CHAPTER - IV

SAMVEDA REMEDIAL
TEACHING MODEL -(S.R.T.M.)
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4.0.0. Introduction

In the present study Samveda Remedial Teaching was employed. Hence the features of the remedial model are discussed below prior to the results section.

Samveda is a Kannada word, which means “to be conscious about delicate feelings and to understand a child in the right perspective”. Samveda Training and Research centre is a registered NGO dedicated to the rehabilitation of the children with specific learning disability (SLD) through remedial teaching and research related to special needs education.

The Samveda remedial teaching model is a holistic approach incorporating multi-disciplinary components to solve an individual child’s learning disability. Training a child with LD does not necessarily mean eradicating the neuro-psychological deficiencies. Essentially training or intervention of children with LD establishes alternative strategies that will help the child to develop scholastically. In other words, the defects arising out of such a deficiency may also cross over into adulthood. But with proper intervention the errors or defects may be reduced and the child will be in a position to handle his/her defects successfully. Though Samveda remedial teaching model is directed towards remedying scholastic deficiencies of the child, it also has elements of developing the total personality of the child.

At Samveda importance is given to developing awareness among parents, guardians and members of the family regarding the problems faced by the child and the kind of support he/she needs. They are encouraged to ask questions, clarify doubts regarding the scholastic development of the child. Reading materials are supplied to improve their knowledge regarding specific learning disability. Due to the lack of awareness among parents and society at large it is difficult for the staff of Samveda to convince parents, who have very high expectations from remedial teaching. When results start showing parents tend to become over – ambitious. A sort of informal
teaching is designed for such parents, so that a wholehearted support is rendered from their side. When parents and family members fail to interact positively, rehabilitation process suffers. For those children who received positive and constructive support from parents and members of the family, the results of rehabilitation have been exemplary.

4.1.0. Objectives of Samveda’s Remedial Teaching

- Each pupil is different in terms of learning ability, academic standards, classroom learning and academic performance, and each has his own way in learning. The aim of SRTM is to provide learning support to pupils who lag far behind their counterparts in school performance. By adapting school curricula and teaching strategies, teachers can provide learning activities and practical experiences to students according to their abilities and needs. They can also design individualized educational programmes with intensive remedial support to help pupils consolidate their basic knowledge in different subjects, master the learning methods, strengthen their confidence and enhance the effectiveness of learning.

- Throughout the teaching process, teachers should provide systematic training to develop pupil’s generic skills, including interpersonal relationship, communication, problem-solving, self-management, self-learning, independent thinking, creativity and the use of information technology. Such training can lay the foundation for the pupil’s life-long learning, help them develop positive attitudes and values, as well as prepare them for future studies and careers.

4.2.0. Role of a Remedial Teacher

A remedial teacher is a very special person. He / she is not a run-of-the mill type schoolteacher. He / she plays a very important role in modeling a child with disability. Therefore, he / she may have to take up the role of a mother, father, brother or a sister or just a good friend. This kind of an emotional attachment with a child enables a firm bondage of relationship between the
student and the remedial teacher. He / she may also have to play the role of a specialist, for example like a doctor, nurse, engineer or more essentially a craftsman or draftsman. The knowledge of these skills helps him / her to develop new tools which can be used for remedial teaching. As demonstration is a very important method (as children with LD lack imagination) used in remedial teaching, teaching and learning tools must be kept handy. This requires a lot of preparation on the part of the remedial teacher. He / she also must carefully observe and inform the researcher as to the necessity of a specific tool type needed for remedial teaching. Hence he / she plays the role of an observer and must also assist the researcher. A meaningful interaction between the remedial teacher / designer / researcher results in superior teaching and learning material. Over the years of practice / experience a remedial teacher can try out plans of his own.

Hence, the training that a remedial teacher receives must be of a higher order. For example, a remedial teacher must know how to sew, embroider, tie knots, lashings etc. Normally a regular class teacher does not learn these skills.

4.2.1. Requisites of a Remedial Teacher

Selection

Selection is an important criterion. If a wrong candidate is chosen and trained for period of 1 or 2 years; the efforts could go down the drain after the training, if the philosophy of the trainee does not match with the requisites of special education. For example, a regular classroom teacher will not take into consideration if a boy / girl has not groomed his / her hair. At the most he may punish the child for having come to the class shabbily dressed. But, a remedial teacher would take the boy / girl to his / her chamber and help the child to groom his / her hair by giving a comb and mirror.
A remedial teacher cannot expect higher-level functions to be performed by children with LD. He / she must be above age and curriculum level dilemmas. For example, a remedial teacher teaching a 12 year old boy / girl (VIII grade) must not feel disappointed / depressed / frustrated when he / she sees a very bad handwriting, spelling, grammar, even though the child has been taught several times on all these topics. Lack of memory, disorientation and cognitive deficits make a child with LD fail continuously. It is the duty of a remedial teacher not to lose patience but always concentrate on the same topics using better lesson plans. Remedial teacher must always take it as an opportunity to learn more about the defects of a child with LD rather than getting frustrated. Hence a remedial teacher has to be highly cultured and possess the highest order of patience, perseverance and a strong will to continue work with the child.

As there are no prescribed textbooks, curriculum or syllabus, it is necessary that a remedial teacher must possess the ability to teach children of different age groups and children of different academic levels. This means a remedial teacher must posses the ability to teach a child of six years, or 16 years.

A remedial teacher must have a thorough knowledge of assessment and evaluation procedures and interpretation of assessment and evaluation reports to assist him/her in preparing Individualized Educational Plan (IEP), Individualized Activity Plan (IAP) and Individualised Medical Plan (IMP).

4.3.0. Curriculum Based Measurement (CBM)
Each module on the SRTM has to be followed by a written / oral test. After a module is complete for a particular child these test papers related to that model are given and the scores are duly recorded. This evaluation establishes the child's performance and the changes that are needed both in the curriculum and in the lesson plans. For example, among the tests that are administered in English the one at the ends of module 4 and module 6 which checks the reading speed of a child is very critical. If the speed is low
and the comprehension is also low then repetition of the module related to
sight vocabulary and generic structures may be necessary. As the IEP is
flexible it allows a remedial teacher to advance and retard the progress of
the curriculum based on evaluation after every module. This is what is
known as curriculum based measurement (C.B.M.).

A remedial teacher must be a person who keeps smiling with the children
and keep children happy under all difficult circumstances. A big broad smile
all the while keeps the child in good mood. A remedial teacher must have
patience and enthusiasm. Impatience and lethargy on the part of the
remedial teacher is an unacceptable characteristic, which not only curtails
the speed of remedial teaching but also disturbs the basic component i.e.,
reinforcement of fundamentals. The remedial teacher must have the
patience till the child masters the fundamentals.

4.3.1. Resources in a Resources Classroom
Resource classroom according to SRTM is a fixed room in which all the
resources required to teach the subject are kept. For example the Kannada
resource room shall have a library of Kannada books, dictionaries, posters,
lessons, computer etc. Hence it is not possible for Kannada remedial teacher
to go from one class to the other as she cannot carry her resource material
from one classroom to another classroom. Therefore, it is essential under
SRTM that a child or a group of children shift from one resource room to
another resource room after a period of one hour. A resource room, hence,
must be a treasury of all tools, maps, charts, CDs, games etc. In addition to
the language laboratories, math lab, science lab etc, a small auditorium is
necessary to show subject related CDs for one or two groups together. The
Individual activity plan (I.A.P) describes the kind of activities (inside the lab
and outside) that a child has to do and such activities must be recorded by
using video or photographs and these video or photographs must be
displayed in the resource room. In other words, the child must be oriented
that videos, photographs, cassettes are not just for entertainment, but also to
pursue academic skills. Because of their reading disability they seem to show extraordinary interest for video and audio CDs and cassettes. For children with LD reading is frustrating. Hence, their love for watching T.V. SRTM strives to achieve good reading speed by employing all the resources available at the resource room. It also tries to keep the child happy by making use of visuals. Remedial teachers must be careful not to employ more audio and video support instead use the video and audio support to instill reading habits. For example, use of ‘scan and read life’ software regularly in the resource room.

4.3.2. Enthusiasm and Remedial Teacher

A remedial teacher must be enthusiastic. He / she must make the content of a lesson interesting and exciting by adding anecdotes, short stories, jokes etc. These help as mnemonic cues for the child to remember the content of the lesson by remembering the story or anecdote or a joke.

Make the child work inside the resource room by giving him written instructions instead of oral instructions. The child must process every activity inside the resource room or the completion of a module by reading the written instructions only. This helps the child to read and understand rather than to listen and understand. Written instructions are used in even for activities outside the resource room like sports, trekking etc. Written instruction cards are also used for behavioural correction. Hence, the written instructions must be clear and unambiguous. Graded language must be used in such instructions based on the modules.

By keeping the class lively, active and engaged in activities the child’s working memory responds well. Hence there must not be any disturbance while a remedial teacher is teaching. If the teacher’s presentation is dull, drab and desultory the students zone out.
A remedial teacher must realise that every child with LD has high regard for the teachers concern and commitments. This is so because the mainstream schoolteacher will have looked down a child with SLD upon. They would have snubbed or scolded a child with LD for low academic performance. These children are ill treated, insulted and humiliated by the mainstream school teacher in front of the peer group. In a resource center the situation is entirely different and hence a remedial teacher’s enthusiasm yields the achievements with only 1/3 of the behaviour problems as the same lessons delivered unenthusiastically.

4.4.0. Useful strategies supporting remedial teaching

Concrete experience: In the initial stage of developing both Kannada and English words with concrete meaning must be selected and introduced to the students. Later words with abstract meaning must be introduced. The major problem among children with LD is that words with abstract meanings are not properly comprehended. They tend to think about words in the direction of concrete experience. But while teaching mathematics and science lab or real world experiences help them to understand a lot better. A combination of mnemonic encoding and concrete experience brings out best results.

