

Togetherness in Play and Learning

Special Needs Education in Mainstream Settings



**Support for
participation**

3.4

Support for participation

From a sociocultural perspective, children's learning and development occurs through building relationships and interaction with others, both adults and peers. Vygotsky uses the term 'zone of proximal development' to describe what the child can master with the help from a more 'competent' individuals, which could be other children or adults in kindergartens and schools. The following five chapters provide examples of practice that adapts in order for children with special needs to be able to participate in inclusive learning communities with their peers.

Nadja Akinshina:

Inclusive practices in kindergarten for toddlers with a cochlear implant

Nadja argues the importance of language development in natural situations for children with a cochlear implant (CI). She calls attention to the relational dimension and opportunities educators have to adapt for inclusion and participation in toddler departments of kindergartens.



Inclusive practices in kindergarten for toddlers with a cochlear implant

This chapter will highlight the possibilities for teachers to facilitate inclusion and participation for a child with a cochlea implant (CI) in the toddler department in kindergarten.

Nadja Akinshina

Most of the children who are born prelingually deaf in Norway are detected at new-born screening. These children are offered bilateral cochlear implantation at a very young age. Some children with CI choose bimodal bilingualism with sign language and spoken language, others choose spoken language only. This chapter concerns children around the age of two with no additional disabilities, who received a CI at a young age and who primarily develop speech and language through listening. When using the terms *language and communication*, we are referring to spoken language only.

Based on sociocultural learning theory, the chapter will argue for the importance of speech and language development in natural situations and the relational dimension in inclusive practices for children with CI. For the efforts in the surroundings to have a positive impact on the child's development, professional pedagogical support and targeted measures are crucial for increased participation as early as possible. One important measure for children with a CI is the strengthening of peer relationship in the community.

Relational dimension in inclusive practices

Inclusive practices may seem to vary in different contexts, however, one of the characteristics of inclusive pedagogy is the acknowledgement of diversity among the group of children. The individual circumstances of children, for example, having a cochlear implant, could be considered part of the variation within the group. The aim of inclusive practices is that all children, including those with special needs, shall be part of the community. Inclusive processes can vary and may be understood from different perspectives. Qvortrup and Qvortrup (2018) emphasise, for example, that there may be different levels of inclusiveness. Arnesen (2017) also describes various ways of understanding inclusive processes. The fact that inclusion may be understood as human interaction is especially interesting, since it reflects the dynamic aspect of communication and relationships between human beings. The relational dimension is linked to the actual interaction that takes place in face-to-face communication, which impacts the child's perception of being a participator in the community. Secure and good relationships between children

contribute to the positive development of each child as well as the general learning environment in the kindergarten. Good relationships start with acknowledgement and good communication, which Bae (2011) highlights as conditions for inclusive processes. Children with disabilities can take part in the same learning arenas as peers and play and interact with them. Those who have difficulties related to communication skills, emotional management or problems solving skills may, however, struggle to take part in the community, and they have limited ability to develop relationships and friendships with other children without adequate facilitation (Odom, Zerther & Brown, 2006). The relational dimension of inclusion may be particularly important within a children's group where one or more children need support in the development of language and communication skills. Pedagogical practices in kindergartens, which strengthen the communication competence of children, also create frameworks for the development of secure relationships and friendships (Brown, Odom & Conroy, 2001).

Role of kindergarten for the inclusion of children with a CI in the learning community

During the day there are endless opportunities to support children in their linguistic and social development. Children with a CI need more support than peers in early language development due to fewer experiences with spoken language. The most important prerequisite for the child to benefit from the pedagogical support provided is safe relationships with the closest adults and peers in adapted everyday settings. Since early childhood care is mentioned in the Salamanca Statement, as a prerequisite and important instrument for schooling, kindergartens have a special responsibility for facilitating adequate development and school maturity for all children.

For children with a CI, this implies additional linguistic and social development support.

Sociocultural learning theory (Vygotsky, 2005) forms the basis for pedagogical practices in most kindergartens in Norway. That is, children shall receive support so they feel that they master situations they would not otherwise have handled.

Examples of support in various situations are when a three-year-old helps a friend to put on his/her rain boot or a four-year-old explains the rules of a playground game to a three-year-old, or when a teacher explains what the second Billy Goat Gruff is.

