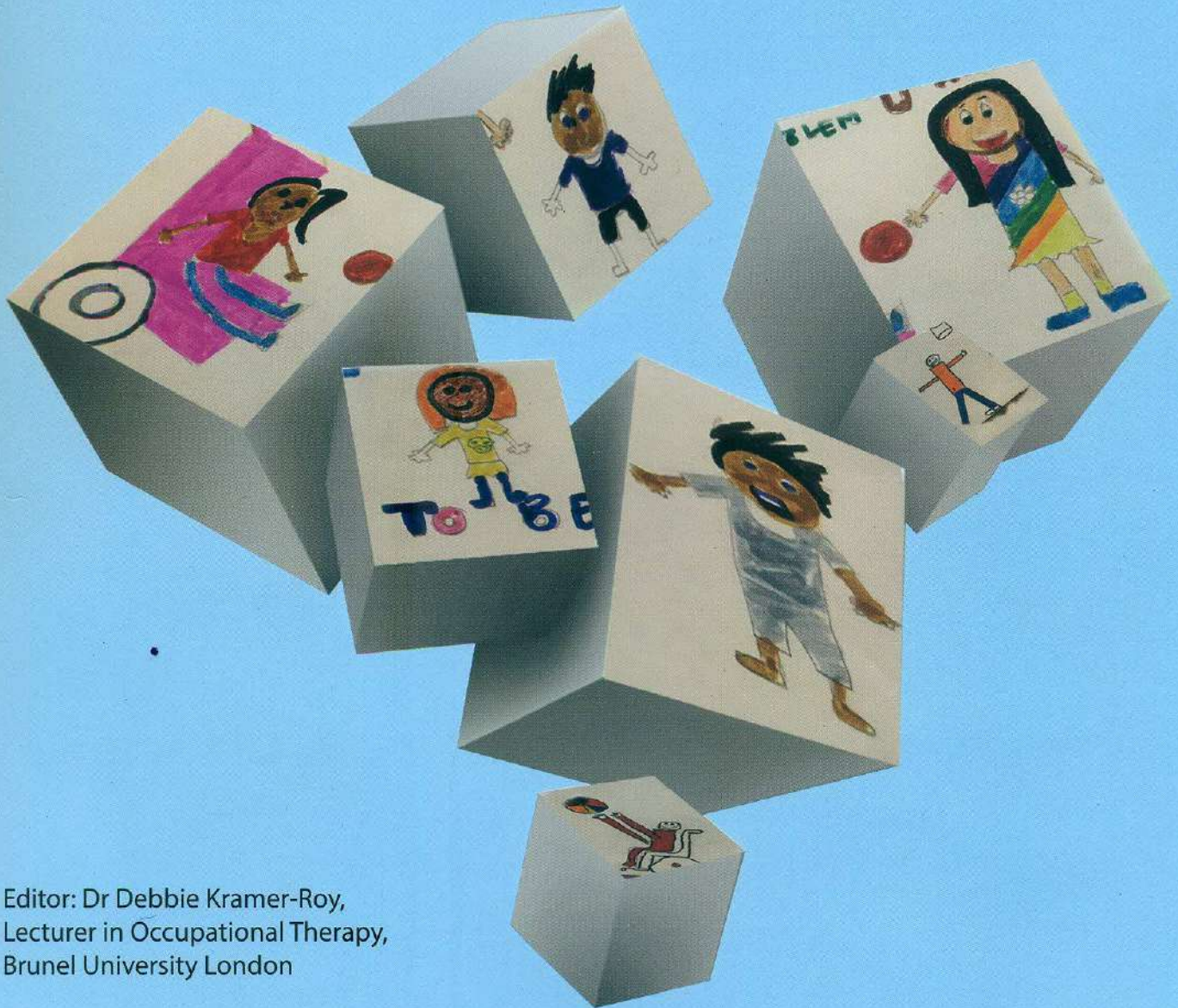


Inclusive Education in Pakistan

A Resource Guide for Teachers & Occupational Therapists



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Forward



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The Inclusive Education research project for Pakistani children with special needs was successfully carried out during three years by a multidisciplinary team of occupational therapists, teachers and school children.

A Resource Guide has been designed to make it easy for teachers and occupational therapists to make individually tailored programs for their own schools, seeking help from this guide for procedures and tools to practically implement Inclusive Education for children with special needs.

I strongly recommend the Resource Guide for Inclusive Education in Pakistan for implementing the Sindh Right to Free compulsory education Bill (2013), which applies to all children, including those with special needs.

Our special thanks to the Higher Education Commission, the British Council and Brunel University London for making this project culturally practical and successful.



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Preface

Welcome to the Pakistani Resource Guide for Inclusive Education!

This guide is based on the findings of a Collaborative Action Research Project that aimed to develop the role of Occupational Therapy in Pakistan.

The project was funded by the British Council and the Higher Education Commission of Pakistan. The project was carried out by researchers from the Occupational Therapy divisions of Brunel University London and Dow University of Health Sciences Karachi, as well as The AMI School over a period of three years.

The majority of children with disabilities and other special needs in Pakistan are still missing out on being in school at all, or if they are in school, many do not receive the support to be able to participate in educational and social activities like their classmates. Occupational therapists have valuable knowledge and skills that can support children and teachers to work together so that all children can be included in the learning process in the mainstream classroom.

The Pakistani occupational therapists and teachers on the team worked together closely every week in the classrooms of three local schools, so that you can be sure that the ideas in this guide have all been tried and tested in your own context!

The guide has been designed to show you both HOW and WHAT we developed, so that you will be able to understand how you can make your own schools more inclusive. As no two schools, nor any two children, are the same, we have described the processes and tools we developed, as well as the practical strategies, materials and inclusive lesson plans. We hope this will inspire you to develop your own ideas for children in your school.

As this guide is based on a small project, it does not claim to be a complete handbook on all possible special needs, conditions and strategies. Instead it demonstrates that it is possible to include children with disabilities and other special needs in mainstream schools, using mostly the resources you already have available in school. To help you explore further information and ideas we have therefore included links to online books and webpages at the end of the guide in Part 4.

This guide is organised into four parts:

- Part one gives background information and an introduction to the key ideas.
- Part two is full of practical strategies for inclusive education and has two sections. The first section gives general strategies that help your school to become more inclusive, and the second section gives examples of how we responded to the specific needs of individual children and/or classrooms.
- Part three shows the importance of networking with other people and organisations who are working to make Pakistani schools more inclusive, to give and receive support to each other.
- Part four contains further resources, including useful websites and the reflective logs used in the project.

All members of the research team have been involved in writing this guide and their names are given in the List of Contributors.

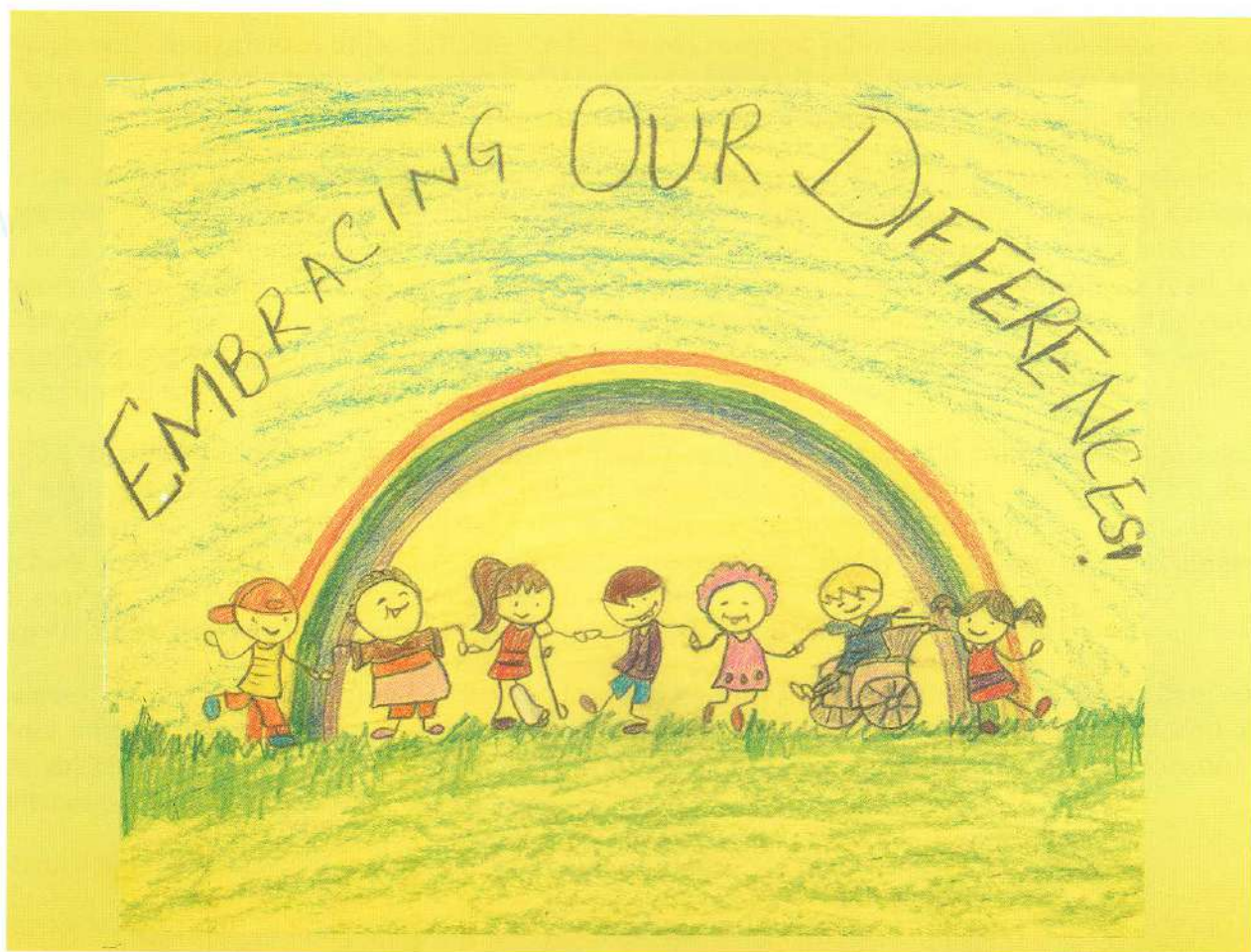
We wish you much inspiration, dedication and success as you use this guide to make your school more inclusive!

Dr. Debbie Kramer-Roy, Principal Investigator and Team Leader



Part 1

Background and Introduction



1.0 Introduction

Why this project in Pakistan?

It is difficult to know exactly how many Pakistani children with disabilities and other special needs there are, because no complete or correct figures are available. But we do know that the vast majority of children with disabilities are not in any school at all; a research study carried out in the Punjab estimates 96% are not in school (Manzoor et al, 2016). There are very few special schools, and mainstream schools are often reluctant to give these children admission because they do not have the training or funding available to support their learning. There is also still a lot of misunderstanding and stigma around disability, which leads to negative attitudes in the community and in schools. For example, there is sometimes resistance from parents who do not wish their child to study and play with a child with special needs, or teachers may not be open to the idea that children with special needs can learn and play with other children.

Children with less obvious or less visible special needs may get admission in a mainstream school, but they may sit at the back of the class, struggling to keep up with lessons without receiving any support from teachers, or they may be excluded from school when they do not pass their exams.

Teacher Education is starting to improve and more courses are now available at Bachelors of Education, Associate Degree and short course levels in Government universities and colleges. But most of these do not contain much information about children with special needs and how to support them in the mainstream school. See the section on Inclusive Education to read why inclusive education is the best approach to reach the goal of Education for All (1990; <http://unesdoc.unesco.org/images/0012/001275/127583e.pdf>), which was again prioritised in the Millennium Goals (<http://www.un.org/millenniumgoals/bkgd.shtml>).

In 2013 the Provincial Government of Sindh brought out legislation that is committed to providing free and compulsory education to ALL children, which explicitly states that children with special needs also have the right to study in mainstream schools with support from trained teachers (2013; <http://www.pas.gov.pk/index.php/acts/details/en/19/192>). Another document that explains the rules further was published in 2016 (http://rtepakistan.org/wp-content/uploads/2016/03/Sindh_Shadow_Rules.pdf).

However, it will take some time before this law will be fully implemented. In the meantime, each school and each teacher can use this law as motivation and support to include all children into mainstream schools. The time is right to introduce a Resource Guide for Inclusive Education in Pakistan!

International development in School-Based Occupational Therapy.

The role of Occupational Therapy has been changing worldwide over the past few decades in the way it supports children in schools. Instead of focusing on “fixing” the child’s physical or intellectual challenges, many occupational therapist now work at the school and classroom level first, to make sure that the physical environment and the people in school become more welcoming, and that the activities (occupations) and the curriculum become accessible for all children. Please see the section on Occupational Therapy for more details on this Person-Environment-Occupation approach.

The World Federation of Occupational Therapists published a Position Statement on Occupational Therapy Services in School-Based Practice for Children and Youth (2016;



<http://www.wfot.org/ResourceCentre.aspx>). This statement encourages occupational therapists across the world to put their efforts into supporting schools to include many more students with special needs. In other words, occupational therapists are advocating for children who are having difficulties to get admission (increasing the numbers) AND supporting teachers to be able to support the children once they are admitted. Occupational therapists do this through collaborating with teachers about adapting the environment, designing educational materials and developing inclusive lesson plans (better quality of learning for all children). Please see the section on Occupational Therapy for details on the three levels of intervention that are needed to make this possible.

Around the world, therapists and researchers have developed specific approaches to school-based Occupational Therapy and Inclusive Education, according to the local needs and resources. A very successful model, Partnering for Change, which was developed in Canada, (<https://www.canchild.ca/en/research-in-practice/current-studies/partnering-for-change>), emphasises the importance of collaboration (partnership) between teachers, therapists, children and parents as well as the three levels of intervention.

The approach taken in this project:

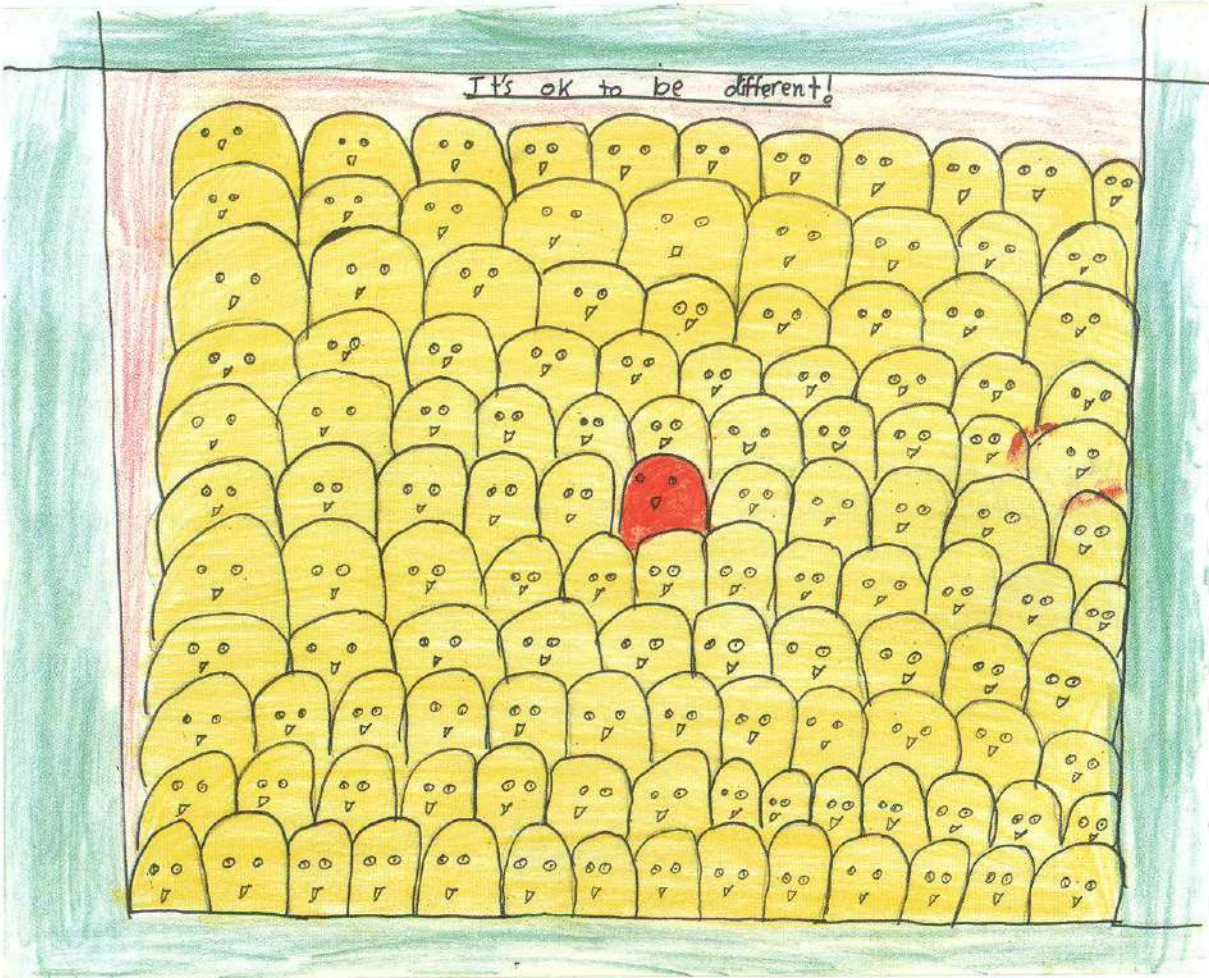
In view of the above, we saw the need to develop approaches that would work in Pakistan, so we did not try to copy what had worked elsewhere. Instead we used Collaborative Action Research to help us to observe, problem-solve and implement ideas together in the classrooms. Please see the section on Action Research for more details on how the occupational therapists and teachers worked together and learned from each other. The forms we used to structure and record the observations, reflections, plans and actions are given in Part 4, for you to use in your own schools. Parents and children are key stakeholders in this project. Therefore, right from the beginning we involved the parents in the process too, both at the individual level and as a group of people who needed each other's and the professionals' support. See the section on parental involvement for more details on the activities and workshops we organised.

Reference:

Manzoor, A, Hameed, A and Nabeel, T (2016) Voices of Out of School Children with Disabilities in Pakistan. *Journal of Research in Special Educational Needs*, 16(S1), pp1099–1103.



1.1 Inclusive education



1.1 Inclusive education

'Inclusion is the act of making a person or thing part of a group or collection'(Collins dictionary)

Inclusive education is thus achieved through:

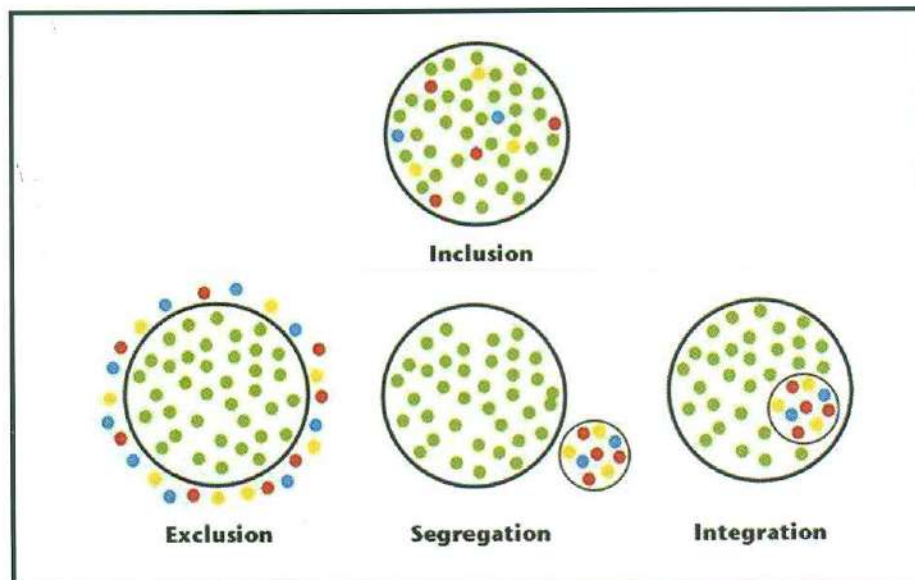
- Valuing all students and staff equally.
- Increasing the participation of students in, and reducing their exclusion from, the cultures, curricula and communities and practices in schools, so that they respond to the diversity of students in the locality.
- Learning from attempts to overcome barriers to the access and participation of particular students, to make changes for the benefit of all students.
- Recognising that inclusion in education is one aspect of inclusion in society.

Source: CSIE (current website)

Benefits of Inclusive Education

Inclusive education is a globally accepted human right of children. It gives equal chance to the children with special needs to be educated with their peers. It is the most efficient way to not only educate the child with special needs, but also to increase the quality of education as a whole by improving teaching approaches and practices. It develops individual strengths and gifts, focusing on individual goals while giving an equal chance for class participation with age appropriate activities. It fosters an acceptance of diversity and individual differences and promotes a culture of respect and care in schools.

The term inclusion is often used wrongly. In many situations children are "integrated" into a mainstream school system that remains unchanged. The child will be welcomed only if they can adjust to the system, i.e. it is conditional. Often children will be physically 'included' (present), but educationally excluded. For example, they are given completely different tasks to do with or without help of a classroom assistant. They are not part of the class learning process and not working with their peers.



The concept of inclusion gradually developed over a period of time as the policy makers gathered together and signed declarations and laws regarding the rights of people with disabilities.

In 1989 a treaty consisting of universally agreed non-negotiable standards and obligations was signed by 140 countries, known as the Convention on the Rights of Children. The laws of the treaty emphasize on full and active participation of children with disabilities in the community and access to education, employment and recreation without discrimination.

The 2008 Convention on the Rights of Disabled People was published, which also focuses on full and effective participation and inclusion of disabled people in society through equal opportunity. It declares that children with disabilities should have a right to express their views freely and to be provided with disability- and age-appropriate assistance to realize that right.

The Salamanca Statement (1994) focuses on the unique needs and abilities of children and designing the education system to meet these diverse needs. It also declares education as a fundamental right of all children and inclusive education as the most efficient and cost effective way to achieve education for all.



1.2 Occupational Therapy



1.2 Occupational Therapy

Occupational therapy is a client-centred health profession concerned with promoting health and wellbeing through occupation. Occupation describes the everyday meaningful activities which people do as an individual or together with others, within the home, at school, at work or in society, such as self-care, work or leisure to occupy time. It is subjectively experienced, for example, to one person the occupation of shopping is a real chore, while for others it is fun. For the child, the occupations of play and attending school are the most important. The meaning and function of occupation varies according to its location in the stream of time.

Occupational therapy is a health and rehabilitation profession. Occupational therapy uses a holistic and client-centered approach. It helps people of all ages, from newborns to adults, as well as elderly, who have disability or other reasons to have difficulty in performing their occupations. Occupational therapists also work with groups who experience disadvantage or challenging situations, such as refugees or prisoners.

The primary goal of occupational therapy is to enable people to participate in the occupations (activities) of everyday life. Occupational therapists achieve this outcome by working with people and communities to enhance their ability to engage in the occupations they want to, need to or are expected to do, or by modifying the occupation or the environment to better support their occupational engagement.

Occupational therapists provide specialized assistance to enable people to lead independent, productive, and satisfying lives despite physical, developmental, social, or emotional difficulties. Occupational therapists use the occupations of self-care, work, and play/leisure activities to increase independence, enhance development, and/or prevent disability.

The Role of Occupational Therapy in Schools

Occupational therapists work with children in a variety of settings, including schools. In most countries they are key contributors within the education team, although this is not yet common in Pakistani schools. The aim of this project was to develop this role.

As children grow and develop, they learn to do many things, including taking care of themselves, managing their school work, playing sports or developing a leisure interest or hobby. Occupational therapy is not only for children who have disabilities, but it can also help children dealing with other specific challenges in schools like learning difficulties, social skills, handwriting difficulties and many others, as described in part 2 of this Resource Guide.

The World Federation of Occupational Therapists (WFOT, 2016) position statement on school-based occupational therapy states that occupational therapists support all students to perform everyday school occupations and will also support inclusive education by providing occupational therapy in schools at three levels of intervention, namely Primary, Secondary and Tertiary.

Primary level of intervention, or “Universal Design for Learning”, describes the contribution of occupational therapy at a school system level, working with the whole classroom and school. They can enhance the capabilities of students, caregivers, parents, etc. to support children in their learning and other school-based activities. Occupational therapists working at this level not only



Help to resolve specific problems but can also help teachers in developing the curriculum and strategies which foster inclusion in school, including Inclusive Lesson Plans.

At the Secondary level of intervention, or “Differentiation”, the occupational therapist will provide extra support to children who may need individual attention. The occupational therapist works collaboratively with teachers in designing specific adaptations of teaching activities and materials for those children. The aim is for the children to participate in the same curriculum and other activities as their classmates, by modifying teaching practices or materials.

The above two levels explain the role of the occupational therapist working with the whole school and classroom. The Tertiary level of intervention focuses more on the individual child, when a student is unable to participate in (some of) the general curriculum and lesson plan. Here, the occupational therapist provides direct support to the child, planning specific activities which maximize the child’s participation and capabilities. The occupational therapist also helps the teacher in developing individual lesson plans, considering the needs of the child.

Currently, occupational therapists working in schools mostly focus on the Tertiary level of intervention as they identify the individual child’s difficulties and plan according to that. They plan different interventions, mostly outside the classroom and they traditionally provide services on a one to one basis through hands-on intervention. It allows the child to meet educational goals without distractions of the classroom, but it reduces the time the child is exposed to the regular classroom environment and limits opportunities for interaction with classroom peers.

The evolving role of Occupational Therapy

Occupational therapists should practice at all three levels of intervention described above. The occupational therapist collaborates closely with the teacher to decide which approaches are best for the child, which enhance his/her skills and motivation. As occupational therapy is a client centered-approach, children should be involved in making decisions and expressing their choices. This will help to determine which would be the best learning environment and activities for the child.

In order to support as many children as possible, the primary and secondary levels of intervention should be considered as a first step. Occupational therapists can support teachers in creating a more inclusive environment in schools and classrooms by focusing on these two levels. In part 2b there are several examples which explain the practical implementation of these levels in schools.

By doing this, the need for tertiary level intervention will be reduced, but some children with special needs may still require individual intervention and specific lesson plans. The occupational therapist evaluates the student’s educational needs to identify and create goals and accommodations, or interventions that may also be included in the student’s Individual Education Plan (IEP). Some children may not respond to the strategies used in the classroom like other students, and may need to work with the therapist outside the class. Based on this individual intervention, the occupational therapist provides specific advice for the teacher to implement when the child participates in whole-class or individual activities in class.

