OFFERING MONTESSORI EDUCATION ONLINE FOR 2 ½ TO 5 ½ YEAR OLD CHILDREN KEEPING MONTESSORI PRINCIPLES INTACT

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ABSTRACT
COVID – 19 has forced preschools to resort to online education. While traditional schools have got adjusted to online teaching quickly, Montessori schools could not turn to online easily. Montessori education is considered to be impossible to offer through online mode to children at home, due to the lack of the prepared classroom, didactic materials and trained parents who could support children's development. The current research presents an action research with an aim to convert Montessori education to online mode and develop a model for offering Montessori education online to the children between 2½ and 5 ½ years of age providing activity to the hands and senses and discusses the limitations and implications.
Keywords: Montessori Online, Low-cost Montessori materials, Montessori parent, Montessori Distance learning, Montessori during post COVID-19

INTRODUCTION
COVID – 19 Pandemic has forced most of the countries to lock down the schools and colleges (Banerjea, 2020), affecting 1.53 billion students. Among them 155million are preschoolers (Dejongh, 2020), (UNESCO, 2020). In India alone school closure has affected 10million preschoolers (UNESCO, 2020). In order to continue the learning process, the Education Department of Karnataka instructed schools to conduct online classes from preprimary to 10th standard as per the recommendations of NIMHANS (Bhat, 2020) (Ullas, 2020), (Bhat, 2020) and (Bhat, 2020). The lockdown and closure of schools compelled traditional schools to resort to online teaching, which they did without much difficulty. However, the Montessori schools have not been able to adapt to online teaching with the same ease as these schools depend highly on prepared classroom, equipment and the presence of teacher which has in turn shaken the very base of their identity and belief system.

MONTESSORI AND PRINCIPLES OF THE METHOD
Maria Montessori, an Italian physician founded the Montessori method of education while working in her famous Casa – dei – Bambini, the House of Children, in 1907. Since then Montessori method has been practiced the world over as a successful early childhood method of education. It is renowned for its scientific nature and psychological base (Montessori M. , 1993, p. 1) (Montessori M. , 2006, p. 33). Montessori believed that child is in the "continued state of growth and metamorphosis", where each stage has different characteristics and needs (Standing, 1998, p. 106). The child between 3 and 6 years has an absorbent mind, which absorbs everything that it comes in contact with. He could not be taught directly, since his intelligence can be reached only through his hands and senses (Montessori M. , 2014, p. 37).

Therefore, the essential feature of Montessori Method is the equipment which the child manipulates (Lillard, 2008, p. 29). The second principle of the Montessori method is choice. While there are hundreds of materials in the Montessori classroom, the child has the freedom of choice within the boundary (i.e. choosing only the materials which are presented to him) and chooses the one which is most appealing to him. The third is, the areas of knowledge are presented according to the presence of the particular sensitive periods of the child. For instance the sensorial materials are presented when the child has sensitive period to refinement of senses, language activities are presented when he is sensitive to language (Lillard, 2008, p. 30). The fourth principle is that the children have natural tendency to concentrate and do not depend on any reward or punishments (Montessori M. , 2014, p. 365). The fifth principle according to Lillard is learning with and from peers. However, she also points out that it is in elementary level i.e. between 6 and 12 years children learn from peers whereas the preschool children love to work individually according to their own choice (2008, p. 31). Apart from these, the important aspects of Montessori method in preprimary age group are the environment – the specially prepared classroom, the Montessori equipment – the specially prepared Montessori materials and the adult – the specially trained Montessori teacher.

THE THREE PILLARS OF MONTESSORI EDUCATION
The Montessori environment comprises of the physical structure along with the Montessori equipment, teacher and the children between 2 ½ to 5 ½ years along with outer and inner spaces of the room with its animal and plant life. It provides an atmosphere conducive for a child's development. It enables the child to work with the Montessori equipment at his own pace and allows him to concentrate on the activity chosen as long as he wants without any disturbance. The Montessori equipment is specially manufactured, as it is scientific and precise

(Sackett, 2016, p. 9). It is borrowed from the works of curative pedagogists like Itard and Seguin, Experimental Psychologists and some were developed by Maria Montessori herself (Montessori M. , 2006, pp. 24 - 35). As Torrence and Chattin assert, the very presence of Montessori equipment makes a "learning environment as Montessori in practice" (2015, p. 344).

However, equipment alone doesn't help in the development of the children. The Montessori teacher is specially trained to use the environment and the equipment for the development of the child. According to Gettman the main duty of a Montessori teacher is to serve the child as "a caretaker of the environment, as a facilitator and as an observer" (1987, p. 17). The Montessori teacher is trained to use the Montessori equipment for the children in a specified manner so that they are developmental. Maria Montessori asserted that children learn better when they are active around the material using their hands and senses. Hence, Montessori classrooms are always buzzing with life, children working actively using the material moving freely in and out of the environment (Gettman, 1987, pp. 27 - 33). Hence, the environment, the equipment and the teacher are considered as the three pillars of Montessori Method.