Vygotsky (2005) emphasises that children, who receive support from a more competent person (an adult or another child), can carry out tasks at a much higher level than what they would manage on their own. Vygotsky calls the distance between what a child can master independently and what a child can master with a partner the *proximal zone or zone of proximal development*. It is important that the person giving the support has more knowledge and skills than the person who needs the support. Older children, or children who have progressed more in their development, may have an important role in supporting and guiding others, as the examples above indicate. For toddlers with a CI to perceive help and support as a natural part of interaction with peers or the teacher, it is essential for them to experience good and secure interpersonal relationships. By using relationship building as a foundation, kindergarten can promote learning and development based on the principles of sociocultural learning theory (Vygotsky, 2005).

Early language development of children with a cochlear implant

Children who receive a CI early have access to sounds, and therefore the possibility to develop spoken language and be active participants in children's groups. A cochlear implant is a high-technology device that is surgically implanted into the inner ear. Electrodes in the inner ear capture signals from a device that is magnetically attached behind the outer ear. Cochlear implants convert magnetic energy from sound waves to electrical signals, which stimulate the auditory nervous system allowing the brain to register and learn spoken language. If the child does not have other any disabilities other than hearing loss, and the technology and surroundings are adapted for the child to satisfactorily hear at all times, the child should generally develop and socialise in the same way as children with normal hearing (Cole & Flexer, 2010).

Cochlear implants do not normally give normal hearing, but a CI will make it possible for most children to develop spoken language by listening. In all likelihood children will learn spoken language after receiving a cochlear implant. The language comprehension of many children, who were born deaf and received a CI before 12 months age, is within the normal range for their age (Fulcher, Purcell, Baker & Munro, 2012; Wie, Falkenberg, Tveté, Bunne & Osnes, 2011; Duchesne, Sutton & Bergeron, 2009).

Concurrently, many studies show large variation between the language skills of children with a CI. The child's hearing history before implantation, age upon implantation, pedagogical monitoring and habilitation may explain some of the variation. Several studies show that both implantation at an early age and educational monitoring correlate to language development (Boons et al., 2012; Percy-Smith et al., 2012; Niparko et al., 2010). The implantation age for children is getting lower and lower,

and many deaf children in Norway receive a CI during infancy at around ten months old.

We know that humans register sounds as early as in the foetal stage. Children who start hearing when they are, for example, nine to ten months old, will require more monitoring and language development support than children born with normal hearing. It is also reasonable to assume that even when a child receives a cochlear implant as early as possible, a one or two-year-old will not have the same prerequisites for taking part in social interaction in kindergarten whilst their brain is still getting used to digital hearing. Individual facilitation in an inclusive learning environment is therefore necessary for optimum language development.

Many meaningful listening experiences are essential for toddlers with a CI in order to stimulate auditory processing and language training through listening (Musiek, 2009). When a child has had limited experiences with sounds from the foetal stage, the brain may need ten times as many meaningful linguistic experiences during the course of a day compared to peers born with normal hearing. In order for an early childhood teacher to give the child the right support in different situations, it is crucial that he or she is adequately qualified in early language development supplemented by individual guidance on listening and the development of spoken language for the deaf and hard of hearing. Pedagogical facilitation for active participation in natural situations enables children with a CI to develop and strengthen relationships with others through spoken communication in an inclusive learning community.

Importance of relationships among toddlers

Children with special needs in language development may have difficulty perceiving and understanding nuances in conversations and social structures, which may prevent them from taking part in the learning community (Ytterhus, 2012). We know that adeptness in establishing and maintaining interhuman relationships is an important part of linguistic and social development. The interpersonal competence we use during interaction with others to cooperate, to be flexible, to show empathy and to adapt to new contexts already begins in kindergarten. As early as at the age of two and three, children show a preference for who they want to play with, and round the age of five or six more than half of the children have stable and permanent friendships with peers (Lindsey, 2002).

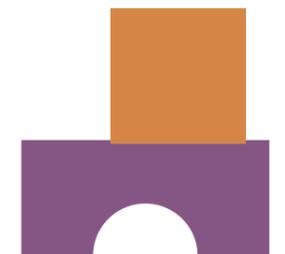
In order to develop relationships with others, children with special needs require extra support in the form of mediation and *scaffolding* through dialogue and interaction with others (Vygotsky, 2005; Hartshorne, 2003). A more competent person, who models behaviour and language in different play situations, helps build the linguistic and social skills the child gradually learns to master. This has an intrinsic value for children with a CI due to delayed language development; however, it has been proven that scaffolding is also an important factor in other inclusive processes where one or more children in a group have special needs. Krampac-Grljusic & Kolak (2018) emphasises friendships among children as one of the important factors in an inclusive

community. In their study, they show that friendships have a positive effect on children's social, intellectual and emotional development as well.