It has become increasingly important for the profession, the individual therapists, and particularly the occupational therapy educators, to re-examine their roles in the light of the new social trends in society, and to consider these levels of intervention.



Occupational therapists have started developing different models of school-based practice based on the Partnering for Change model in Canada , which strongly emphasizes the need for close collaboration between teachers, parents, occupational therapists and children.

Reference and resources:

World Federation of Occupational Therapists (2016). *Occupational Therapy Service in School-based Practice for Children and Youth*. Available:
<http://www.wfot.org/ResourceCentre.aspx> (filter for Position Statements).

Partnering for Change:
<https://www.canchild.ca/en/research-in-practice/current-studies/partnering-for-change>

Definition and further information about Occupational Therapy:
<http://www.wfot.org/aboutus/aboutoccupationaltherapy/defintionofoccupationaltherapy.aspx>



1.3 Importance of Interprofessional Collaboration

DIVERSITY



1.3 Importance of Interprofessional Collaboration

Interprofessional collaboration:

Interprofessional collaboration means a group of individuals from different professions working and communicating with each other to work towards a common goal. Each person provides his/her knowledge, skills and experiences to support the contributions of others. The effectiveness of interprofessional learning depends on the collaboration between the professionals.

Collaboration may occur at almost any level of an organizational structure. People can collaborate within an organization, between organizations, between one another, between countries, and between professions. Important aspects of collaboration are sharing and partnership.

After a collaborative study is complete, the communications among researchers often will continue. Skills and ways of thinking that were shared among group members can have long-lasting effects. The traditional approaches are expanded by working with other professions; thus, the problem can be solved in different and new ways.

See Green and Johnson (2015) for a more detailed article about interprofessional collaboration.

Interprofessional collaboration during this research project:

In the beginning of this collaborative research, initial training workshops were conducted for teachers and occupational therapists by the team leader. Through these workshops we learned about action research and its process.

For the first year the occupational therapists from DUHS visited the AMI School weekly and worked directly with the teachers in their classrooms and school setting. This was the first time we collaborated so closely, and it took a while to get used to it. As we learned more about each other's professional knowledge, skills and experience, the respect for each other's professions grew and the collaboration became more productive.



During this collaboration, teachers and occupational therapists both observed the students in their classes and planned teaching strategies, learning material and lesson plans together. We also planned and conducted workshops for parents, for other schools and for other organizations. Both contributed in preparation of workshop material by mutual understanding on objectives and content. Both professionals exchanged views and created new ideas, which were beneficial for their professional development.



During this interprofessional collaboration we found solutions when trying to solve complicated issues. We learned a lot from and with each other, such as observing, thinking and reflecting critically. We found ourselves becoming more committed and creative. Through interprofessional collaboration we got opportunities to learn and go beyond old ways of thinking. It improved our potential to develop new skills and lifelong relationships and bonds that may be beneficial in the future. It increased productivity as we completed more work in less time.

Reference:

Green, B. N., & Johnson, C. D. (2015). Interprofessional collaboration in research, education, and clinical practice: *working together for a better future*. *The Journal of Chiropractic Education*, 29(1), 1–10. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4360764/>

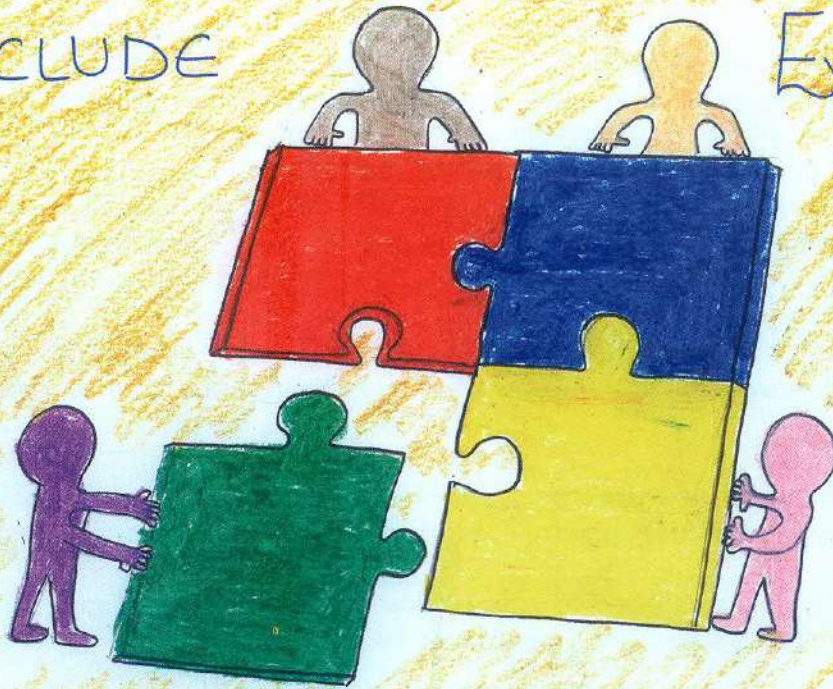


1.4 Action Research

Just like a puzzle, our society is incomplete, if we exclude anyone

INCLUDE

EVERYONE!



1.4 Action Research

What is action research?

Action Research is a process of identifying a problem, planning, acting to implement the plan, then observing and reflecting. If the plan works then the plan is continued, but if it does not work then changes are made to the plan and the cycle is repeated.

This approach has been used in Pakistani Schools before and the key source for this section is The Action Research Planner (Kemmis et al, 2004), a publication of the Aga Khan University Institute for Educational Development (AKU-IED).

Action Research provides a way of thinking systematically about what happens in the school or classroom, taking action where improvements are thought to be possible, and monitoring and evaluating the effects of the action with a view to continuing the improvement.

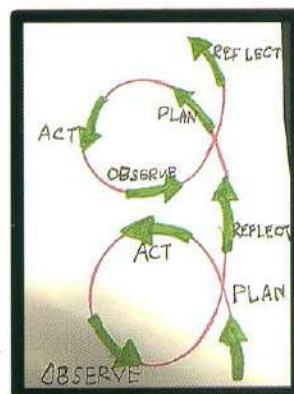
The linking of the terms action and research highlights the essential feature of the method: trying out ideas in practice as a means of improvement and as a means of increasing knowledge about school leadership, curriculum, teaching and learning. The result is improvement in what happens in the classroom and school. Action research provides a way of working which links theory and practice into the one whole: ideas –in-action.

The concept of action research has its origins in the work of social psychologist Kurt Lewin who developed and applied it over a number of years in a series of community experiments in post-world war America. Two of the ideas which were crucial in Lewin's work were the ideas of group discussion and commitment to improvement. A distinctive feature of action research is that those affected by the planned changes have the primary responsibility for deciding on courses of action which seem likely to lead to improvement, and for evaluating the results of strategies tried out in practice.

Action research can be seen as a method for practitioners to live with the complexity of real experience, while at the same time striving for concrete improvement. It is a way of managing complex situations critically and practically.

The action step is a change in strategy which aims not only at improvement, but at a greater understanding about what will be possible to achieve later as well.

Put simply, action research is the way groups of people can organize the conditions under which they can learn from their own experience, and make experience accessible to others.



Source: Kemmis et al (2004)



The four phases in the action research cycle are:

To develop a plan of action to improve what is already happening;

To act or implement the plan;

To observe the effects of action in the context in which it occurs; and

To reflect on these effects as a basis for further planning, subsequent action and so on, through a succession of cycles.

To do action research is to plan, act, observe and reflect more carefully, more systematically and more rigorously than one does in everyday life.

There are many types of Action Research, but a key feature is that those affected by the planned changes have the primary responsibility for deciding on courses of action which may lead to positive change, and in evaluating the results of these actions.

Why did we choose to use it?

We chose to use this process because the occupational therapists and teachers worked together in the schools as a team with the aim to develop new strategies to promote the inclusion of children with special needs in the schools. In other words, the aim was to improve the situation through the research process. In each class children with special needs were identified, and then the teachers and the occupational therapists worked together with the students.

How did we use it?

The plan made was inclusive and not only for a particular student. At times it was not just one student in the class but more than one student or the whole class who faced difficulties, e.g. with group behaviour.

During this research project, a team of occupational therapists and teachers started visiting various schools with different socio-economic backgrounds, to systematically work together to develop teaching and remedial materials, lesson plans and strategies to optimise the inclusion of all children in the schools, using an action research process. Before implementing our own ideas, the team approached the principal and introduced the idea of conducting an action research project in collaboration with the teachers at their school. The concept and the purpose of the research were explained to the principal and head teachers. Once the school leadership agreed, it was discussed with teachers as well. Weekly visits were planned according to the convenience of the teachers, because teachers share an important part in developing a learning environment in the school.

The process began with exploring the existing situation and teaching pedagogies, addressing an issue, identifying what needed to be changed in the current situation. It was not simply the identification of what needs to be changed but also the context was important in which the change had to occur, the circumstances of the teachers' and administrators' willingness to adapt to those changes. First the students in the different classes for whom challenges were already identified were chosen. The occupational therapist did a classroom observation and discussed what she noticed about the environment, activities and the children (see the section on the Person-Environment-Occupation (PEO) approach for more details).



After critically analyzing the findings, constructing a detail plan was an important strategy, as the strategies had to be helpful and specific in achieving the goal. The plan had to be shared with the class teacher, and closely monitored about what had to be done, and the effects of the plan. Making a timetable for an action step was necessary, which explained the time, date, and duration of the action plan.

Implementation of the action plan was carefully observed as it provided the basis for reflection and further planning.

Case study:

Given below is a brief example of the cyclic process of action research that was carried out during this project and how it brought change in Class 6 with different activities that were undertaken. For observation and recording of the findings, three logs were used namely; classroom observation log, reflective log and resource development log. The formats for these can be found in part 4.

Observation:

The occupational therapist-teacher team identified the challenge to be addressed with the help of the class teacher. Children of Class 6 did not follow the teacher's instructions and demonstrated disorganized behavior including hitting, speaking loudly etc. The team observed the children during their different classes and also the physical and social environment of the classroom. A classroom observation log was used which focused on all those areas described above, along with the participation of children collectively and individually.

Explore:

To move further towards planning, all aspects and information should be taken into account by looking at the records, through teacher's and parent's reports, etc...

The class teacher shared the information with the team and informed them about strategies she used before and its effect.

Reflecting:

Giving meaning to the observed data was important. We reflected on what might have been possible causes of action, using the Person-Environment-Occupation approach. Factors which hindered and facilitated the behavior of children were analyzed.

Possible reasons for the behavior of Class 6 were:

- The children appeared to be unclear about what was expected from them in class.
- Rules were not visually represented and explained.
- Teacher verbally informed the children about some rules but was inconsistent in implementing them.
- The children seemed to find the class activities and material too easy so they were not challenged by them. They did not take interest in the planned activities and spent very little time with most of the material.



Planning the first Action step:

After gathering the required information and recording this on the classroom observation log, strategies were planned to address the social and emotional context. Field of action was described, the availability of resources and negotiability of actions were taken into consideration. In this case of Class 6 the following strategies were planned:

Classroom Rules

After discussion with the teacher, we planned to write the most important rules for the class on a laminated sheet of paper. Teacher showed her concern on some areas which were kept in consideration while making the rules. These rules were to be placed on the desk in each group and reinforced every day as a visual reminder.

The rules were:

- Do not leave your seat without permission
- Do not interfere in other groups
- Follow the teacher's instructions
- Raise your hand before you speak
- Do not hit others
- Push your seat inside when you get up
- Keep your desk clear

Behaviour Reward Chart

We recommended using a behaviour chart, highlighting 4 groups and 4 weeks. In that chart the teacher had to mark the behaviour of children observed in a whole week by adding stars on good behavior and following rules. This was planned for the whole month and at the end of the month the group with the most stars received an Incentive, which the teacher decided on, it had to be a surprise for the students.

Reflecting on Action plan:

Before implementing the plan, it was necessary to have a final look to make the plan work. Making adjustments to clear any doubts was important.

The researchers' confirmed with the teacher of class 6 that the plan was not too difficult for her to continue and that it would not have any negative impact in the future.

The occupational therapists and teachers worked together to fill in a resource log with strategies /activities / lesson plans, and developed it following the action research cycle.

Implementing the first Action plan:

Now the plan had to put into practice carefully.



These strategies were planned for Class 6:
Visual representation of rules:

- Classroom rules with pictures were pasted on each desk, discussed and reinforced.
- Rules were explained, one rule at a time and all the rules were reinforced first thing in the morning.

Behaviour Chart:

- A behavior chart was prepared, with the names of children and days of the week. The children were given stars for good behavior.
- Rewards were given to the whole class, like extra play time, movie time.

Monitoring the first action step:

It is important to observe the whole process of how the plan is carried out as this helps in reflecting, developing the general plan of action and improving the ongoing action research cycle. Findings were recorded for the whole week. Rules were pasted on the desks even after a week. Teacher repeatedly emphasized the need to follow the rules and reminded them that they would earn or lose stars on the behavioural chart.

Reflecting:

Now after the action step had been taken, teachers and occupational therapists had to reflect throughout the process to critically analyze and re-plan accordingly. They had to fill in a reflective log for this purpose.

Reflecting on Class 6, the occupational therapist and teacher observed a noticeable change in the behaviour of all the students. They were not as loud as in the previous weeks. They tried controlling their voices and also gave reminders to each other. They did not fight with each other; in fact they prompted each other to follow rules. Group leaders showed a sense of responsibility by following the teacher's instructions. There was less movement in the class by the students and most of them were focused on the lesson. Those students, who were not participating in lessons in the previous week, were also managing well and completed their task within time. They went down to wash their hands in an organized way and came back in the same way.

During discussion time the teacher mentioned that she was also satisfied with their behaviour and not only she, but other teachers as well.

The logs we used in the Action Research process were helpful in recording our observations and findings. It provided a base for reflection all throughout the process.

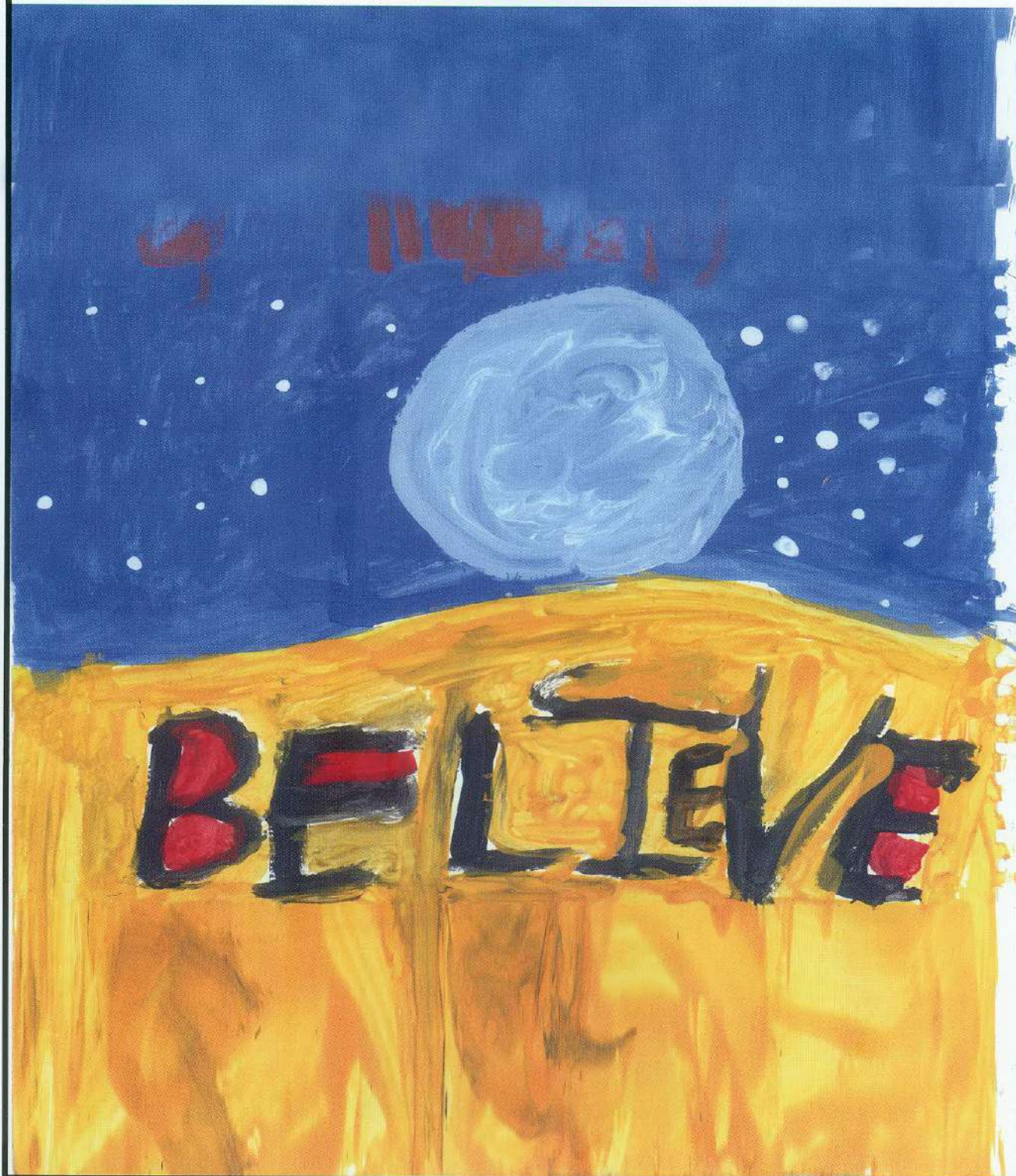
All the sections in Part 2 of this Resource Guide are based on the same Action Research approach used by the research team. Each section explains both the PROCESS and the successful STRATEGIES that were developed, so that you can try out the same approach in your own schools.

Reference:

Kemmis, S., McTaggart, R. and Retallick, J., 2004. The Action Research Planner. Karachi, Pakistan: Aga Khan University Institute for Educational Development.

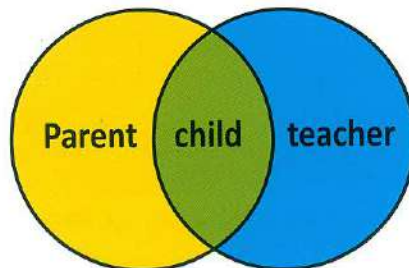


1.5 The Importance of Parental Involvement in school



1.5 The Importance of Parental Involvement in school

Parents play a very important role in their children's education through active involvement. Academic success cannot be achieved without the collaboration between families and schools. It is considered a three-way partnership where the parents and teachers are equally involved in the social and educational development of the child.



Parents' contribution ensures better academic performance, good attendance and consistency in homework completion. As a result children show a positive attitude and behavior, increased motivation and better self-esteem.

Research shows that 'a positive relationship exists between at-home parental involvement and a range of school-related outcomes'. This includes students' engagement in school, their academic achievement and adjustment to different socio-emotional situations (Izzo et al., 1999).

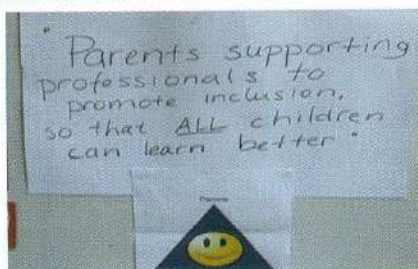
Another research study shows that home based parental involvement activities (e.g. regular communication with school, reading books with the children and checking homework), are related to positive academic outcomes of minority students in the United States (Jeynes, 2003; Sui-Chu & Willms, 1996)

Another research by Bower & Griffin, 2011 confirms that low student achievement and engagement can be partly due to inadequate or no parental involvement.

Henderson and Berla (1994) reviewed and analysed eighty-five studies that documented the comprehensive benefits of parent involvement in children's education. This and other studies show that parent involvement activities that are effectively planned and well implemented result in substantial benefits to children, parents, educators, and the school.

According to them, the most accurate predictor of a student's achievement in school is not income or social status but the extent to which that student's family is able to:

1. Create a home environment that encourages learning.
2. Express high (but not unrealistic) expectations for their children's achievement and future careers
3. Become involved in their children's education at school and in the community (p. 160)



These findings are confirmed by a recent meta-synthesis which looked at all available research on parent involvement and its effect on their children's achievements at school (Wilder, 2014).

Here are some more benefits of parental involvement for children, parents and schools:

Benefits for Children

- Children do better during lessons if their parents support them at home and are involved in their education.
- They show better understanding of key concepts and hence, better performance during tests and exams.
- Improved academic performance leads children to feel more confident. They develop a positive attitude and their behavior improves.
- This helps children to gain confidence and build social relationships.
With more help from the parents, fewer children are being placed in special education and remedial classes.
- There are less chances of children being kept behind after lessons, if parents are helping them at home to revise the lessons and help with homework.

Benefits for Parents

- There is better collaboration between parents and teachers.
- When the parents are more involved, they develop a better understanding of their children's social, emotional and intellectual developmental needs.
- They gain more confidence in their parenting skills.
- They develop a better understanding of the curriculum.
- They are more likely to respond to teachers' requests for help at home when they know what their children are learning at school.
- They exhibit improved parenting and decision-making skills.
- They tend to make more use of affection and less use of punishment.

Benefits for School

- Consistent parental involvement ensures better communication between parents and teachers.
- It develops an understanding and respect of the cultures and diversity of the children's families.

Parents develop more respect for the teaching profession

There are a number of ways to ensure that parents are involved and engaged in the school, including:

- Teachers should guide parents to set goals with their children according to their developmental and learning needs.
- Parents should access parenting magazines, online resources, teaching materials and books, etc to keep track of their child's work and progress.
- Better parent-teacher relationship should be ensured through regular communication strategies to help in homework and to solve specific issues.





Acknowledging the importance of parental involvement with children's education, we organised several workshops for parents and families. (see details in part 3, spreading the word: workshops for Parents). The workshops were planned according to the needs and requests of the parents. The topics of these workshops were a presentation on balanced diet for young children, developmental milestones in young children, helping your child with homework, collaboration between parents and occupational therapists at the AMI School, and parents supporting professionals to promote inclusion, so that all children can learn better.

The workshops provided support and knowledge to the parents about Inclusive education which would help them to focus and develop ideas to offer their contributions in future.



The workshops were well received by the parents. They were interactive, asked questions and reported what had worked best with their child, so that other parents could also try those techniques and activities. Their suggestions were very useful as they were simple and contextually relevant. This is a very important outcome of the research project: to link parents with one another and to develop connections so that they can learn from each other and take advantage of the wealth of experience amongst themselves. This will empower them to take initiatives on their own based on knowledge and personal experiences.

Reference:

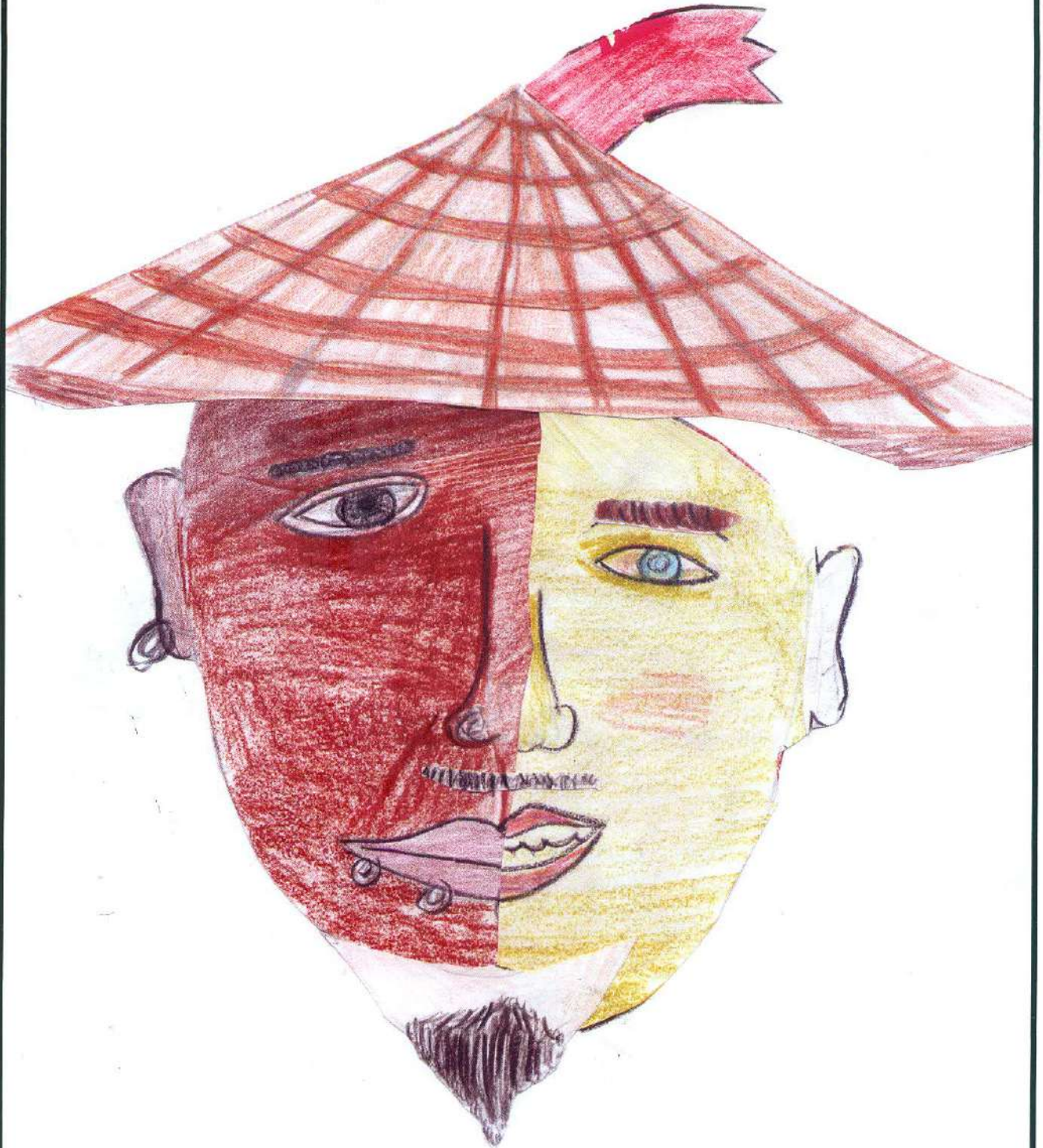
<https://www.education.com/reference/article/benefits-parent-involvement-research/>
<http://neatoday.org/2014/11/18/the-enduring-importance-of-parental-involvement-2/>
<https://csd.wustl.edu/publications/documents/wp13-15.pdf>
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.843.5835&rep=rep1&type=pdf>

Wilder, S (2014). Effects of parental involvement on academic achievement: a meta-synthesis. *Educational Review*, 66:3, 377-397. DOI: 10.1080/00131911.2013.780009



Part 2

Practical Strategies for Inclusion



2A.1 Physical environment

The physical environment consists of all physical factors. The components of the physical environment can be natural, such as atmosphere, soil, water, weather etc. and man-made environments which include buildings, roads, lakes and much more. All these factors, whether they are natural or man-made, influence human wellbeing in different ways.

