Supporting the social inclusion of students with Down syndrome in mainstream education

Gert de Graaf

Stichting Down Syndroom (Dutch Down Syndrome Foundation)

Parents and families can work together to improve social inclusion

This article is written by Gert de Graaf. He is a free-lance researcher in the field of education for children with a developmental disability. In addition, he is the education officer of the Dutch Down Syndrome Foundation (Stichting Down Syndroom) and although bearing the same family name, he is not related to its director. Erik de Graaf. Finally, he is the proud father of a lovely twelve year old girl. She happens to have Down syndrome and is in the seventh grade of a mainstream school (the grade for ten/eleven year old children in The Netherlands).

During the last three years, on behalf of the Dutch Down Syndrome Foundation, Gert de Graaf has conducted several research projects in relation to the social inclusion of students with Down sundrome in mainstream schools. As such, he has made a thorough survey of the international literature. In addition, he has conducted a series of indepth interviews of teachers, special educators, school administrators and parents of included children, and he has also made observations in the schools (both in the classrooms and in the playgrounds). On the basis of the findings of his research, he gives a list of practical recommendations for interventions aimed at improving the social inclusion of students with Down syndrome.

Dutch schools

Before presenting the findings it is necessary to set the scene with some remarks about the Dutch situation in relation to the inclusion of students with Down syndrome in mainstream education.

- 1. The Netherlands has an elaborate system of segregated special education. More than four percent of all children between six and seventeen years of age are taught in special schools. Since the seventies, the constant increase in the number of referrals to special schools for children with mild developmental disabilities and for children with specific learning disorders has worried educators and policy makers. Since the nineties, education policy, known as Weer Samen Naar School (Once Again Together at School), aims at reducing the number of children attending these types of special schools, with some success in recent years.
- 2. The integration into mainstream education of children traditionally placed in special schools for children with sensory or physical disabilities or severe learning disabilities (students with Down syndrome were traditionally placed in SLD-schools in The Netherlands) is largely due to the activities of parent organisations and was not the result of deliberate governmental policy. How-



Arjan, age 9, sitting in class





Annelot, age 8, during morning break

ever, the Dutch government has followed this trend by changing rules and regulations in order to provide extra support in mainstream education. In grades 1 and 2 (4 to 6 year olds) schools receive qualified extra staff for half a day each week. In grades 3 through to 8 (6 to 13 year olds) schools receive extra staffing for one day each week. This means that, in comparison to, for instance, the United States, Italy or the United Kingdom, the amount of assistance for included children is rather low. Despite this fact, a growing number of schools agree to the parents' request to accept their child. Over the last ten years, the total number of students with Down syndrome in mainstream education has risen to almost 600 (which means slightly more than 25 % of children with Down syndrome in The Netherlands in the age range from 4 to 14 years).

- 3. Due to the limited amount of assistance being provided by the government and due to the fact that mainstream primary schools in The Netherlands simply do not have to accept a student with a developmental disability, the inclusion is selective. This means that more able children with disabilities have more chance of being placed in a mainstream school and to continue their schooling there. New legislation is being prepared, but in this legislation there is no such thing as a clearly stated right to attend a mainstream school, though for schools a written policy in respect to inclusion will be mandatory and schools will have to give arguments if they refuse placement of a child.
- 4. In The Netherlands, since the late eighties, parents of children with Down syndrome have been encouraged (by the Dutch Down Syndrome Foundation) to use an early intervention programme to improve the development of their child. As a result, it is not unusual for some children with Down syndrome to be able to read before their peers. Unfortunately, there is a lack of professional support for parents working with early intervention. The Dutch government still has not given any

serious concern to implementing professional early intervention services and, in fact, is now breaking down the bit that existed.

As promised, a list of practical recommendations will now be given for interventions aimed at improving the social inclusion of students with Down syndrome, especially those in mainstream education. However, many recommendations are also useful in situations other than mainstream school. Some of these interventions are directly aiming at social inclusion, some more indirectly.

