a time when the disability becomes much more difficult to handle. Problems and challenges are often found to increase. One reason is that the school is an activity setting where the possibilities for valid social agency become narrower than in the preschool setting. New types of demands arise that some types of impairments make it difficult to meet, thus creating new instances of incongruence or increasing existing ones. Developmental delays from earlier periods (eg, in theory of mind, pretend play, own acquaintance with skills and

objects in the world) mean that the child with disability has less knowledge to build upon, knowledge that teachers tend to assume children bring to school. This delay in knowledge and skills increases the incongruence in relation to demands in school, thus creating further incongruence that is only indirectly related to the child's impairments. The child with disability will often seem and act less "ready for school". However, it is central to understand "school readiness" as dialectically developed. The child with disability might never become ready for school in the same sense as other children without disability. Children with disabilities have more difficult conditions for school participation due to biological and social reasons. Many types of impairments give rise to special learning needs, considered as an inability to learn the required curriculum the same way and at the same speed as peers. The additional problem is "cultural deprivation": a lack of development of higher mental skills leading to a general delay in skills that will contribute to a negative developmental pathway as the distance to peers grows and the incongruence increases. As the child begins to develop an awareness of the minds of others and social perception, the experience of his/her own social agency will include its own stance in relation to particular social expectations within a social group. Social affordances within the peer group opens and closes possibilities for the members to contribute and transform the group and thus feed forward to the member's further development of social agency and possibilities for contributing to the aim and content of the group and its activities. The contributions of the child with disability to the class and the peer group through his/her social agency will be mirrored in the social affordances of the child and hold the potential of negative as well as positive developmental trajectories. The danger of cultural deprivation requires us to take care of both sides of the problem: individual development/learning and social agency. Cultural deprivation due to the impairments of the child need be addressed by dialectic assessment of the child to ensure acknowledgment and support of the child's learning potential. Secondly, a passive social stance requires us to create opportunities for the child to feel and act as a valid contributor to the school practice – themes to be followed up in Parts 3 and 4 of this book.