Practice and feedback: Though traditional drill method is used in SRTM in certain modules, the main thrust is not on drill. Hence, remedial teaching is not drill and kills business. Introducing games, computer-assisted games etc. are more likely to leave a lasting impression on the child’s mind. It should be noted that children with LD get frustrated and bored with only the old-fashioned practice session. The remedial teacher must be very observant to make necessary changes in the strategy when the child is disturbed by the conventional practice session. The play-way methods are liked when compared to the conventional method. During practice sessions using black board usually disorients the child. The child with LD does not particularly appreciate any strategy that is used for mass education. The one-to-one interaction produces a sort of control by the remedial teacher on the child.
Teaching using black board gives ample opportunity to zone out. If this has to be reduced the remedial teacher will have to interact with the child on one-to-one basis.

In each module after the content is explained with supporting examples the teacher has to give sufficient time to the child to understand a concept. Usually before completing the module a model test is given. If the child is not confident he needs rehearsals. Rehearsals are important. They develop confidence in the child.

**Feed back:** If the child fails to comprehend even after repeated explanation the remedial teacher must encourage him. After a couple of rehearsals the module test must be given and the results of the test must be discussed with the child. If the child has committed errors proper feedback must be given. Analysing failure is an important duty of a remedial teacher. Giving feedback to the student on a regular basis on his failures and successes helps the child to analyse his problem. The child must be made to understand the curriculum-based measurement (CBM). He should know how we are analysing his defects. Why tests are conducted and how they are interpreted must be clearly explained to the student. This makes him realise that he should achieve better results in every module test.

**Give, Fade and Take-Back Strategy**

Strategies used at different levels of SRTM have certain life. If the use of a strategy is prolonged it reduces its efficacy and the child continues to process other concepts based on the strategy already introduced. Therefore depending on the module a strategy is introduced and when the child is moving towards the next module a fresh strategy may be introduced. In that case it is necessary that the use of previous strategy be faded and finally withdrawn. For example, at the fundamental level (English) phonic exercises are predominantly used in many modules. But when the child shifts to the interface level the phonic exercises are reduced and spelling strategies are
introduced. And when the child shifts to the parallel level, the phonic and spelling rules are completely withdrawn but grammar strategies and generative structures are given utmost importance. At the parallel text and text level if the child makes spelling errors he is asked to look into the dictionary for correcting spellings. This is how give, fade and take-back strategies are employed at different levels in SRTM.

4.4.1. Principles of Helping Pupils with Learning Difficulties

- **Teaching preparation**
  Before preparing for their lessons, remedial teachers should identify pupils’ diverse learning needs as soon as possible so that they may design appropriate teaching plans to facilitate pupils’ effective learning.

- **Devise various learning activities**
  Since pupils have different characteristics in learning, teachers must devise different learning activities with the same teaching objective to develop pupils’ varied abilities and skills in problem solving. It is more effective for teachers to adopt a series of relevant and simple teaching activities than assigning one long teaching activity since pupils may acquire the required knowledge and skills better through diversified activities.

- **Design meaningful learning situations**
  Remedial teachers should specifically design meaningful learning situations, language environments (especially for English subject), games or activities so as to provide personal learning experiences for pupils’ and stimulate their interest and initiative in learning.

- **Teaching approaches**
  Teachers should give concrete example before proceeding to abstract concepts by way of simple and easy steps at a pace in line with the learning abilities of students. Teachers may teach new concepts from different perspectives by various approaches so that pupils can grasp the ideas
through meaningful and repeated illustrations. Teachers should encourage pupils’ active participation by more frequent use of teaching aids, games and activities. They can also make use of information technology and all the teaching resources available to help pupils understand the main points.

- Provide clear instructions
Pupils with learning disability are less competent in understanding written language. Therefore, remedial teachers should give pupils short and clear instructions to avoid confusion. They must explain clearly the arrangement of each learning activity. If necessary, they may ask pupils to repeat the steps of activities so that every pupil may understand the instruction.

- Summarize the main points
At the close of teaching, should always sum up the main points in teaching and write the key phrases on the board to enhance pupils’ audio and visual memories. Teachers can guide their pupils to link up the knowledge they learn from class with their life experiences so as to enhance the effectiveness of learning. Besides, guiding pupils to repeat the main points in verbal or written form is also an effective way of learning.

- Enhance learning interest and motivation
Suffering from frequent frustrations in their work, pupils with learning disability may gradually lose their interest in learning. Therefore, teachers should adapt the curriculum to meet the needs of pupils. With less pupils in the SRTM, teachers can design interesting activities coupled with reward scheme to stimulate pupils’ interest. It is most importance to help pupils overcome their learning difficulties so that they may gain a sense of achievement and recover their confidence and interest in learning.

- Encourage pupils active participation in class activities
Pupils with learning difficulties usually lack self-confidence and are more passive in class. They seldom ask questions or express their views.
Remedial teachers should patiently encourage active participation in class. Pleasurable learning experiences may help enhance pupils' interest in learning.

- Show concern for the performances of individual pupils
Pupils may encounter different problems in their studies. Therefore, teachers should carefully observe the learning process of individual pupil in class. Whenever necessary, they should provide individualized remedial teaching before and after class, during recess or lunchtime, so that they can remove their leaning obstacles as soon as possible. When marking assignments, teachers should take note of the common errors of pupils and deliver the correct concepts and knowledge to them promptly.

4.4.2. Curriculum Adaptation
- Remedial teachers should adapt the curriculum to accommodate the learning characteristics and abilities of pupils. They should set some teaching objectives, which are easy to achieve to ensure that pupils may acquire the knowledge as desired after the completion of each module.
- Teaching should not be directed by textbooks, which should not be taken as the school curriculum. There is need to cover all the contents in the textbooks as well. Schools can classify the teaching content into core and non-core learning aspects according to the teaching objectives and pupils abilities. Core learning aspects require in-depth studies and application whereas materials in the non-core or advanced learning aspects may be streamlined or appropriately selected for teaching.
- Teachers are encouraged to adopt recommendations on cross-curricular teaching by linking up related teaching areas flexibly so that more time can be spared for effective activities and learning.
- Teachers should make good use of all teaching materials. For example, they may select and use the materials in textbooks to meet the teaching objectives, or compile their own supplementary teaching materials. They may also design materials of different standards. Materials from the
internet, newspaper, magazines and references provided by the Education Department may help teachers design interesting and enjoyable activities to enhance pupil’s effectiveness of learning.

4.4.3. Homework Policies

- Schools should formulate clear policies on homework, which should be reviewed regularly. The assignments should be targeted at the teaching objectives and serve the purposes of learning. Exercise books available in the market should only serve as a reference. Schools should choose these exercise books carefully and make appropriate adjustments to the category, quantity and quality of homework.

- Teachers should take note of the following points when designing homework for pupils
  i. The homework should have clear objectives and accommodate the level and needs of pupils;
  ii. The form and content of homework should be of a great variety so as to develop pupils creativity, self-learning and collaborative skills;
  iii. The homework should match the content taught in class;
  iv. Teachers should give simple and clear instruction;
  v. Assign appropriate amount of homework each day;
  vi. Ineffective and mechanical drills should be avoided; and
  vii. Teachers should make good use of the homework as a tool for evaluation and feedback to enhance the motivation and effectiveness of learning.

4.4.5. Formulation of Teaching Plans

- When formulating teaching plans, teachers are advised to take the following two aspects into consideration: On the one hand, teachers should formulate practical teaching objectives that meet the learning characteristics and weaknesses of pupils so as to foster a sense of achievement. On the other hand, teachers should decide whether the
learning items should be taught in detail or in brief. Moreover, the items should be classified into different levels and taught through small and simplified steps to facilitate comprehension as well as strengthen pupils' confidence in learning.

- With reference to the common difficulties encountered by pupils, teachers should set down the main points for remedial teaching and make adjustments promptly according to the performance of students.
- Teachers should make a brief record of the learning aspects, teaching objectives / aims, key learning points, activities, use of teaching aids and evaluation for future reference.
- Teachers may deliver the teaching content by means of modules, themes, learning aspects or teaching items and work out the teaching plans accordingly.
- Post-lesson reviews should focus on the teaching process and pupils performance, with specific and critical evaluations made. Examples of main points for review are as follows:
  i. The common difficulties of pupils
  ii. The effectiveness of teaching strategies and class activities to help pupils understand the taught content, grasp the main points and apply what they have learned; and
  iii. Issues of concern (e.g., basic knowledge that requires enrichment, the need to break down or re-arrange teaching steps, etc.).

4.4.6. Teaching Activities, Aids and Supporting Materials

- Teachers should design appropriate learning activities in line with the focus of teaching. On the basis of low starting point, small steps, diversified activities and instant feedback, teachers should encourage pupils to participate actively during the learning process to help master the skills and methods of collaborative learning. Diversified teaching activities such as situational teaching, competitions, collation of information, discussion, oral reporting, games, topical research, production of graphs / figures / models, role play, recording, visits and
experiments may help pupils enhance their interest in learning, stimulate their thinking and reinforce the effectiveness of teaching.

- Teachers should exercise their discretion in the appropriate use of teaching aids. Appropriate teaching aids not only help to enhance pupils' interest in learning, but will also consolidate the knowledge they learned, thus achieving the objectives of teaching. Common teaching aids are concrete objects, figures, models, word cards, number cards and audio-visual equipments such as tape recorder, headset, wire free induction loop system and multimedia teaching aids, etc. When designing and using teaching aids, teachers should first consider their practical use and assess whether the aim of remedial teaching can be attained.

- The design and organization of teaching materials should be pupil-oriented. They should be selected and collated systematically to serve the purpose. Teaching materials provided by the Education Department or other academic institutions may also serve as a reference for teachers.

4.4.7. The Setting of Learning Environment

- Well-designed learning environment helps to maintain pupils' attention and interest in learning and facilitates the achievement of teaching aims. In this way, it is easier to achieve the aim of teaching. The teaching environment should be designed to support remedial teaching and group activities. For example, teachers and pupils may form a circle when holding discussions; and two pupils or group members involved may sit together during peer group or small group learning.

- Teachers should prepare a rich, pleasant and comfortable learning environment for pupils. For example, they may set up a self-learning corner, book corner, toy corner, science corner, prize corner or stationery / learning resources corner, etc. to enkindle pupils interest in learning.