Right from birth

Parents have an influence on the abilities, the behaviour and the social network of their child, right from birth. For young children with Down syndrome the following recommendations can be made:

- Medical care should be based on an up to date medical checklist for children with Down syndrome.
- Both hearing and vision should be checked regularly from an early age onwards.
- **3.** An early intervention programme should be used to improve the child's abilities.
- **4.** Teaching reading and number skills should be initiated before the child enters school.
- 5. Many children with Down syndrome misuse their social skills to avoid learning. Parents should not give in to this behaviour. Instead, they should try to make the task more interesting, to give the child more support and more encouragement and/or to build in smaller steps.
- 6. Language skills make an important contribution to social skills. In young children with Down syndrome expressive language is often lagging behind receptive language as well as behind overall development. Parents can strengthen their child's expressive language skills by:
 - encouraging the child to use words he/she already knows;
 - systematically teaching the child the words that fit to particular situations:
 - using signing and reading to support spoken language, thereby making use of the relative visual

"Some years ago I started with letting her match flashcard words. She learned these words pretty quickly. All the words she can say, she can also read. She now knows a few hundred words, but she is not yet able to decode new words. Reading does have an effect on her talking in the sense that she reads aloud and thereby practises." (mother of Gwen; 6 years, grade 1/2)

strength of children with Down syndrome.

- 7. For the development of social competence in their child, parents should combine emotional warmth and sensitivity with developmentally appropriate behavioural demands.
- 8. For the development of social competence and self-confidence it is important that a child experiences him/herself as an effective communicator. Due to a combination of motor, sensory and neurological problems, the communicative signals of many young children with Down syndrome fare less clear, and their reactions often show a time delay. Parents of children with Down syndrome can learn (and often do learn) to take notice of smaller signals and to give the child more time to react.
- **9.** Parents can help their child to learn pro-social behaviour by providing their child with examples, and by explaining and reinforcing pro-social behaviour.
- 10. Parents can help their young child with Down syndrome to gradually build up the ability to participate in longer interactions by imitating their child, by giving their child enough opportunity to take turns, by reacting to their child's initiatives, by extending their child's play (instead of switching to other activities too soon or too often).
- 11. Fantasy play is seen as a vehicle for social growth for young children. Many children with developmental disabilities do not spontaneously engage in elaborate fantasy play and/or are not very interactive in their play. Parents can help their child in this regard by engaging in their child's play as a playmate, thereby

elaborating on the child's play theme.

- 12. Create opportunities for playing with other children. Playing together can be stimulated by giving children play suggestions, giving play materials which encourage playing together, encouraging and reinforcing playing together, getting play started by beginning to engage in a play situation yourself (and withdrawing when other children have joined in), helping children to resolve conflicts.
- 13. Building a social network starts right from birth. It starts by introducing the child to his/her parents' social network and in the neighbourhood and can be extended by making use of regular services, like a regular day care centre.
- 14. When parents are feeling good about themselves, this has a beneficial influence on their child's feeling of well-being and his/her behaviour. Parents should organise adequate support for themselves.

Choosing a mainstream school

Presently, under the 'old' legislation, more than half of the parents of children with Down syndrome in The Netherlands choose a mainstream school for their child:

- Many parents expect that their child, by going to a mainstream school, will have easier contacts with children in the neighbourhood.
- Many parents believe a mainstream class is a more stimulating social environment.
- Many parents think that a child in a school for children with severe learning difficulties (SLD) runs a greater chance of picking up inappropriate behaviour from his/her classmates.
- Some parents expect a better development of academic skills and criticise the curriculum and the way of teaching in a SLD school.
- Some parents believe educational inclusion can have a positive influence on the acceptance of people with disabilities in society.

Ideally, parents manage to find a school:

- with enough coping capacity (cooperation in the team; a strong school leader; some organisational stability; good social climate);
- in which differences in educational needs between children are being seen as normal;
- in which the school leader and most of the teachers see inclusion of a child with Down syndrome as a positive challenge.

From the viewpoint of social inclusion, a school in the immediate neighbourhood has one great advantage: the child meets the same children at school as in the neighbourhood, which greatly facilitates the building of a social network of playmates outside school hours

Getting into the school

As has been stated before, in The Netherlands mainstream schools do not have to accept a student with a developmental disability. Consequently, parents have to 'sell' their own child.

It is important that the school makes a well informed decision about the individual child with Down syndrome and does not base its decision on prejudices with regard to children with Down syndrome in general.