Research has shown that the physical environment has various effects on each individual as every person reacts differently to the environment according to their intellectual and biological conditions. These differences are more evident between children and adults, but also varies greatly from child to child (see the Clever Classrooms report in the link below).

The physical environment plays an important role in child development as they grow, learn and play in the same environment. It affects children's emotional and physical wellbeing. It can have both a positive and negative effect on their occupation (daily activities).

The most important occupations for children are playing and learning, so the physical environment where they learn - that is school or any other learning place such as home - is crucial. An inappropriate learning environment can create barriers to learning. Areas to consider in school are size of the classrooms, ventilation, temperature, location, light and setting of the classroom which includes seating arrangement, board position and furniture.

Referring to part 2b of this booklet, you can find some practical examples for creating an appropriate physical and learning environment according to the needs of children. Following are some key areas in building an inclusive and suitable physical environment in the classroom.

Classroom size and design

- Classroom size should be spacious enough to accommodate all children in a class so that appropriate furniture can fit in and allow enough space for children to move around. The physical layout of the class, will reflect the teaching style of the teacher.
- Provide hooks in the classroom for children to hang their bags on, or a corner stand to keep their bags. Children should not place their bags on their chairs or hang them from their chair. Please see part 2b for an example of how we addressed this issue, which greatly enhanced the comfort level of the children.
- It is important to arrange ramp access to make the classroom inclusive and accessible for all children including children with difficulties in walking.
- Creating a colorful classroom can be more interesting for students. The teacher can ask children to arrange bulletin boards with colorful and informative displays but placing those boards in such a way that students are not distracted during work time, or overwhelmed by too much visual information.
- It is important to have visual representation of classroom rules in the form of posters/charts which will make the class look more organized and help in shaping the child's behavior in class.

Writing board position

- White or black boards should be fixed on a wall which directly faces the students so that it



is clearly visible to every student.

- Make sure that the board is placed away from the window in order to avoid glare.
- Using white chalk on the blackboard or black marker on white board, and writing with bold letters will make it easily readable for all children, especially those who have difficulties with vision or in differentiating figure from background as explained in a challenge of visual perception in this booklet.
- Avoid too much material on the board at the same time to avoid any confusion. Writing in a dispersed way will be difficult to understand for some students who are struggling to learn and read, so organize the space on the board well.
- Teacher should write in a straight line from left to right with appropriate spacing.
- Some practical examples which provide a rationale for the above suggestions, have been given in visual perception, 2B:5 including suggestions to deal with specific issues to improve performance of children in the class.

Seating arrangement

Seating arrangement of a classroom significantly influences learning. Proper arrangement will promote interaction among students and teacher, impacting on engagement, motivation and focus. Children with special needs may need specific accommodations or adaptations in the classroom. Proper seating structure of a class will support them to learn better.

While making any seating arrangement the following factors should be taken into account:

- Seating arrangement of a classroom should enhance positive interaction among teachers and student.
- It should be done in such a way that the white or black board is easily visible to all students without any strain or difficulty that may consequently lead to improper posture.
- Make sure that your preferred seating arrangement can work within the space of the classroom and keep a broad walkway from front to back and on the sides. There should be enough space for the teacher as well as students to move around. Every child should be approachable for the teacher when necessary. It will also help children with physical disabilities for their mobility. See the physical environment challenge of part 2.b, to see how a few adaptations in the seating arrangement made it easier for the teacher to observe all students closely. There are many different seating styles available on the internet which can be used according to the size and space of a classroom.
- Place students in such a way that facilitates inclusion, considering their physical, sensory and intellectual needs. Children striving to understand concepts, or having learning difficulties, shy or unmotivated students, and those with behavior issues should be seated with supportive peers and in the center or front of the class so that teacher can easily observe them and help them to interact more with their fellow students.

Appropriate furniture

- Proper furniture will help in creating a better learning environment in which children are focused and comfortable. Children spend more than 6 hours per day in school so it is necessary that furniture be designed carefully.
- It should be flexible and provide enough space to allow necessary movement needed for the human body as it is natural to shift and vary postures. It is important to select an appropriate desk and chair that does not result in poor posture, ultimately causing damage to the body.



- Chairs should have back supports and appropriate height so that feet are resting flat on the floor instead of the legs dangling. The size of the desk is important in maintaining a child's appropriate posture as a small/low desk will result in the child bending over the desk with a rounded back due to which his physical development will be affected.
- To facilitate the learning of children with special needs, the teacher should be aware of their physical needs as well. Management should be informed if a child needs extra support and they should provide appropriate furniture which will meet the child's special needs. In the case of Aania, discussed in the physical environment challenge of part 2.b, provision of a specific chair and table tailored to her needs, improved her classroom performance and provided a comfortable learning environment for her.

Class composition:

- A class of students should have a mixed ability group of students. The diversity and strength of the class should be viewed according to the variety of gender, culture and social background of the students, as well as learning needs.
- The number of students should be according to the available space in the classroom, furniture size, space for movement and other necessary material needed in the classroom.

Lighting:

- Lighting in the classroom should be adequate enough for students to work comfortably. It is linked with the ability to see clearly, what the teacher writes on the board.
- It is also important for students to read, write or perform activities at their desk.

Air:

- The learning environment must have fresh air and good ventilation to ensure that the learning environment and learning process can occur well.
- Indoor air quality in a learning environment includes three factors namely; temperature, humidity and air flow.
- Inadequate temperature in the classroom affects students' focus during learning. Temperature should be appropriate to the learning activities performed. Therefore, the environment should be equipped with temperature control devices to enable the room temperature, to be controlled according to the seasons. Air humidity is important too because high humidity can contribute to health problems among students.
- The classroom should be built with a sufficient number of windows in addition to having wide openings, to allow maximum air flow. The number of fans should be adequate and in accordance with the size of the classroom.

Sound

- Reduce unwanted noise and echo in the classroom with carpeting and by using rubber tips on the legs of chairs and tables.
- Pupils should be seated close to the teacher.
- Toilets, storerooms and corridors can act as buffer zones.
- Adding sound proofing can help enormously to reduce noise, as well as carpets and false ceilings.



It is important to identify all aspects of a classroom's physical environment as it is a first step in a child's learning process. Students' involvement in the process of creating their environment can empower them and increase motivation.

Reference:

The Clever Classroom report: <http://www.salford.ac.uk/cleverclassrooms>

The INclusive Class: <http://www.theinclusiveclass.com>



2A.2 Classroom Management

During the project we learned that classroom management is very important for creating an inclusive learning environment. This section is based on our own experiences as well as on two very helpful websites where further information can be found.

http://www.educationworld.com/a_curr/strategy/strategy047.shtml

<http://mx.unoi.com/2014/08/27/8-activities-for-classroom-management/>

Classroom Management

The term classroom management refers to the procedures, strategies, and teaching techniques teachers use to manage student behavior and learning activities.

Classroom management is about providing an environment in which children can happily learn. It is about understanding different learning styles and adding a variety of activity-based learning strategies into the lesson plan so that all children can benefit.

Characteristics of Classroom Management

The Atmosphere/Environment

We learned from our research that preparing the classroom can be an effective learning tool. For instance, you can reduce distracting light on a whiteboard by adding shades to the window or possibly by moving the whiteboard. This makes it easier for the students to read and write from the board.

- There needs to be enough lighting throughout the room.
- Arrange the placement of tables and chairs away from the door entrance to reduce distractions.
- Ensure exits are clear of obstructions and the room is open and inviting.
- Avoid unnecessary furniture in the class as it reduces space for moving around.
- Place and store the needed work materials, books, papers, pencils, and tools, in reach of the students.
- Make sure that the teacher and students can move freely in the classroom.



Figure 1: Provide walking space for teacher to access all students.



Figure 2: Make displays clear and relevant.



Figure 3: Keep books and materials organized and within easy reach of the students.



The Observable Characteristics of a Well- Managed Classroom

A well-managed classroom is task-oriented and clear. The students know what is expected of them and what they are to do to achieve success.

With regards to the Students

- Provide more hands-on teaching to explain the lessons. For instance for a Science lesson on "Dissolvable Substances" the teacher can bring at least 4 beakers, ask a child to fill them with water half way from a plastic jug. Then teacher can bring some salt, sugar, oil, ink, sand, etc... She can ask one child to add the salt into one of the beakers then ask the children what is happening, and so on. This method of teaching will make the lesson more meaningful, more memorable, and more fun.
- Teacher can call student's names during the class, activity or lesson, or ask questions related to the activity so that the students will be more attentive and aware of the lesson.
- Provide stretch breaks by asking children to stand near their desks and imitate the teacher's movement. These movement breaks address the children's physical needs, as it is difficult for children to sit and engage in one activity for a long period of time.
- Class expectations should be clear and posted centrally for all to read. Involve the children in discussing and setting the expectations at the start of the year.
- The students should understand the procedures as well as how to put them into practice.
- The students should know the purpose of the assignments they are completing.
- The students should understand all aspects of what and how they are to do a task as it affects their performance.
- The students should sometimes work independently (alone) and at other times cooperatively (with other students).
- Encourage the students to respond positively and properly to one another and to the teacher.

With Regards to the Teacher

- The teacher should have a plan for everything: procedures, discipline, rewards, lessons, assignments, tests, activities, and even surprises.
- The teacher should maintain a classroom rules chart. Rules should be positive, motivational, purposeful, and practical.
- Teacher can split the class into two sections if possible. While performing any written/reading activity allow half the students to sit on the carpet and do something with materials or read a book, and half the students will work on table and chair. Then change the groups around. This will help the teacher to work more efficiently with the students who will all get teacher's attention and support as needed.
- The teacher should develop a positive and personal understanding with each student.
- The teacher circulates around the room, goes to each student to check on, assist, and ensure the children's progress by answering questions and giving positive motivation. E.g. "You are all working so wonderfully on this assignment, great work!"
- The teacher should demonstrate respect in dealing with his or her students.

Considerations for the Wall Space

The classroom should be pleasantly decorated with students' artwork. The classroom decor, which is defined by the teacher, should be attractive, interesting, and orderly. Decorated bulletin



boards and materials should be educational, and purposeful, supporting the curriculum goals. Teachers should not make the boards too busy, as some children will be distracted by this and have a hard time visually processing what they see.

Consider the following:

- Display boards should be relevant to the subject being taught, but not overly crowded. They must be changed on a regular basis as well.
- Display reward charts to encourage children to behave, learn a task, be responsible for their homework, etc.
- Use wall space to support learning concepts. Present them in an attractive and ordered manner.
- Place most display boards towards the back of the room so children are not distracted by them when they look at the teacher.
- Classroom rules and schedule should be placed on the front display board or on the wall. We have implemented this strategy in a class and it was observed that children were following the classroom rules very well during the activities. The teacher reminded those who were not following the rules, by pointing out the rules that were on the side of the board. Reflection of the strategy was that the class was better organized; students were listening to their teachers; they were raising their hands to answer and were taking turns. This was helpful for the teacher as she was able to explain the lesson calmly.



Figure 4 Plan the wall space to help teach a topic or lesson.



Figure 5 Place picture boards with word/s below the picture to help children follow what comes next and what they are to do.



2A.3 Importance of Physical Education and Active games

Introduction:

In all the schools that participated in the project we found that physical education and active play-time gave opportunities for children with special needs to gain valuable skills, to benefit from movement breaks to improve better concentration during other lessons, and to be more socially included.

We also found that physical education was not seen as a priority by the school management and teaching staff until they were able to observe the positive effect of the strategies developed during the Action Research cycles.

This section is based on information from helpful websites, combined with our own experiences. There are also examples of strategies we developed in Part 2B of this guide.

Physical education is an important part of the school curriculum that focuses on developing physical fitness and the ability to perform and enjoy day-to-day physical activities with ease. Children also develop skills necessary to participate in a wide range of activities, such as football, basketball, or swimming. Regular physical education classes prepare kids to be physically and mentally active, fit, and healthy into adulthood. An effective physical education program should include engaging lessons, trained P.E. teachers, regular time-tabled PE classes, and student evaluation. Participation in physical activities also gives many other skills to children such as team playing, problem solving, sharing and maintaining discipline.

<https://study.com/academy/lesson/what-is-physical-education-definition-overview.html>

Benefits of Physical Education: Broad and Powerful!

Children benefit from PE in the following ways:

- Improves physical fitness
- Enhances motor skills development
- Provides regular and healthy physical activity
- Teaches self-discipline
- Facilitates development of student responsibility for health and fitness
- Influences moral development, leadership, cooperation with others
- Reduces stress – a source for releasing tension and anxiety
- Strengthens peer relationships
- Improves self-confidence and self-esteem
- Helps children to develop respect for themselves and their teammates
- Provides experience in setting goals
- Improves academic performance

<http://www.phitamerica.org/Page1139.aspx>



Active Students = Better Learners
www.cdc.gov/healthyschools/PEandPA



Effective Inclusion in and through physical education:

A good example of how physical education has the potential to increase the inclusion of children with special needs in the school is Steven and Black's (2011) "Inclusion Spectrum". They identify five stages:

- **Open** – everyone can play: here few modifications are needed. Pupils are encouraged to work at a level appropriate to them.
- **Modified** – change to include: the emphasis here is on all pupils doing the same activity but with some level of challenge or support integrated to allow progress to be made. In our experience, for basketball, the height of the basket was adjusted to the height of the child with Down syndrome. It facilitated his participation in games with his peers and now he practices every day and actively participates during sports class.
- **Parallel** – ability groups: here pupils are grouped according to their ability and are provided with an activity appropriate to their needs. The basis of the activity remains the same for all groups. In our research experience, the children with weak gross motor skills were grouped and were given a hula hoop to jump in and out to replace a tyre which was being used by their peers. The objective of the activity was to learn to jump in and out which was a part of outdoor physical activity.
- **Alternative or Separate Activity** – here individuals are given separate activity and practice on their own. Once they are able to complete the task they should be reintegrated into the activities planned for the rest of the class as appropriate.
- **Adapted Physical Activity and Disability Sport** – here adapted activities are delivered to the class allowing for greater integration of disabled pupils.

Source: Laurence, J (2018) Teaching Primary Physical Education (2nd Edition). Sage Publications.

Classroom Physical Activity:

Classroom physical activity includes physical activities (e.g., stretching, jumping, dancing) performed in the classroom. It includes integrating physical activity into lessons as well as providing breaks from theory lessons, specifically designed for physical activity. Classroom physical activity can take place at any time during the school day, lasts 5–15 minutes, several times a day. Classroom physical activity benefits students by:

- Increasing their overall physical fitness
- Improving their attention, classroom behavior and grades.

Physical Activity Breaks:

It is a break given for physical movement that is based on classroom lessons which enhances on-task classroom behavior of students. For example: Take a walk outside as part of a science class or ask students to name and act out action words from a story through physical activity. When a break is given for movement or any other physical activity from learning time then the children pay more attention to the task performed after it. In one of the schools, the child had difficulty in paying attention and completing tasks in class. Physical exercises such as stretching were introduced in class, after which his attention span and focus improved.

Break times:

During break times the students have unstructured physical activity, either outdoor or indoor. They get a chance to interact and communicate informally with other age groups and break times also provide a time to have snacks, rest and relax. While playing together they learn to resolve



conflicts too. Schools should incorporate at least 20 minutes of recess per day in addition to physical education classes.

Physical Activity and Physical Education: Relationship to Growth, Development, and Health

The general health benefits of physical activity are:

Regular physical activity promotes growth and development and has multiple benefits for physical, mental, and psychosocial health that contribute to learning.

Specifically, physical activity reduces the risk for heart disease, diabetes, obesity, and other diseases; it also improves general fitness, and reduces stress, anxiety, and depression.

Physical activity can also improve psychosocial outcomes, for example as self-concept, social skills, setting and achieving goals and confidence. This makes it more likely the child will continue to participate in physical activity.

[Https: //www.ncbi.nlm.nih.gov/books/NBK201497/](https://www.ncbi.nlm.nih.gov/books/NBK201497/)

Research Based Observation

In this project we observed when the physical activities were introduced it helped in reducing hyperactivity and improved attention span and concentration. It motivated students to participate actively in play and classroom activities. After performing physical activities, children were able to sit and pay attention to their work for much longer, and they were able to listen and follow teacher's instructions and their performance in academic tasks improved.

During the research we also found that structured physical activities played a very important role in improving behavior (for example, restlessness, hitting, teasing, disciplinary problems, arguments). After participating together in physical activities, the students learned the importance of working together, having a disciplined routine, keeping calm and resolving conflicts among them.

Examples of Classroom strategies developed in this project:

Movement Breaks:

Physical exercises were recommended after observing challenging behavior in grade V, they had not been given any movements breaks or time for physical activity. This can also include stretching exercises or yoga. Please see the section 'Following Instructions' in Part 2B for details.

Sensory Activities:

Some children may have some sensory needs. This can cause poor sitting tolerance, hyperactivity, inattention and restlessness. To fulfill these needs the following activities were performed, hourly.

- Duck walk
- Crab walk
- Sac racing
- Kangaroo jumps
- Jumping in circles
- Walking on different line patterns
- Pushing and pulling heavy baskets
- Throwing ball in targeted basket.



Initiatives in Local Schools:

Many primary pupils like to be challenged. Activity challenges are a good way of encouraging pupils to engage in an activity and encouraging them to record their progress. Locally, it has been observed that schools have taken some common initiatives such as morning exercises, yoga, gymnastics, taekwondo, roller skating, etc. as physical education.

Conclusion

Physical Education and activities play an important role in child development and should be included in the curriculum in all schools. It is beneficial for all children and gives good opportunities for social inclusion of children with special needs.

Reference:

Centers for Disease Control and Prevention (2011). School health guidelines to promote healthy eating and physical activity. MMWR, 60(RR05):1–76.

Centers for Disease Control and Prevention (2013). A Guide for Developing Comprehensive School Physical Activity Programs. Atlanta, GA: US Department of Health and Human Services.

Centers for Disease Control and Prevention (2014). Health and Academic Achievement. Atlanta, GA: US Department of Health and Human Services.

Institute of Medicine (2013). Educating the Student Body: Taking Physical Activity and Physical Education to School. Washington, DC: The National Academies Press.

Laurence, J (2018) Teaching Primary Physical Education (2nd Edition). Sage Publications.

Websites:

<https://study.com/academy/lesson/what-is-physical-education-definition-overview.html>
<http://www.phitamerica.org/Page1139.aspx> <https://www.ncbi.nlm.nih.gov/books/NBK201497/>



2A.4 Individual Education Plans (IEP) and Inclusive Lesson Plans (ILP)

This section is based on the Inclusive Education Study Guide of the M Ed Programme at the Aga Khan University Institute for Educational Development (Kramer-Roy, 2003).

Empty forms are given in part 4, for you to use for your own planning.

Individual Education Plans

The IEP should be prepared in collaboration with the occupational therapist and any other professionals involved in the child's education, such as the teacher, school management, parents, any professionals who work with the child and – very importantly – the child himself. This will ensure that everybody can play their part in helping the child to achieve his objectives.

The IEP summarizes the child's strengths and needs. It also indicates the objectives set for the child to work towards during the academic year. In this sense, you could consider the IEP a bridge between the child's abilities and the curriculum for his class level. The IEP provides a reference point for the teacher to base her decisions on when she plans her lessons or thinks of activities to do. The IEP consists of the following steps:

- Describing present level of performance
- Defining Objectives
- Making a Plan

Describing Present Level of Performance (PLOP)

This is based on the observations of the teacher and the occupational therapist, as well as information from parents, doctor or psychologist reports, and the child's own views. Whenever possible you should involve the child in the process of developing PLOP.

The PLOP needs to be broad and highlight both strengths and needs in the areas of motor, sensory, perceptual, emotional, social and cognitive development. These levels of skill development need to be considered in relation to curriculum components and other school tasks at the child's class level. In addition, environmental factors need to be considered - under what circumstances is the child asked to carry out the activity? The mismatch between the child's level of functioning and the curriculum/school demands forms your problem statement.

Defining Objectives

Based on the PLOP, long term (e.g. for the next academic year) and short term (e.g. for the next unit/week/month) objectives can be defined.

These need to be SMART objectives:

- Specific
- Measurable
- Appropriate
- Realisable
- Time-bound.

For example:

- the child will be able to write a story of 10 lines with no more than three grammatical errors during the English lesson by the end of this term
- the child will be able to work in a small group for 15 minutes, without distracting or hurting his peers, by the end of this academic year.



- Usually, between three and six long-term objectives can be set and up to four short term objectives will probably need to be set for each of these. However, setting too many objectives will be discouraging for the child. You must ensure that the child is involved in setting the objectives or at least knows what objectives he is working towards.

Making a Plan

The individual objectives will help the child to meet the curriculum demands as much as possible. Once these have been set, the actual plan can be made. You now find yourself at the stage between assessment and teaching. While making the plan, you need to think about how the objectives will be met.

In order to achieve the objectives, you will need to analyse the identified tasks and break them up into small steps that can be achieved one at a time.

Then you need to plan which teaching methods are most appropriate, and keep these in mind every time you prepare an Inclusive Lesson Plan. For example, individual vs. group work; using explanation, demonstration or experimentation; prompting and praise.

Consider what changes need to be made to teaching and learning materials. For example, layout and design of worksheets, size and contrast of print, providing concrete materials, etc. Plan when and where activities are best carried out. For example, beginning or end of the day; in the classroom or in a quiet place; at school or at home, etc.

Consider environment factors. For example, supportive seating, location in the class, avoiding distraction (e.g. visual, sounds), which classmates to work with, etc.

Think about reinforcements. For example, praise for progress made; discussing with the child why progress is (not) being made and reviewing the plan; material rewards, etc.

Because the plan is built up around the objectives set, it is helpful for monitoring the child's progress. When you use this plan you will notice that a simple form that specifies the objectives and tasks, the way of testing success, and the date the objective was set and achieved, will help to track the child's progress. All people involved in the preparation of the IEP also need to be involved in the monitoring and evaluation process. A new IEP needs to be prepared at the start of each academic year, which should build on the previous one.



Ensuring Inclusiveness	How have students' strengths and needs been kept in mind in planning the activities? How will some of the activities be modified for children with special needs? Be specific about this and base your modifications on the children's identified needs and IEP objectives. For example, enlarging print of worksheets for the child with visual impairment; ensuring opportunity for verbal responses for the child with severe dyslexia; ensuring access to concrete materials and adding a simpler activity for the child with intellectual impairment, etc.
Assessment / Evaluation	This is a way to test whether the objectives have been met. The methods used must be linked to the measurable objectives.
Connections / Follow up	How can this lesson be integrated with or linked to other subjects? What would be the next step?
Evaluation of the Lesson Plan	After teaching the lesson, reflect on whether the plan was effective and the objectives were met. Think about successes and challenges and describe what you would do differently next time. Also use your experience to improve your lesson planning skills in general.

Reference:

Kramer-Roy (2003). Inclusive Education Study Guide for the Optional Module of the M Ed Programme. The Aga Khan University Institute for Educational Development



2A.5 Multisensory Teaching

Multisensory instruction is a way of teaching that engages more than one sense at a time including sight, hearing, movement and touch which can be helpful for learning. It helps children use their learning strengths to make connections, form memories and express themselves in a wider range of ways. For example, while learning letters children can write in sand, mud, play dough, shaving cream on a mirror, sing letter songs, jump on a named letter etc.

Having used the techniques we found that children responded well and learned the concepts quickly. The teachers found these very useful because they were able to apply them to the whole class which gave good results.

The Multiple Intelligence theory by Howard Gardner suggests that different people have different ways to learn and share knowledge, therefore a variety of teaching strategies will work best for all the students at different times.

Teachers can plan better lessons according to the student's strengths depending upon their multiple intelligences and their learning preferences (Visual, Auditory or Kinesthetic: VAK. These techniques foster multiple ways to learn, so it gives every child in the class a chance to succeed.

Howard Gardner identified nine different areas of intelligences:

- Linguistic Intelligence: People having the ability to understand and use spoken and written words.
- Logical-Mathematical Intelligence: People having the ability to use logic and comprehend numeric symbols and operations.
- Musical Intelligence: People who understand music and have the ability to use such concepts as rhythm, pitch, melody and harmony.
- Spatial Intelligence: People who have the ability to mentally visualise objects and spatial dimensions.
- Bodily-Kinesthetic Intelligence: People who have the ability to coordinate physical movement well.
- Naturalistic Intelligence: People who have the ability to understand and identify phenomena in nature like different types of plants, animals, weather formations, etc.
- Interpersonal Intelligence: People who have the ability to understand and recognize people's moods, desires and motivations.
- Intrapersonal Intelligence: people who have the ability to understand and use one's thoughts, feelings, preferences, and interests.
- Existential Intelligence: People who have the ability to ponder different phenomena or question beyond sensory data. (Moran et al., 2006)." (1)

Studies show that children who learn in a multisensory way, tend to retain what they have learned better. The added benefit is that children enjoy active learning and they eagerly participate in it.

In one of the studies conducted by Özdemir et al. (2006) who used the multiple intelligences theory, students were placed in two science groups. One group, the control group, received "traditional" science instruction with lectures and worksheets. The second group, the experimental group, targeted the multiple intelligences in instruction. Students in the experimental group completed tasks such as drawing pictures, composing, watching a performance, dramatizing and playing with puzzles - all instructional methods appealing to multiple senses.."(1)



The study concluded that students in the experimental group had gained and retained knowledge better than students in the control group. Multisensory teaching focuses on the fact that different children learn in different ways. Addressing children with visual, tactile and auditory learning styles helps meet the varying needs of all children not just those with learning and attention issues.

Example:1



Using The Wet Dry Try Method—Tracing over teacher-made letters with a wet finger or small piece of sponge (2 inch by 2 inch) dipped in water and squeezed out, then taking a small piece of cloth and drying the letter. Finally the child traces the letter with a small piece of chalk (not more than 2 inches). Using small pieces of cloth and chalk encourages development of good pencil grasp. This is a multisensory approach to develop a proper pinch, and is an activity described by Janice Z. Olsen in her book series “Handwriting Without Tears”.