- Teachers may display the teaching materials of the week or the learning outcomes or products of pupils at prominent places to stimulate their motivation in learning.
4.5.0. Remedial Teaching Strategies

The actual training concentrates on three aspects:

1. Physical health
2. Mental health
3. Scholastic development

Based on these aspects three plans are made

1. Individual Activity Plan
2. Individual Medical Plan
3. Individual Education Plan

4.5.1. Individual Activity Plan (IAP)

- Physical exercises like jogging, skipping, yoga, team games etc., are planned according to the physical health of the child. However, yoga is compulsory to all.
- Different activities are planned to train an individual child in the following aspects
  - Eating habits
  - Concentration and Balance
  - Multi-sensory coordination
  - Fine motor skills
  - Time consciousness
  - Personality and appearance
  - Social movements
  - Interactions at the market place, bank, post office etc.,

4.5.2. Individual Medical Plan (IMP)

- Children falling under category two and three of the classification of the disability sometimes need medical intervention. In most of these cases parents are directly responsible for the medical treatment. Children at Samveda home (Hostel) are under the direct care of the warden and teacher.
- Our past experience and the lessons taught from the West discouraged us to follow the treatment based on allopathy. The side effects of
allopathic medicine are always detrimental to the total rehabilitation process.

- The individual nature of intervention that is required for children with Other Health Impairment (OHI) and SLD, prompted us to try homoeopathy medicine. These drugs are absolutely free of side effects and the prescription is specifically made for an individual.

Our experiences with homoeopathy medicine for past 3 years have been encouraging. However the parents are free to choose any line of treatment.

Sometimes a SWOT (strengths, weaknesses, opportunities and threats) analysis on a child is also made.

4.5.3. Individual Educational Plan (IEP)

Geared to the learning needs of individual pupils, the individualized programme aims to reinforce the foundation to learning, help pupils overcome their learning difficulties and develop their potentials. Individual Educational Programme should include short-term and long-term teaching objectives, learning steps, activities and reviews to ensure that the programme is implemented effectively. Teaching can be done in small groups or for individuals. If necessary, remedial teachers, other teachers, student guidance officers / teachers, parents and pupils alike are to participate in designing the programme. Remedial teachers hold meetings regularly to evaluate the effectiveness of work and gather opinions for refinement. The components of IEP are as follows:

- Remedial teaching programme for languages
- Remedial teaching programme for Mathematics
- Remedial teaching programme for general concepts
- Training in Arts and Crafts
- Remedial teaching programme for Fundamental level
- Remedial teaching programme for Interface level
- Remedial teaching programme for Parallel Text level.
The classroom activity is carried using remedial teaching material that is developed according to Samveda Remedial Teaching Model. The IEP is scheduled for a trimester programme.

4.5.4. Peer Support Programme
Remedial teachers may train pupils who perform better in a certain subject to become little teachers and who will be responsible for helping schoolmates with learning difficulties in group teaching and self-study sessions as well as outside class. Peer support programme helps pupils reinforce their knowledge, and develop their communication and cooperation skills as well as good interpersonal relationships. To enhance the effectiveness of the programme, remedial teachers must provide training to the pupils concerned beforehand and make regular reviews on its effectiveness. Generally speaking, this programme is more suitable for pupils of higher grades.

4.5.5. Reward Scheme
The reward scheme has a positive effect in enhancing pupils’ motivation. It aims at guiding to set their own objectives and plans, and positively reinforcing their good performance. No matter what reward is provided, the most important thing is to help pupils cultivate an interest in learning and gain a sense of satisfaction and achievement during the learning process. When designing the rewards offered, remedial teachers should take note of the following:

i. Set clear and specific targets (for example: requirement on the score of dictation and number of assignments submitted);
ii. Set achievable objectives;
iii. Give diversified rewards (including verbal commendation) or prizes to accommodate pupils’ interest; give rewards instantly;
iv. Review and revise the reward scheme regularly; and
v. Invite parents to help children improve their work.
4.5.6. Development of Generic Skills

- Remedial teachers should help pupils develop good learning habits and attitudes, such as completing the assignments tidily, keeping their promises and being responsible and disciplined. A constructive attitude is the foundation for life-long self-learning and it helps enhance pupils’ learning effectiveness.

- Pupils should be helped to master basic self-learning skills and abilities. For example, teacher may teach them how to set appropriate learning objectives and priorities, time management, note taking, reading skills and examination taking skills, etc.

- Remedial teachers can also make use of information technology to motivate and teach pupils to learn according to their own pace, help them cultivate the habit of self-learning, so that they will benefit from such training for their whole life.

- Pupils can be taught to solve problems by different methods, tools or by drawing insight from their past experiences. For example, teachers can teach them the use of dictionaries, as well as skills of seeking and handling information obtained from the school and public libraries. These are ways to develop students’ flexibility, creativity and independent thinking.

- Teachers should train pupils to establish good interpersonal relationships so as to facilitate effective communication and collaboration as well as to enhance the team spirit of students.

4.5.7. Assessment and Record on Learning

- Assessment plays a very important role in teaching and learning. By means of assessment, remedial teachers can know the learning progress as well as strengths and weaknesses of pupils; hence, they may design different teaching activities to help pupils learn in an effective manner. Besides, it is also a means to measure the discrepancy between SRTM
pupils and ordinary pupils so that teachers may decide whether it is desirable for the pupil(s) concerned to withdraw from SRTM.

- The two most common assessment methods are listed as follows for teachers' references:
  
  **i. Formative assessment**
  Teachers can understand and assess the learning abilities of pupils from their daily classroom and homework as well as individual or group projects, such as model making, drawing, information collection, measuring activities and the way they relate daily events to the topics they learn in class, so that they can revise the teaching content accordingly.

  **ii. Summative Assessment**
  With reference to the progress in teaching, teachers may assess the performance of students by means of examinations / tests. The examination / test papers must cover all the main points in teaching where the levels of difficulty meet the pupils abilities. The weighing of questions and marks should be balanced. Different types of questions should be included.

- Schools may have different forms and measures of assessment.
- Remedial teachers should keep a detailed record for each pupil under SRTM. They should assess the progress of pupils regularly and systematically. A comprehensive record provides information on the learning progress of pupils and serves as a reference.
- Teachers should pay attention to the response of pupils during classroom learning and make a record in the Evaluation column of the teaching plan to facilitate follow-up actions or changes in teaching strategies. In addition, teachers should make reference to the teaching objectives in evaluating the effectiveness of teaching, and revise their teaching plans according to the learning needs.
4.5.8. Liaison with Parents

- In order to help pupils with learning disability, schools must liaise closely with parents. Apart from providing guidance on homework to their children, parents also handle pupils' problems either in the same way or similar ways in line with the requirements of the school and schoolwork.
- Some parents may have unrealistic expectations of their children's performance. In such cases, remedial teachers have to explain to the parents about the characteristics and abilities of pupils so that they may help their children to learn in a pleasurable manner. On the contrary, some parents' expectation may be too low. Teachers must then keep in contact with parents to help them understand their children and to provide appropriate guidance to develop the pupils' potentials.

4.5.9. Co-ordination with Other Teachers and Professionals

- Remedial teachers must keep in close contact with other teachers. They are encouraged to discuss or share their experiences with others to find out ways to improve pupils' learning and behaviour. For example, they may discuss the teaching plans, learning progress of pupils, test and examination questions, pupils' problem behaviour and partial or total withdrawal of pupils from SRTM.
- Remedial teachers should also liaise with other related professions to seek professional support with a view to helping pupils solve their problems.
4.6.0. Samveda Remedial teaching model

I. Curriculum
1. Kannada
2. English
3. Math
4. Science
5. Social Science

II. Non curriculum
6. Memory
7. Spatial Skills
8. Organisation
9. Leadership

III. 15. Behavioural correction
16. Medicinal aspects

IV. Module based activity
Exercise based activity
- Medicine based treatment

Procedure

Research
SRTM is a model of 16 components. These components are further classified into 4 sub divisions:

1. Curriculum
2. Non curriculum
3. Behavioural correction
4. Medicinal aspects

The 16 components belonging to these 4 divisions are applied to children with LD, following a procedure. Continuous research has been modifying the SRTM as and when required. The model also extends itself as prescribed by the procedure to module-based activities, exercise - based activities appropriate reporting for homoeopathic medicines and a wholesome diet.

4.6.1. Curriculum

Introduction: According to the procedure after psychological assessment and entry-level tests a curriculum is designed for every individual student and the same is written in IEP. Irrespective of the age of the child the modules prescribed in IEP have to be achieved by the student. Hence a student of 12 years may have to start learning letters of the alphabet till he attains a certain level of proficiency, which is decided by periodical evaluation. The academic failures in children with LD are a major concern. As the existing education system does not address the special educational needs of children with LD the SRTM is designed exclusively for ‘exclusion’. Though SRTM can easily be converted to ‘inclusion’ once the existing education system gears up with necessary changes in policy to address the special educational needs of children with LD. However, SRTM at present is functioning under the exclusion criteria. Therefore SRTM has its own curriculum, syllabus, time table, evaluation procedures etc., the curriculum for each of the subjects starts outside the classroom and is divided into modules. Each module has a prescribed number of specially designed remedial lessons. The curriculum is based on four levels of SRTM. The four levels are:
1. Fundamental
2. Interface
3. Parallel text
4. Govt. prescribed text

For each of these levels prescribed number of modules are present. The details of the academic sub division, levels and modules of SRTM are as follows:

4.6.2. Languages Remedial Teaching – Kannada and English
The curriculum of SRTM is tailored to meet the individual aptitude and ability of the children so that they can work and progress at their own rate. In teaching languages to children with learning disability, emphasis is on the learning of functional language and basic skills. In order to cater to individual needs of pupils, modifications and adaptations of textbooks and teaching resources used for pupils are made. In addition, teachers may have to devise their own teaching material geared more specifically to learning disability that the pupils have experienced in the languages.

Teaching Aim
The aim of teaching languages in SRTM is to provide intensive remedial teaching geared to the learning difficulties of pupils so that they can work and progress at a rate commensurate with their abilities and aptitude.