Psychological tests often give an underestimation of the abilities of children with Down syndrome in real life. To give the school an adequate picture, it is recommended that a videotape of the child's functioning in daily life and in play and/or to use a checklist for skills from an early intervention programme is used instead.

The school director should see it as his or her responsibility to make sure the team is well informed and to create enough support in the team for inclusion.

Some general conditions for success

There is more chance for successful inclusion when teachers and parents cooperate well. This is more likely to occur when teachers and parents share basic ideas about the goals of inclusion, give each other enough positive feedback and make

clear arrangements for regular consultations together.

Parents need support for themselves. Many parents experience the exchange of ideas and experiences with other parents of children with Down syndrome in a comparable situation as a strong support.

A positive attitude, with high expectations, is most important. A child should not be judged by his or her spoken language, because he/she will usually understand much more. In this respect the teacher's attitude is an important factor.

Teachers are more likely to find solutions for problems, when they have an optimistic view, seeing problems as challenges and believing in the modifiability of the child. Also teachers should learn to value small steps as success.

There should be enough assistance for supporting the child, the amount depending on the individual needs of the child. When the amount of extra assistance is limited, it is better to have many short periods of extra support during the week than accumulating all assistance on one day.

Extending the child's social network

The school is not the only source of friends and playmates. Parents are recommended to invest in a broad and varied social network for their child, looking wider than the school and wider than same-age peers only.

Parents are recommended to be active in organizing opportunities for playing with peers. For parents of a child with a disability it is often necessary to start with actively inviting classmates to their home and to invest in good relations with the parents of classmates.

"At a meeting for the parents of his class, the first week after the holiday, we, the teachers and his mother, gave some information. The reactions were very positive. Other parents asked questions, like: 'If he comes to play at our home, how can we be supportive'?" (teacher of Floris; 6 years, grade 1/2)

Teachers should keep the parents of the child with Down syndrome informed about which classmates he/she gets on well with at school.

Giving the parent of the child with Down syndrome an opportunity to explain his or her point of view to parents of classmates can help to take away possible fears and inhibitions on their side.

To prevent misconceptions (and possible envy about the extra assistance for the included child with Down syndrome) it is important that teachers give the parents of other children information about school decisions and its organisation with regard to the inclusion of children with disabilities.

In decisions about repeating a class, possible negative effects on the social network of the child should be taken into account.

Sometimes it is necessary to make use of a more deliberate method for creating and extending the social network of the child, such as 'circle of friends' or 'making action plans' (MAPs).

Social inclusion and social problems

The extent of social inclusion of individual children with Down syndrome is influenced by many different factors: child factors (for instance, social skills, speech, age), and environmental factors (for instance, social climate in the classroom, teacher's attitude, hehavioural management). Interventions for improving the social inclusion of students with Down syndrome are more likely to be successful when they are aimed at different relevant factors simultaneously.

The social inclusion of a child with Down syndrome can evolve without any serious problems, with the child being well accepted and having friends.

However, social problems can occur. In this research three types of social problems were observed.

- 1. The child is more or less isolated. Interventions could be: improving the child's play skills, social skills and language/speech; creating play and learning situations which are more suited to the child's abilities; inviting classmates to play at the child's home; improving the social climate in the class; creating a 'circle of friends'.
- Classmates are dominating the child, smothering the child with too much help or overprotecting the child.

Interventions could be: giving classmates clear directions for their behaviour towards the child and, as a teacher, being a role model in this respect; diminishing the need for extra help by teaching the child more skills in self care; giving the child clothes, a bag and packed lunch that he/she can handle without assistance; creating situations in which the child can participate more as an equal or in which he/she can even excel.

3. The child is often behaving inappropriately or anti-socially. Sometimes it is classmates provoking these behaviours.

Interventions could be: making a thorough behavioural analysis of different relevant situations; ascertaining that inappropriate or anti-social behaviour is not unintentionally reinforced; reinforcing appropriate social behaviour; encouraging positive relations with classmates; giving classmates clear directions for their behaviour towards the child.