To understand relationships that are formed among children, it might be important to differentiate between acceptance of others in a group and friendships that are maintained over time. In this context, acceptance of other children means that the child is liked by another group of children, whilst a friendship is a mutual relationship between two individuals. Ladd's (1990) study shows that early friendships impact the positive development of children. Increased participation also occurs in a children's group when a child with special needs can rely on another child that he or she feels safe with (Ottoson & Bengtson, 2002). A best friend may be an important support for a child with a CI during play when the child experiences unnecessary broken communication after misunderstanding what has been said. Facilitating the development of secure friendships for a child with a CI may also be crucial to the development of listening, language and communication skills, and for intellectual and emotional development.

Leo and Simen

To highlight how a teacher can facilitate relationship building and the development of communication in a children's group where one of the children has a CI, reference is made to an example of a conversation observed during a guidance session.



Example from a case history

Kristin is reading a book about a farm to Leo (26 months old), who has a CI, and Simen (24 months old) with normal hearing. Leo and Simen are best friends and live in the same neighbourhood. “Here the farmer is picking apples. The apples must be harvested at the right time. Look, so many apples have fallen on the ground,” says Kristin. Leo is listening intensely but says nothing. “Delicious, sweet apples,” continues Kristin. “Fall down,” says Leo. “Yes, the apples fall down when they are ready,” says Kristin affirmingly as she looks at Leo. “And the farmer picks some off the tree and some off the ground,” says Simen. Suddenly Kristin points towards the window to draw Leo’s attention to the sound of a tractor in the field immediately outside the kindergarten: “Listen, a tractor is making that noise.” Leo looks out of the window and Simen stretches to get a better view. “Look, green tractor again!” he tells Leo whilst pointing towards the window. “Yes, the green tractor has come back,” replies Kristin. Then with a rhythmic tone of voice she says: “The tractor has to drive backwards and forwards, again and again.” “Look driving back towards us,” Simen adds. Leo looks at Simen each time Simen talks. “Drives again and again,” repeats Simen. “gain, gain,” says Leo cautiously and points towards the window. “Tactor driving.” Leo and Simen bang on the window, looking at each other and laughing.

Supporting children’s communication development through participation

Spoken face-to-face human interaction is essential in pedagogical practices, as it creates space for the zone of proximal development and allows relationships to be built. For children like Leo, it is crucial to have a more competent person giving support through explanations, repetition, new learning and essential auditory experiences to promote speech and language development.

Kristin reads a book to Leo and his best friend and knows that they are mutually interested in farms. She follows Leo’s eyes and starts talking about the apples which captures his attention. In this way, Kristin builds a scaffold of words and terms that support what each child understands and connects language to what they are looking at. We see several attempts at scaffolding along the way, which strengthens various aspects of language development. She builds up the children’s comprehension of volume by illustrating what ‘many’ means. In addition, she continually focuses on the same topic

thereby expanding the auditory attentiveness of the children. Kristin chooses a new word for the children to learn, i.e., høste [“harvest”], which is easy for the hearing sense to register, the vowels are slightly longer than the consonants, and with two open syllables, it is easy for Leo to register the sounds. For a child to be motivated by learning, he or she must receive the necessary support and experience mastery (Vygotsky, 2005). Kristin facilitates this in that she simplifies the syntactic structure and repeats the last sentence with three words, “Delicious, sweet apples”, which Leo immediately picks up and answers with “(f)all down”. She also uses the situation to build up understanding of a new term, harvest, with known terms, such as pick, fall down and ready. In this way, she expands the children’s comprehension of language.

When it starts getting noisy outside, Kristin draws the children’s attention to a sound in the field. Even though Leo is two years old, it is still important to stimulate the interpretation of sounds in his surroundings rapidly and effectively for the best possible

auditory processing. At the same time, Kristin knows that the importance of social relationships and play with other children increases with age. As soon as Simen starts talking to Leo about the tractor, Kristin stops reading and allows the children to communicate with each other. She also creates opportunities for Leo to take part in the conversation, for example, by repeating “again and again” with a rhythmic tone of voice. When words and phrases are sung, it makes it easier for children with a CI to register sounds, and Leo eventually said the word “again” after Kristin and Simen.

If children with a CI are to develop relationships with other children in natural situations, they will generally need a lot of support and guidance, for example, when many people are talking at the same time or when there is distractive background noise. For people with hearing impairment, background noise can be a major obstacle for picking up spoken language. In a toddler’s department in kindergarten, the most minor distraction in the background may prevent a child with a CI from fully picking up a word with the correct phonetic form, which can lead to mislearning and a lot of broken communication during the course of a day. Kristin repeats the phrase about the tractor with a rhythmic tone of voice and keeps the children’s attention on the same topic, thereby preventing broken communication.