Teaching Objectives
The teaching objectives of SRTM are as follows:
1. To stimulate pupils' interest in learning languages by providing them with enjoyable experiences.
2. To help pupils understand simple functional English and Kannada.
3. To equip pupils with elementary English and Kannada which they can use to carry out simple tasks successfully.
4. To develop in pupils the basic skills for further learning of English and Kannada.
Four Language Skills

It is essential that pupils develop competence in using the four language skills of listening, speaking, reading and writing in order to use English effectively.

Listening Skills: A pupil needs to acquire good listening skills in order to interpret what he hears in English. In aural-oral interaction, listening is a prerequisite for oral communication. Pupils must be able to understand what is said to them before any success can take place. Listening skills are the most important skills to be mastered by primary pupils before they acquire other skills.

Speaking Skills: Speech is the most convenient means of communication. Pupils must acquire speaking skills to convey meaning clearly and communicate with others. However, pronunciation is a prerequisite for developing speaking skills. Teachers have to teach pupils some phonic skills.

Reading Skills: Pupils can read for information and enjoyment in real life situations if they acquire sufficient reading skills. They have to cultivate a positive attitude towards reading so that they are enthusiastic towards reading for pleasure as well as to explore the world. Reading also helps to consolidate their knowledge of vocabulary and structures that have already been learnt through listening and speaking.

Writing Skills: Writing skills are an extremely important means of communication in the modern world, whether in the form of traditional paper-and-pen writing or even the electronic mail. Pupils can develop their writing skills in the four stages of copying, controlled writing, guided writing and free writing. Pupils in primary schools have to focus on the development of the first stages to master the basic writing skills for the various communicative functions.
A. Spelling and Pronunciation

Teaching strategies

1. Using the Look-Write-Check method.
2. Teaching pupils some phonic skills to help pupils attach sounds to letter.
3. Word recognition and games (homophones)
4. Directing pupils’ attention to words with similar sound.
5. Arranging frequent but short quizzes on spelling.
6. In creating an English-speaking environment in class, teachers have to speak simply and concisely about classroom routines, organizing teaching activities and providing opportunities for exposure to the pupils.
7. When teaching spelling, teachers should note the following: Do make sure that pupils always write from memory.
   - Do help pupils with their handwriting.
   - Do encourage them to be careful.
   - Do give lots of praise for all their efforts

Learning Activities / Tasks

- **Look**: Pupils look at the work with the intention of remembering it.
  - **Cover**: Pupils cover the word by turning the card over.
  - **Write**: Pupils write the word without stopping to look again.
  - **Check**: Pupils check word with the one on the card.

- **Bingo**

  Pupils are each given a card with some word written in grids. Teacher reads out long and short vowel sounds at random. Pupils have to cross the words, which contain the sounds. The first person to cross out the words wins the game.
• What’s the message?
Pupils work in groups. Each group is given a short note in which the initial consonant sound of some keywords is missing. Pupils have to fill in the appropriate sounds and work out the message.

• To find root words within a word and get the pupils to see the connection between them. For example, ‘musician’ is easier to spell if pupils realize it links with ‘music’.

• To help pupils to list out words with similar sound, e.g. ‘ought’ and ‘bought’, ‘cold’ and ‘sold’, etc.

• To test four or five words each day is more effective than twenty words a week.

• To give direct and simple instruction in English, e.g. ‘Turn to page K.’, ‘Please speak in English’, ‘Clean the blackboard, please’, etc with gestures or pictures if needed.

• To encourage pupils to answer questions in simple English.

• To devise pair work or group work for pupils to practice speaking English.

• To provide tapes for pupils to train their oral skills.

• To post some instructions, language items, classroom regulations, articles in English on the notice board in the classroom.

B. Vocabulary

Teaching Strategies

1. Teaching new vocabulary items by employing the 3 C's approach which is conducted in three steps:
   Conveying meaning
   Checking understanding and
   Consolidating pupils' acquisition of the new words.

2. Using and making dictionaries

3. Developing vocabulary learning strategies of pupils
Learning Activities / Tasks

- To use visual aids like pictures, real objectives and simple sketches to introduce new vocabularies.
- To let pupils match the word cards with real objects, pictures, definitions, synonyms or antonyms.
- To use gestures, quick mime or facial expressions to show the meaning of words, e.g. guessing the occupations of people.
- To make use of word relations like synonyms and antonyms, e.g. dirty and clean, big and small, etc.
- To check pupils’ understanding of vocabularies by completing close exercises.
- To interest pupils in learning vocabularies by playing some spelling games, e.g. domino, hangman, scrabble, etc.
- To train pupils to make best use of the dictionary for spelling and finding out the meanings of words, e.g. teachers can motivate pupils to use the dictionary by competition in class.
- To encourage pupils to make their own dictionaries, with pictures or words they have learnt in the textbooks, readers or other contexts with a specific theme. Pupils can share their dictionaries with other classmates in class.
- To encourage pupils to guess the meanings of words used in context by common sense and previous knowledge.
- To enrich pupils vocabulary through word association activity. Pupils are given a word or a list of words (e.g. drink) and asked to respond by saying another word or words that come to their minds (e.g. eat, water, bottle, etc.). Pupils listen to each other’s words and try to understand how they are associated with one another.
- To consolidate pupils’ vocabulary through some word games, e.g. scrabble, crossword puzzle, etc.
C. Comprehension Skills

Teaching Strategies

1. Helping pupils to master the comprehension skills
2. Jigsaw story telling
3. Promoting reading habit in light of the Extensive Reading Scheme (ERS)
4. Using computer software to enhance pupils' interest in reading.

Learning Activities / Tasks

- To help pupils make guesses of the theme of story by studying the title and pictures.
- To prompt pupils to get the main idea of a text, pick up the key words and information, study the story context in great detail and learn the meaning and use of some lexical items while reading a passage.
- To ask pupils to draw pictures or answer questions to check pupils' understanding.
- To help pupils retell the story with the help of picture or word prompts.
- To complete exercises to reflect on reading content through activities like drawing, matching, identifying, choosing and classifying.
- To arrange pupils' to work in small groups and each group has to tell the class part of the story in their own words.
- To encourage pupils to read more books by some incentives award schemes.
  To let pupils share the interesting stories they have read with other classmates in lessons regularly.
- To provide books, video / cassette tapes to boost pupils motivation to read.
- To role-play: the stories.
- To let pupils read interesting stories with colourful pictures with the aid of some computer software as a form of self-study.
- To allow pupils to work on their own, in pairs or in groups: The teacher walks around and checks on pupils' activities, and helps them solve their problems if necessary.
- To guide pupils to complete the reading comprehension questions as follow-up.
D. Writing

Teaching Strategies
1. Boosting pupils’ interest in simple writing task
2. Controlled and guided writing

Learning Activities / Tasks
- To label the floor plan of a house.
- To read out the sale items of a supermarket from an advertisement and preparing a shopping list.
- To list out classmates’ favorites toys and their prices from a drawing of the display window of a toyshop.
- To fill in the blanks with suitable words to complete lyrics of a song.
- To keep a record of the appearance and other information about their favourite animals.
- To write some sentences about yourself / your family.
- To prepare a shopping list for a specific occasion like a picnic.
- To send a card to a friend for a specific purpose such as wishing him / her happy birthday.
- To construct phrases, sentences or a story according to the pictures given.
- To accomplish a writing task by answering some guided questions.
- To complete a story with an interesting beginning or ending.
English Remedial Teaching Module (SRTM)

FUNDAMENTAL

LETTERS

WRITING
1. STENCILLING (5 lessons)
2. TRACING (5 lessons)
3. COLOURING (5 lessons)
4. NUMBERING (5 lessons)
5. CUTTING & PASTING (5 lessons)

IDENTIFICATION
6. MATCHING (5 lessons)
7. ASSEMBLE (26 lessons)
8. NUMBER (5 lessons)

2 TO 5 LETTER WORD
9. WORDS (5 lessons)
10. DIPHTHONGS (5 lessons)
11. RHYMES (5 lessons)
12. SENTENCES (5 lessons)
13. STORY (10 lessons)
English Remedial Teaching Module (SRTM)

 INTERFACE

 WORDS

1. DIPHTHONGS (25 lessons)
2. DIGRAPHS (10 lessons)
3. BLENDS (15 lessons)
4. SYLLABLE (2 lessons)
5. SILENT LETTERS (5 lessons)
6. SENTENCES-II (25 lessons)
7. SPECIAL SOUNDS (5 lessons)

 SENTENCES

8. TONGUE TWISTER (5 lessons)
9. STORIES (10 lessons)
10. Q & A PATTERN (5 lessons)
11. LET’S LEARN ENGLISH -1
12. DYSLEXIC DICTIONARY
13. SONGS THE LETTER SINGS
14. PICTURE DICTIONARY
15. CONNECT –1
16. SENTENCES – III & IV (50 lessons)
17. FUN WITH GRAMMAR – I & II
18. GRAMMAR (5 lessons)
19. LLE - 2

 PARALLEL TEXT

1. SENTENCE – V & VI DIPHTHONGS (25 lessons)
2. CONNECT II & III
3. DIALOGUES (10 lessons)
4. COMICS (20)
5. FUN WITH GRAMMAR III
6. GRAMMAR (5 lessons)
7. VII & X TEXT
4.6.3. Kannada Remedial Teaching Module (SRTM)

**Fundamentals**

**Before introducing Kannada alphabet**

1. Samveda remedial teaching starts only after knowing the nature of specific learning disability. Depending upon the type and nature of disability individualized education plan (IEP) is prepared. The use, intensity and duration is taken into account. If the child fails to respond in the given time or not suitable for him / her to respond the same exercises are given in another form and repeated until he / she learns. There is no time limit. Unless the child learns he / she cannot go for the other exercise.

2. Before introducing Kannada alphabet the child is encouraged to develop interests, memory and creativity in other activities.

3. Thinking ability and skill of identification is developed. Training is given to identify smell, taste and sense of touch. Behavioural modification / correction is done and awareness about the society is created to adjust and lead life.