Creating situations

It is important to carefully observe situations in which the child has more positive interactions with his/her peers. Then, if necessary, similar situations can be recreated. Children with Down syndrome often have more interaction in situations with only a few other playmates. These situations can be arranged at school, whatever the total size of the class. Playing at home also gives opportunities to arrange adequate play situations.

Additionally, teachers and parents can organize 'set-ups'. This means getting play sessions started by engaging in a play situation with the child, only to withdraw when other children have joined in.

"In the beginning I helped play to get started by engaging children into fantasy play, because that is the kind of play Annelot likes and is good at. For instance, I give them a lot of clothes to use for dressing to represent all kind of fantasy figures." (mother of Annelot; 8 years, grade 3/4)

Teachers can pair another child with the child with Down syndrome

for certain activities (play as well as work).

Available extra assistance can be used for supporting a small group of students including the child with Down syndrome instead of only supporting the child with Down syndrome.

"The assistant tries to encourage Dorinde to play with other children. For instance, she starts an activity with Dorinde and then she invites one or two children to join in. She encourages them to play together. Or the assistant varies a round game, for instance a kind of colour-matching game." (teacher of Dorinde; 5 years, grade 1/2)

Improving the child's skills

Improving the child's play skills, language, speech and social skills, can have a positive influence on the his/her social inclusion.

With regard to play skills, it is recommended that these are included as objectives in the child's educational plan. Observe which games are actually (in that particular period of time) being played in the school's playground and try to teach the child with Down syndrome the relevant skills and rules. Ask other children at school and in the neighbourhood if they want to assist. When the child is unable to play the game by the rules, for instance as a result of motor problems, make adaptations in consultation with the child and his/her playmates.

"In a subtle way the teachers do support him. For example, in grade 6 the sports games at gym get faster and more competitive. The teacher discussed this with Caspar: 'You have less speed and ability with the ball'. And then she suggested that the team which wants to choose Caspar may choose an extra child, because the two together form a good team." (mother of Caspar; 13 years, grade 8)

With regard to speech and language it is important to realise that in children with Down syndrome expressive language is often lagging behind receptive language. So, never

Inclusion in Dutch mainstream schools

judge the child's understanding by his spoken language.

Children with Down syndrome often have poor auditory processing and working memory. Therefore, make language visual by the use of signing and (early) reading. Do not speak in long sentences. Attract the child's attention before telling him or her something.

Many children with Down syndrome have difficulties with extracting information from spoken language, searching their memory for information and words, and giving an answer. Give them enough time to react.

Some children with Down syndrome have difficulties in managing changes in activities (there is probably also a time-delay in inner speech). Make the day's timetable visual and let them know if there is a change of activity some time before it actually occurs.

Teachers (and parents) can strengthen the child's language and speech abilities by:

- encouraging the child to use words he/she already knows
- systematically teaching the child the words which fit to particular situations

"In the beginning he pushed other children away, because he didn't talk at all then. This frightened the other children. We discussed this with the class, that he didn't have the words and that we could teach him the right words together. For instance, one child told me: 'Floris pushed me'. Then the two of us together went to Floris and told him that he could say 'away' or 'no'. In this way he has learned that you don't have to push, that there are other ways." (teacher of Floris; 6 years, grade 1/2)

 using signing and reading to support spoken language, thereby making use of the relative visual strength of children with Down syndrome.

With regard to social skills the following is recommended:

- encourage the child, if necessary, to ask other children if he/she may join in their play. Practise this in role-play
- teach the child the ability to think up and/or accept compromises in conflict situations

"I asked her whether she sometimes wants to join in a play situation but does not succeed. Cornelijne said: 'I don't know how to ask'. Then we practised this in a role-play. I pretend I am a child and Cornelijne comes to me and has to ask: 'May I join in?'" (teacher of Cornelijne; 9 years, grade 3/4/5)

- teach the child to stand up for him/herself in an appropriate way
- invest in teaching the child good manners
- make rules and routines in the classroom visible

"You repeat the rules, you demonstrate the rules, if possible with other children. Using other children as a model is often quite effective. 'Look, Martin is showing how to hang up an apron for painting.' We also make use of cards which show all the activities of that particular day with images for the different activities. In the beginning he was saying 'mama' all the time. Now that we are using these cards he realises that first there is a work session and then snack time and then playing in the playground and then finally mama comes to fetch him. This supports him very well. It has proven to help some of the other children in his class as well." (teacher of Floris; 6 years, grade 1/2)

 give the child clear directions for behaviour, for older children especially for showing friendliness, making physical contact and handling amorousness