Example:2



Creating words on a string with multi-coloured letters. This task incorporates the use of 2 hands. Also the child has to explore the lettered beads and pick the right letter amongst many letters in the box to complete the word. This draws on the child’s ability to perceive the object they are looking for against a busy background. This is called figure-ground perception which is necessary for reading and writing. This activity also promotes a fine pincer grasp along with good control of both hands. This is also multisensory, as it is a visual task combined with an auditory request from teacher to attach a word on a string e.g. “small”. Finally the task requires manipulation of the beads on the string, which draws on our sense of touch and coordination.

Example 3

For a memory game (Auditory Sequential Memory) ‘Have the children stand in a circle or line. Teacher starts a sentence by saying: “Mother went to the market and she bought eggs.” The next child repeats the sentence and adds another item such as bread. The children follow the same pattern by adding another item to the list until ten items have been reached. After the tenth item the teacher goes to the board and writes the sentence. The next child in line writes the first



item, followed by the next child who writes the second item and so on till the sentence is complete. This is multisensory because it is initially an auditory task that recruits memory skills, then it is a physical task with chalk on the board.

Example 4

For the recognition of letters and numbers we planned multisensory activities. We first show the letter or number card, then say its name and demonstrate its formation. Then we ask the children to follow the teacher's directions to form the named letter making the letter in sand / pulses / rice / shaving foam tray, or drawing the letter with chalk on the ground, jumping on the named letter and moving a mini car on the letter in the correct formation of that letter. This task involves looking at visual cards, listening, and imitation of the letter or number in different media, which provides tactile sensations. Jumping on a named letter or number provides a movement and deep pressure element through the feet, which also requires good body awareness, and manipulating a toy mini car over a letter or number involves visual-motor control and a sense of direction. These multi-sensory strategies can be used for teaching any subject or skill, and are helpful for all children in class. However keeping in mind the strengths and needs of children with special needs, will help the teacher to think of strategies that enable the children to use their strengths.

Reference:

<https://rdw.rowan.edu/cgi/viewcontent.cgi?referer=https://www.google.com.pk/&httpsredir=1&article=1109&context=etd>

General References

<http://www.icanspell.co.uk/teachers-and-schools/spelling>
<http://www.brighthouseeducation.com/special-ed-inclusion-strategies/4198-multisensory-teaching-methods-and-activities/>

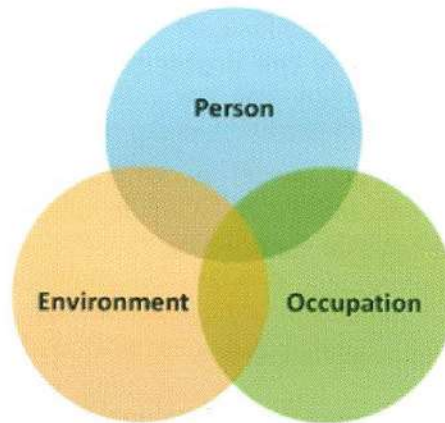
Handwriting Without Tears: Kindergarten Teacher's Guide by Janice Z. Olsen



2A.6 Identifying Challenges using a Person-Environment-Occupation approach

In this collaborative project we found the Person-Environment-Occupation Model (Law et al, 1996) very helpful.

Identifying the relationship between the individual student and the school's physical, social and cultural environment is essential to support student learning within the classroom. Occupational performance is a mode of describing the way the person is able to carry out purposeful activity within their environment. How successful a child is in carrying out a task (occupation) is directly affected by the physical and psychosocial atmosphere (environment), as well as the child's own abilities and difficulties (person). On the basis of this person, occupation and environment model we can discover problems and solutions more effectively.



INTRODUCTION

The model is used to analyse the relationship between the child and the physical and social environment in which he or she is working. The Person-Environment-Occupation model of occupational performance emphasises the inter-dependency between a person and their relevant setting. Every aspect of the environment directly or indirectly influences the performance of that person. Therefore, we can facilitate or control the occupational performance by making strategic changes in the environment.

COMPONENTS

Person

A distinguished feature of human beings is that they have multiple roles. Every person has a different lifestyle, and diversity of knowledge and skills. All these qualities are influenced by physical, psychological, social, developmental and environmental aspects. A person explores and learns from the environment (their perception) and they act on this perception (their behaviour or performance). Environmental factors help or hinder individual skills; they have an immense impact on individual behaviour.

Environment

The surroundings where the person performs their activities is called the environment, it is influenced by things like socioeconomic status, culture, community, and traditions. The person develops life values on the basis of their circumstances.



Occupation

Occupations are all activities that the person carries out, which have purpose or meaning. Human beings are involved in self-directed and shared purposeful activities throughout their life. Occupations are often divided into work, self-care, play and leisure, but these are not fixed categories.

School-based Occupational Therapy Assessment: Identifying Occupational Performance Issues in School Occupations

Assessment is a continuous process, and it involves observing the child within the school environment and analysing the situation they face, as well as their abilities. This enables the occupational therapist and teacher to identify the problems during the school activities and what triggers the issues.

In this research project we used the PEO Model as our main tool to identify challenges, and to problem-solve together. For this purpose we started with classroom observation. During observation, the therapist and the teacher focused on three things, i.e. the child, occupation and environment.

Environment - Example 1:

The Class 2 children were being observed, the classroom was not spacious enough for students and teacher to move about during activities and tasks. The seating arrangement was set up in three rows and there was not enough space for the teachers to reach every student, especially those who were seated in the corner. Each child had a single chair and a desk. The chair and desk were the right size and were at the chest level. The children's bags were kept on the chairs, which reduced space for them to sit and led to restlessness.

Noise from outside made it difficult for the students to hear the teacher's instructions clearly, as it was distracting. The classroom doors were kept open due to the heat. Therefore, the teachers had to repeat the instructions several times.

Light from the windows caused some glare on the board and overall there was not enough light in the classroom.

Environment - Example 2:

In another school there was a child with Cerebral Palsy, who had very little use of her left arm and hand (hemiplegia). She had difficulty in managing her books and stationery on the tablet chair and she also needed to look in her partner's notebook to copy work from the board because she had difficulty shifting her gaze between the board and her books. Her tablet chair was just in front of the door, which was a source of distraction. Also, the tablet chair had the arm table at the right side, which blocked the child's most active side, so that it was difficult for her to access her bag that was kept at the right side. Finally, the tablet chair left very little space for children to keep their books and stationery.



Occupation – Example 3:

In this case a whole KG class had difficulty following classroom rules and ignored the teacher's instructions, at times hitting each other.

Two children were identified as having particular difficulty. They ignored the teacher's instructions, were inattentive during activities, and regularly hit other children. But, they were good in academics, finishing the work quickly.

We observed that the children were taking interest in drawing and colouring and some were making creative models with blocks. As they were good in academics they finished work quickly and found their work less challenging. Keeping their interest and need in mind we decided to offer constructive, creative and challenging activities as part of the school day.

As there were no set rules in the class, we decided to make an age appropriate pictorial representation of the classroom rules to make children clearly aware of the expected behaviour.

We expected that the visual (seeing), auditory (hearing) and kinaesthetic (feeling of posture and movement) input together would result in creating a strong impact, as the information is going through multisensory modalities. We decided to give the children class responsibilities to develop a sense of responsibility and to keep them engaged in meaningful tasks. The idea was to develop the concept of helping others and sharing responsibilities.

When we started to offer creative and challenging activities within a structured environment, we found a good combination of occupation and environment, which had a positive impact on the children's behavior and academic tasks.

To reinforce classroom rules a Star Chart was made. The children earned stars as an incentive for following the rules. We made a visual representation of classroom rules.

To help children to practice following instructions, we played "Simon Says" and "Follow the Leader". In addition, the children were given movement breaks in the class, in the morning and before leaving time. Children were more relaxed and as a result they were more willing to follow instructions. We also did relaxation exercises with eyes closed in a relaxed sitting posture. They were told to breathe in and out deeply for 5 minutes; then they were allowed a 5 to 7 minutes nap time.

To help children start taking responsibility, groups of children, including the ones identified as having difficulties, were made monitors. For example they were given the role of line monitors. Other responsibilities assigned included class monitors, line monitors, and clean up monitors. Children were given badges, to give a sense of pride in their role. Positive reinforcement for following the rules and fulfilling responsibilities were given.

Finally, we also provided the children with constructive and challenging activities and materials. The artwork was displayed in the art corner.

All these positive occupations, resulted in a very positive outcome, especially during art time (group and individual) when the children worked collaboratively with interest, and waited for



their turns to share material. We discovered hidden strengths. The children with particular difficulties were found to be very good in art.

A sense of ownership of the rules and responsibility for their own and others' behavior was developed; e.g. responsibilities for a proper line as a line monitor, and keeping the class clean as a clean-up monitor.

Person – Example 4:

Another child in Class 4 had difficulty in distinguishing figures from the background, for example identifying pictures on a paper. She also had difficulty in other aspects of visual processing and took longer to complete regular class tasks.

In order to support the child to develop her skills, the teacher used the following strategies: A worksheet was given that had some pictures at the top of the paper, and the task was to identify the same picture from a busy scene given below.

- They were asked to complete the task as quickly as possible and they were timed for this.
- Students were instructed to track the pictures in horizontal sequence.

All children in the class enjoyed the task. The identified student took much longer but all her answers were correct. We also found that there were a few other children who had similar issues and they did not follow the instructions correctly. This means that with teacher's facilitation and regular practice, children with similar issues will be able to complete the timed task. Such activities are helpful to improve visual processing speed and figure ground perception.

Conclusion:

The above examples show how we can identify difficulties by using the PEO model. It shows how this helped us not to explain the child's difficulties with occupational performance by their special need only, but by factors in the environment and the task or activity as well.

According to Koenig and Rudney (2010) the PEO model can be of benefit to children who have sensory challenges in school. In school multi-sensory teaching strategies help in learning and exploring, but for some children with special needs it becomes a complex task to filter specific learning and hence it can become a barrier in the learning process. This demonstrates that the child, the environment and the occupation need to be considered together, to make sure the child can learn to their best potential.

- Observe and find the main problem children face in the environment.
- Then modify the circumstance or task according to the child's special need(s).
- Promote or facilitate the child to regulate himself and calm himself in certain situations.



Koenig, K. P., & Rudney, S. G. (2010). Performance challenges for children and adolescents with difficulty processing and integrating sensory information: A systematic review. *American Journal of Occupational Therapy*, 64, 430-442.

Law, M, Cooper, B, Strong, S, Stuart, D, Rigby, P and Letts, L (1996). The Person-Environment-Occupation Model: a transactive approach to occupational performance. *Canadian Journal of Occupational Therapy* 63(1), pp219-234. Available:

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2B.1 Challenging Behaviour

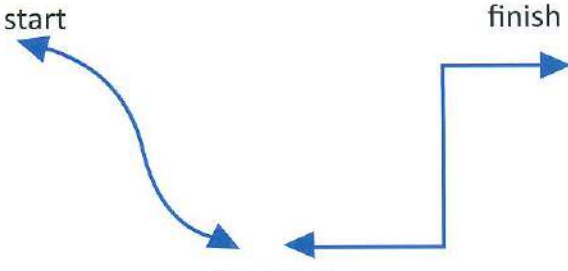
2B.1a Short attention span / interacting with friends

Observation:

Aliza was a 10 year-old student of class 5. She did not participate actively in class activities and did not interact with other students in class. Most of the time, Aliza was absent minded in class. She didn't initiate any task, needed a lot of prompting during work, and was easily distracted. Aliza depended on others to get her work done. According to our observation and family history she was quiet and withdrawn during all activities but after prompting she initiated tasks. We suspected that these behaviours were due to her emotional distress.

Reasons:

Due to having several younger siblings her parents were unable to give due attention to Aliza. She shared a room with her elder sister who kept her awake till late at night and as a result she was found sleepy in school. Aliza also lacked self-confidence. She was shy and did not actively participate in games and sports activities.

Why	How	Outcome
<p>Aliza was a shy student and had difficulty in interacting with her classmates. Aliza did not show initiative in any activity</p> <p>Attention seeking behaviour due to family neglecting her</p>	<p>Step 1: To address her emotional issues and increase her initiative we involved her in sports and leisure activities to give her an opportunity to participate actively.</p> <ul style="list-style-type: none"> • We planned some physical exercises to engage her actively and to improve her ability to focus, for example throwing a ball at the target pins keeping the ball in both the hands above the head). • We arranged physical activities in groups through which she was given maximum opportunities to interact with children. <p>Physical and warm up activities Agility test-</p> 	<p>Initially Aliza did not respond, but after participating several times in such activities she started sharing her problems with her friends and mixing with other children.</p> <p>Regular physical activities helped her to overcome the issues of insecurity related to environment and attention.</p>



	<p>This is an activity, in which the child will take a paper ball from the starting point, run on the line, then frog jump, then again walk on the track as above and finally put the ball in the basket at the finish.</p> <p>Frog jump: for the frog jump exercise the child should stand straight with feet shoulder width apart. Now go into a squat, as deep as the child feels comfortable and then leap forward. The child should leap at least one foot forward. Now the child will continue these steps for 10 times.</p> <p>To enhance her body posture and to get her actively involved, we taught the children some animal walks such as bear and crab walk.</p> <p>We also organised a group activity which included targeting cones placed on a table. Every group had four turns to knock over all the cones with bean bags.</p> <p>We decided to include some relaxation exercises to feel comfortable, make her active and take initiative in class task. This included deep breathing and standing on toes.</p>	<p>These activities increased motor skills and coordination. It involved concentration, and improved coordination between physical activity and cognitive skill. The child was actively involved.</p> <p>Aliza responded well to this activity but she required multiple commands and prompts. After 3 trials she used to actively participate as other students were doing.</p>
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Outcome:

Aliza showed a marked change in her behaviour after implementing these strategies. She started to communicate with her classmates and was motivated to take initiative in class tasks. Her self-confidence increased and she became an active participant in class.

Considerations before planning:

Before implementing the above mentioned strategies, gain information about family background. Find out if the child has been formally assessed and diagnosed with any other psychological issue (stress, anxiety or low IQ) by a psychologist. Sports and arts activities are an important part of the school day, but should not replace academic activities; if a child is more interested in such type of activities you can use it as a reward.



2B.1b Following instructions

Observation

Whole class with children aged 5, were not following the teacher's instructions. This led to other behavior issues like hitting, speaking out of turn, not waiting for their turn and speaking loudly.

Reasons:

The children appeared to be unclear about what was expected from them in class. Possible reasons for this could be that rules were not visually represented and explained. There was no behavior chart. The teacher verbally informed the children about some rules but was inconsistent in implementing them.

The children seemed to find the class activities and material too easy so they were not challenged by them. They did not take interest in the planned activities and spent less time with most of the material. We also observed that they took interest in Lego blocks or other constructive materials and made many creative objects with it. The children played with this material daily in their free play time which is almost 1 hour and 15 minutes in total, distributed at different times. Each play time is of a duration of 20 to 30 minutes. While one group is reading, writing or working in a small group with their teacher, the other group is involved in free play.

Why	How	Outcome
The children of the class were ignoring verbal instructions, they were speaking out of turn, not waiting for their turn, and speaking loudly.	Visual representation of rules : <ul style="list-style-type: none"> • Classroom rules with pictures were posted, discussed and reinforced. • We explained one rule at a time and all the rules were reinforced first thing in the morning. 	By the end of month the children were able to understand and follow the rules. Initially when they were trying to follow the rules they found it difficult because they did not have a habit of following the rules.
To make the children more responsible for their behavior we assigned responsibilities to the children.	Assigning responsibilities <ul style="list-style-type: none"> • Responsibilities were given to the children in groups to keep them physically involved. • The children were given specific roles like line monitors, teacher's helpers etc. • Badges of the roles were made and placed on the children's shirts. These responsibilities rotated among the children. 	The response was immediate. The children wanted to be monitors and wear the badge which helped them follow the rules.





To motivate the children we made a behavior chart to reward the children on their good behavior

Behaviour Chart :
We made a behavior chart with the names of children and days of the week. The children were given stars for good behavior. Rewards were given to the whole class, like extra play time, movie time.

The children responded well, they followed classroom rules as they all wanted the stars to get the reward.

To keep the children engaged we provided them with challenging activities . These were a reward for following the instructions.

Promoting constructive activities

- We provided art material to the children and made an art corner. A group of five children worked on it as a reward for following the rules.


The children took a lot of interest in the material and activities. They followed the rules in order to play/use the material.



- We added new and challenging materials; like Lego blocks, other manipulatives, puzzles etc.
- Children worked in groups of 4 on an art project (making a garden scene) in which they had to draw , cut and paste, and take turns.

In the group project they learned to work together collaboratively, following the rules and taking turns.



		
<p>We introduced games that required following instructions</p> <p>These movement break activities were planned to address the children's physical needs as they could not sit to engage in one activity for a longer period of time.</p> <p>At times, when the children's energy level was very high, we planned relaxing exercises.</p>	<p>Games that require following instructions :</p> <ul style="list-style-type: none"> ● We played games like Simon Says, Follow the Leader and Boogie Woogie to develop the habit of following instructions ● These games were planned as movement breaks in the class, whenever it was required. ● After stimulating activity we planned relaxing exercises. The children sat in different relaxing postures and carried out deep breathing exercises. 	<p>They were more interested in playing the games and in doing so they followed the rules.</p> <p>Movement breaks helped to refresh the children and prepared them for the next task.</p> <p>The children were relaxed and were more willing to listen to us</p>

Outcome

The class responded well. , They started following the classroom rules . The monitors also reminded their peers to follow the rules, which made the children generally more responsible.

Other activities that helped other children with similar difficulties were:

We used a different strategy to manage a classroom with older children . The children were of grade 6. They were not following the classroom rules and instructions. They found it difficult to sit in their place. As there were not any daily physical activities for them, we suggested that their lesson plans should be a combination of active and passive activities/ sessions.



Example:

5 minutes -Recap time - Active time

Example : Throwing balls to the children. The child that caught the ball had to say a fact to recap the lesson.



5 minutes – Brainstorming –Active time

Example: Showing a picture related to the topic and initiating discussion.

10 minutes – Introduction – Passive



Example : The topic / concept should be introduced using concrete material pictures , diagrams , models , videos, books etc.

10 minutes – Hands on- Active time

Example: Dividing children in mixed ability groups, giving sections of books to read, discuss, read information, and write important points on a chart paper



10 minutes-Recording after the lesson has finished - Passive

5 minutes - Conclusion - Active

Example :Divide the class in two teams, ask questions from a representative of each team, the first person to run and write the correct answer on the board wins.

Seating arrangement :

The desks were arranged in rows, so we rearranged into a group setting, with four desks making a unit. This arrangement made it easier for the children to interact during group work. Groups that performed well and followed the rules were rewarded with extra play time, movie time etc.



Physical exercises:

Some physical exercises were recommended in one of the other schools, where the children had the same behavioral issues and they had not been given any time for physical activity or any breaks for physical movements:

Plan at least 10 minutes for physical exercises every day. Take them outdoors (if outdoors is not possible then these can be done indoors too), give them instructions and ask them to listen and follow.

For example:

1. Close your eyes and take a deep breath and exhale. Repeat it 3 times.
2. Stretch your arms up and bend down, touch your toes, wait and count till 10 (once).
3. Now, come up and keep your arms straight by your side.
4. Jump 3 times.
5. Stretch your arms straight in front, hold and count till 10.
6. Now drop your arms and keep your arms straight by your side.
7. Close your eyes and take a deep breath and exhale.

This whole set of exercises can be repeated 3-4 times depending on the time provided and the age (these were recommended for 10 year-old children).

Considerations before planning:

Prevent behavioral issues prior to occurrence.

If you have issues in your class regarding following instructions, one of the best strategies for teaching is to learn methods that help to prevent the occurrence of behavioral issues, such as:



- Consider the physical environment. Remove the distractions in the form of cluttered furniture, reduce distracting / excessive colors, and cover no more than 50% of the walls with the displays, leaving the front wall as plain as possible..
- Increase the amount of supervision present during high-risk periods such as group work
- Ensure tasks are manageable to avoid stress factors that can cause a child to begin to misbehave, but not so easy that the children get bored.
- Divide lessons in chunks, it is less likely to overwhelm the student.
- Provide the students with choices, specially give them as rewards.
- Ensure children reach out for help when they need it because they might not know how they can receive help and might break rules, such as getting up from place without permission.

For more ideas and information you can visit the given web link

Ref : <https://education.cu-portland.edu/blog/classroom-resources/strategies-for-teaching-students-with-behavioral-problems/>



2B.1c Difficulty in socialization

Observation:

Farhan was a 7 year old boy and a student of class 3. He did not participate actively in class activities and also did not interact with other students in class.

Reasons:




He had difficulty in making friends and communicating with them. He also lacked confidence. He used to sit in the corner near the window and looked outside, getting distracted by the outside activities, so he did not pay attention in class.

Why	How	Outcome
<p>Farhan was a shy student and had difficulty in interacting with his classmates.</p>	<p>Step 1:</p> <p>Seating arrangement</p> <ul style="list-style-type: none"> - His seat was changed; he was placed in the centre row in front of the board with a student who was friendly and interacted well with others. <p>Step 2:</p> <p>Assigning responsibilities</p> <p>The responsibilities assigned to him were:</p> <ul style="list-style-type: none"> -To clean the whiteboard after every lesson -To distribute and collect books from students. -To return the borrowed books to the next door class. 	<p>We noticed that he started interacting with other students along with his partner (who he was sitting with).</p> <p>Initially he showed reluctance in cleaning the board but when he observed other students doing the same activity; Farhan showed interest and was motivated to perform the given responsibility.</p> <p>He also fulfilled other responsibilities and felt important and took pride in performing the given tasks.</p>

Before implementing the above mentioned strategies, gain information about family background. Find out if the child has been formally assessed and diagnosed with any other psychological issue (stress, anxiety or low IQ) by a psychologist. The child should be able to read names to distribute copies. Time management should be considered. While performing assigned duties the child should not miss his or her own class work. The child should be monitored when sent outside the class to do any task.



Activities carried out with another child with similar difficulties

How	Outcome
<p>Activity: Story sums were given on paper to do in groups and find the solutions.</p> <p>Students had to come in front and explain their worked out solution using the whiteboard.</p>  	<p>The Group Activity was effective as Iqra participated with her group members very actively and also she came in front of the class to explain and write on the board with her group members.</p> 



2B.2 Difficulties with Learning

2B.2a Reading and writing

Observation:

Azib was a 9 year old boy and student of class 3. He actively participated in class discussion but sometimes he did not listen to the teacher's instructions and was busy with his own work like playing with stationery and writing on the desk. His writing was illegible; he could not write on the line and made many spelling mistakes while writing.

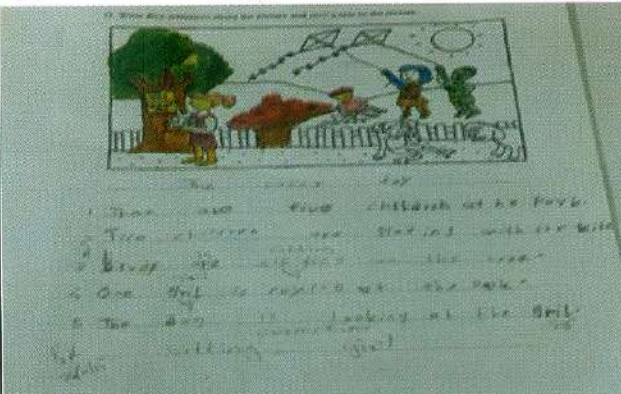
Reason:

Azib had difficulty in paying attention in class. He was also distracted by activities in his environment and was looking around at other kids. He had difficulty in understanding the teacher's instructions due to his poor understanding of the English language. He made many mistakes during free writing or copying from the board. He had difficulty in time management as he could not complete tasks on time and required individual attention. He also lacked confidence.

Home Environment: He was not given enough time by parents for academic tasks and Urdu was the main language spoken at home.

Why	How	Outcome
Azib had difficulty in writing: he made spelling mistakes and his writing was often illegible.	<p>The following strategies were recommended:</p> <p>Step 1: Self-checking in writing</p> <p>The teacher made a chart with four lines and wrote all capital and small alphabets on it. This chart was displayed on one corner of the board. The teacher instructed all students in her class to check their writing such as size of letters or lines after copying from the board or any writing task, before getting their copies checked by the teacher.</p> <p>Homonyms</p> <p>The teacher made a worksheet and during activity time she wrote some words with the same sound but different meaning on the board so that every student chose the correct or appropriate word to fill in the blank.</p>	<p>These strategies were used by all class teachers.</p> <p>Initially Azib needed reminders to check the letter size and lines from a chart but when he started to check he corrected his mistakes and his writing improved. He also started to write on the lines.</p> <p>Initially he had difficulty in understanding homonyms and required individual attention but then he started to write words with correct spellings.</p>



	<p>Fill in the blanks activity:</p> <p>One or two days before and one day after starting a new chapter, the teacher selected a few difficult words for students to practice their spellings. During activity time she called all students one by one to come to the board to fill out the blanks in order to complete the correct spellings.</p>	<p>This activity was interesting for all children and Azib also became very excited and motivated to win this activity. So he learned the given spellings and during the activity he participated well and tried to recall correct spellings. His attention during this activity was also good.</p>
<p>Azib also worked on improving his reading skills and sentence formation.</p>	<p>Step 2:</p> <p>1. During English lessons, the teacher displayed a picture on the board and the children brainstormed about what they could see in the picture. In this way all kids shared their ideas. They also named the picture and thought of a title for their story. Then they wrote their stories individually.</p> 	<p>This activity motivated Azib as well as other students. He participated in this activity and tried to write some sentences without any help. His confidence also improved and he was able to focus better.</p>
	<p>2. Azib was given homework to read one page from a storybook at home every day.</p>	<p>His reading skills improved during reading in class as well.</p>
	<p>3. He was given the responsibility to distribute copies or books in class.</p>	<p>He started to read the name of each student written on copy or book and distributed them.</p>



Outcomes:

Azib needed a lot of repetition of the suggested activities but after 2 weeks his reading and writing skills improved. His confidence grew and he was motivated through the group activities.

These activities also helped other kids as they also checked their writing.

Azib started to follow the teacher's instructions as he was excited to complete the activities. When he was given responsibilities this developed his confidence and he focused well on this task.

Activities that helped other children with similar difficulties were:

- **Stretch breaks:**

Stretch breaks were given to all the kids during class at least twice so as to make all the children feel fresh and relaxed. This helped them to pay attention during work time so they could write and read better.

- **Advance lessons for homework:**

The teacher had regular weekly meetings with parents to give weekly plans in advance as a homework. It mostly included reading tasks. It helped kids to prepare for the lessons in advance, so that during reading they became more alert, and if questions were asked they had more confidence to answer.