4. To develop common sense, shapes, colours, money concept, time concept, weight, direction exercises are prepared.

5. Examples for the above said skills:
   a. Clay model
   b. Paper cutting
   c. Flower making
   d. Colour paper cut and stick
   e. Taste (salt, sugar, pepper)
   f. Feeling (sand, floor, etc., )
   g. Smell

6. With these activities small stories and poems are introduced for listening, then the child is asked to recall the same. When the child reaches this level, conjunct consonants, are introduced.
7. When the child is adjusted to Samveda’s environment and teacher’s activities the child is encouraged for writing. In relation to writing, stencils are prepared.
   - Firstly, writing outer area of the simple shapes (4 lessons)
   - Secondly, writing outer and inner areas of the simple shapes (4 lessons) = 8
   - Thirdly, writing outer area of slightly difficult irregular simple shapes (4 lessons)
   - Fourthly, writing outer area of difficult irregular shapes (4 lessons) = 8
8. After stenciling programme is over tracing is given. Firstly the child is asked to trace on buffer sheet using sketch pen. After this the child is asked to trace on tracing paper (5 + 5 lessons)
9. Matching the simple shapes with the similar shapes. Matching difficult shapes with the similar ones.
10. After overcoming all these stages the child is trained to write Kannada letters with exact pronunciation.

II

Introducing of Kannada Alphabets

11. Introducing the letters of Kannada alphabets, with exact sound of a letter to the child is very important. The child is asked to pronounce the letter and while pronouncing he is asked to find the difference in sound of the letter is introduced. The child should pronounce the letter in such a way that he / she should listen clearly.
12. Short form and long form of the vowels are introduced clearly and to make it perfect the child is asked to construct simple words using the same letters.
13. Simple word construction method, by using two or three letters. There is no restriction that it should be meaningful word. For example: Aa Aaa, Aaa Ee, Ee Eee, Uu Ee, Aa Ee Uu, Kaga, Gakha, Gagha, Kakhagha, Jachcha, Jhaja, Chachchaja,........
14. Introducing simple, known letters and symbols. Asked to read simple words and the same are taught. Simple stories and poems are introduced.

15. 2 to 4 letters words construction is introduced.

16. 2 to 3 words sentence construction is introduced.

F III
17. Secondary vowel forms: make the child understand in such a way that the secondary vowel forms is the outcome of the convergence of vowel and consonant. Vowel + consonant = secondary form.

18. Words with secondary forms are introduced.

19. Learning secondary forms by introducing vowels and consonants.

20. Introduced to word construction with the intention of word vocabulary helps to construct sentences. Then introduced to sentence construction.

21. Story telling, narrating with pictures to improve the level of imagination. Encouraged to interact with language to develop knowledge of the language.

22. During zero hour description about size, shape, colour, weight, direction etc., are given.

23. The simple books about nature, environment around us, word vocabulary are introduced.

F IV
24. Instructions to teachers.

25. To overcome pronunciation problem some sentences are introduced to read out.

26. Trained to say fluently 50 sentences to improve the clarity of pronunciation.
I. Interface (ITF)

I1
1. The conjunct consonants are introduced to construct sentences.
2. Ka to Ksha are consonants. All consonants are having conjunct consonants.
3. Conjunct consonants are divided into 3 types
   a. Basic letter type
   b. Basic half letter type (Battom)

I2
4. Creating a small memorable lesson for each conjunct consonant containing 10-15 sentences.
5. While writing words and sentences with conjunct consonants conjunct consonants are marked with red ink.
6. The child is taught how to pronounce conjunct words and sentences with conjunct consonants.
7. Few words with conjunct consonants are given to split into two in the written form.
8. The split word with conjunct consonant is given in the written form and the child is asked to construct that work.
9. Words with like conjunct consonants, unlike conjunct consonants and mixed conjunct consonants are introduced and encouraged to construct words and sentences with conjunct consonants.

I3
10. After introducing vowels, consonants, secondary vowel forms, conjunct consonants, words, and writing sentences, answering questions, few pictures are introduced and encouraged to write story. Exercises for answering simple questions are given.
11. Stories of history are introduced.
12. According to the schools' educational policy some textbooks are introduced mugging up of Kannada poems and writing the same. Full stop commas are analysed with the way of using it.

13. Introduce the lessons to improve creativity and thinking ability. Kannada grammar is introduced.

14. Language skills training for listening, speaking, reading and writing is introduced. Special training is given here after.

15. Story telling every day to improve reading, writing and listening to comprehension skills. Construction of own sentences and expressing it orally. To encourage these activities, story telling and poems are introduced and they are asked to recall.

**Parallel Text (P.T.)**

After completing these exercises, according to their age level and class text level a parallel text is prepared and children are trained. Then they can go for the regular text level. (Details are given in appendix).
4.7.0. Math Remedial Teaching

In planning the mathematics curriculum for SRTM on the one hand teachers are advised to make reference to the “Primary School Mathematics Syllabus” and the “Target Oriented Curriculum Programme of Study for Mathematics” with adjustments and adaptations made according to the circumstances of individual schools. On the other hand, teachers should understand the learning behaviour of pupils and the difficulties they encounter in the study of mathematics before setting the teaching objectives and learning requirements. They should also work out a holistic plan on the curriculum, teaching schedule and focus as well as the pupils assignments for the delivery of the remedial teaching. Focus should be placed on pupils learning abilities in determining the approach for the curriculum design, and the spiral approach should be adopted so that pupils are guided to integrate relevant knowledge and learn mathematics purposefully and effectively towards the objectives.

The primary objectives of providing remedial teaching in mathematics is to help pupils in the SRTM to acquire basic mathematical knowledge and skills through the provision of additional guidance and support, thus enhancing their abilities for life-long learning.

To help pupils overcome the difficulties encountered in mathematics, teachers should focus their teaching on developing a sense of achievement among pupils and fostering their interest and confidence in learning instead of gearing them towards their peers in ordinary classes.

Focus on the pupils learning process and their abilities in applying numbers, symbols and other mathematical concepts when solving problems in their daily life as a means to develop independent thinking.
Remedial teaching of mathematics should be focused on the following areas:

i) Knowledge: To assist pupils to understand and grasp the basic concepts in the following dimensions.
   - Number (whole numbers, fractions, decimals, percentages, number patterns, the rules and nature of numbers).
   - Shape and Space (common, two – and three – dimensional shapes)
   - Measures (length, weight, time, money, temperature, angles and directions, area, capacity and volume)
   - Data Handling (data organization and graphical presentation)
   - Algebra

ii) Skills
   To assist pupils to develop the following skills:
   - Basic computation (perform mixed operations with whole numbers, fractions, decimals and percentages)
   - Basic measures (length, weight, money, temperature, angles and directions, area, capacity and volume)
   - Basic skills for problem solving (estimation, counting, calculation, comparison, classification, making hypothesis and validation, data collection and analysis).
   - Make use of modern technology to learn mathematics.

iii) Attitude
   To help pupils develop the following generic skills and to foster positive attitude and values through the learning of mathematics.
   - Apply mathematic knowledge to solving problems in their daily life
   - Calculate with care and evaluate one's own work
   - Think independently and flexibly
   - Develop cooperation and communication skills in the course of learning
   - Have confidence in learning mathematics with the aid of information technology.
Focus should be placed on designing practicable remedial programmes which serve to address the difficulties encountered by the study of mathematics and to improve the learning outcome.

The presentation of teaching should include activities and practices, which help pupils to understand, apply and consolidate mathematics concepts. Meanwhile, teachers are advised to provide sufficient time and opportunities for the pupils to practice during the teaching process, so that they can acquire the knowledge step by step.

Teachers should give suitable guidance and instant feedback to the pupils, who are allowed to use different interpretations in problem solving so as to enrich their learning experience.

SRTM teachers can make use of the teaching strategies of Mastery Learning to help pupils to achieve the desired outcome in a progressive manner.

The common difficulties encountered by SRTM pupils in the learning of mathematics are categorized as follows:

i. Understanding mathematical concepts and the relations among them
   For example: the concept of multiples, factors and prime numbers; the relations of percentage to fractions and decimals.

ii. Basic computation skills
   - Unfamiliar with the basic computations. For example, the rules of carrying, decomposition, multiplication and division.
   - Fail to follow the necessary steps. For example, performing multiplication and division prior to addition and subtraction in mixed operations; general formulae, conversion of units, etc.
   - Poor in data handling. For example, the handling of place values, “0” and large numbers.
iii. Solving mathematical problems
   Fail to understand the problems and apply the acquired knowledge to analysing and working out the steps when solving word problems.

iv. Applying basic mathematical knowledge in daily life
   For example, the use of measurements, exchange of money, reading of charts, etc.

Following are the suggestions on remedial teaching for teachers' references with regard to the four categories above:

1) Understanding mathematical concepts and the relations among them
   Teaching Strategies:
   1. Guide the pupils to “learn from practice” and conduct inquiring activities in order to establish an interactive mode of learning.
   2. Repeat using appropriate real life examples to help pupils understand and acquire the correct basic concepts.
   3. When teaching abstract concepts, teachers should make use of mathematical and non-mathematical examples (taken from everyday life) as far as possible to support pupils learning. Aids such as cubes, bars, illustrations, tables, graphs, images, models and experiments can facilitate the development of abstract thinking from concrete examples.
   4. Make use of real life example and experiments to demonstrate the relationship between concepts to enable pupils to learn from practical experiences.
Learning Activities / Practices

1. Arrange suitable diversified class activities, e.g. counting numbers, counting cubes, dividing objects, folding papers, playing puzzles, experiencing the shape of models, etc., for teaching in order to consolidate pupils' understanding of mathematical concepts.

2. Select enrichment topics to help pupils review their acquired knowledge, or provide self-learning software to reinforce their understanding of specific topics, e.g. by drawing diagrams, charts or making statistical tables.

3. Provide graded learning materials for pupils to work on during individual or group assignments in or after class. The number of questions in each assignment should be limited.

4. Pithy formulae and game kits designed for building up mathematical concepts are also useful tools to consolidate the knowledge of pupils.

5. Make use of real life examples or experiments to encourage pupils to engage in informal reasoning, making hypothesis and validations through observations, e.g. the relation between radius and circumference.

2) Basic computation skills

   Teaching Strategies

1. In working out topics to each pupil, teachers should pay attention to the knowledge required for learning new topics.

2. Before proceeding to the next learning dimension, teachers should help the pupils to revise / review relevant knowledge so as to facilitate the acquisition of new knowledge.