"He has a tendency for kissing and cuddling. When he was six years of age, I thought 'I don't want this any more'. I really had a conflict with some of my family about this cuddling. Some of them said: 'Oh, let him'. I then told them: 'Yes, now it is still cute. But, if he is eighteen years of age, and he is still doing this, then he is the one who will have to pay.' We drew clear lines for him. We told him that it is appropriate at a birthday party to give a kiss to the hero of the feast but that's it. You have to make these social rules crystal clear for him." (mother of Caspar; 13 years, grade 8)

"At the beginning of this years school he scratched other children. I then cut his nails short and every morning I told him very clearly - looking straight into his eyes: 'Remember, don't hurt other children, so no crabbing.' And I told him: 'Mama is going to ask the teacher.' At the end of the morning - in the break - and after school time I then went to the teacher and asked: 'Did he scratch anyone?'. The teacher said 'no'. And then I said to Arjan: 'That is excellent, really great, you are mama's hero.' He hasn't crabbed after this. I continued this strategy for a few weeks and then skipping a day sometimes and now I don't do this any more." (mother of Arjan; 9 years, grade 4)

- reduce inappropriate or antisocial behaviour by giving clear behavioural directions, by making sure unwanted behaviour is not unintentionally reinforced and by reinforcing good social behaviour
- take a long term perspective.

Annelot in class



Informing classmates

In most cases classmates are well aware of the 'specialness' of the child with Down syndrome. Without adequate explanation, the chances are that classmates will form their conclusions about Down syndrome founded on fragmented information. Thus it is recommended that teachers explicitly inform classmates about Down syndrome. As has been stated above, in many cases, it is also necessary to give classmates clear directions for their behaviour towards the child. In addition, an open discussion with the class gives the opportunity to explain to classmates ways in which they can be supportive to the child with Down syndrome (without being overprotective).

"Annelot was pampered, really coddled. 'Oh Annelot may do so', for instance if she grabbed something from another child. With another peer they would have said 'keep off'. So when the teacher gave the class information about Down syndrome he also told them: 'Annelot is just a girl. Some things are different, but you should treat her in a normal way. So you can just tell her 'no'.' I think this was a very good thing to do. The children are still kind, but it has become more normal, not too sweet." (mother of Annelot; 8 years, grade 3/4)

It is suggested that Down syndrome is discussed in the context of more general social themes.

Improving the social climate

A good social climate is essential for the social inclusion of a child with a disability.

Improvements in social climate are stimulated by:

 discussions with the class about the fact that all children are different

"Many times we have discussed in the class that every person is different. For instance there is a boy in the class who lost his hair because of an illness. This boy had a hard time when he lost his hair. That is a reason to discuss differences. We have classroom discussions about 'what do you like about yourself and what do you not like?' A speech therapist of another child said that she was surprised that this child wasn't teased with the fact that he couldn't say 'r'. But in our class these kind of things are really being discussed." (teacher of Dorinde; 5 years, grade 1/2)



Arjan trying to get a football from over the fence

- discussions about social themes (e.g. friendship, feelings, discrimination)
- giving all children clear guidelines for social behaviour, reinforcing pro-social behaviour, intervening in cases of antisocial behaviour, encouraging all children to think up alternatives for inappropriate or anti-social behaviour

"If children do not behave in a social way, for instance taking something from another child without asking, then I let them do it over again. I then first ask them: 'How should you do this?' It's a good thing to give them the opportunity to think about this for themselves first. And I find that, with regard to interacting with each other as a teacher, you have to give the right example yourself as well. For instance if a teacher is yelling at the children all the time then the children will also tend to quarrel more in the playground. If as a teacher, you treat the children with good humour then children will learn to also treat each other in such a way." (teacher of Annelot; 8 years, grade 3/4)

- explaining to all children the rationales for rules in the classroom or even making the rules in consultation with the children
- as a teacher, making plentiful use of positive methods for keeping order and managing behaviour.