Consideration before planning:

It is important to find out why a child is having difficulty with reading and writing tasks in class. Make sure to check their eyesight. An occupational therapist may also observe the child and may decide to assess the child's visual perceptual and visual motor skills, as difficulties with these skills can also cause difficulty in reading and writing.

Children with hearing impairment can also have difficulty in understanding instructions, so hearing needs to be checked too.

Before implementing these activities teacher should also observe a child individually and if he doesn't perform well, then environmental factors should be considered, such as if he sits at the back of the class where he cannot see and hear the teacher well, then the child should be moved to the front of the class.

Size and placement of the board: the board should be in the centre of the front wall and not too high so that every child can see it. Lighting is also important: there should be enough light and there should not be glare on the white board from the windows.

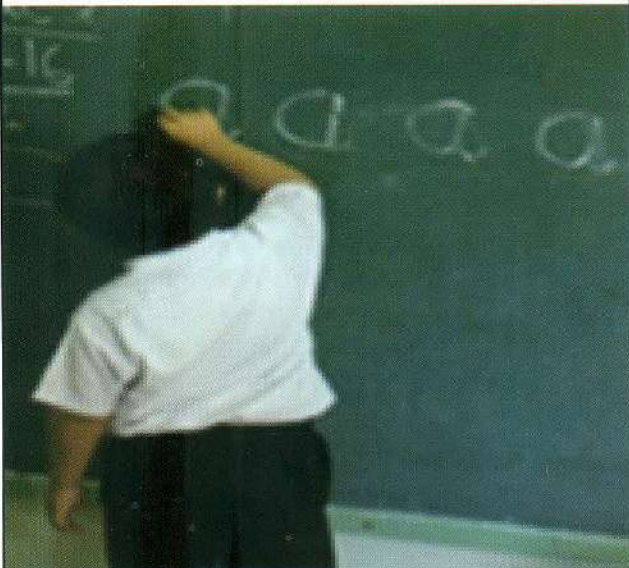
Activities that helped other children with similar difficulties were:

Asim was 5 years old; he had difficulty writing letters and numbers with correct formation on paper and placing letters on the line. Asim also had difficulty staying focused on the given writing task.



Reason:

Asim has Down syndrome and had difficulty in attending to tasks long enough to complete them. He was unable to write on the lines with correct letter formation. This might have been because he showed little interest in task oriented activities and due to weak muscle strength.

Why	How	Outcome
Asim was unable to write letters with correct formation	<p>Step1</p> <p>Multi-sensory approaches were used:</p> <ul style="list-style-type: none">● Writing in sand and on the chalkboard.● Erasing letters from the chalk board with the finger to develop formation of letters and numbers 	A week was allotted for these activities but he initially did not engage with the task due to his short attention span and lack of interest in writing. When we introduced multi-sensory learning methods he actively participated.
Later Asim was able to form letters but he could not follow the lines.	<p>Step 2</p> <ul style="list-style-type: none">● We introduced finger painting on chart papers with different colors. Asim traced letters and numbers with his finger dipped in poster paints.● Asim also used large brushes to make simple strokes on card sheet to follow the lines.● He wrote letters and numbers with crayons on small pieces of card sheet.	Asim responded well to this activity; he started making letters and numbers using paint on card sheet within the lines. His muscle strength and grip improved with crayon and brush activities.



Outcome:

Asim started to take interest in writing on the chalkboard and on card sheet. The plan was followed for more than two weeks. His concentration and sitting tolerance improved with these activities. This helped Asim to start working in a group; his socialization skills developed and his behavior improved. Asim showed good improvement in visual motor skills.

Considerations before planning:

- He had difficulties with writing skills which could be due to short attention span, or weak muscle strength.

It also might be due to:

- Visual perceptual issues
- Limited ability to understand
- Visual issues (weak eyesight)
- Lack of concentration
- Behavioral issues
- Environmental factors
- Developmental delay

Read more:

<https://pathways.org/blog/sand-play- natures-etch- a-sketch/>

<http://playfullylearning.blogspot.com/2012/02/sand-tray- writing.html>

<https://www.everydayfamily.com/5-fun- activities-to- promote-good- writing-skills/>



2B.2b Difficulty in remembering spellings

Observation:

Sophia is an 8 year old girl studying in Grade 3. She has difficulty in remembering spellings of words.

Possible Reasons:

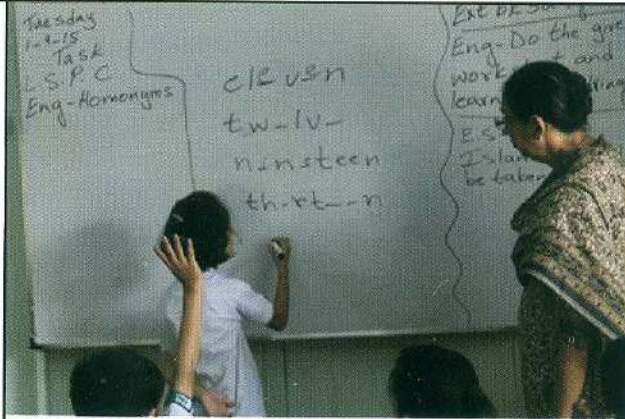
- She may have attention issues that are distracting her. This may come from the environment (the class set up), children speaking next to her, noise outside the classroom,
- She may be placed too far from the blackboard or teacher, etc
- She may need a hearing aid or glasses for weak eyesight.
- She may be Dyslexic and needs to be evaluated.
- She may have an intellectual impairment.
- She may hold her pencil in an awkward fashion and may press too hard or too light making writing speed difficult.

Why	How	Outcome
Sophia has difficulty with attention and staying on task. She is unable to remember spellings and retain concepts that are explained in class.	<p>To improve her ability to spell, the following strategies were implemented.</p> <p>Step 1:</p> <ul style="list-style-type: none"> ● Filling in the missing letters were done on the whiteboard. ● We played hangman for spellings. ● Flash cards of words were made and put up on the board. ● Sophia's mother also made flashcards at home and placed them in different places on the wall to help her retain the spellings. She also worked on worksheets with missing letters and used plastic alphabets to complete the words. ● Later copies were given to be distributed and collected to check if she could read the spellings. <p>Activities:</p> <ul style="list-style-type: none"> ● Spellings with missing letters were written on the board, Sophia and the other children were asked individually to come up to the board and complete the word. 	<p>After a few weeks of implementation Sophia improved. Slowly and gradually she was able to remember spellings.</p> <p>Interventions introduced at home proved to be useful and we noticed an improvement in Sophia's attention span and retention of spellings.</p>



- Hangman was played on the white board for spellings with individual children coming to the board to add a letter.

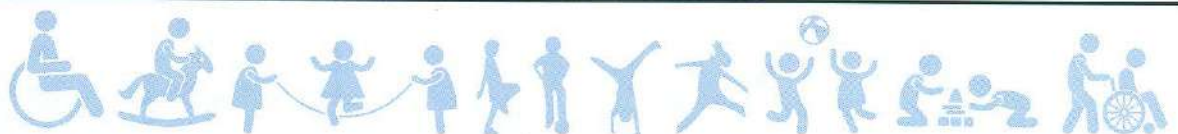
Sophia sustained her attention during this activity.



Step 2:

- Homophone exercises were done in class and given for homework also. First some sentences were discussed and children were asked to choose the correct missing homophone, such as 'meet vs. meat' and 'eight vs. ate'. The words were written on the board. Sophia and the other children were asked to come to the board and choose the correct word. Two things were checked, they had to read the sentence, understand and choose the correct spelling.

Repeated exercises in class and at home, helped Sophia with spellings and retention of the words she was to learn. However homophone exercises are still a challenge for Sophia. Next time we will try small pictures next to the words, for example two people who meet and a piece of meat.





Step 3:

- She sat with a “buddy” (an empathetic, bright student) who could help her and befriend her.
- If any new topic was explained she could ask help from her “buddy” when needed. In addition, Sophia was asked by the teacher after calling 2 or 3 students, to check if she understood or not.
- Simple word search puzzles were done in class.
- She sat with a “buddy” who could prompt her when she needed it and encourage and praise her when she found the answers on her own.
- Word search puzzles were done in different subjects for visual perception (finding the hidden words amongst other letters) and spellings.

i	s	e	t	n	a	h	p	m	l	
n	m	r	a	a	n	l	a	t	t	
s	s	d	t	i	a	b	l	a	e	amphibian
e	t	a	r	b	e	t	r	e	v	bird
c	r	i	f	i	s	h	b	l	l	fish
t	b	t	e	h	b	h	a	i	m	insects
s	p	r	d	p	e	m	h	t	l	mammal
i	a	h	n	m	t	m	p	f		reptile
b	r	b	i	a	b	r	a	e	r	vertebrate
a	b	n	m	m	i	i	p	r	e	

- Reading was done in the class and encouraged at home.

Having a “buddy” helped her to stay focused and boosted her confidence.

These puzzles were fun and helped a lot as it involved finding hidden words. Sophia and the whole class enjoyed solving the puzzles.

Consistent reading promotes recognition of words and their spellings.



Outcome:

Sophia benefitted from the strategies that were planned. Whole class games like 'fill in the missing letter', hangman, going to the board to write a correct homophone. All these activities helped Sophia and the whole class to learn in a fun and meaningful way. Activity-based instruction helps children to retain concepts better.

To increase her pace of writing, one- page writing from her text book was given for homework and mother was asked to record the time it took her to complete the page. Later Sophia was asked to complete the work in less time, since she was able to understand the words and concepts. This led to a slight increase in pace, which was advantageous in class when she had to copy from the board or from a book, or when she had to write from dictation.

Suggestions:

Consult an occupational therapist for help with learning issues.

Consult a child psychologist who can test and diagnose specific learning needs.

Helpful website for help with spelling/reading:

www.readingrockets.org/helping/questions/comprehension





2B.2c Difficulty in reading comprehension and understanding concepts

Observation:

Asma is a 10 year old girl in grade V. She was a social child. She lacked self-confidence. Asma was a slow reader and could not always comprehend what she was reading. Her teachers reported that she learned better with help of visual cues.

Reasons:

Asma was often distracted and had a low attention span, which reduced her attention while reading and resulted in difficulty in comprehension. As she was more of a visual learner she had difficulty in understanding descriptive text in the book.

Why	How	Outcome
<p>Difficulty in comprehending the text after reading.</p>  	<p>We planned a multisensory approach, so apart from auditory instructions we added visual and tactile components as well.</p> <p>A big chart paper was prepared with selected pictures of pertinent landforms to design the activity. We also made word cards to accompany the pictures.</p> <p>The children were asked to match the correct word cards to the pictures of the landforms on the poster and then speak about that particular landform.</p> <p>It was a group task so that they could discuss and get assistance from each other to complete the task.</p>	<p>All children were engaged in the activity. All children learn better with visual cues. Asma needed some support which she sought from her group members.</p>
<p>Struggling in understanding geographical and mathematical concepts</p>	<p>Activity was planned to explain mathematical concepts of measuring distances on maps.</p> <p>A worksheet was prepared on a small square sheet. Children were given a task to measure a distance from one point to another, represented through a curved line on the sheet, using a piece of string and a marker.</p> <p>After marking distance on the curved line, the length of the string up to the marked point was to be measured on a ruler. The activity was performed in pairs.</p>	<p>Everyone was well engaged in the activity. Pair work was useful as they needed assistance in handling the string on the line while measuring it. Their meaningful interaction was increased during the activity, which resulted in better understanding of the concept.</p>



Consideration:

Regular practice of the suggested visual and tactile activities is recommended for better comprehension.

The teacher needs to demonstrate how to carry out the measurement before the children start the task.


All sorts of distraction should be considered and avoided in order to gain better focus while sorting the words to go with the pictures.

Children should be encouraged to learn through different modes.

Additional ideas from working with other children:

Sadia, age 8 years in class III had difficulty in understanding abstract and mathematical concepts and she needed individual support to complete her class tasks.

How	Outcome
<p>Paper clocks were made for the children using paper plates, ice cream sticks and markers. After making the clock, children were asked to write numbers on it to mark the time. Children were asked to use that clock to solve the time problems given in their workbooks, which was to convert digital time to analog with the use of long and short arms of the clock.</p>	<p>This activity helped to improve skills like motor planning, visual perception and math problems. Use of the paper clock enhanced understanding of time concepts much better than just using the text in the book.</p>



Nazia is an 8 year old girl and a student of Grade 3. She had difficulty in comprehending the concepts explained in class. At times she was not attentive as she was easily distracted. She had a short attention span.



To overcome difficulty in comprehending her work, the following strategies were implemented.

How	Outcome
<p>Step 1:</p> <p>“Following directions”:</p> <p>Activity:</p> <p>Each student was given a copy of a picture which was the size of a page. They were asked to write their names on the paper. Directions were given and each direction was read aloud to the students. Adequate time was allowed between directions for all students to complete their work. Sentences were repeated when necessary so that all students could carry out the instructions successfully.</p> <p>Examples of directions were:</p> <ol style="list-style-type: none"> 1. Circle the ladybird. 2. Put an X on the monkey that is wearing a hat. 3. Colour the banana yellow. 4. Colour the butterfly red. 5. Colour the rabbit’s eyes blue. <p>A total of 12 instructions were given. Later students were asked to exchange their papers with the students sitting next to them.</p> <p>Directions were repeated and the students were asked to check if the work was done correctly or not.</p> <p>Step 2:</p> <p>The next step was a story reading activity. Again, the students had to follow the directions.</p>	<p>Nazia enjoyed this activity a lot. She paid attention and tried to follow the directions by listening more carefully and by visualizing.</p> <p>Nazia answered all the questions using both visual and auditory channels simultaneously.</p>



To overcome difficulty in comprehending the work the following strategies were implemented.

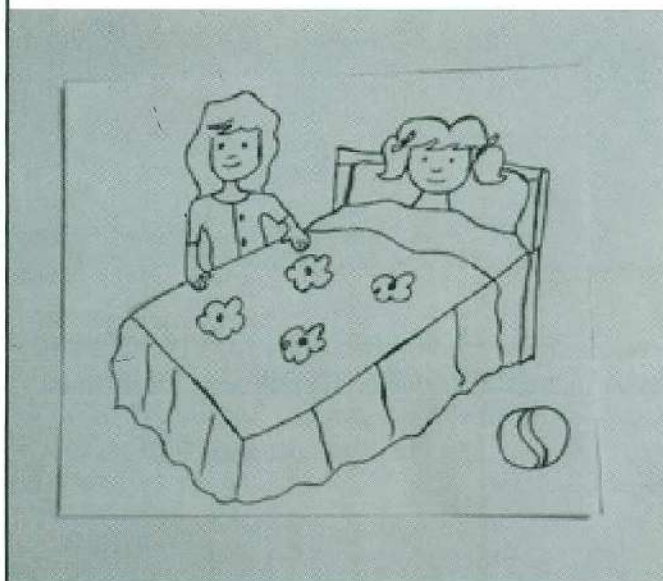
Activity:

A picture was given to each child and a story was read aloud to the group. The children had to look at the picture and at the same time listen to the story which was being read aloud.

In this way the students were utilizing both their visual and the auditory channels simultaneously and it helped them to remember the details of the story. Later they had to answer the questions or complete the sentences as they were read aloud. Ten questions / sentences related to the story were asked eg:

1. Is Mary sleepy or sick?
2. She is lying on her _____.
3. Did Mary eat the sweets today or yesterday?
4. Mary said she ate too much because the sweets were _____.

Later the students were asked to exchange their papers and check the answers.



This time Nazia was able to comprehend well. She took a lot of interest in this activity. She was able to answer almost all the questions and later retell the story by looking at the picture. Since she understood everything well, she was very excited to retell the story.

All the students enjoyed doing these activities utilizing their visual and auditory channels

After implementing all these strategies, which involved listening, understanding, remembering and verbalizing, Nazia performed better in the class. She gained confidence, and started taking interest in her work. There were three more children in the same class who had similar difficulties and they also benefited from this. The same approach was used for teaching other topics and concepts too.



To overcome the difficulty in comprehending the work the following strategies were implemented.

Step 3:

The third step was a story reading activity, which was done with another picture. Again, the students had to follow the directions.

Activity:

- This time after answering the questions they had to retell the story in their own words by looking at the picture. An additional step was taken.

The following strategies were given to be done at home with parents

-Advance lessons were given to her mother every week to prepare her at home so when the lessons were done in class she was prepared.

-At home she was asked to do lessons at intervals i.e. study for an hour with a break of 15 minutes in between as she had to study both English and Math.

Considerations before planning:

Before implementing the above strategies, check the student's background history and find out if the student has been assessed formally, as it can be helpful if available.

Activities developed for other children with similar issues:

Amna, another student of grade 3 aged 8.5 had similar difficulties in comprehending the work.

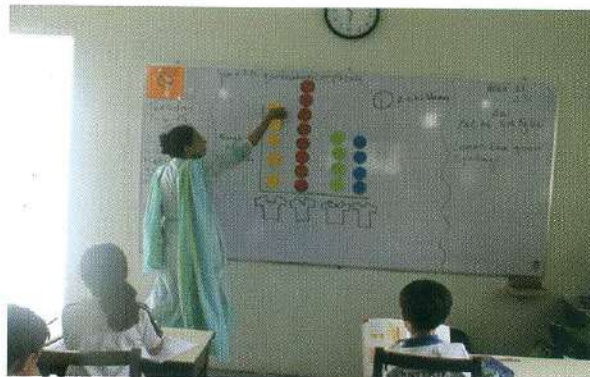
The following strategies were implemented in math in different activities:

1. For three-dimensional (3D) shapes, actual shapes were shown and the students were asked to hold the shapes in their hands and record the number of faces (sides), vertices (corners) and edges. Later the students had to make riddles (they had to write the riddles on the paper) related to the 3D shapes and ask the class to guess the shape (pair work) (In this way they used their tactile and proprioceptive senses).

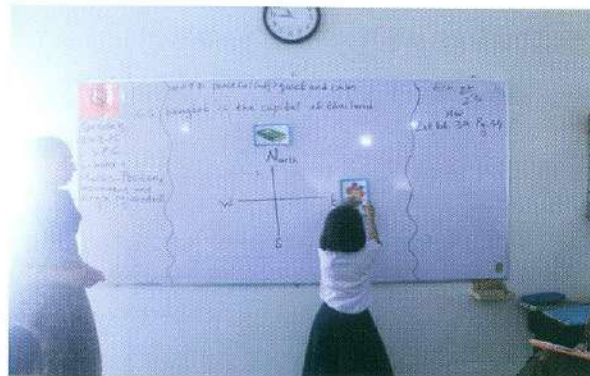




2. For pictograms (graphs using pictures) circles were put up on the board by the students (four different colours for different necklines) according to the number given in the question e.g.: yellow colour for square neck; if ten children liked it then five circles were put up (one circle for two children).

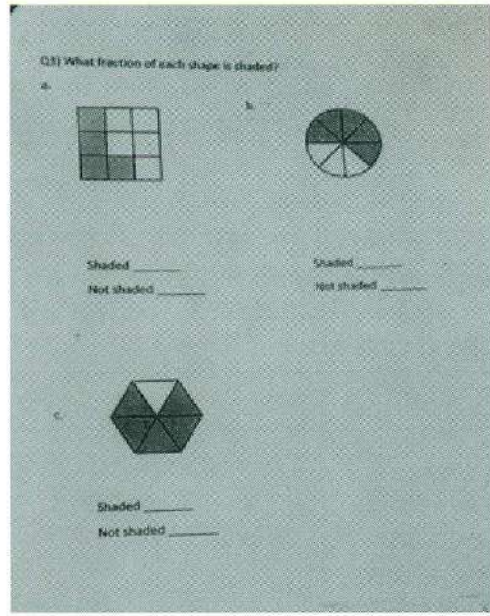
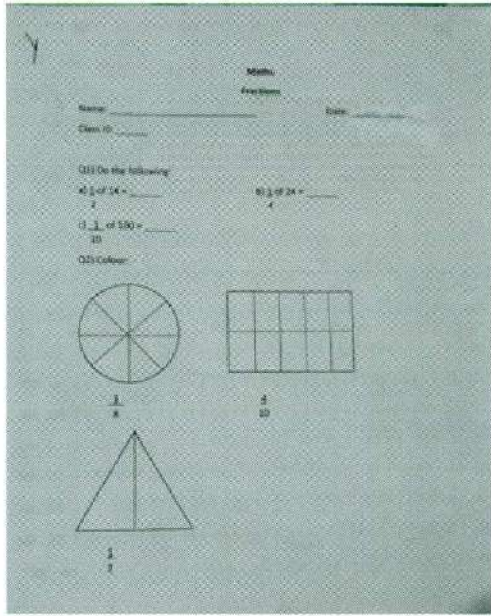


3. For position, movement and angles students had to put actual objects on the floor in the four directions and they had to move in different directions e.g. take one turn anti-clockwise or clockwise. Later students had to put pictures on the board in four directions. So the activity of right angles was first done with actual objects on the floor then with pictures on the board.



4. For fractions, material was given along with a fraction sum. The students had to put the material in groups according to the given fraction. After this they had to solve the sum. Later, a worksheet on fractions was given to complete in pairs.





All these activities were done as Amna had difficulty in comprehending the work. These activities helped her and the other students of her class.



2B.2d Difficulty in receptive and expressive language skills

Observation

Ameer, an 8-year old boy studying in grade 2 had difficulty in verbal thinking and reasoning, difficulty in sentence comprehension, and difficulty in understanding abstract concepts.

Reasons:

Ameer had delayed milestones in speech (receptive and expressive language), which led to difficulty in initiating conversations, socializing with other children, understanding abstract concepts, and participating in conversations and discussions. Ameer might also have sensory integration problems.

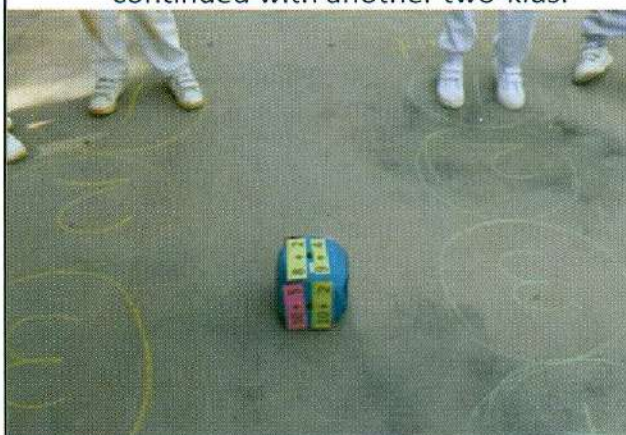
Why	How	Outcome
<p>Ameer was unable to understand concepts because he had difficulties in understanding written and spoken words.</p>	<p>The following strategies were used</p> <p>Step 1:</p> <ul style="list-style-type: none"> ● We presented concepts visually to help Ameer understand. We used three dimensional objects while teaching to give him hands on experience. ● Later we used two dimensional pictures with words underneath. ● As he progressed we used word flashcards without pictures. <p>Activities</p> <ul style="list-style-type: none"> ● For teaching prepositions, the children and toys were placed all around the ground outside. ● The prepositions were reviewed and a child was asked to place an object according to the teacher's instructions e.g. place the car on the bench, or place a block in front of Ameer. <p>Later the objects were replaced by a written flash card of the preposition and the child was asked to place the card as above.</p>	<p>After a week we observed that Ameer was responding well and was able to understand the concepts, so the strategy was continued and used for all subjects. The teacher's lesson plans improved as more concrete material was used which enhanced learning of the whole class in a more fun and creative way. Building up the level of complexity in this way is called "grading".</p>



Once Ameer was able to understand with 3D and 2D material, a physical element was added to encourage spontaneous social skills as these activities fostered speech.

Step 2:

- A physical element was added to the lesson plans through outside games. This was an addition task.
- First the children used 3D materials (blocks) and 2D materials (flash cards) to count and add, and then wrote the addition fact on the board. The class continued the lesson outside. Two teams were made with two sets of circles drawn in a straight line from 1 to 10. A dice with addition facts was thrown by a child on each team and each child had to solve one of the sums. For example $3+2=?$ One child was chosen as the pawn. If a child gave the right answer he jumped into the first circle, if wrong he stayed on the last circle that was answered correctly. The children continued to roll the dice and solve the sums and jump into the next circle if they were correct until one reached the end first and won the match. Play continued with another two kids.



Step 3:

- In the next activity, sentence strips without punctuation marks were prepared. Three cards, each

Ameer was actively involved in outdoor and indoor games, he spontaneously communicated with his teachers and other peers. The interest level of the rest of the class was also increased.



Outcome:

Ameer showed improvement but needed consistent repetition during activities. He was more confident and developed friendships with his classmates. As these activities were used inclusively in this class as well as in other classes, the teachers' lesson plans became more inclusive and more effective. The teachers were able to add other creative tools to their repertoire.

The materials and activities mentioned above have been used with several children from ages 4.5 to 7.

Considerations before planning

- Determine the reasons for the delay in language development, which could be due to hearing problems, brain injury, or a family with a history of language disorders.
- Children with mixed receptive-expressive language disorder are also more likely to have developmental difficulties, especially attention-deficit disorder (ADD), hearing loss, autism, learning disability, etc. so check for these too.
- Warning signs of Language disorder include:
 - Reduced vocabulary in comparison to other children of the same age
 - Limited ability to form sentences
 - Impaired ability to use words and connect sentences to explain or describe something
 - Reduced ability to have a conversation, leaving words out
 - Saying words in the wrong order
 - Repeating a question while thinking of an answer
 - Confusing tenses (for example, using past tense instead of present)

Some of these signs are part of normal language development. However, a child may have a language disorder if several of these issues are persistent and don't improve.

- Consult a speech therapist for speech related issues and an occupational therapists if these issues are accompanied by learning issues.

Read more:

<http://www.minddisorders.com/Kau-Nu/Mixed-receptive-expressive-language-disorder.html#ixzz4wEO3SkCu>

<https://www.healthline.com/health/mixed-receptive-expressive-language-disorder#Overview%201>



2B.3 Gross Motor

2B.3a Sitting posture and organizational skills for the workstation.