3. Teachers are advised to break down the teaching content into small steps and adopt the Task Analysis method so that teaching can be done step by step and from simple to complex.

4. Through the cycle of “Teaching, Learning, Assessment”, teachers can give pupils timely feedback and adjust the complexity of the teaching content which help to improve learning.
5. Make use of mathematical symbols, such as the signs for carrying and decomposition, to minimize errors in calculation.

6. The examples and exercises used in teaching should be limited to the use of small numbers. For example, the numbers involved in addition and subtraction should not exceed 4 digits.

7. Provide a learner-friendly environment with learning aids, e.g. putting up formulae, measurement conversion charts, multiplication tables, 10 times 10 number boards, illustration on basic mathematics principles etc. in the classroom.

**Learning Activities / Practices**

1. Gather the common errors committed by pupils in doing calculations on the blackboard / school work. Then direct them to correct errors together and make improvement.

2. Provide training on mental and rapid calculation.

3. Cultivate the habit of validating results among pupils. (Teachers may advise pupils to validate the results for each other before conducting self-validation).

4. Use different methods to assess pupils’ learning (e.g. mental calculation, written calculation, question setting, measures and statistics etc.) and provide remedial teaching according to the results of the assessment.

5. Design different tasks according to the objectives of each topic. For example, quiz cards with answers, worksheets, puzzles, collection of information, models, open-ended problems set by pupils. (Teachers can ask the pupils to think of all the combinations that will give a sum of less than 30) so as to foster their confidence and ability in doing mathematics.

6. For complicated problems, pupils should be allowed to use calculators so that they can concentrate on learning the skills in problem solving (This applies to pupils at senior levels only).

7. Inter-group competitions or interesting games, such as Bingo, trading, card games, Monopoly etc., are helpful to consolidate pupils’ knowledge and arouse their interest in learning.
3) Solving mathematical problems

Teaching Strategies
1. Simplify and make the teaching context straightforward. Help pupils to find out the key words in the questions so that they can easily understand the requirement of the question.
2. Relate the problems to real-life situations or make use of graphs, illustrations or comparisons to help pupils solve the problems.
3. Allow pupils to answer the questions in a way that suits individual capability and aptitudes.
4. Encourage pupils to participate in exploring activities so that they will exercise their logical thinking in deducing the answer.

Learning Activities / Practices
1. Create stories based on mathematical expressions or put the question into a specific context so as to strengthen the comprehension power of the pupils.
2. Encourage pupils to form study groups/partners to discuss and solve their problems together so that they can share the learning outcome.
3. Encourage pupils to set questions for each other so as to enhance their organisation, imagination and analytical power as well as to develop their thinking skills.
4. Implement "peer tutor" system to cultivate the spirit of sharing and rendering mutual support among pupils and to motivate learning.
5. Arrange peer assessment and interactive mathematical activities, which help boost the learning atmosphere in class and build achievement among pupils.

4) Applying basic mathematical knowledge in daily life

Teaching Strategies:
1. Adopt an interactive mode in exploring the learning topics instead of just explaining set examples. Pupils may select the things in their daily life when carrying out mathematical activities.
2. To teach by making good use of the school environment and the surrounding objects.
3. Design topics relevant to the real life experience of pupils so as to enhance their learning interest.
4. Direct pupils to search information on mathematics from the internet in order to enrich the teaching content and add more real life elements to facilitate learning.
5. Adopt an award scheme to motivate pupils to learn mathematics and make frequent use of the acquired basic knowledge.

Learning Activities / Practices
1. Invite pupils to pose mathematical questions related to their daily life during the learning activities / exercises. For example:
   - By saving a certain amount of pocket money each day, how much will they get at the end of the week?
   - By making use of the broadcasting time, frequency and duration of a TV programme, pupils can learn about data handling.
2. Take the examples from the surrounding environment and facilitate in the school. For example:
   - The number, dimension, shapes and areas of the classroom and study tables.
   - Collect drinking cans / cartons as the teaching materials for volume and capacity.
   - Ask pupils to compare the prices and nature of goods sold in the supermarket when introducing decimals, percentages and money exchange.
3. Share with pupils interesting tips for learning mathematics. For example, relating the longer and shorter months with the knuckles of the fist.
4. Design prize-winning quiz to reinforce pupils' abilities in problem solving. For example, what can the time are when the hands of a clock form a straight line?
4.7.1. Math Remedial Teaching Module (SRTM)

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<th>Parallel text (PT)</th>
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<td>Multiplication (19 lessons)</td>
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<td>Number math (20 lessons)</td>
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<td>Money (15 lessons)</td>
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<td></td>
<td>Time (20 lessons)</td>
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</tbody>
</table>

Math Fundamental

Concrete Math

1. Numbers with concrete support with numerals
2. Big – Small
3. Long – Short
4. Tall – Short
5. More – Less
6. Equal
7. Far – Near
8. Thick – Thin
9. After – Before
10. Left – Right and center
11. Up – down
12. Reverse order
13. Clockwise – anticlockwise
14. Ascending – Descending order
15. Grouping
16. Separation
17. Distribution
18. Straight line – curved line
19. Basic number

Concrete-Abstract Math

20. Basic Number concept (Numerals)
21. Big – Small
22. More – Less (Greater – Lesser)
23. Equal
24. Far – Near
25. After – Before
26. Left – Right and Center
27. Up – down
28. Reverse order
29. Ascending – Descending
30. Grouping
31. Separation
32. Distribution
Math - Fundamental
Addition

1. Numerals from 1 to 99
2. Addition (Simple) (Mathematical Representation, Odd/Even)
3. Split and Write
4. Odd Numbers
5. Even Numbers
6. Digits
7. Representation of digits on abacus
8. Addition on number line (Simple)
9. Numeral from 100 to 999
10. Split and write
11. Representation of abacus
12. Place value
13. Value of different digits on different place
14. Split form into number form
15. Skip counting
16. Comparing of numbers
17. Probable chances of getting each number
18. Addition of numbers Without carry over
19. Properties of addition
20. Row and column arrangements
21. Addition by split method
22. Zero in addition
23. Addition of odd + odd
24. Addition of odd + even
25. Addition of even + even
26. Addition of 2 same number without carry
27. Addition of 2 same number with carry
28. Habit formation
29. Addition for fun
<table>
<thead>
<tr>
<th></th>
<th>Subtraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Reverse order of the number</td>
</tr>
<tr>
<td>2.</td>
<td>Get each preceding number of subtraction</td>
</tr>
<tr>
<td>3.</td>
<td>Simple Subtraction</td>
</tr>
<tr>
<td>4.</td>
<td>Properties of subtraction</td>
</tr>
<tr>
<td>5.</td>
<td>Zero in subtraction</td>
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<tr>
<td>6.</td>
<td>Subtraction on number line</td>
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<td>7.</td>
<td>Subtraction by split method</td>
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<td>8.</td>
<td>Subtraction in place value chart</td>
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<tr>
<td>9.</td>
<td>Subtraction with borrow from</td>
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<tr>
<td></td>
<td>10th Place</td>
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<td></td>
<td>100th Place</td>
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<td></td>
<td>1000th Place …</td>
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<tr>
<td>10.</td>
<td>Subtraction of odd in odd</td>
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<tr>
<td>11.</td>
<td>Subtraction of even in odd</td>
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<tr>
<td>12.</td>
<td>Subtraction of odd in even</td>
</tr>
<tr>
<td>13.</td>
<td>Subtraction of even in even</td>
</tr>
<tr>
<td>14.</td>
<td>Subtraction ending in zero</td>
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<td>15.</td>
<td>Subtraction ending in remainder</td>
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<tr>
<td>16.</td>
<td>Subtract to get the difference as 2, 3, 5, 7, 8</td>
</tr>
<tr>
<td>17.</td>
<td>Verification for addition</td>
</tr>
<tr>
<td>18.</td>
<td>Verification for subtraction</td>
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<tr>
<td>19.</td>
<td>Habit formation</td>
</tr>
<tr>
<td>20.</td>
<td>Games for subtraction</td>
</tr>
</tbody>
</table>
Math Interface - I

Multiplication

1. Addition of same addends with different times
2. Representation of repeated addition of addends in another form
3. Simple multiplication with concrete support (One digit X One digit)
4. Properties of multiplication
5. Zero in multiplication
6. Multiplication table with addition process
7. Multiplication by one digit
   Two digit
   Three digit
8. Speeding / Hastening of addition with the help of Multiplication
9. Multiplication of odd X odd
10. Multiplication of even X even
11. Multiplication of odd X even
12. Multiplication of zero ending numbers
13. Strategies in multiplication
14. Habit formation
15. Games of multiplication

Division - II

1. Equal distribution of things
2. Make the groups of equal numbers
3. Easy distribution by sharp process
4. Simple division with concrete support
5. Division as repeated subtraction
6. Zero in division
7. Relations between multiplication and division
8. Division methods (long and short)
9. Division of number with reminder & without reminder
10. Verification for division in every step
11. Division of odd by odd
12. Division of odd by even
13. Division of even by odd
14. Division of even by even
15. Division of numbers by zero ending numbers
16. Verification of multiplication
17. Habit formation
18. Division games

PARALLEL TEXT
4.8.0. Non-Curriculum

Memory

Many excellent books, articles and newspaper stories have been written about memory. These sources cover all aspects of memory, including techniques to facilitate memory using the various mnemonic systems. Children with LD have severe problems in STM. SRTM makes an effort to develop memory to its full potential. Children use different memory systems. Therefore, SRTM uses Pryor’s memory development system, which is unique and natural. Pryor’s memory system creates visualization (function of right hemisphere) and relate theme to words and numbers (function of left hemisphere). Such activities bring both right and left sides of the brain into play and focus on one idea or event. Such an activity forces association between the right and left sides of the brain. With the entire brain brought into play the unique power of the brain is realised. The Gestalt is greater than the parts; association is greater than separation. Therefore mnemonics is more effective than pure visualization alone. The fundamental and common need of any artificial memory system is to establish in LTM an absolutely firm and familiar set of number-image associations, a mnemonic set. Thus a mnemonic set becomes an artificial baseline for use in forming useful association as memory.