"At the beginning of this school year we wrote down some rules, on a large piece of paper on the door. The children themselves add rules in the course of the year. For these young kindergarten children this also means all kind of small rules for behaviour, because these children don't make a clear distinction between rules for interacting with each other and other behavioural rules. The children themselves now say: 'We should write this down.' And we bring their attention to the rules whenever there is an opportunity. The children know exactly what the rules state, even though they can't read." (teacher of Floris; 6 years, grade 1/2)

Stimulating selfconfidence and a positive self-image

Self-confidence and a positive selfimage have a positive influence on social competence. Included students with Down syndrome are in a situation in which most of their classmates are more able in many areas. Although most children with Down syndrome, according to the parents and teachers interviewed, do not perceive this as a problem, it could be valuable for their selfesteem to place them in situations in which they are not the least capable, too.

The following recommendations are made:

• try to create situations in which the child can participate more as an equal or even in which he/she

"He is very good at riding on a skelter. If he is doing that he has no handicap whatsoever. He can join in like any other child. For riding a skelter you don't need to be able to talk. It is just racing one after the other." (mother of Arjan; 9 years, grade 4)

"Anne excels in learning topography. She often gets an 'A' and sometimes the class spontaneously gives her applause. If she does something very well, then I mention this aloud. I do this with other children as well." (teacher of Anne; II years, grade 6)

- not only school activities, but also hobbies can be a source of selfconfidence
- make plentiful use of cooperative learning
- if possible, sometimes put the child in a leading position, for instance by making him/her the tutor of a younger child for certain activities.

It is essential that the parents give their child with Down syndrome adequate information about his or her own disabilities (and capabilities). For older children, contacts with others with a disability can be helpful in providing them with a frame of reference. Also with older children these contacts can eventually provide an opportunity for more equal friendships. Yet, such friend-

"She is good at jazz gymnastics. At school she really showed bravery: at the weeks closure-ceremony she danced to ABBA all by herself. The other children were really impressed. That is a great value of her doing jazz gymnastics, she dares to do something the others wouldn't dream of." (mother of Anne; II years, grade 6)

ship will not automatically occur. A careful search for a comrade with a certain match in development, experience and interests is needed. Furthermore, equal friendships are not the only valuable relationships. Again, parents are recommended to invest in a broad and varied social network for their child.

The child as a student

Participating as much as possible in the 'normal' curriculum leads to more shared experiences and this can ensure that the child is seen more as part of the class, by him/

"Judith's small group is now working on a paper about ancient Egypt. The other children are reading texts and putting it in their own words. I don't exactly require Judith to do the same. Judith is copying parts of the texts. But she does remember what she has written. Judith is very interested in history, geography, biology and social science. In these subjects she takes part in the regular lessons. But she gets her own test. I, for instance, give her less places to learn for topography. Or I let ludith take the questions of the test home in advance, so she has the opportunity to prepare. In this way she can succeed. She wants to get an 'A' too." (teacher of Judith; 14 years, grade 7)

herself and by his/her classmates.

It is recommended to make a timetable of the school day, with the activities of the class on the one hand and the eventual adaptations in support, demands or objectives for the child with Down syndrome on the other. Making such a plan means that teachers will look more systematically at opportunities for participation in the 'normal' curriculum.

"I let him do his own work, but in the same subject as the other children, because in that way he is still to some extent involved in what is going on in the class, also in the eyes of the other children." (personal assistant of Timo; 7 years, grade 3)

Participation can also be encouraged by:

- putting the child with Down syndrome near the teacher during lessons for the entire class
- making more use of visual presentation
- getting round the child's speech difficulties, for instance by letting the child point to the right answer instead of having to speak
- making use of pre-teaching in an individual or small-group setting
- making plentiful use of cooperative learning and of peer-tutoring. Many children with Down syndrome misuse social skills to avoid learning. Teachers should not give in to this behaviour. Instead they should try to make the task more interesting (for instance by contextualizing a 'dull' task in a more interesting activity), to give the child more support and more encouragement, to build in smaller steps, to give the child choices between tasks and during tasks, etc.