For Leo and other children with CI to communicate and establish friendships with other children, it is important to focus on the ability they have to understand each other through spoken language. Both the children, Leo and Simen, in the above example from the case history have the ability to understand and exchange thoughts with each other. Both use language actively when they talk about the tractor in the field, and even contribute to self-inclusion during the conversation and play. At the same time, a child with a CI is more dependent on the

surrounding frameworks in order to take part in conversations with others, especially in relation to good listening conditions. By reading with two children, the teacher helps to ensure that the frameworks for learning, participation and relationship building are good for both children, especially Leo, who relies on good sound quality and close proximity to the person who is talking.

Facilitating relationship building between children

Once a good trusting relationship has been established, the child will find it natural to seek support and guidance during play or a conversation. Guided participation builds on an interpretation of Vygotsky’s sociocultural learning theory emphasising the role of adults in the mediation of social activities and helping with the mastery of new cultural skills (Rogoff, 2003). Toddlers with a CI require many repetitions and experiences with language and social interaction. In this regard, the teacher’s guidance and support are crucial to learning outcomes, participation and further development of language and communication skills (Cole & Flexer, 2010). Pedagogical support during play and conversations between a child with a CI and a peer are adjusted along the way; more help is given when the child is struggling but is gradually withdrawn once the child manages to communicate independently in the situation. In the conversation about the tractor, Kristin gives the necessary support by using language correctly, “Yes, the green tractor has come back,” and then withdraws when Leo and Simen connect and start using language independently. The kind of support that should be given in each situation depends on the possibilities the community provides for increased participation and learning (Robson, 2012).

A good relationship between Leo and Simen helps the wellbeing of both children and gives them the perception of being

included in the learning community created between them when they talk about the tractor. Kristin actively engages Simen in the conversation with Leo, and she supports the relationship and social interaction between the boys. It is a well-known fact that friendships have a positive impact on child development, especially for children with disabilities (Krampac-Grijsic & Kolak, 2018; Ladd, 1990). Simen and Leo live in the same neighbourhood, therefore Kristin pays particular attention to situations that allow the boys to further develop a good relationship and friendship. By facilitating relationship building, the teacher can simultaneously contribute to better conditions for the child's social, emotional and intellectual development in learning community. Leo registers and understands a lot, and even though there is still a long way to go before his spoken language reaches the same level as peers, he can adequately participate in play with others, and he masters both turn-taking and simple conflict resolution strategies. It may be a fine balancing act for the teacher trying to ensure that children learn to communicate with each other and develop secure relationships on their own accord. Kristin supports Leo in his communication with Simen, whilst at the same time helping him to be understood without intervening too much.

For a child like Leo, who has a CI and is slightly cautious, it may push his limits somewhat to take part in conversations and to pronounce words that are perhaps not immediately understood. Kristin gives Leo the security he needs to take part in communication with his best friend and other children. She can give explanations and guidance where necessary, but she can also withdraw when she observes interactional situations that allow the children to learn social rules and skills from each other. The fine balance between giving and withdrawing support in linguistic and social situations is

particularly challenging for teachers who work with CI children. It can be difficult to notice that a child with a CI has not registered a familiar word, and that this interruption causes broken communication or the play to stop. A good and secure relationship can help ensure that guided participation is perceived as useful and natural for both the child and teacher. In Leo's kindergarten, moments of guided participation and pedagogical support are like small pieces of a jigsaw puzzle during the inclusion process. If we want to finish the jigsaw puzzle, he needs many of these experiences every single day with adapted support that upholds language development and relationships between children in as many natural situations as possible.