There are memory lessons, developed at 3 different levels,

- Fundamental
- Interface and
- Parallel text

The first level has 12 modules; second level has 9 modules; and the third level has 12 modules. A child with severe impairment of memory has to spend at least one hour a day on these modules.

Spatial Skills

In order to develop spatial skills, several exercises, games are designed and are used in the regular curriculum. Children are taught the use of their sensory organs and how best they should make use of these organs in order
to acquire knowledge. Every exercise reinforces memory, attention, concentration, etc. Some exercises are developed in order to make the student think. Perception, learning and thinking are the processes that every child gets into while doing exercises related to module-based activities. The level of difficulty increases according to the level and the sequence of modules.

Logical reasoning and analytical reasoning help the child to comprehend a concept better. In order to sharpen their reasoning capabilities children are given a logical reasoning task almost every day. General strategies are taught for problem solving using logical reasoning. For example, solving jigsaw puzzles the following procedure is taught:
1. Group jigsaw puzzle pieces according to pictures / colours.
2. Identifying corner pieces and edge pieces.
3. Shapes of the jigsaw depressions and protrusions according to prominent picture in the colour cue.
4. The remaining pieces of the jigsaw have to be assembled according to prominent pictures. Pictures have to be identified as figures and colours.
5. Follow the above steps without timing factor. Once the strategy to solve the jigsaw is mastered then children are encouraged to solve jigsaw puzzles in competitions.

Organization
After the children are taught weights and measurements directions they are taught basics of mapping skills. They are also taught to pictorially represent by drawing foci’s and maps, charts or graphs, the ideas represented in a story or an essay. They are also given the exercises to do it visa versa.

Leadership
Children with LD are a neglected lot in mainstream schools. They would be neglected completely by the teachers and parents at home. Teachers neglect them because they are academically poor and parents discourage
them because they are scholastically backward. Hence, all the opportunities to develop as leaders or to participate in extra curricular activities is lost.

Samveda remedial teaching model aims at bringing children into the limelight. After the first 6 months an observation report is prepared on each child, who would bring to light abilities, talents the child already possesses and skills and talents that have to be further nurtured. An IAP is prepared to include the curriculum for non-academic activities based on the observation report. Individual activity plan is periodically evaluated and modified according to the progress made by the child. IAP meetings are held on monthly basis. To develop the leadership qualities children are grouped and an individual child is made the leader of the group on rotation basis. Every opportunity is made for children at Samveda to participate in all competitions organized by regular schools, NGOs etc.,

**Games**

As a part of SRTM, games are practiced to maintain physical health and mental health. For children with LD it is very difficult to understand the instructions of the games. Usually children with LD lack interest and sporting spirit. Every day they have to be instructed. When facing competitors they lose self-confidence very easily. They need continuous encouragement until the game or competition is over. They expect the physical the trainee to be with them all the time while competing with others. Children with LD quarrel frequently for simple reasons. Body balancing is low when they come to Samveda. Very slowly it is recovered by practicing games regularly. When they practice regularly consumption of food will be noticeably high and vice-versa. Usually they sleep well when they practice well, it is also vise-versa. After all the training and instruction given regularly, children with LD never practice by themselves; again they need instruction of the physical trainee. The following games are practiced by the children with LD which are as follows:

1. Volley ball
2. Throw ball
3. Kabbaddi
4. Shuttle badminton
5. Foot ball etc.
**Athletics**

For athletics children with LD need lot of practice and they pick up well soon when compared to the games. They participate in the following events.

1. 1500 mts race
2. 1000 mts race
3. 800 mts relay race
4. 400 mts relay race
5. 200 mts relay race

One of the children with LD i.e. Mr. Pavan Kumar was selected for district level competition in triple jump event. Unfortunately he got the 4th place. As he reported he lost the event because of tension and difficulty in coping with the situation.

**Yoga**

Yoga is one of the important aspects of Samveda remedial teaching model. The children with learning disability practice yoga every day in the early morning with the assistance of yoga teacher. Yoga exercises help the children with LD to overcome the problems with time concepts, concentration, bodily ailments, hyperactivity, epilepsy, bed wetting etc. While practicing yoga children with learning disability tend to be disturbed by looking at others, smiling at others and most of the times while doing Shavasana children with LD have slept. Children with LD have shown lack of interest to practice yoga voluntarily. Before practicing yoga they speak so much and after practicing yoga they keep silent for about one hour. To improve concentration and other psycho physiological the children with LD practice conditions the following exercise.
Yoga Exercise | Areas of Improvement and Relief
---|---
1. Suryanamaskara | (Overall body exercises)
2. Thrataka | (Concentration (ADD))
3. Jalanethi | (Respiration and headache)
4. Sutranethi | (Respiration, headache and giddiness)
5. Vajrasana | (Digestion, body pain, concentration)
6. Padmasana | (Concentration)
7. Pranayama | (Overall body exercises)
8. Ushtrasana | (Memory, blood circulation, asthma)
9. Shavasana | (Deep relaxation for the body)

Trekking
Trekking is organized thrice in the seasons of Rainy, winter and summer each year. Each trek is different from the other. The first trek is planned and organized by teachers, whereas the second trek is planned and organized by the students or children with LD. Treks are organized with the intention of creating awareness among the children about weather, geographical areas, animals, birds, plants, forest areas, canals, reservoirs, village life, and organizing skills etc. These first two treks are adventure filled because they have to trace the path to reach their destination (around 30 kms by walk). The third trek is by bicycle.

Cycling
Cycling is organized at the end of the academic year. Usually it covers a distance of around 70 km. The children with LD have to follow the plan given by the teacher. There are two batches, in order to cover the geographical area, avoiding traffic, grouping and maintenance. Four children of s Samveda competed at State level cycling competition for the distance of 80 kms (Birur to Mudigere). They cycled 80 km in 3½ hour and secured certificates. Cycling is organized to develop confidence, build body, stamina, and body balance and motor activities of the children with LD.
4.9.0. Behavioural Correction

Samveda Behavioural Management Strategies

These techniques are all based on learning and behavioural models, such as operant conditioning and the use of shaping. They attempt to teach children to be their own agents of change.

There are 6 basic steps in the construction of Samveda behaviour modification program for use in the classroom and outside the classroom.

Specifying Observed Behaviour

The targeted behaviour is defined. It is then observed in terms of "action or performance", which can be seen and agreed upon by all observers involved (both in school and hostel). Often descriptions of behaviour are vague due to personal interpretations by observers. For example, a child who swears and shouts out loud in class when asked a question may be considered by one teacher as displaying confrontational behaviour, whilst another may see it as attention seeking. Confusion can result. Thus the terms such as "aggressive" or "hostile" behaviour are better defined in terms of the number of times the subject hits out at or swears at other pupils.

Measuring Behaviour

Once the target behaviour has been agreed upon, then a method of recording observations is decided upon, in order to establish a "baseline" of behaviour against which the success of the intervention can be measured. Each observer has to rate from 1 hardly noticeable to 10 (unbearable). If the duration of the behaviour is the area of concern, then it is measured using a stopwatch. The baseline is then established by observing the typical behaviour of the subject over several sessions, until the observer is satisfied that all aspects of the child's undesirable behaviour have been established. This measurement is then recorded and an intervention strategy tried and the same behaviour observed and measured. If the frequency or occurrence rate of the observed behaviour drops then the intervention is considered to
be working and should be continued until a desired level of positive
behaviour is reached.

**Setting the Goals**
Samveda's strategy is to set achievable goals using a school skills checklist. This breaks down specific desired behaviours into appropriate skill categories, such as starting, getting on with and finishing a lesson, presenting work, interacting with pupils, responding to praise, criticism, teasing or bullying. The teacher then completes these categories and the child graded in these areas as either, "A, -A, ++A". For the purposes of setting behavioural goals these skills are broken down into sub-skills (e.g. getting on with lesson; stays in appropriate place; puts hand up and asks quietly for teacher to assist; completes set work; requests next task).

**Arranging Cues**
A cue is a signal or prompt, which can guide or encourage a pupil to behave in a particular manner. There are within the classroom environment, 3 such components which contain cues;

- **Physical Cues**: These include factors such as the classroom surroundings (e.g. is it near a noisy corridor or facing a main road), and its assorted furniture, materials and equipment. Examples from studies include an increase in "on task" attention when children sit in rows instead of groups around a table and when boys and girls sit separately instead of together.

- **Social Cues**: These include factors such as teaching style or grouping arrangements. Studies of young children have shown that combining physical praise with verbal praise by the teacher increased work involvement.

- **Educational Cues**: These include factors such as the curriculum content and the presentation manner of the learning tasks. An example would be an
increase in primary school children’s reading time when their teacher demonstrated how to read quietly with them.

Reinforcements
Samveda behaviour modification programme has the following reinforcement procedure.
Positive reinforcers: The true goal of all external rewards is that appropriate behaviour encouraged will lead to its own intrinsic rewards. All skillful teachers use effective rewards, or arrange desirable consequences, for their pupils. These can take either the form of tangible rewards or social approval.
To shape behaviour effectively the reward follows the targeted behaviour as soon as possible. In the case of social approval (e.g. praise by the teacher or recognition from a peer group), this is easily and quickly accomplished, using terms such as “I like the way you work quietly, well done, that was a good question”. However if praise is unsuccessful a tangible reward may be required and this is not easily immediately delivered. One solution is the Samveda token system (such as the awarding of stars or points), that can be exchanged at a later stage for a tangible reward. To increase the immediate association of the targeted behaviour with a future reward, the award of the token should always be paired with praise. Always be ready to remove the tangible rewards when praise alone has become a sufficient reward.
Deciding on the appropriate reward can be accomplished via negotiation with the class group. This can be an enlightening experience as all adults may have incorrect preconceived ideas of what the current youth group deems a reward.

Punishment: It may regrettably be necessary to consider the use of punishment, if all other attempts at behaviour modification through positive reinforcement fail. Punishment is the use of an aversive, unpleasant consequence of behaviour, with the intention of reducing its frequency. It can take many forms such as; criticism, reprimands, extra work, detention, time out etc., In an extreme situation where a child’s behaviour is personally
dangerous and excessively disruptive to the lesson, punishment may be necessary to suppress bad behaviour in the short term. Thus the child fails to become an active learner. Punishment can only help in stopping a bad behaviour, never in starting a good one.