THE PROBLEM

Online classes restricted Montessori children from using the prepared environment, prevented them from getting access either to equipment or to get the support from the teacher. Thereby collapsing all the three pillars of Montessori method. Since, Montessori is not a talk and chalk method, without the Montessori equipment and environment, the Montessori teachers are obstructed from performing their duties as care takers of the environment, facilitators and observers. In addition, the children who are used to working with the didactic materials are suddenly disoriented, while the parents are unable to help their children at home as they are not trained to use the materials, and do not understand the Montessori philosophy.

REVIEW OF LITERATURE

Montessori distance learning or online training is not completely new. Montessori Teacher Training Institutes have been offering Teacher training courses online along with a minimal onsite training (Indian Montessori Centre, 2020), (Navadisha Montessori Foundation, 2020), (MACTE, 2020). However, schools offering Montessori Education to children online are very rare.

Lamplighter Montessori School tried to offer Montessori online under the caption Schooling from Home, but its activities were limited to art, rhymes, singing, storytelling, reading and some exercises of practical life activities in addition to simple cooking. Lamplighter has been giving printouts of beads to the parents for teaching teens, simple addition, and subtraction.

Antigua Montessori School, in Guatemala, USA, successfully implemented Montessori Distance Learning, distributed Montessori kits to its parents and conducted parent education program by publishing Montessori guides on YouTube (Plihal, 2020).

Sue, a Montessori trained mom blogged on 15th May 2020, that Montessori could be taught online (2020). Sue argued that although there are some obstacles in teaching Montessori online, Montessori lends itself for distance learning. It is self-paced and encourages independence.

Deepa Kamath, the Director of Athreya Montessori House of Children, shared that many Montessori schools in Bangalore have resorted to Montessori online at varying degrees - from delivering oral language activities to art and craft activities, and from providing worksheets to alternative materials. She also speculated that some apps have been developed to replace Montessori materials like Stamp Game and Long Bead Frame. However, these apps do not give the natural feel of the Montessori materials, including the awareness and discoveries that accompany the physical movement.

Recently Montessori world is witnessing a sudden boom of Virtual Montessori Schools which provide a. set of Montessori Materials and Montessori guides and personalized support for parents online (Higher Ground Education Inc., 2020).

RESEARCH QUESTION

Is it possible to convert Montessori to online mode without compromising its principles?

METHODOLOGY
Action Research methodology is used according to the definition given by Richard Sagor (Sagor, 2020). As schools are closed due to COVID -19, the teachers are trying to identify a process by which the Montessori Education could be offered online in order to continue learning at home by providing low cost Montessori materials.

AIM OF THE STUDY
To convert Montessori education into online mode and develop a model to implement it.

OBJECTIVES OF THE STUDY
  a. To prepare teachers as trainers and facilitators for parents
  b. To prepare parents as shadow teachers
  c. To design low-cost and homemade Montessori materials

DESIGN
The Montessori classroom has five main types of activities which are called Developmental Activities. They are – Exercises of Practical Life, Sensorial Activities, Language Activities, Arithmetic Activities and Culture Activities. The Montessori Teachers are trained to prepare most of the materials required for Exercises of Practical Life, using locally available material (Annexure – 4). The materials of Sensorial Activities are the most expensive of all since they are scientific and precise. The materials of Language and Arithmetic activities are not as elaborate and precise as sensorial material. The Montessori teacher is trained to paint, cut, paste and prepare booklets. Nevertheless, the Montessori teachers, unlike traditional school teachers are not trained to get directly involved in the children's learning process. They are trained to be indirect in their approach and act as a "link" between the child and the Montessori environment with its materials (Joosten, 2013, p. 42). Their work is to establish contact between the child and the material (Standing, 1998, p. 305). Once that contact is established the teacher takes a backseat. In other words, if there were no Montessori environment or Montessori materials, the Montessori teacher has no existence.

The moment the teachers heard about online classes they were perplexed, the first question they raised was, "How to offer Montessori education without the materials?" Then followed the next question, "If the materials are given, who will present them to children?" In this scenario, the first and foremost step was to prepare the teachers to broaden their outlook, second step was to help the teachers train parents as shadow teachers and third step was to prepare low-cost Montessori materials keeping the Montessori philosophy intact. These steps were not chronologically airtight but parallel depending on the need and requirement.