Name: Ammar

Class: 6

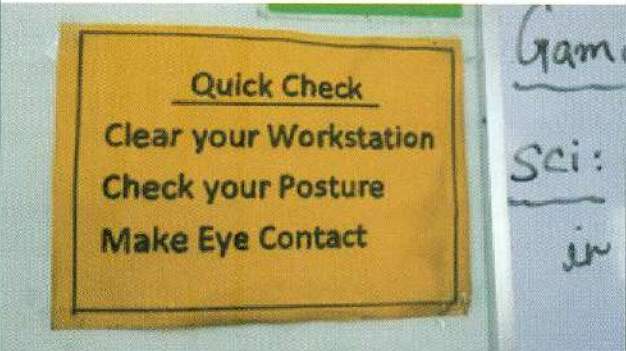
Age: 12 years

Psychological evaluation: immature motor skills and delayed development

Observation: Ammar had good understanding of all the lessons being taught in all the subject areas, however he had difficulty in coordinating movements, sitting still and following instructions given by the teacher.

Reasons:

- Due to his immature motor skills Ammar was unable to maintain his body posture in sitting and walking.

Why	How	Outcome
<p>The goal was:</p> <p>To improve his posture while sitting. His workstation was not organized, and he was distracted by unrelated things.</p>	<p>Strategy 1:</p> <p>Teacher wrote some instructions on A4 paper and displayed it on the top of the white board. The instructions were,</p> <p>Clear your workstation Check your posture (Sit up straight) Make eye contact</p> <p>Before every class the teacher announced "Quick Check Time" and every child read and followed the instructions (30 sec exercise).</p> 	<p>Ammar was able to maintain his workstation and made better eye contact with the teacher. His posture improved but for short time periods.</p>





To improve his posture and coordination.	Strategy: Ammar was given a ball to play catch and throw with his classmates under the supervision of the games teacher.	After a few weeks his coordination improved. Also he benefited from the opportunity to interact with other children.
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Outcome:

Due to the above strategies, Ammar improved his posture and organizational skills. These strategies were used for the whole class and benefited everyone.

Activities and strategies that worked with other children with similar challenges are:

Children of age 6 had similar difficulties with their posture. With them the following strategies were implemented.

How	Outcome
<ul style="list-style-type: none"> • Teacher explained about correct posture then she demonstrated for children before her class, for 5 minutes. • A Poster was prepared with coloured pictures showing correct posture. That poster was shown to students to follow and was kept in their class as a reminder. 	<p>Teacher's demonstration and the poster with correct posture illustrations were helpful, as children got to know what posture was expected of them. They were reminded every day through the poster, as it was kept in their class.</p> 



Students were instructed to keep their bags off the chair because bags occupied all the space on the chairs and then students were left with less space to sit.

- Suggestions were also given to the teacher and management to fix hooks in class or keep a table for the placement of bags.



Simple stretching exercises were recommended to make children physically active and to help them maintain a correct posture. Teacher demonstrated the exercises in between class, after 20 minutes of work time, and in games period as well.

There was now enough space for children to sit, as their bags were removed and they could sit with comfort which also improved their attention span and focus.

Stretching exercises helped in releasing stress in the body and made them more active and attentive in class.

Consideration:

Correct posture is vital for all ages. Children should be given guidance at an early age so that the right body postures are developed. Good posture can also help to reduce the chance of developing secondary issues such as fine motor, writing / attention and physical issues as well. Parents and teachers should know about the importance of correct posture.

Teachers need to inform parents about the strategies and discuss what they can do to support their child's posture issues.

Also make sure before trying these stretching exercises in your classroom, that none of your students have health conditions that require restrictions on physical activity. Make sure each student has plenty of space, and won't bump into classmates or anything else in your room.

Consistency is essential for the suggested activities to work. Parents and teachers need to regularly monitor the child for any guidance required.

A child of 4 years, had posture issues due to short height and being underweight. With her the following strategies were implemented.



Strategies	Outcome
<p>To correct her sitting posture, the following plan was recommended. We modified her chair, giving her a slightly higher one, combined with a footrest to help her feet rest on a surface.</p> <p>Push and pull activities: pushing the wall by placing palms on the wall with feet back at an angle or pulling/pushing heavy objects in a hamper or box.</p>	<ul style="list-style-type: none"> ● Initially she took time in adjusting and pushed the footrest away, but later on she adapted to the correct posture. ● All the push and pull activities helped in hand strength and upright posture.

Activities and strategies that worked with other children with similar challenges are:

A child of age 4.8 years had posture issues due to short height and underweight he was in Montessori 1, where there were children of age 2.6 to 3.6. With them the following strategies were implemented.

Strategies	Outcome
<p>To improve his posture during sitting, standing and walking.</p> <ul style="list-style-type: none"> ● It was suggested that a flashcard with a picture of the child in a proper sitting position – back straight and hands in a resting position, should be shown or kept in front of the child, instead of always telling him how to sit. ● Making shapes with neon tape on the floor and jumping into the shapes one by one. ● Ball throwing in three steps: <ul style="list-style-type: none"> ○ Over head ○ Chest level ○ Ground level ● Weight bearing exercise with both arms stretched against the wall applying pressure, was taught to the teachers, for the child to improve his muscle strength and body perception. 	<ul style="list-style-type: none"> ● Visual cues/ flash cards were really helpful to improve the child's sitting posture. ● Physical activities such as jumping, throwing, and catching were interesting activities for him and the whole class. ● The weight bearing activities helped to improve muscle strength and upright posture.



2B.4 Fine Motor

2B.4a Handwriting.

Name: Ammar
Class: VI A
Age: 12 years

Psychological evaluation: none

Observation: Ammar's handwriting was not age-appropriate (immature letter formation, poor spacing between words and letters, poor writing on the line and also drawing). It was difficult to read his copies. He had difficulty in writing and cutting. He also had difficulty in holding his pen for a longer time and copying work written on the board.

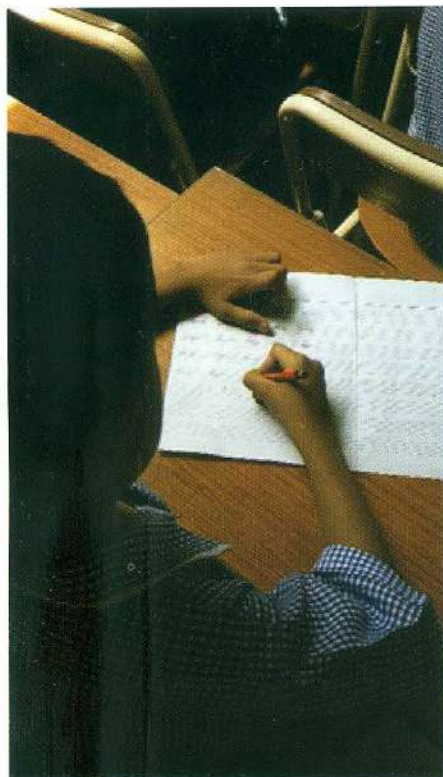
Reasons:

- May be due to his immature fine motor skills as Ammar was unable to write appropriately i.e. improper letter formation, poor spacing between words, inconsistent letter writing on the line, and also poor drawing.
- May be due to weak pen grip, he was unable to write on the lines
- He may have some perceptual problems.

Why	How	Outcome
Difficulty in writing in an appropriate manner (improper letter formation, poor spacing between words, and inconsistent letter writing on the line). He also had a poor grip when cutting with scissors.	<p>Plan:</p> <ul style="list-style-type: none"> ● Pencil grips were suggested. ● Worksheets given for home and for school. ● Practice cutting on different patterns while using round tipped scissors to improve fine motor control. ● Activity worksheets to improve writing and pencil control were planned. <p>Strategies</p> <ul style="list-style-type: none"> ● Cutting worksheets with simple cutting designs with bold colors and broad boundaries were given to cut with safety round tipped scissors. ● Pencil grips were suggested and used to improve his grip. ● Making curves/zigzags around a circle and in a specific direction, and using a pencil without lifting his hand or shifting the paper. This will improve his writing flow. 	<ul style="list-style-type: none"> ● Use of pencil grips helped the child improve his control over the pen while writing. ● Worksheets helped him improve his hand writing in terms of letter and word spacing. ● With regular practice at home he was able to cut more easily on the lines.



- He was also given worksheets to practice continuous round motions



Outcome:

Due to use of pencil grips Ammar' pen grip improved to a great extent and he was able to hold his pen for a longer time while writing.

Due to regular practice of the suggested activities at home and at school, his letter formation and spacing between letters and words also improved dramatically.

Activities and strategies that worked with other children with similar challenges are:

- 1- A 4 year-old girl had difficulties learning to write. This could be due to muscle weakness She had difficulty in fine activities such as gripping a pencil or spoon appropriately.

Strategies	Outcome
To strengthen her fine motor skills, the following plan was recommended	



Strategies	Outcome
<p>Plan</p> <ul style="list-style-type: none"> ● To strengthen finger muscles as well as hand muscles, push and pull activities (10 to 15 times) were recommended on a daily basis during recess time. ● To hold the pencil properly and tightly, prompting during writing tasks was recommended. Tripod pencils were given. <p>Activities: The following fine motor activities were done to improve her hand strength:</p> <ul style="list-style-type: none"> ● Push and pull activities: pushing the wall by placing palms on the wall ● Lacing beads ● Opening and closing nuts and bolts ● Kneading, pinching and making balls with dough, inserting beads in dough and taking them out with finger and thumb. ● Using scissors to cut paper or play dough. ● Punching with machine (Paper puncher with designs) 	<ul style="list-style-type: none"> ● After two weeks of implementation she did better with some prompting to trace letters. ● She was better in colouring – she coloured according to the shape, movement was circular in a circle and horizontal in a triangle. ● All the push and pull activities helped in improving body schema, motor planning and upright posture.

2- Iqra, age 9 years, class IV had poor writing skills. She gripped the pencil at the very end off the nib and sometimes she used a lateral grip of thumb to index.

How	Outcome
<p>Teachers were instructed to guide the students about the proper tripod grip and to maintain finger grip distance: one inch above the nib.</p> <p>Preparedness: students were given an exercise to move fingers up and down on the pencil in a tripod fashion. Tripod pencils were also provided.</p>	<p>With repeated practice according to teacher's instructions and exercise, the pencil grip of most of the students improved. Iqra was able to hold her pencil almost $\frac{3}{4}$ inches above the pencil nib most of the time.</p>

Considerations:

Parents and teachers should meet regularly. Teachers should inform parents about the strategies and the child's progress. Consistency is essential for the suggested activities to work. Parents and teachers should regularly monitor the child for any support required.

Also keep in mind that before implementing these activities, you need to assess whether the child has physical impairment, which may need to be assessed by a therapist for adaptive assistance and recommendations.



All push and pull activities should be performed for maximum 10 minutes before class, after class, during recess time and before going to bed.

For children who need some individual support and prompting to complete tasks, extra time and individual assistance should be provided.

If your child has fine motor issues refer to this link.

<https://therapyfunzone.net/blog/ot/fine-motor-skills/handwriting/>

3. Many students of class 2 had difficulties developing their handwriting skills. Their pencil grasp was not correct and they had difficulty writing on the lines and doing cursive writing.

The following strategies were applied to overcome the difficulty in writing:

Strategies:

-We introduced a correct sitting posture and taught the children to always put their bags down on the floor so they had their chair free to sit on. A good posture is important as it helps to position the child's arm and hand onto the paper.

-Making beads with newspaper was a good exercise for fingers. The students were given pieces of newspaper. They had to tear them into small pieces and fold them up, using their fingers, both hands were used. Each child had to make two to three beads with paper.

- Making small pyramids with play dough, using one hand only. This too is a good exercise for the hand muscles.

-Pattern making worksheets were done in class. Before writing the letter, the children had to make patterns using different lines, such as wavy, zigzag, diagonal, etc.).

-Patterns were made on ice cream sticks which were later made into bookmarks. Different patterns like horizontal, vertical, diagonal and wavy lines were made on sticks.

All these activities helped in improving handwriting.



The problem is that the writing hand is off the table. This will lead to fatigue and poor writing. Also speed will be affected by this posture.





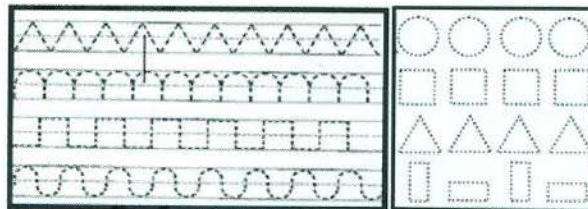
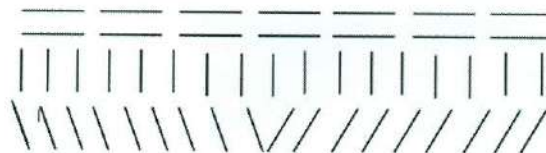
Pyramids made with playdough



Patterns made on ice cream sticks

MY SMART HANDWRITING SKILLS

NAME _____ DATE _____



DRAW A SHAPE /DIAGRAM WITH THE HELP OF ABOVE CURVES AND LINES AND COLOUR IT



2B.4 Fine Motor

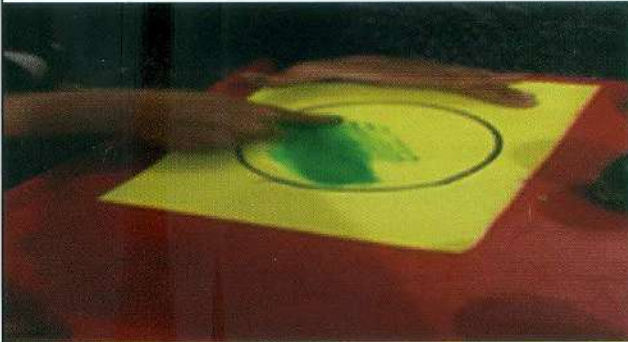
2B.4b Common challenges: difficulty in Fine motor skills

Name: Fiza

Class: KG-1

Fiza is a 4.8 year old child and is in KG-1, where children of age 2.6 to 3.6 are studying. She cannot hold a pencil and small objects with a proper grip and adequate strength.

The following strategies were applied to improve her fine motor skills:

Why	How	Outcome
Fiza was unable to hold small objects using a pincer / tripod grip	<ul style="list-style-type: none"> ● Dough Activity : The children were provided with dough and molds. The children, including Fiza, were shown how to roll and use pincer grip to put the molds over dough, to improve fine motor skills. ● Finger painting on chart sheet: Cut outs of card sheet were given and paint was also provided. The children, including Fiza, were shown how to dip fingers in paints and paint on card paper.  <ul style="list-style-type: none"> ● Pegging activity: Pegs and a basket were provided to Fiza and she was shown how to put pegs on the basket. 	Fiza's fine motor, skills improved. She started holding objects with a pincer grasp but her pressure was not adequate while doing this activity. A week was allotted to improve her skills. As all of these were inclusive tasks, the whole class benefited from it as well.
Fiza faced difficulty in applying proper pressure for fine motors skills.	<ul style="list-style-type: none"> ● Ball squeezing: Soft ball was given to Fiza and she was, instructed to squeeze it 10 times. Other children can also participate in this activity. 	A week was allotted for these activities to improve her pre writing and cutting skills. She not only improved but her behavior improved as well. The whole class enjoyed these activities.



	<ul style="list-style-type: none"> ● Crayons were provided to improve pencil pressure as colouring is a resistive exercise. ● Self-opening scissors would be best to use. Using regular scissors are quite challenging as she cannot use the required force to open and cut the paper. Similarly, holding paper in one hand and cutting with the other was also very challenging for her. 	
<p>Fiza was unable to perform fine motor activities with proper strength.</p>	<p>Recommendations:</p> <ul style="list-style-type: none"> ● Tweezers activity with coins using index finger with thumb. ● Nut and bolt activity. ● Kneading, pinching, and making balls with dough. ● Picking up rice or beans with a pincer grip using tweezers or ice tongs with supervision. ● Making beads with paper. 	<p>These activities were inclusive. With these activities her skills improved. Socialization skills improved. She started taking initiative in class. Teachers and parents were guided to repeat the plans, to develop and improve her skills according to her class level.</p>

For more fine motors activities:

<https://www.messforless.net/18-fine-motor-activities-for-preschoolers/>



2B.5 Visual perception

2B.5a Visual discrimination


Observation

Taha, aged 5, had difficulty recognizing and differentiating between letters 'b' and 'd'.

He used to misjudge 'b' and 'd' by articulating incorrect sounds or pointing to the letter incorrectly.

Reasons:

- Might be due to the medications received at an early age due to burn injury.
- Lack of exposure in the previous school - the child did not have enough exposure and was made to sit in a corner, as the school was very much concerned about the injury.
- Home environment - Mother hadn't given enough time to Taha as she was too busy with the younger sibling.

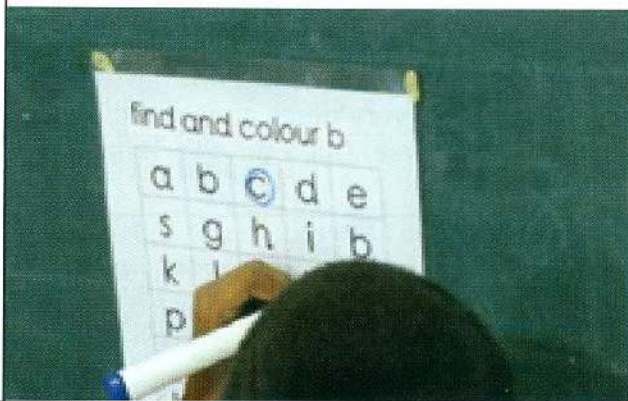
Why	How	Outcome
<p>Taha was unable to recognize and differentiate between letters 'b' and 'd'</p>	<p>The following material was prepared step wise</p> <p>Step 1:</p> <ol style="list-style-type: none"> 1. A letter discrimination card with letter "b" (bold) and pictures was made and laminated. The child was instructed to repeat the sound and name of objects beginning with the sound . He was instructed to match the picture with the letter sound. 2. This was repeated for a week and then the same material was made for the letter 'd'. The same procedure was used for the recognition of letter 'd'. 	<p>A week was allotted for each letter.</p> <p>Taha responded well and was able to differentiate between the letters after two weeks.</p>



Once Taha recognized letter 'b' and 'd', the task was to make him practice differentiating 'b' / 'd' from other letters. A worksheet was planned where he was made to circle the correct letter

Step 2:

A worksheet with letters "b" printed several times with other letters was prepared. Taha, along with the other children, was asked to circle letter 'b' only. Same procedure was applied for letter 'd', three days of practice for each letter.



Taha was able to differentiate letter 'b' / 'd' from other letters after almost a week

Once Taha was able to differentiate letter 'b' / 'd' from other letters, another worksheet was planned where he would have to circle all the letter 'b's or 'd's in the worksheet in order to distinguish one from another.

Step 3:

A worksheet with letters "b" and 'd' printed several times was prepared. Taha was asked to circle letter 'b' or 'd' only as per instructions .

Taha got confused at times but was mostly able to differentiate 'b' from 'd' and vice versa


To give tactile input in order to have better recognition and memorization of the letter we planned to implement some multisensory approaches.

Multisensory approaches were used on a daily basis including:

- Graphesthesia – Without vision, recognizing letters drawn on his skin with fingers.
- Tracing letters on sandpaper letters , writing letters in a tray with sand /pulses etc.

Taha responded well to graphesthesia and other tasks.



<p>To involve parents in order to have reinforcement and practice at home, a home plan was provided</p>	 <p>Each material made was given to the parent on weekends. The parent was also advised to use easily available material like pulses , rice etc. for letter tracing.</p>	<p>The parents were able to implement the strategies as the material was provided or easily available.</p>
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Outcome :

Taha showed improvement but needed constant repetition of the letters ‘b’ and ‘d’ through the suggested activities.

The material/ activities mentioned above have been used with several children of age 4.5 till 6 and have worked well in their letter recognition and discrimination.

Considerations before planning

- Is your child the same age as mentioned? Refer to the link <https://blog.allaboutlearningpress.com/letter-reversals/>
- Is your child confused in other letters ? Refer to link www.nha-handwriting.org.uk/handwriting/about-handwriting-difficulties <http://www.pbs.org/wgbh/misunderstoodminds/writingdiffs.html>
- Screen your child if they can copy the basic forms
- For detailed tests consult an occupational therapist or bring an occupational therapist in your school.

Other Children with similar issues:

Child’s name: Iqra, Age 9 years in grade IV, had difficulty in distinguishing figures from the back ground (for example identifying pictures on a paper). She also had difficulty in visual processing and took longer to complete regular class tasks.



How	Outcome
<p>A worksheet was given that had some pictures at the top of the paper, and the task was to identify the same picture from a busy scene given below.</p> <p>The class was asked to complete the task as quickly as possible and they were timed for this. Students were instructed to track the pictures in a horizontal sequence.</p>	<p>Children enjoyed the task and most attended well. Iqra took much longer but all her answers were correct. We also found that there were a few other children who had similar issues and they did not follow the instructions correctly. This means that with teacher's facilitation and regular practice, Iqra and other children with similar issues were able to complete the timed tasks. Such activities are helpful to improve visual processing speed and figure ground perception.</p>

Some children in class 2 had difficulty in copying from the board due to improper writing pattern, also teacher wrote words in a dispersed manner all over the board, which was confusing for the children, especially those who had problems with visual perception.

How	Outcome
<p>Teacher was given instructions to write the lesson plan on a chart sheet rather than writing on the board and she was to place that chart adjacent to the board. Chart sheets were provided to the teacher for this purpose.</p> <p>Tips were given to the teacher about writing on tape lines on the board. some glitter removable tapes were given to her to make a line on the board to differentiate the words from the tape line this will help those children who had discrimination problems.</p>	<p>Writing on tape lines helped children to improve their boundary concepts and spacing as well. It became easier for them to copy from the board. Children were benefited from the lines made by glitter tape, as spacing between lines and word was more prominent.</p>

Consideration:

Regular practice of the suggested activities is important. There was a lesson plan written on the left side of the board which covered a considerable amount of space and cluttered the board before. Teacher should remove all distractions in order to help children focus better.



2B.6 Sensory Processing

2B.6a Hyperactivity and unable to sit still

Observation:

Fatima was 4 years old, she showed hyperactivity in class and moved around all the time in and sometimes out of class as well.

Reason:

Fatima had difficulty understanding commands and was not maintaining eye contact. She also had difficulty in understanding the environment as there were many other kids in class and she was not given individual attention. Some underlying neurological or psychological conditions can cause difficulties with sensory processing and hyperactivity.

Why	How	Outcome
The child was unable to sit still in class.	<p>The following material was prepared step wise</p> <p>Step 1:</p> <ol style="list-style-type: none"> To provide sensory input (relaxation techniques), to calm her down and sit still during the lesson time. Fatima and her classmates carried out heavy work tasks during break time or play time: <ul style="list-style-type: none"> ● Jumping in circles, drawn on the floor in a straight direction. ● Duck walk, (walk in a squatting position like a duck) ● Race while jumping or hopping ● Walking on a straight line with alternate feet to slow down her activity level. <p>These activities were recommended for 3 weeks.</p>	<p>Three weeks were allotted to apply these strategies. Fatima responded well in these activities and she actively participated. She also waited for her turn without leaving the task when other kids performed these activities.</p> <p>Her working stamina increased.</p> <p>Her hyperactivity was reduced and she was much calmer in class.</p> <p>Fatima was able to sit still for longer during the class and lunch time as well.</p>
Once Fatima was able to sit still for longer, she worked on standing in line during transition to or from class with other kids.	<p>Step 2:</p> <ul style="list-style-type: none"> ● We put number tags on the back of all kids in the class during transition from class for play time or any other activity outside the class. Fatima was placed in the middle order, if total number of kids was 22 then she was tagged with number 11 or 12 and her number was also written on her hand. 	<p>Fatima stood in line and did not leave her place while the children moved from class to the playground.</p> <p>Fatima waited for her line to move according to the teacher's instructions.</p> <p>Fatima began to run less outside the class.</p>



Outcome:

Fatima was able to sit still for longer periods as the heavy work helped her to have better body awareness and to reduce her hyperactivity. She could stand in line while transitioning to and from class and she did not run out of line. She also waited for her turn during play time when other kids were performing activities.

Considerations before planning:

Make sure that these strategies are not implemented if the child has any physical condition, such as joints issues.

Carry out the heavy work activities for a maximum of 2 times for 10 minutes per day. The child will be less hyperactive and be in a calm and alert state so that he/she will be able to focus and concentrate in class for greater periods.

Choose a suitable environment for the activities, e.g. an airy and open space, cool and shady. The floor should not be slippery, to reduce the chance of falling during jumping and racing.



2B.6 Sensory Processing


2B.6b Sensitivity to Touch.

Observation:

Ali was 3 years and 6 months old and attended Nursery. He was over-responsive when it came to touch sensations, which meant that he required firm touch sensations because light touch was uncomfortable for him. He avoided many textures; he was very restless and would roam around, perhaps to avoid sensations.

Reason:

Ali was diagnosed with Autism and had many sensory difficulties that interfered with learning.

Why	How	Outcome
<p>Ali had severe sensory difficulties as he avoided many textures and was restless. He couldn't participate in any classroom activities. It was decided that Ali needed some intervention outside the class, to get him ready for regular class activities. A sensory diet was planned for him.</p>	<p>Sensory Diet:</p> <ul style="list-style-type: none">● Ali was taken to another room where the resource teacher was instructed by the OT on how to relax him in order to get him in an alert state for classroom activities● Deep pressure massage: We held the child's hands between the palms of our hands and applied firm pressure in a circular motion with our thumb to the palm of the child. This circular motion was at the base of the thumb and the base of the finger joints. After that we applied pressure with our thumb from the base to the tip of the fingers. This was done on both hands. It helped to desensitize the hands to help the child in handling touch sensations during class activities. 	<p>Before the intervention with these activities, Ali found it difficult to sit and focus on any activity. After two months it was observed that Ali was able to attend classroom activities for 5 minutes at a time. He started to seek out these movement and pressure activities and seemed to feel relaxed and calm.</p>



To apply deep pressure and provide slow movement, which promotes a calming effect on the nervous system, we used the Lycra swing. This activity promotes body awareness and adjustment to the movement of the swing. The slow movement also has a calming effect on the vestibular (balance) system.

Some additional activities were planned for providing a calming effect to Ali. One of these activities was "hot dog in a blanket". Deep pressure from the blanket provides a calming effect and the rolling component makes the child more aware of his body. Creating activities that involve deep pressure along with movement, helps the nervous system become more organized so the child can

Lycra swing activity

Two adults held a sheet/ blanket like a swing with Ali lying in it and moved it to and fro for 5 minutes



Hot dog in a blanket:

Ali was slowly rolled in a blanket and then unrolled, making sure his face was not covered.

- First we laid a heavy blanket on the floor, than we had Ali lay at one end of the blanket, making sure that his head was outside the blanket before we started rolling
- We rolled the blanket around him until the blanket was wrapped around him.
- Next we applied deep pressure down his back, arms and legs. While applying pressure we named the body part that was receiving the pressure.
- Then we gently pulled on one end of the blanket so that the child rolled out of the blanket.