Evaluation Success: Evaluation should show that the behaviour modification program has produced a tangible increase in both academic achievement and social competence, as well as a general improvement in the classroom climate.

Although no intervention can be expected to solve all different behavioural problems immediately, the reinforcement selected should have an apparent effect within a short period of time. If there is no increase in defined targeted behaviour, within the same time period as that used to establish the baseline, then the program must be reviewed and modified. There can be many reasons for this, either the rewards have been insufficiently powerful, or the punishments counter productive. Perhaps the arrangement of cues has failed to trigger the desired response. All evaluation and revisions are undertaken only after a series of meetings of observers / teachers and in some cases, parents.

If punishment is the reinforcer being used, and the number of applications is increasing rather than decreasing, then it is not being effective. It should be discontinued at once. The child’s bad behaviour may be “unofficially reinforced”, by increased attention from staff and other pupils, sufficient to outweigh the negative consequences. In effect they enjoy the attention. To increase the severity of the punishments is wholly inappropriate and possibly emotionally damaging for the child.

Steps to review rewards or revise classroom arrangements are taken after timely meetings. The program should be re-examined, modified and implemented again. If the lack of success is systematic after a few such
attempts, then another form of intervention should be tried other than behaviour management. In such circumstances homoeopathy medicines are tried.

Since the object of the exercise is to make teaching and learning a positive experience and therefore more enjoyable, there should be a reciprocal effect. There should also be positive reward for the teachers expending their time and effort on this exercise. If this is not happening there can be several reasons.

Modeling or Observational Learning seeks to establish a new approved pattern of behaviour by having the subject observe another person demonstrate the desired behaviour, with apparent favourable consequences. The observation is frequently followed by role-play, in order to practice the new repertoire of responses in a non-threatening situation, before confronting the real life situation.

This technique has been used to improve children’s social skill in coping with bullying, dealing with alternatives, and resisting the urge to engage in antisocial or aggressive behaviour (e.g. talking your way out of argument or disagreement does not get you into trouble). Several other interviews such as self-instruction / cognitive behavioural training give the child these skills to regulate their own behaviour via ‘think before you act’ examples.

Positive Teaching: Sometimes when using behaviour modification programmes to get desired behaviour from a student it can also modify the behaviour of the teachers.

The remedial teacher has to follow these simple rules in order to win the love and praise of pupils.

- Arrive before the class
- Acquire silence in reasonable time
- Organize and maintain seating arrangement
- Deliver well prepared lessons
- Present attractive and understandable materials for all levels of achievement
- Keep everyone occupied and interested
- Extend and motivate all pupils
- Mark all work promptly
- Use a fair, clear and positive marking system
- Have regular homework patterns
- Encourage creative dialogue
- Keep an attractive tidy room
- Maintain good wall displays

**Token Economy**

Token reinforcement or economy allows teachers to use a behavioural approach with both groups and individuals working toward a tangible goal.

There has been considerable success with the formal “behavioural contract” approach in the area of token reinforcement. This involves the drawing up, following negotiation between pupil (or pupils) and teacher an agreement on changes in behaviour for both parties. The teacher usually arranges a specific reward (e.g. from extra time spent on a task enjoyable to the pupils), which is dependent upon the pupils improved work performance, punctuality, good behaviour or other reasonable targets. The agreement should not only contain details of desired behaviour change and rewards, but also penalties, duration of contract, measurement of success, and methods of dispute settlement or contract re-negotiation. The contract should however be kept fairly short and simple as it is dealing with children not lawyers, and then both parties sign it. The greater strength of this approach is the increased commitment by pupils due to their point of view being recognised and taken seriously. Thus the pupil has as much to lose with the contract’s failure as the teacher.
Token economies have also been successful in the reduction of truancy in the form of attendance programs, awarding “attendance points” for every day completed school attended. These can, at various times of the year, be converted into tangible rewards of varying levels (in fact pupils can save up for larger rewards), ranging from a school pen, to a football, or tickets to a football match. Combined with publicity during awarding of both the points and the prizes, pride (an important intrinsic motivator) in the achievement of school attendance grows.

**Time Out**

This intervention is most effective with children aged between 4 and 12 years. It is not recommended for use with adolescents, as it is often met with resistance (some times physical). When the child is non-compliant to an instruction issued by the adult, they are immediately sent to the time-out location. A time out location can be as simple as a chair in the corner of the room (preferably facing a wall or corner) or a separate room (preferably empty of interest or a window, depending on the severity of either the child’s behaviour or the type of non-compliance observed. Once time out is completed the teacher explains the reason for the time out to the child and the previous direction is restated. If the child shows signs of co-operating, a verbal reward (praise) is given. However if the child is again non-compliant then time out is repeated, but a minute is added to the time. If the child leaves time out abusive or even more confrontations, the child can be sent right back for another period until he has calmed down.

The purpose of the time out is not to punish the child, but to let him consistently know that he is being non-compliant and this will not be tolerated. Eventually the child will be compliant. However if the non-compliance is to the instruction to take time out, then physical restraint may be required, but is not recommended. Then perhaps Differential Attention should be used.
Over Correction
This approach is effective with younger children, adolescents can find it irritating or patronising and consequently resist its use. Basically it involves the repeating of any inappropriate action in the correction manner, several times. For example a child slams a door, and is told by the adult “doors need to be closed quietly”. The child is then instructed to close the door quietly. If this is completed successfully then the child is instructed to repeat the action 3 to 4 times. The instructions are most effective if delivered in a pleasant manner, along with the explanation that this is not a punishment but merely practice. The instruction should also include that if there is a repeat of this inappropriate behaviour it merely means that there was not enough practice the first time, so the period will be doubled next time.

Differential Attention
Ignoring or differential attention as an intervention, is not a passive process but an active one that requires attention not to be paid to a child displaying inappropriate behaviour, but immediate attention should be paid when the child exhibits compliant behaviour. Once a direct request is made of a child, and he fails to comply, ignoring him at that point would be an ineffective intervention alone; some other form of aversive consequence would be more effective (such as Time Out). However if the child is engaging in additional aversive behaviour or non-compliance with a previous direction, in order to avoid a punishment (such as Time out), then ignoring is appropriate. If the child is ignored at this point it sends a clear message that the teacher will not deal with the child until he is complaint. Once the child regains self-control the teacher can re-issue the direction to follow through with the punishment. If the child repeatedly tests this situation, by being non-compliant with up to three subsequent requests, then an additional aversive consequence should be introduced (e.g. detention).
Response –Cost
Due to the particular nature of children with emotional behavioural difficulties (EBD) (e.g. repeated confrontational behaviour), they frequently fail to earn many reinforces used in behavioural programs. This can reduce the motivational force of any reinforcer on offer; due to the child’s perception that it is unobtainable, Response-cost turns the tables.

Simply put, response-cost is an ingenious way of using a desired reinforcement as a punishment. In the first situation (such as a class lesson in social skills training), the child is provided with the entire positive reinforcer (e.g. 20 minutes on a desired, such as access to a computer, of 5 extra tokens in a token reward program). On subsequent occasions the child must earn the reinforce via their good behaviour or on task time.

If the child behaves in a manner deemed inappropriate by the teacher or parent, the reinforcer is reduced for each infraction (e.g. 4 minutes computer time or 1 token is subtracted from the reward). The circumstances for the reduction of the reward should have been clear and agreed upon between the teacher and child before commencement (a behavioural contract is very appropriate with this approach). With each reduction a visible notation (such as crossing off minutes on the black board), or verbal reminders of why the reduction has been made, should be used.

Because of their confrontational styles and lack of reward history, many children with EBD perform much better working to keep what they have got, rather than trying to earn something they do not have.

Self - Control Instruction
Self-control instruction is similar in its approach to modeling or observed learning. In a one to one setting, instructor (parent or teacher) models the task for the child and provides an overt verbal description while engaging in the task. The instructor verbalises the task and possible approaches for
solving the task. This includes selection of a strategy and application of it, monitoring, evaluating and rewarding progress and completion of the tasks, as well as possible selection of an alternative strategy if the first should prove unsuccessful.

The instructor guides the child through the task and then helps the child develop verbal reminding prompts to guide itself when the instructor is not present. The instructor whispers self-instructions, and encourages the child to repeat them out loud. This "talk to themselves" approach is not permanent, as the overt verbal instructions fade; they become internal voices always reminding the child of the appropriate response.

An example would be a child who fails to complete class work because of disruption (e.g. talking, moving out of seat etc.). The teacher could talk them through what is expected and the time limits available and show that if they completed the task on schedule they would have time to talk or move legitimately afterwards. The child is taught to repeat to himself (first allowed and then as an internal practice) the agreed time and target.

4.9.1. Medicinal Aspects
The main reason for adopting an alternative medicine such as homoeopathy is because it does not have any side effects. The second important reason is that the direction of the treatment is curative and not palliative. A third important reason is that the medicine makes the "vital force" (rejuvenating the immune system). Though an empirical study has not been done to prove that homoeopathic medicine plays an important role, SRTM continues to put selected children (depending on willingness of the parents) on homoeopathy. There is a strong feeling that there is a major difference between the general and specific under homoeopathic health condition of the child under allopathic treatment (before coming to Samveda) and the health condition of the same child (both general and specific) under homoeopathy. Research studies have to be initiated in order to find out the
specific effect of the homoeopathic drug on the child. As SRTM has components like, yoga, sports and specific diet, it becomes too difficult to accurately measure and statistically analyse the effect of homoeopathic drug on the child. But in the recent past some children who were not on the homoeopathic drug and who were not given allopathic treatment but they were given the same food and yoga exercises have had periodic problem in general health conditions. Such observations have prompted us to empirically prove the validity of using homoeopathy drug. Here again the choice of a classical homoeopath must be taken into account. Many of the homoeopathy practitioners do not practice classical homoeopathy administering ‘single remedy treatment’. Most of the practitioners are not qualified and are using multidrug treatment. SRTM always advises the choice of classical homoeopathy that uses a single remedy treatment. However, no research has been done to prove the effect of homoeopathic drug, which improve reading, writing and other scholastic skills.