Summary

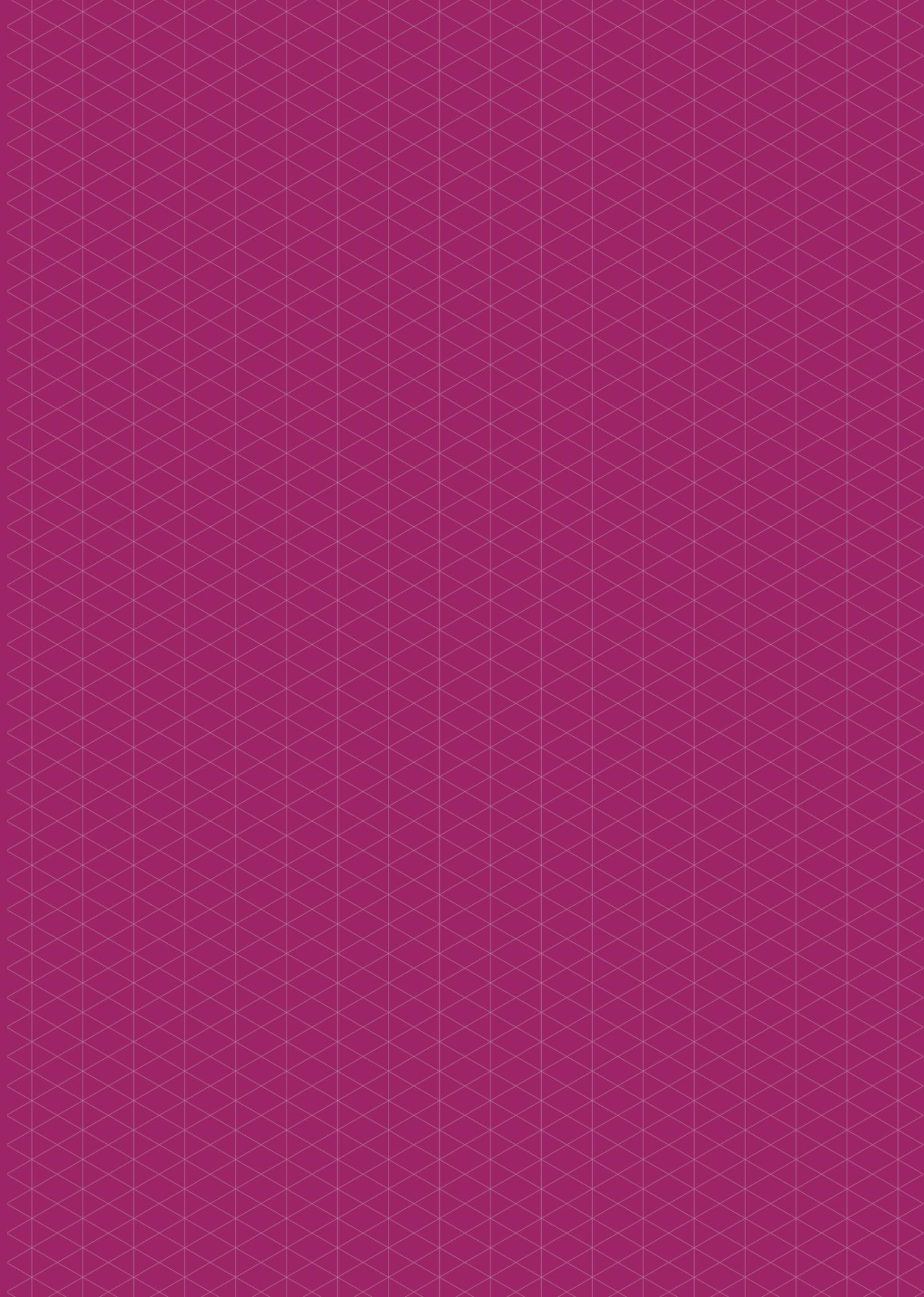
The prognosis for the development of spoken language for children who receive a CI early is good, yet it requires supportive measures from both adults and children. At the same time, it is crucial to their learning that they are content, have secure human relationships and are active participants in the learning community. Daily life in kindergartens offers many opportunities for new learning. Much of the potential for a child with CI and his/her development lies within the pedagogical practices around the child, especially during linguistic interaction with their surroundings. Successful guided participation and pedagogical support can be highly demanding know-how processes that require continuous adaptation to both the child's individual development goals and inclusive learning community. By facilitating language development and guided participation based on sociocultural learning theory, the teacher can contribute to adequate language development in children with a CI and strengthen the inclusive practices in the group the children are part of.

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From a sociocultural perspective, children’s learning and development occurs through participation in social communities – where community with peers is of particular importance. Children’s participation in learning communities with other children, or facilitation of such participation, is a recurring theme in this anthology. The contributors to this anthology are advisers at Statped with experience from a variety of fields. They account for various approaches founded on experienced-based and research-based knowledge. What they all have in common is that they, through their adviser roles, have worked closely with the field of practice. This anthology shares the experiences from collaborations with kindergartens and schools in the efforts to develop a knowledge-based practice.

The anthology is primarily directed at students and professionals who work in kindergartens and schools but may also be of interest to others.