Working independently on an assigned task is a skill most children with Down syndrome have to be taught in a step by step fashion. Teachers should start with requiring the child to work independently for only very short tasks and then gradually stretch this out. For

"Sometimes it is possible to involve him in a regular lesson, for instance with biology. But I then have to pose the question in such a way that he only has to answer 'yes' or 'no'. With biology we also often use concrete materials, when it is about topics like colours or hard and soft or about the sounds animals make. Or with a lesson about traffic we had a bike in the class. I clearly named the parts of the bike and Arjan pointed at them. He could do this perfectly. He just isn't capable of articulating the words clearly." (teacher of Arjan; 9 years, grade 4)

"Cornelijne and another girl are sitting at the computer. The girl asks: 'up to ten?' Cornelijne answers: 'yes'. The girl points to the screen and says: 'here'. Cornelijne presses the mouse. It is a programme in which a picture appears with a particular amount of animals. The students have to choose the actual number corresponding with this amount from nine figures randomly scattered on the other side of the screen. Cornelijne and the girl are taking turns. They are speaking aloud to each other ('how many?', counting aloud, 'good', etc.). Now and then other children come and look what they are doing." (observation of Cornelijne; 9 years, grade 3/4/5)

independent work, tasks should be chosen which the child has already mastered well.

The child should practise new tasks first with support and then repeat these independently in the classroom.

"To get him motivated enthusiasm and variation is essential. That is what he likes. He is very sensitive to the way you are presenting something to him. Sometimes, I'm just not original enough, then he finds it boring. What also works out very well with him with things you want to teach him is letting him experience it. For instance learning to read the word 'on' as a flash word for him is much more interesting if we simultaneously climb on something." (remedial teacher of Arjan; 9 years, grade 4)

Co-operative learning: Annelot reports the findings of her small group to the other groups







Arjan sitting in class

It is important to invest in teaching the child to read and write. Mastering these skills opens up a much greater variety of tasks which can be done independently.

Even more than teachers, parents have the opportunity to search for meaningful applications of academic skills in daily life.

Inclusion does not have to be perfect

Many parents and teachers say that they, at times, feel dissatisfied with the inclusion of the child and with their own efforts, but most of them do also tone down these feelings: It is important to see a limited extent of social inclusion as valuable as well.

Gert de Graaf Stichting Down Syndroom (SDS) Bovenboerseweg 41 NL-7946 AL Wanneperveen The Netherlands tel: -31-(0)522-28 13 37

fax: -31-(0)522-28 17 99 email: Graaf.Bosch@ision.nl or: Sdswannl@knoware.nl http://www.downsyndroom.nl "He may choose from a few different activities and that makes him more highly motivated. Since some weeks I'm not hearing him saying all the time 'I find it too difficult'. For instance, he now really wants to read and write series of words in which one letter is being changed. He also really enjoyed forming 'dirty' words from magnetic letters. It is part of this reading approach to let a child decide what words it wants to learn to read. Since I have started to work in this way, his motivation for reading has grown immensely." (teacher of Milan; 8 years, grade 3)

"I'm trying to teach him to work independently. I'm now trying to stretch out the time he is doing this. I make very well structured and visually clear working sheets, but I do try to vary the way the sheet is ordered or the task is structured a little bit, for instance a picture has to be glued with a word instead of the other way around, because I fear that otherwise he would get stuck into one sort of frame. Before I let him work independently we first, the two of us together, look carefully at the material. I'm making sure that he knows the flashcard words and that he recognises the pictures. After doing this he puts the cards to the side of the sheet again and then he has to glue the cards on the right places all by himself. He now often corrects his own mistakes at the moment he is going to make them. In the beginning, if he was going to make a mistake, I said: 'Look again'. But now I keep silent and more and more he proves that he can find out it himself. So now, also when I'm sitting next to him, I don't correct mistakes immediately." (personal assistant of Timo; 7 years, grade 3)

"The remedial teacher practises work with him in a one to one situation and then Caspar does the same work over again in the classroom. For instance with reading comprehension the two of them together fill out worksheets with multiple choice questions about a text and then later in the week Caspar does the same sheets over again in the classroom, all by himself." (teacher of Caspar; 13 years, grade 8)



Annelot working one-to-one with a special educator outside the classroom

Inclusion resources

Books:

Children with Down's Syndrome: A Guide for Teachers and Learning Support Assistants in Mainstream Primary and Secondary Schools. By Stephanie Lorenz (1998). London: David Fulton Publishers. ISBN: I-85346-506-2. http://www.fultonpublishers.co.uk/

First Steps to Inclusion. By Stephanie Lorenz (2002). London: David Fulton Publishers. ISBN: I-85346-763-4. http://www.fultonpublishers.co.uk/

Effective Teaching Strategies for Successful Inclusion: A Focus on Down Syndrome. By Barbara Tien (1999). Calgary, Canada: The PREP Program. ISBN: 0-9686493-0-0. http://www.prepprog.org/shopping/

Education for individuals with Down syndrome – An overview. By Sue Buckley and Gillian Bird (2000). Portsmouth, UK: The Down Syndrome Educational Trust. ISBN: 1-903806-31-3

Education for individuals with Down syndrome – Whole school issues. By Sue Buckley, Stephanie Lorenz and Gillian Bird (in press). Portsmouth, UK: The Down Syndrome Educational Trust. ISBN: I-903806-27-5

Including Pupils with Down's Syndrome: Information for teachers and Learning Support Assistants - Primary, & Including Pupils with Down's Syndrome: Information for teachers and Learning Support Assistants - Secondary. Published by The Down's Syndrome Association and The Scottish Down's Syndrome Association (2000). See their websites at http://www.downs-syndrome.org.uk and http://www.sda.org.uk

Guidelines for Teachers for Junior & Primary Schools (1999) & Guidelines for Teachers for Upper Primary & Secondary (1999), published by the Down Syndrome Society of South Australia. See their website to order and for their whole range of publications. http://downssa.asn.au/

Videos:

Down to Earth: Mainstreaming children with Down's syndrome in regular primary education (1998). Holland: Stichting Down Syndroom. http://www.downsyndroom.nl. This and other material from the Dutch Down Syndrome Foundation will soon be available from The Down Syndrome Educational Trust.

Workshops on inclusion at The Sarah Duffen Centre (autumn 2002)

Monday 16 September Meeting the educational needs of children with Down syndrome in mainstream schools – Infant school

Tuesday 17 September Meeting the educational needs of children with Down syndrome in mainstream schools – Junior school

Monday 23 September Meeting the educational needs of children with Down syndrome in mainstream schools – Secondary school

Monday 04 November Supporting the development and education of children with Down syndrome (Day 1/2)

Tuesday 05 November Supporting the development and education of children with Down syndrome (Day 2/2)

See our Services brochure for details of these and other Workshops, or visit our website at: http://www.downsed.org



Including Children with Down's Syndrome in Mainstream Schools

A conference and workshop programme for professionals in education

Presented by the Down's Syndrome Association

Infant and Primary Schools

Friday I Ith October 2002

The Dennison Centre, University of Hull, Cottingham Road, Hull, HU6 7RX

Thursday 7th November 2002

Royal National Hotel, Bedford Way, London WC1H 0DG. Contact: Education Information Officer Tel: 01326 311007, or email: educate@downs-syndrome.org.uk for application forms

Transition to and inclusion in Secondary Schools

Thursday 10th October 2002

Brantingham Park, Elloughton, East Yorkshire, HU15 1HX. Tel: 01482 392430 for application forms

Friday 8th November 2002

Gt Baddow Centre, near Chelmsford, Essex. Email: senaps.inset@essexcc.gov.uk or fax: 01245 436588 for booking forms

Thursday 14th November 2002

 $Haringey\ Professional\ Development\ Centre,\ Downhills\ Park\ Road,\ London\ N17\ \underline{6}AR.$

Contact: Sue Rush. Tel: 0208 489 5028, fax: 0208 8489 5001 or email: sue.rush@haringey.gov.uk

Friday 15th November

Curriculum & Teachers' Centre, London Borough of Richmond upon Thames

Contact: Tina Cruise. Fax: 020 8891 7516 or email: t.cruise@richmond.gov.uk, by I November 2002

Friday 22nd November

Bestwood Lodge Hotel, Bestwood Country Park, Arnold, Nottingham

Contact: Education Information Officer. Tel: 01326 311007, or email: educate@downs-syndrome.org.uk for application forms