Ali enjoyed the activity and wanted us to continue when we had stopped. Then it was continued for one more time, then Ali was removed from the blanket.

After the activity he was more relaxed and followed through on other activities planned for him.

At first Ali didn't want his hands to be wrapped in the blanket and he resisted. Later he allowed us to keep his arms and hands inside the blanket as we rolled him. He liked the deep pressure input when he was pressed under the blanket. Overall this activity helped Ali to calm down. He was able to sit and attend to classroom activities for longer periods



Perform activities in the classroom.

Unrolling the child at the end of the activity also promotes greater body awareness (ability to understand where your body parts are and how to use them)

Ali had problems with his sense of touch. It was difficult for him to manipulate toys or classroom items. He used to avoid different textures. As Ali needed to adjust to different touch sensations, we provided a tub filled with coloured pompoms. This activity was also used to reinforce colour recognition as the child was asked to pick up a pompom of a specific colour

Whole Class Strategies Texture tubs with soft balls

Ali and other children were provided with a tub full of coloured pompoms. He was asked to pick up red and yellow pompoms.



Ali was given the texture tub full of soft pompoms. He immediately picked them up. Held them close to his eyes. He kept on doing it with the other children who were working with him. When asked to pick up a pompom of a specific colour he demonstrated 50% accuracy.

Another activity to provide tactile sensations was finger painting.

Ali and other children were provided with bowls of different coloured finger paint and paper. At times they were made to print hands and at other times they were made to finger paint in outlined pictures.

At first Ali avoided the paint by pulling his hand away. In the second or third attempt he started participating in the activities.





His acceptance of textures improved with time as he was introduced to different textures slowly.



Another activity to provide tactile sensations was finger painting on tray of shaving cream.

Ali and the other children were provided with a tray with shaving foam. They were asked to draw in the shaving cream.

At first Ali did not want to touch the shaving cream. when teacher used her hand over his, he let her guide him but immediately rubbed the shaving cream on his chest. He seemed to enjoy the smell. With time he will accept this texture as well.



Another activity was included to improve Ali's sense of touch and textures. We made a game of hiding different objects in a tub of sand.

Hidden Gems

Items were hidden in a bowl filled with sand and the child had to find the objects with his fingers. After finding the objects he was asked to place the found objects into another bowl. We encouraged him to use both hands to search for the objects.

At first Ali was hesitant to put his hands in the sand. Later he liked to pick up and fling the sand all over. The teacher tried to physically help him to find some of the hidden objects. She encouraged him to find the other objects on his own. After several attempts he was





successful in finding the last objects and removed them from the sand and dropped them into the other bowl.

Outcome:

Ali showed improvement with regards to accepting and manipulating different textures along with the children in his class room. He demonstrated better awareness of his body and how to coordinate his movements. His initial fear of being wrapped in the blanket and swung was replaced with enjoyment for this activity and non-verbal requests for more swinging and rolling. As a result he was less restless in class after these activities and attended to other class activities for longer periods.

Considerations before planning:

If you have children with tactile problems you can provide different textural sensations such as mud, clay, Styrofoam chips, lentils, rice, cut up paper strips, cut up rubber strips, etc. This helps them in tactile registration, discrimination and desensitization.

Tactile registration

Exposing the children to different media to register / become aware of different textures.

Tactile discrimination:

By providing a lot of tactile input to the skin, children will learn to distinguish the media (e.g. sand from the hidden objects they are searching for).

Tactile desensitization:

Providing a variety of textures helps to desensitize the child who is touch sensitive and to prepare him for functional and academic activities.

If you have children with fear of movement the following simple activities can be gradually introduced. Monitor the child's response closely, as each child is different and it is possible that they may react negatively to some of the activities - in that case, stop immediately:

Rolling on the grass, jumping into circles drawn on the pavement, swinging in a blanket, jumping on the trampoline, sliding down the slide, climbing on the jungle gym, moving on monkey bars, see-saw, and riding on a carousel.




2B.6c Visual and auditory problems leading to difficulty in following commands

Observation:

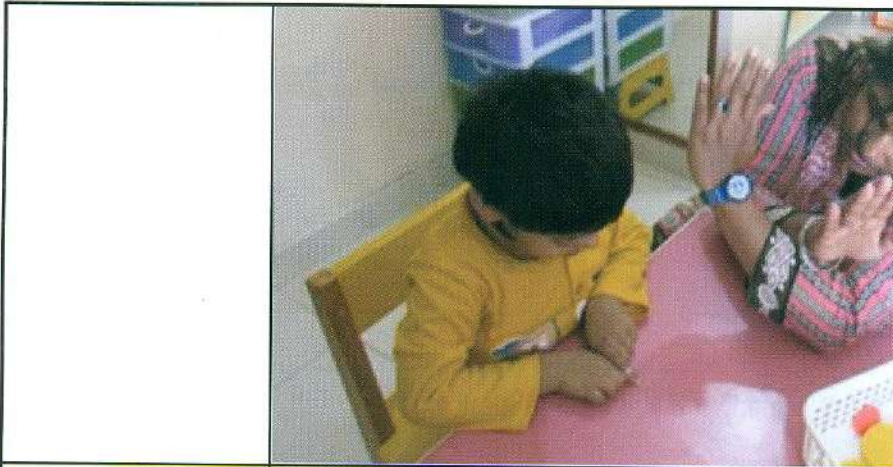
Ali was 3 years and 6 months old and attended Nursery. Ali had poor eye contact and difficulties in communication. He was unable to follow commands.

Reason:

Ali was diagnosed with Autism and faced difficulty processing visual (related to seeing) and auditory (related to hearing) information. This led to difficulty in understanding and following commands.

Why	How	Outcome
<p>Ali was unable to follow verbal commands or gestures, which was more difficult when there were many distractions (noise and visual distractions like display boards and toys in class)</p>	<p>The following strategies were used</p> <p>Step 1:</p> <ul style="list-style-type: none"> ● We presented visual cue cards, in order to help Ali understand what was expected of him. ● we took Ali's pictures while he was doing the following actions: <ul style="list-style-type: none"> ● Sitting down ● Swinging ● Hand washing  <p>Procedure:</p> <ul style="list-style-type: none"> ● Before starting the activity Ali was shown the visual cue cards and the action was modeled for him. 	<p>After two weeks Ali started responding and followed some of the commands when the cue cards were shown.</p>
<p>Once Ali understood the visual cues, gestures were introduced</p>	<p>Step 2:</p> <ul style="list-style-type: none"> ● Transition was introduced by using a sign for "break" with right hand horizontal and left hand vertical. ● The sign for "Finish" was introduced by making a cross with the forearms (see picture). ● We took pictures of a person doing these actions and showed them to the child. ● Then we physically demonstrated them. 	<p>After two or three weeks Ali understood and followed the gestures.</p>





To link visual cue cards and gestures, a “visual timetable” (i.e. a schedule board) was made for him to follow a daily routine, to be mentally prepared for the regular schedule, or any changes in this, and to increase his immediate and overall understanding. This helps with verbal directions, as it pairs visual cues with verbal directions.

Step 3:

We took pictures of Ali doing different classroom activities that are part of the school’s daily schedule. We made visual cue cards out of those pictures.

Procedure:

To introduce the cards, we showed them to Ali before each activity. Once Ali was familiar with the pictures, the cards were placed in order. Ali used to pick up the card of the activity to be done, keep it with him till the activity was over and then placed it in a “finish basket” once the activity was over. The schedule was used with the whole class. The teacher used to point at the picture of the activity in the visual schedule. Then Ali was asked to pick the card up.

After two or three weeks Ali understood and followed the gestures.

Ali took time to get accustomed to the visual schedule cards but soon developed the habit of going towards the visual schedule to proceed to the next activity. Using symbols and pairing them with words on Ali’s visual schedule facilitated his understanding that symbols and words represent concepts.

As the activity was used inclusively, it helped the whole class to be more comfortable as the routine was predictable.

To help Ali to understand and follow the commands easily, we decided to give short one step commands along with gestures,

We gave short, simple one step commands to the child. This was followed both at school and home.

Examples:

- Pick up your bag.
- Come here.
- Close the door.

Ali started responding to the commands but needed constant prompting. With time and practice he gained mastery.



<p>always using the exact same words</p> <p>Multiple commands were avoided as that was too much information for Ali to process.</p>		
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Outcome

Ali showed improvement but needed constant prompting to follow directions. The visual schedule was used with the whole class and it was observed that many of the children felt more comfortable with the predictable routine presented visually. The teachers also used visual schedule cards with another child 6 years of age , who had Down syndrome and it also helped him to follow the routine and given directions.

Other activities that helped other children with similar difficulties were:

A 10 year old child with similar visual perceptual problems such as visual figure ground perception and low visual processing speed was helped by the following strategies.

Strategy1

Strategies	Outcome
<p>We planned some worksheets in which the task for the students was to spot the specific pictures in a busy scene given below within the given time. The task was applied in a class for 40 minutes.</p>	<p>Children enjoyed the task and most of them attended well. This task proved that the child was able to identify the picture in a busy scene. She was enthusiastic to finish it within the given time and this helped her to gain some processing speed, while some other children were slower than her in completing the activity.</p>



Considerations before planning

Sensory Processing Disorder (SPD) occurs when the nervous system struggles to adequately process incoming sensory information and as a result produces a disorganized and inaccurate response to expected motor, behavioral or emotional responses.

Reference:

<http://www.ot-mom-learning-activities.com/sensory-processing-disorder.html>

- Younger children with sensory processing difficulties or those with limited language, often have **difficulty understanding instructions** which prevent them from following through on the instructions. While giving instructions to these children make sure that :

- you do not give **too many instructions** at once – children often need a little extra time to process what you are asking them to do and can feel overwhelmed if they are asked to do too many things at once.
- The **instructions aren't too hard** – sometimes children do not have the right skills to do what they're asked to do. For example, if a child does not know how to button her shirt, she might have trouble if she is asked to get dressed.
- **The instructions aren't too vague** – children might have trouble following directions if they aren't clear on what they're supposed to do. For example, instead of saying 'Watch your shoes on the couch, Ahmed' say 'shoes off the couch!' or instead of 'Do you want to go to play with your toys , Sara?' say 'Sara, play with toys!'. It's best to be as clear and brief as possible.

-Three-step prompting

This is a simple strategy that can encourage cooperative behaviour by ensuring that your child will follow through on your instructions.

Step 1 is to give the instruction.

Step 2 is to give the instruction again and demonstrate the preferred behaviour to your child.

Step 3 is to give the instruction again and use physical guidance.

Read more:

http://raisingchildren.net.au/articles/autism_spectrum_disorder_encouraging_behaviour.html
These strategies can be useful for the children of all ages with similar visual perception issues.



2B.6 Sensory Processing


2B.6d Visual attention in Autism.

Observation

Ali was 3 years and 6 months old and attended Nursery. Ali had poor eye contact which led to difficulty in focusing and concentration.

Reasons:

Ali was diagnosed with Autism and faced difficulty maintaining eye contact with people and visual attention with activities. This is common in children with autism and leads to difficulty in visual processing (unable to accurately interpret what is seen) and social communication issues. This led to difficulty in attention and concentration.

Why	How	Outcome
<p>Ali was unable to maintain visual attention, which led to difficulty in maintaining his focus and concentration. This led to difficulty in performing tasks.</p>	<p>Tracking bubbles</p> <ul style="list-style-type: none"> ● We took Ali and a group of children outside the classroom. ● Teacher blew bubbles and children were to sustain their attention and pop them. 	<p>All the children including Ali were actively engaged in following the bubbles and popping them.</p>
<p>To improve his visual attention and eye hand coordination a modified basketball game was planned. Another reason for choosing this activity was Ali's interest in balls.</p>	<p>Targeting Ball in the Basket</p> <ul style="list-style-type: none"> ● Children were involved in a modified basketball game. ● A big ball and big basket were used for this activity. Children stood 4 feet away from the basket and threw the ball in it in turn. 	<p>After two weeks, Ali understood the concept of throwing the ball into the basket and was 40% successful in his attempts. All children including Ali participated in the activity and enjoyed it.</p>



To improve Ali's visual attention, another whole-class activity was planned.	The room was darkened and pictures of animals and babies were posted on the walls in different positions. Children had to find the mother and baby animals that matched, while using a torch.	Ali and other children took interest in the activity. Ali was able to sustain visual attention during this activity for up to 3 minutes.
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Outcome

Ali showed improvement in visual attention and enjoyed the activities that were planned. In addition he worked alongside the children in the class. The strategies used benefited the whole class to improve their concentration.

Considerations before planning

Paying attention uses particular networks in the brain. It is a skill that develops over time. We need to be alert to pay attention, and it is a key skill for learning.

Children with autism spectrum disorder (ASD) can find it difficult to focus on things that are not of their interest. Also, it can sometimes be hard to attract the attention of children with ASD, especially if they have trouble making eye contact with people and sustaining visual attention to perform an activity.

To help a child to maintain visual attention, you can place an object within your own and their line of sight, and then move the object towards his/her eyes. Try starting from different directions and move the object towards his/her eyes.

Eventually your child will start to look towards your face when you call his/her name. You can acknowledge when he gives eye contact and say 'Good! Looking'.

Also, **short activities with definite ends** or goals are good for improving visual attention— for example, making a necklace using two beads and a piece of string. You can put on the first bead together, and then let your child put on the second one, and so forth.

Source:

<http://www.icanforautism.com/single-post/2015/05/28/4-Ways-to-Help-People-with-Autism-Improve-Eye-Contact>



2b.7 Physical Environment

Class: II and III

Age: 7-8 years

Observation:

The classroom was not spacious enough for the students and the teacher to move about during activities and tasks. The seating arrangement was done in three rows and there was not enough space for the teachers to reach every student, especially those who were seated in the corner. There were 28 students in the class all together. Each child had a single chair and a desk. The chair and desk were of appropriate size and were at the chest level. The school bags were kept on the chairs, which reduced the space for them to sit and created restlessness.

Noise from outside made it difficult for the students to hear the teachers instructions clearly, which resulted in distraction. The classroom doors were kept open. Therefore, the teachers had to repeat the instructions several times.

The light from the windows caused some glare on the board and there was not enough light in the classroom generally.

Reasons:

- Classroom was not spacious enough to accommodate all the kids, therefore not leaving enough space for teacher to reach them.
- Due to lack of space other arrangements of the furniture were not possible, which would have allowed easier access for teacher.
- There was no separate area (hooks, cupboard etc.) specified to keep bags. Consequently the children kept their bags on the chairs with them.
- There was noise from outside when children from other classes were playing during games and enjoying break.

Why	How	Outcome
The seating arrangement of the class was in such a manner that teacher was facing difficulty in reaching the all children.	Strategy: Teacher was guided about the different seating arrangements and was provided with a document for ideas. (U-shape seating, L- shape seating, linear seating and group seating etc.)	Teacher tried different seating arrangements according to the document but couldn't adopt any due to lack of space. However, she improved the row setting and made enough spaces in between the rows to allow her to move through the rows and reach all the children.
Distraction due to noise from outside the classroom and visual distraction	Strategy: To avoid noise from outside the following suggestions were made. 1. Keep the class room door closed - only	By closing the doors, the noise was reduced. Students were able to hear the teacher's instructions and concentrate better on their work.



through windows.	when there are children playing outside. 2. Block visual distraction by using curtains or blinds on windows when needed.	In some of the classrooms curtains were placed, which avoided visual distraction.
Children were restless due to insufficient space on their chairs.	Strategy: It was suggested that bags should be kept either by the side of the chair, on the ground, or hung on hooks in specified area.	The students were instructed to keep the bags off the chairs and place them next to the chair instead. This resulted in enough space for children to sit and work. Restlessness was reduced as they were more comfortable and better able to focus on table work.

Outcome:

The children were now better adjusted on their seats with their bags off the chairs, and because the teacher had easy access to the students, this enabled her to support all children’s learning.

Due to reduced noise level, students were better able to focus on their tasks and to hear the teacher’s instructions.

The most important outcome is the realization of the impact that the environment had on learning; now the teachers made it a regular practice that students were checked that their bags were off the chairs, doors were closed when any activity was in process outside and, if available, the curtains were drawn.

Consideration:

For all the above strategies it is important to work closely with the school management as any environmental modification comes under management control.

While closing the doors of the classroom it was also suggested to make sure that there was an adequate light source in the room.

If possible, it is good to change the area of outdoor activity so that the noise would not bother any of the classes.

Teachers were informed about the different factors that create an effective classroom environment, i.e. classroom space, temperature, lighting, noise level and also the displays that support teaching and learning.

Activities and strategies that worked with other children with similar challenges are:

1. A student of grade III had a chair and table that were too high for her. This resulted in restlessness, she often stood up from her place to do the tasks and her legs kept dangling



sitting as they did not touch the ground. To meet her height, a footrest was recommended. That way she would have her legs stable and would find the furniture adjusted to her height.

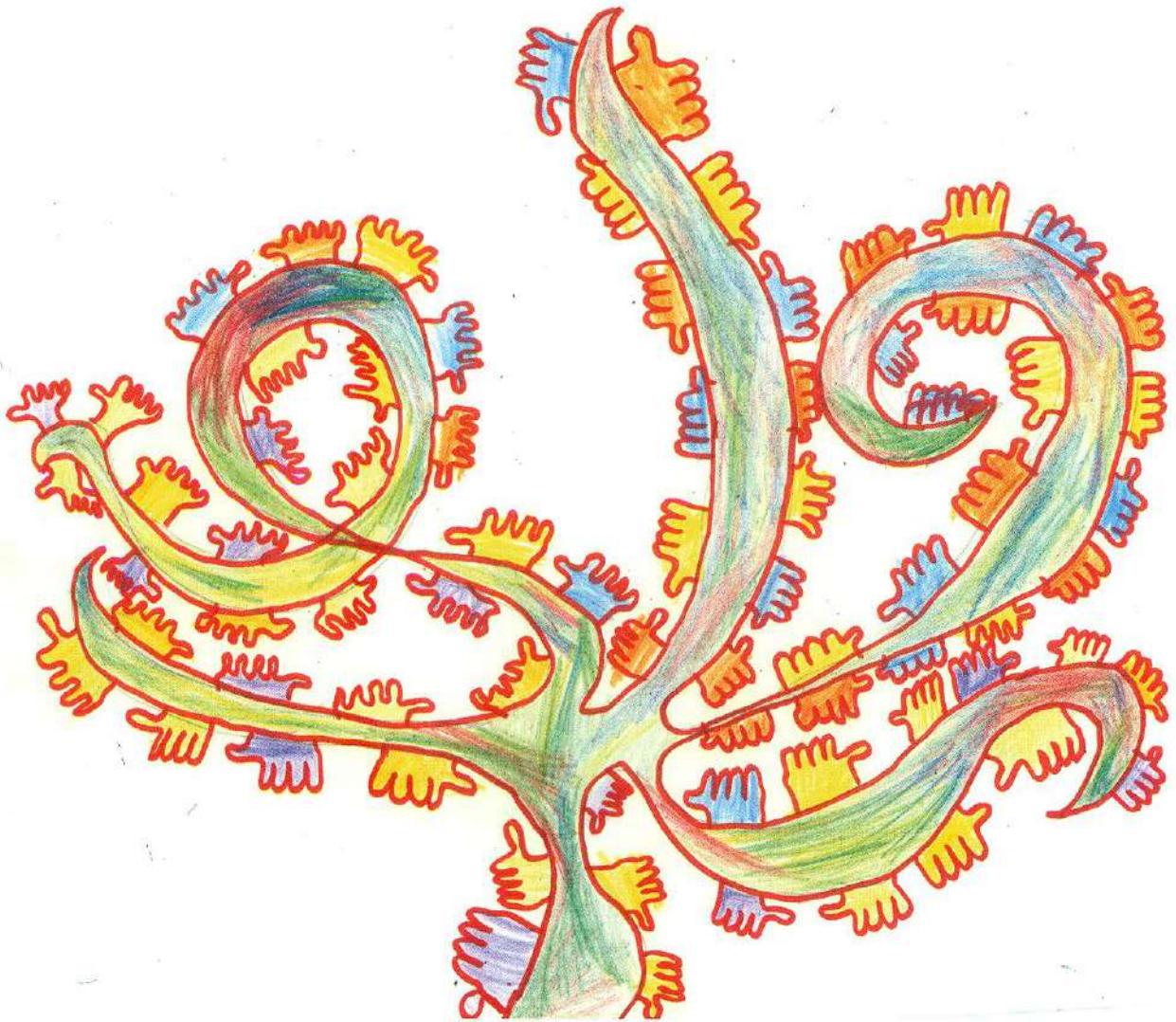
- Another child in grade VI had Cerebral Palsy. She had a left-sided hemiplegia (weakness on the left side) and she kept her left wrist flexed (bent downwards) with adduction of her thumb (tucked into her palm). She had difficulty in managing her academic accessories on the tablet chair and also needed to look in her partner's notebook to copy work given on the board as she had difficulty working directly from the board. Her tablet chair was placed just in front of the door, which was a source of distraction. Also the tablet chair had the arm table at the right side, which blocked the child's most active side. This acted as an obstacle for her to access her bag, which was kept at the right side as her left side was not active. The tablet chair left very little space for children to keep their books and stationary.

How	Outcome
With the school management's support a separate chair and a table suitable for her height was provided for better writing and comfort.	On a separate chair and table now Aania was more comfortable and had better access to her bag as both her sides were free to move. This helped her to focus much better on her work.



Part 3

Spreading the word



3.1 Networking

As we were working together within the three schools involved in the project to develop strategies, materials and solutions to improve the social inclusion and academic achievement of children with special needs, we found it important to build a network of people and organisations who are already working to support children with disabilities and other special needs, but also with those who are not yet doing so.

This section gives details of some of the contacts we made.

3.1a The Government Sector:

Sindh Secretariat - Education Department and Special Education Department

Both these provincial government departments have shown support for this project and for Inclusive Education in general.

The following information and issues were discussed:

- In 2013 the Provincial Government of Sindh brought out legislation that is committed to providing free and compulsory education to ALL children, which explicitly states that children with special needs also have the right to study in mainstream schools with support from trained teachers – see <http://www.pas.gov.pk/index.php/acts/details/en/19/192>. Another document that explains the rules further to help implementation, was published in 2016 - http://rtepakistan.org/wp-content/uploads/2016/03/Sindh_Shadow_Rules.pdf.
- The departments oversee teacher training in the government sector, including professional development programmes. They requested us to provide workshops within their training programmes for Head Masters and for Early Childhood Education Teachers. These were very well received.
- Possibilities for future research and collaboration are being explored and supported by international aid organisations.

Contacts:

- Education Department: Dr. Fouzia Khan, Head of Curriculum wing Education and literacy Department, Govt. of Sindh
- <http://www.sindheducation.gov.pk/>
- Special Education Department: Mr. Ahsan Ali Mangi, Secretary of Special Education.
- http://sindh.gov.pk/dpt/special_education/index.htm

University of Karachi Education Department:

The Faculty of Education at the University of Karachi has three Departments, i.e. Education, Teacher Education and Special Education. The Dean of the Faculty is Prof. Nasir Salman.

We discussed the possibility of having inclusive education added to the teacher training curriculum being followed for B Ed and Associate Degree programmes at Karachi University, in order to raise the awareness of student teachers and equip them with the required knowledge,



Contact: Mr Farhan Khan
+92 (321) 8267326 or info@kvtc.org.uk <http://www.kvtc.org.uk/>

PNS Karsaz Special School

This is a special school for children with physical, sensory and learning disabilities. The teachers have a Masters in Special Education. In addition, Occupational Therapists, Physiotherapists, Speech and Language Therapists and a Braille teacher work at the school. Karsaz Special School has excellent facilities.

We plan to organize a student exchange programme between the Special School students and The AMI School, to give the children an opportunity to work and play together and learn from each other. Collaboration between mainstream and special schools can be a good way to promote inclusion in education and society.

Contact Person: Dr. Nadeem Ghayas, Principal
Address: D-37/2, PNS Karsaz, Bahria College Habib Rehmatullah Road Karachi
Contact details: nadeem_ghayas@yahoo.com



3.2 Educating others



3.2 Workshops for other schools

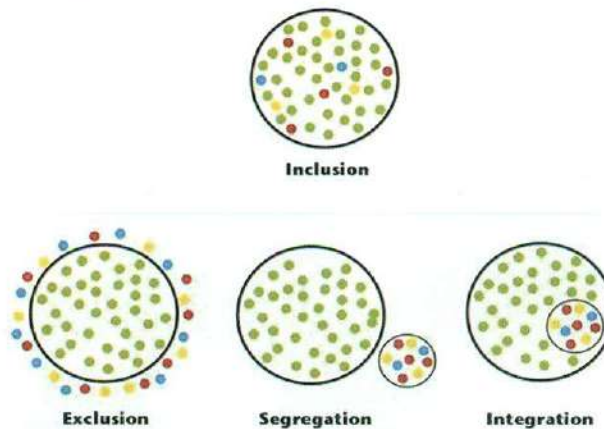
As we started to develop our approach to Inclusive Education, we offered workshops to share our experiences.

The following sections are examples of workshops organized in the project schools, as well as for other organisations. They were all a combination of theory, national and international guidelines, and hands-on activities. Team members took turns to facilitate the workshops and received a lot of good feedback.



3.2a Workshop for Teachers on Developing Inclusive Classrooms

Inclusive education proposes that all education systems should be designed to include all children, regardless of their abilities and skills. Inclusive Education acknowledges that every child is an equal participant in the learning process and should be provided with the support that they require. At the moment most mainstream schools in Pakistan do not cater to children's individual needs. At places we might see students with different abilities included in areas like music, PE or extra-curricular activities, however in the case of academic subjects, students with special needs are either segregated or partially integrated.



A 2-hour workshop was conducted in two schools for Primary and Montessori teachers. There were around 30 participants in each workshop.

The workshop began with a briefing about inclusion and the importance of developing inclusive classrooms. Teachers shared their experience of how they work with differently abled kids in the school and the challenges they face. There were four key areas that were covered in the workshop. These were:

1. Classroom organisation such as furniture, storage, lighting, etc.
2. Instructional material such as textbooks, visual cards, use of technology, etc.
3. Instruction methods – such as thinking time, movement breaks and peer assistance where children can assist each other to do lessons together.
4. Parental involvement – helps to develop the child's learning

Teaching strategies to plan activities that involve all children with varying levels of intelligence were also shared. Our research team members also shared their practical strategies which they had learnt through the AR cycles.

Suggestions for improving the classroom's physical organization such as furniture, class routine such as introductions and rest points, classroom climate such as temperature and lighting, and use of multisensory approaches were discussed.

The workshop also introduced the idea of "Cooperative Learning" strategy where students work in groups and each group has a mix of students with and without learning difficulties. This strategy improves overall achievement and social integration of all children. It also provides students with opportunities to develop interpersonal, social and cooperative skills. Finally, it helps to create an ethic of cooperation in the class.



Another important aspect of the workshop was the opportunity to discuss 'what not to do' such as expecting children to sit still for long periods of time, or changing the curriculum too much. This was very useful as it gave a clear idea to the teachers what to avoid in order to encourage inclusion in classroom settings.

Challenges:

Many teachers are already aware of the importance of having inclusive classrooms but are often uncertain about how to teach children with special needs with peers. This workshop provided them with some practical tips to foster inclusion in classrooms.

The teachers shared that they face a challenge of a heavy academic syllabus to be completed in the given academic time/ session, because of internal and board examinations, which they believe is a great hindrance in applying the activities suggested to promote inclusion.

The management/ policy makers play an important role in developing inclusive classrooms as the resources required to adjust the physical environment, decisions about setting academic syllabus and providing curricular activities are all the matters that need to be addressed at management level in schools.

Overall this was an insightful workshop and the participants requested us to arrange similar sessions regularly so that these tips and ideas can spread to more teachers, so that subsequently more students can benefit.



3. 2b Workshops for teachers: Bullying

A workshop was conducted for teachers at AMI School on 'Dealing with Bullying'.

Children with special needs are more vulnerable to being bullied as they may be seen as 'different' or 'weaker' than other children. It is therefore important to use strategies to prevent bullying behavior and to address it if it still happens.

The workshop was an interactive session for primary and secondary school teachers, in which the teachers shared their experiences and gave their views.

The content of the workshop was as follows and real life examples were used to illustrate each section:

- What is Bullying?
- Types of Bullying
- Warning signs
- Strategies to deal with bullying
- Question/ answer session.

What is bullying:

Bullying is defined as a hurtful behaviour, done on purpose. It is carried out repeatedly and it can be written, verbal or non-verbal.

Bullying includes unwanted teasing, making fun, threatening, intimidating and stalking.

Types of Bullying:

Types of bullying are: physical, social, verbal and cyber.

Warning Signs:

Warning signs of being bullied include the child feels depressed, anxious, eats or sleeps less or more, has difficulty in concentrating on school work, has trouble making friends with others, lies or steals, avoids school, loses lunch money etc.

Strategies to deal with bullying:

Teachers can help by teaching the bullied child the following strategies: ignore, pretend you did not hear, don't cry, don't get angry, don't look at them, don't show them that you are upset, respond to the bully firmly, turn and walk away, talk to an adult etc.

Children can also be helped to avoid bullying:

Do not bring money or expensive things to school, label belongings with marker, avoid unsupervised areas, act confident, don't walk alone, avoid places where bullying happens.

The session covered types of bullying, warning signs and strategies to deal with it. There was a strong emphasis on creating 'Safe Classrooms' as teachers discussed various factors that cause a hostile environment in classrooms such as 'a popular kid' or 'a big personality'. The workshop also used short video clips that gave some useful ideas to integrate in everyday school life. This would help children to develop their social skills and foster a well-balanced environment,



hence reducing the chances of bullying. Some examples are:

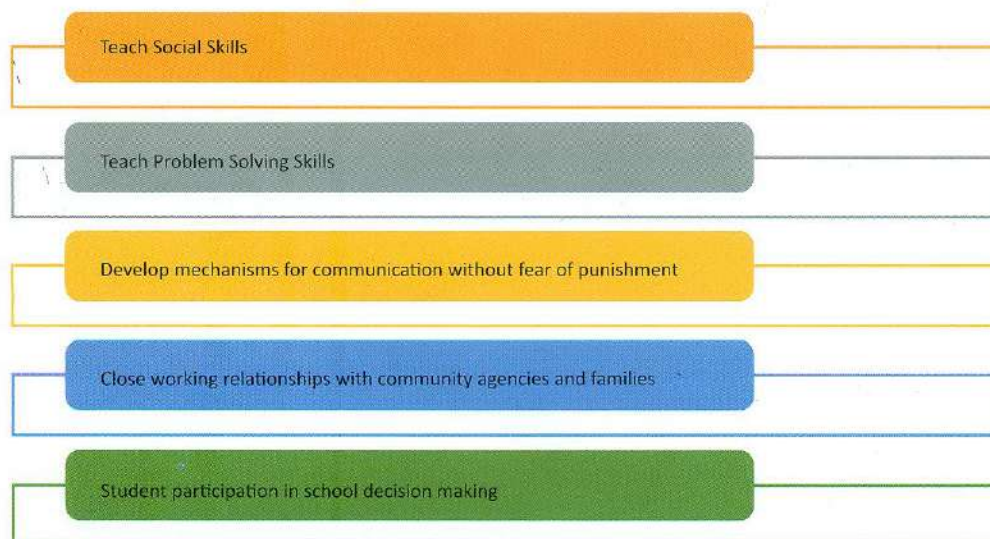
- 'Anti-Bullying Pledge' for all children to sign up to
- 'Mini Mentors' in the playground so that no child feels alone
- Introducing a 'Worry Box' so that children can drop a note if they are worried about something

A second session was held for around 15 senior school teachers. During this workshop, the emphasis was on creating a 'Safe School'. One key issue that was discussed in depth was cyber-bullying and its effect on teenagers. Different strategies to deal with bullying were explored and teachers particularly enjoyed the 'Role Play' where one became the bully and the other became the victim. Furthermore, another important element of this workshop was to raise the importance of teaching social skills to children such as:

- Problem solving
- Anger management
- Expression of feelings
- Conflict management

Both workshops were very well received and generated a lot of interesting discussions. The teachers participated actively and they valued the practical ideas which they could easily implement in their classrooms. This workshop was also an opportunity for them to talk about the issues that they face not only in their classrooms, but also in their own families and with their own children. There were plenty of opportunities for exchanging tips, sharing ideas and questions and answers. Lastly, teachers also suggested that the same workshop should be run for parents as well so that they are also trained in identifying and dealing with bullying. As a snapshot, here is the slide that summaries 'How to deal with Bullying'.

Creating a Safe School



Inclusive education acknowledges the importance of creating safe, inclusive and accepting school environments. This is essential to ensure the wellbeing of students and their success in studies.

Resources:

Anti-bullying video <https://www.youtube.com/watch?v=l8snKQhxQQc>

Helping friends video <https://www.youtube.com/watch?v=6ut4VbvCORQ>

<https://www.bullying.co.uk/bullying-at-school/what-parnts-need-to-know-about-bullying-at-schools-and-academies/>

<https://www.anti-bullyingalliance.org.uk/>



3.2c Parent Workshops

Parents are very important partners who share the responsibility for the development and education of their children with the school.

Throughout the project a number of parent workshops were held in all partner schools. Each one was different, depending on the needs identified by the parents and/or the school.

Introduction to the Project:

The first session held for parents offered an introduction to the aims and objectives of the project. Through this session the team provided an opportunity for parents to give their input. The session was well received and parents willingly shared their ideas and expectations.



Collaboration between Parents and Occupational Therapists at AMI School:

A session was arranged for a small group of parents at AMI. The session began with an overview of the project through power point presentation. The concept of inclusion and its benefits for all children in school were discussed. The parents were asked to think of ideas through which they could contribute to the project in order to promote inclusion.

After a discussion the parents came up with some interesting ideas including:

- Some kind of parent forum including activities that can support learning in school.
- Some digital form of communication (Facebook, What's App) to enable frequent and quick communication.
- Homework advice to strengthen the connection between school-based and home-based learning.
- Topic-based workshops (e.g. behavior management, handwriting, etc.)

The team came to the conclusion that we would need to provide the parents with the support and feedback through workshops and sessions in order to give them ideas for future contribution for inclusion. After a few months a workshop was organized to provide the parents with a forum to discuss and share their ideas on the ongoing research. The topic of the workshop was "Parents supporting professionals to promote inclusion, so that all children can learn better". During the session the collaborative work of teachers and occupational therapists working together at AMI was shared through successful examples of inclusion such as visual time tables, visual classroom rules, use of a multisensory approach for teaching etc.





After that the parents were engaged in hands-on activities, such as working with materials to brainstorm diverse ways of learning through activity-based learning. They were provided with play dough, coloured wooden play blocks, plastic interlocking gear blocks, coloured paper for origami etc. The parents were asked to play with the material and list the concepts/ skills that could be learnt by using it. They later shared the results with the participants. They were happy to learn that a group of professionals was engaged to improve the teaching and learning practices at the school. At the end of the session parents discussed the support they can provide to promote inclusion in the school.



Some of the important suggestions which were different from the earlier small group discussion include:



- Parent-led newsletter with ideas on how to support children at home.
- Guidance to children about attitudes towards children with special needs: accepting diversity.
- Helping teachers to make materials for classroom use.
- Approach to learning: give kids time and hands-on experience to learn at home too.
- Awareness to the children about professional jobs. Inform them about what skills and education are required for those professions.



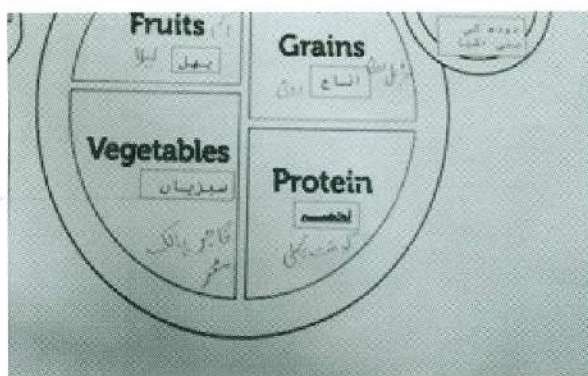
Inclusive Practices & Collaboration: As we started working in other schools, orientation sessions were organized to raise awareness about inclusive practices and collaboration between occupational therapists and teachers in our research. The sessions were appreciated with optimistic feed- back from the parents. One such session was organized, for a local school in a low income area of the city. In our session we shared with the parents the process of our action research working collaboratively to incorporate inclusive practices, to solve individual issues, and improve the quality of education overall. The parents discussed their issues and were happy to work alongside the school in this project.

Health Awareness: Some sessions on health awareness were arranged in one of the schools depending upon the needs of the children and kinds of help required by the parents. Many children in that school were undernourished and parents did not have awareness or the resources to get information about how to plan a well-balanced diet and find less costly food substitutes. Also, they did not have any information about normal development. The workshop focused on these topics:

- Balanced diets for young children.
- Developmental milestone changes in young children.



The sessions were planned in Urdu so that most of the parents could understand and share this knowledge. They were shown pictures of a food pyramid with recommended daily allowances of the different food groups. More reasonable and less costly food alternatives were shared, considering the economic background of the group. Through a group activity, parents planned a healthy diet for their children.



Normal physical growth and posture of preschoolers were shown and parents were alerted to look for any abnormalities and seek help when observed.

Help with Homework: Another useful session on homework was offered to the parents of all the schools we worked with. The topic of the session was 'Help your child with homework'. The session focused on the importance of homework, environments that facilitate good study habits and strategies that help children in their homework. The session was highly appreciated by the parents. They shared their experiences and during the discussion gave solutions to each other according to their social background and available resources. This was a very important element as parents were learning from each other and they discovered the advantages of collaboration and peer to peer support. This had an empowering effect on the parents as it gave them ideas on how to initiate changes on their own.

As the work in other schools was going on, we continued disseminating knowledge and spreading the word through parent orientation sessions at The AMI School, and by sharing books and resources.



3.2d WORKSHOP CONDUCTED FOR OCCUPATIONAL THERAPISTS WORKING IN MAINSTREAM SCHOOLS

A three-hour interactive session was conducted for OTs who were already working in mainstream schools, to create awareness about the results of our collaborative action research project on Inclusive Education and to learn about the World Federation of Occupational Therapists (WFOT) position paper on school-Based Occupational Therapy (2016).

Workshop:

The workshop began with a brief introduction and the approach of our research project. The WFOT position paper on school-based OTs was shared and in particular, the levels of OT interventions were discussed, i.e. the Primary or Universal Design for Learning level, the Secondary or Differentiation level, and the Tertiary or Accommodation Level (please see the introduction for details). The emphasis was to encourage the participants (OTs) about the type of support and services they can provide in school according to these levels of intervention, by increasing work at the Primary and Secondary levels as compared to the Tertiary level. Some case studies were given reflecting the use of Person-Environment-Occupation approach (please see the introduction for details) to provide a clearer understanding of the occupation-based approach to school-based OT and the Action Research cycles. Hands-on activities were completed in groups to encourage the use of educational materials and toys to develop school-related skills and concepts.

Participants shared their experiences about working with children with special educational needs in schools and how their approach towards inclusion vary from the inclusive practice which was carried out in this research project. OTs were also able to understand the importance of practicing primary and secondary levels of intervention to promote inclusion and of using multi-purpose activities to develop skills in children.



3.2e Practical workshops for Teacher's of other school's

During our research we organized many workshops to spread the knowledge and research among the teachers of the schools we were working with and other private schools of different socio-economic backgrounds, including teachers and administrators of government schools.

Among these workshops were two sessions organized for newly recruited Early Childhood Education (ECE) and primary level Head teachers of Sindh government schools. The workshop also included representatives of NGOs.

Early Childhood Education Teachers:

The first session was a one and a half hour session and a part of a three-week in-service training workshop for ECE teachers. The group was first apprehensive about inclusive education, generally taking it as special needs education and considering it impossible for the government sector to cope with the situation because of their limited resources. After we explained the concept of inclusive education and gave real examples from our research, the participants understood the importance of inclusive education and requested a longer session to help them implement this in their own schools.

Head Teachers:

this was a three-hour session which was part of a three-week in-service training workshop for newly recruited Head teachers of Government sector. We briefed them about our research project and the idea of promoting inclusive education in Pakistan through teacher and OT collaboration.

Most of the participants were highly qualified head teachers. This group of teachers initially expressed concern about including special needs children in their schools due to lack of resources and training. After a number of interesting group activities and presentations we explained the difference between inclusion, integration and segregation, which clarified the idea of inclusion. We presented some real examples from our research which helped them think in a different way about practicing inclusive education in their schools and play their role as administrators to facilitate and support their staff. The field of occupational therapy was new to the participants and they were amazed to learn about the support these professionals could provide.

They asked a lot of questions and were very interested to share their experiences and ideas with us. They requested to arrange more awareness programs and workshops in their institutions as well.

Both these workshops made it clear that Pakistani teachers and head teachers are mostly unaware of the need for inclusive education, but that they became open to the concept and are willing to learn how to apply it in their own schools. It is important to provide the theory and policy background as well as practical activities during awareness raising workshops or meetings, because the participants develop knowledge, skills and attitudes that enable inclusive education in their schools through this process.



3.3 Presenting our work at National and International Conferences

The research team members all had opportunities to present the project at conferences in Pakistan and abroad. This gave a lot of opportunities to speak to and learn from other researchers, teachers and occupational therapists who worked together to improve Inclusive Education in their own contexts.

- College of Occupational Therapists Annual Conference, UK, June 2015: Poster
- International Conference Inclusive Education: Education for Diversity 2016: Presentation
- Athens Institute for Education and Research Conference on Inclusive Education, May 2016: Presentation
- Council of Occupational Therapists in European Countries, Ireland, July 2016: Workshop (by Skype as visas did not come through on time)
- British Educational Research Association, UK, September 2016: Poster
- Achieving Impact & Investment in Collaborative Research - A UK Pakistan Partners Event, April 2017, Islamabad: poster
- Royal College of Occupational Therapists Annual Conference, UK, June 2017: Workshop (by Skype as visas were rejected)
- Occupational Science Europe Conference, Germany, September 2017: Poster.
- International Conference on Inclusive Education, Lahore, October 2017: Poster



3.4 Disability Expo

Place: Karachi Expo Center

Title of the exhibition: Disability Expo

Objectives: To raise awareness about different organizations supporting differently abled people.

Action Research Stall:

Our team of Action Research placed a stall to inform the visitors about our project "Developing the Role of Occupational Therapists in promoting Inclusive Education in Pakistan". Our purpose was to develop connections with different institutions working for the same purpose so that at the end of this project we can share our findings and the resource book, which would help others in promoting inclusive education.

Visitors were interested in our stall as they wanted to know about which schools offer inclusion in Karachi and how they help all children learn together. They were also enquiring about the role of different experts like occupational therapists, psychologists, physiotherapists etc. in schools. Many were comparing special schools with inclusive schools as they were asking about schools where different experts could help students with special needs individually. Overall this expo was quite insightful as people from different backgrounds shared their knowledge and learnt about each other's experiences and ideas.



Teachers from The AMI School at Disability Expo





Occupational Therapists from the Institute of Physical Medicine and Rehabilitation, DUHS, displaying adaptive devices at the Karachi Expo.



Interest from the public for Occupational Therapy and Inclusive Education.



Part 4 Resources



4.1 List of online Resources

Websites with practical activities and advice:

OT Toolbox: <http://www.theottoolbox.com/>

Box of Ideas: <https://www.boxofideas.org/>

OT Mom Learning Activities: <https://www.ot-mom-learning-activities.com/>

Teacher Vision: <https://www.teachervision.com/teaching-strategies/special-needs>

Your Therapy Source: <https://www.yourtherapysource.com/freestuff.html>

Your Therapy Source – reasons for physical movement in class:
<https://www.yourtherapysource.com/blog1/2017/03/27/evidence-based-reasons-include-movement-classroom-instruction/>

Clever Classrooms report about the effect of the physical environment on children's learning:
<http://www.salford.ac.uk/cleverclassrooms>

Child-to-Child resources for active child participation:
<http://www.childtochild.org.uk/news/child-child-materials-now-available-website/>

Online Books:

The following books (and many more) are available on the UNESCO resources website
<http://unesco.org.pk/education/icfe/resources.html>:

McConkey, R (editor) (2001) Understanding and Responding to Children's Needs in Inclusive Classrooms. UNESCO.

Perner, D, Ahuja, A and others (2004). Changing Teaching Practices. UNESCO.

UNESCO (2004) Embracing Diversity. Toolkit for Creating Inclusive Learning-Friendly Environments.

Werner, D (1987). Disabled Village Children. The Hesperian Foundation.
<http://www.dinf.ne.jp/doc/english/global/david/dwe002/dwe00201.html> This is book is full of practical ideas to support children with a range of disabilities in the community and in school.

Occupational Therapy and Inclusive Education:

Partnering for Change: a model of school-based OT developed in Canada:
<https://www.canchild.ca/en/research-in-practice/current-studies/partnering-for-change>.

World Federation of Occupational Therapists Position Statement: Occupational Therapy Services in School-Based Practice for Children and Youth (2016). <http://www.wfot.org/ResourceCentre.aspx> (Filter for Position Statements).



International Guidelines for Inclusive Education

UNESCO Resources for Inclusion in Education: a range of reports and guides:
<https://en.unesco.org/themes/inclusion-in-education/resources>

Enabling Education Network: <http://www.eenet.org.uk/>

Start on the “What is Inclusive Education” page:
<http://www.eenet.org.uk/resources/docs/124394e.pdf> and then explore lots of documents and videos to learn more.

The Centre for Studies in Inclusive Education: <http://www.csie.org.uk/>

UNICEF website:

Inclusive Education resources:
https://www.unicef.org/education/bege_61717.html

State of the World’s Children Report (2013), focus on Children with Disabilities:
<https://www.unicef.org/sowc2013/>

State of the World’s Children Reports (all years): <https://www.unicef.org/sowc/>

Education for All (1990): <http://unesdoc.unesco.org/images/0012/001275/127583e.pdf>
Millennium Development Goals: <http://www.un.org/millenniumgoals/bkgd.shtml>.

Government of Sindh School Education & Literacy Department:
<http://www.sindheducation.gov.pk/> Contains statistics and information about education in Sindh.

Government of Sindh Special Education Department:
http://sindh.gov.pk/dpt/special_education/index.htm

The Sindh Right of Children to Free and Compulsory Education Act 2013
<http://www.pas.gov.pk/index.php/acts/details/en/19/192>.

Rules under this Act (2016):
http://rtepakistan.org/wp-content/uploads/2016/03/Sindh_Shadow_Rules.pdf
Produced to help schools to implement the Act.



4.2a Situational Analysis – How inclusive is the school?

The following list of questions will help the management and teaching team of a school to evaluate which policies, practices, resources and attitudes already support– or hinder – inclusive education. This will become the starting point for planning how to include more children with special needs, and how to improve the teaching and social environment in the school.

What is the policy on giving admission to children with an identified special need?

What is the history of this policy?

Does this depend on the nature and severity of the special need?

What is the policy on keeping children in school once a special need is suspected /identified?

How many children with special needs are there in the school / in each class?

What is the nature of their special needs (conditions / functional description)?

Do children with special needs follow the same curriculum as the other children (in principle and in practice)?

Are the same assessment methods used for children with and without special needs?

How satisfied are the children with special needs / their teachers / their parents with their academic process?

How satisfied are the children with special needs / their teachers / their parents with their social and emotional status?

What is the overall approach to teaching / education in the school?

How do teaching approaches used in the school facilitate or hinder children working and learning together in mixed ability pairs/groups?

Do the children with special needs have an Individual Education Plan (IEP) or similar?

Who is involved in writing the IEP? E.g. teachers, head teachers, therapists, psychologist, parents, child?

How is the IEP used? E.g. for lesson planning, classroom organisation, individual support, designing individualised learning tasks, reporting on progress, communication with parents, etc.

What (teaching) qualifications do the teachers have?

Have class teachers received any specific training or guidance on how to teach children with special needs? If so, explain what / how they acquired this.



What is the teaching team's attitude towards including children with special needs?*

What is the attitude of children without special needs towards those with special needs?

What is the attitude of parents of children without special needs towards the school's inclusion practices?

Are all areas of the school building accessible for children with limited mobility?
If not, what arrangements are made for the child to participate in all aspects of the school day?

Do any professionals (therapists, psychologists, etc.) visit children in the school? If so, how do they liaise with the teaching staff?

What involvement do occupational therapists have currently?

If children attend therapy or remedial sessions outside school, do those professionals communicate with the school?

Is there a parent-teacher association (PTA)? What are its roles?

Does the PTA have a role in curriculum design?

Does the PTA have a role in decisions about the admission of children with special needs and their support?

Identifying resources outside the school that are/could be drawn on:

- courses for CPD in the area of inclusion
- other inclusive schools with whom experiences can be shared
- professionals / treatment centres
- web-based resources

Any other information that will be useful to know at the start of the project:



4.2 b Classroom observation

Date:	Class:
Name of observer:	
Describe the physical environment, e.g. set up, lighting, wall displays	
Describe the activity / activities taking place, e.g. materials used, explanation or instructions given, children work or play alone / in pairs / in groups?	
Whole-class Participation:	
To what extent are the children participating? - Fully participating? - Fully participating with help from an adult and/or adaptation of the task? - On-looking –involved as an active observer? - Not participating at all?	
How do you know? Describe what you observe children doing!	
What facilitates the participation of children, e.g. physical environment, materials, instruction, classmates, adults?	
What barriers are there to the participation of children, e.g. physical environment, materials, instruction, classmates, adults?	



Individual child participation:

Choose one child who is not participating fully and consider possible reasons for this.

Briefly describe the child:

Consider factors in the environment, the occupation and the child:

Person (child):

Environment:

Occupation/task:

Reflect:

What can you conclude from the above about what **facilitates** or hinders the child's participation?

Plan:

What will you do next?

(you may need to move on to the Resource Development Log from here!)



4.2c LOG SHEET for RESOURCE DEVELOPMENT

(teaching materials, educational games, lesson plans, classroom strategies, etc)

Date:	Stage of cycle	What did I/we do?
	Observe: What is the issue or challenge to be addressed?	
	Explore: Gain more info (e.g. from records / teachers/ parents/ OT assessment)	
	Reflect: What is the reason for the problem (use PEO)	
	Plan: Discuss options, list them and choose one	
	Plan: Think / read / explore www / use experience to design	
	Act: Make the activity / thing / strategy / lesson plan	
	Reflect: Does it look like it will work? Any doubt?	
	Act: Make final adjustments	
	Act: Use it / apply it / try it out	
	Observe: Describe what you see when it is used	
	Reflect: How did it go and why?	
	Plan: Are any changes needed?	
	Act: Make adjustments OR Continue using it AND File photograph / copy with this log with instructions how to make it.	
	Any other comments	



4.2 d Reflective log of action research activities:

Name	
Date	
Others present	
Nature of activity	E.g. classroom observation, implementing a new strategy, making a teaching resource, meeting with parents, meeting with team, etc. Describe:
Phase of AR cycle	(please circle) Exploratory phase – planning – action – observation – reflection – complete Action Research cycle - unsure
Description	What / where / who did you actually do / observe / discuss?
Reflection	What was important about this activity/observation? - Ask "why?" to explore reasons for issues (e.g. child factors, environmental factors). - What did you learn? What new ideas did you get?
Next step (Plan)	What will you / other team members do next, based on this activity? E.g. explore further / plan / act / reflect? Be specific!
Action	Describe how your plan worked out in practice
Observe	Describe how your plan worked out in practice
Reflect	Why is it important? What does it mean for the next step?
Plan	Review your plan: - Refine it if it went well - Change it if it did not go well
Etectera!	



4.2 e Individual Education Plan

Child's Name:	
Class:	
Nature of special needs:	
Professionals involved:	
Present Level of Performance	<i>Describe the child's strengths and needs here:</i>
Long term goal(s)	<i>Decide on the overall goals for the academic year</i>

Objectives	Date set	Way to test success		Date Achieved
1				
2				
3				
4				
5				

Making the Plan

1	Suitable teaching methods	
2	When and where activities should take place	
3	Environment factors	
4	Reinforcements for learning	
5	Kinds of changes to teaching materials	



4.2 f Inclusive Lesson Plan

Lesson Plan Title	
Grade / Subject	
Topic / Concept	
General Goal	
Specific Learning Objective	
Prerequisites	
Warm-up Activity	
Instructional Procedure	
Ensuring Inclusiveness	
Assessment / Evaluation	
Connections / Follow up	
Evaluation of the Lesson Plan	



“Inclusive Education: the way forward”



This Resource Guide is based on the Collaborate Action Research Project conducted by the Occupational Therapy departments of Brunel University London and Dow University of Health Sciences Karachi together with The AMI School Karachi.

The project was funded by the British Council Pakistan and the Higher Education Commission of Pakistan.

We hope that it will inspire Pakistani teachers, school managers and occupational therapists to support more and more children with disabilities and other special needs in mainstream school settings.

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