  a. To prepare teachers as trainers and facilitators for parents
Montessori teacher training courses are intense and enable the teachers to think and see the child from a new perspective. The downside is the teachers restrict themselves to the materials and refuse to think beyond. The announcement of online classes made teachers fearful and the very mention of absence of material undermined their confidence. This had to be rebuilt by training in technical, academic and material preparation, and at empathetic levels.
  • Technical Training – Montessori schools seldom use computers. Some use computers for only uploading attendance and communication purpose. The teachers have to be trained in using computers, uploading worksheets and video files on school web portal and to handle video and audio communication platform like Zoom, Google Meet or Microsoft Teams for conducting online sessions with parents.
  • Academic Skills – Montessori teachers might have Montessori Diplomas from recognized institutes, but the 'new normal' demands a new kind of skill. The teachers had to look at the materials from a different perspective as to whether they could be modified for the present situation. This requires understanding Montessori philosophy, method and studying nuances in the characteristics of the materials and their presentations.
  • Material Preparation and Presentation – After studying, the teachers could come up with ideas for the preparation of new materials which are low-budget, that could be given to all children without sacrificing the Montessori philosophy. Once a new material is prepared, its presentation is devised, practiced and shared with the team.
  • Teamwork – Train them to be a part of a group while being responsible for the whole team, and to cooperate and coordinate within the team.
  • Empathetic skills – While speaking to the parents most of the times, the teachers would become counsellors as they have to listen empathetically to the parents affected adversely by the COVID-19. and yet remain calm and maintain their composure.

b.   Preparing parents as Shadow Teachers

Parents have to be prepared at different stages – before starting the online classes, while uploading the Weekly Activity Plan, and finally after uploading the Weekly Activity Plan. A sample Weekly Activity Plan is attached in Annexure – 1.

Before starting the online classes – Before starting the online classes, parents have to be prepared for the online classes. They need to understand the circumstances leading to online classes and the advantages and disadvantages of online classes compared to children being at home. This could be achieved by orienting parents towards Montessori philosophy. In Montessori schools, there are two communities of parents – the new parents, who have admitted their children for the current academic year and the old parents, whose children have already been studying in the school for the past 2 – 3 years. Both these parents have to be oriented separately. A detailed training module is attached in Annexure – 3.

- The new parents are completely new to the Montessori world. Hence, they need an online program of 10 – 12 hours of training. Each day one and half to two hours of webinar a day comprising Montessori philosophy, principles and curriculum of Montessori.
- Old parents, already aware about Montessori method and philosophy from yearly orientation programs, termly class presentations and observations require a shorter program of 8 – 10 hours of online sessions spread across 5 days.

While uploading the Weekly Activity Plans – The orientation program provides answer for the 'why' of the Montessori method and materials to parents. The parents may not be able to practice the presentation (demonstration) of each activity to reap maximum benefit from the material, as teachers do in their training courses. Working parents lack time to practice the activities with the material. Hence, the presentation of each activity is sent to the parent in written form as 'Weekly Activity Plan' and the same is presented live or recorded and uploaded on the school web portal for the parents' reference. Even while uploading the activities, the parents have to be given guidelines, regarding dos and don'ts. This could be done by giving:

- Live presentation of the activities on zoom. It includes introducing the low-cost material, comparing it with the actual Montessori didactic material and then the presentation is given with low-cost material.
- After the presentation, orally explaining how each step should be performed, what statements should be made, what is attractive to the child in the activity or the 'point of interest' and what to expect when the activity is correctly performed which is technically called 'Control of Error'.
- If the presentation is uploaded as a recorded file, to play the file and discuss it.

After the Online Class – It is essential to keep the communication channels open so that the parents could reach out to teachers either on voice call or text on WhatsApp during school hours and clear their doubts. If the parents do not call, the teacher makes a voice call individually and finds out how they are doing with the presentations. On the basis of discussion and parental request further training program or individual talks like principles of presentation, errors and their corrections, significance of freedom and their limitations, importance of concentration are to be planned.

c.   Designing low cost Montessori materials

Designing low-cost Montessori materials starts almost at the same time as training teachers and parents. To decide what materials could be designed, first, one needs to make yearly plan, half-yearly plan and decide the list of materials required for the coming term or month. Once the list of materials is decided, possibility of making those materials low-cost should be thought of carefully. For instance, in Sensorial Activities, the idea was to convert the Cylinder Blocks into two dimensional cards with knobs. In the process, it was realized that all Cylinder Blocks could not be converted into two dimensional cards. Only 'Block B' could be made into two dimensional. It turned out low-cost 'Block B' Cylinder Cards were same as 'Block C' and 'Block A' and 'Block C_1' cards could not yield into purposeful activities. A list of possible low-cost materials is attached in Annexure – 2.
At the same time, Geometrical Solids were not made since they are three dimensional and would be expensive to make in wood. It is beneficial to involve parents in material making. Especially where colouring is involved and where materials are easily available at home like Sound Boxes and Fabrics Box.

Steps to follow while preparing the material:

1. Studying the material description, guidelines about preparation of materials, characteristics of the material and the nature of the activity before designing the material.
2. Analyzing the market and inquiring the kinds and nature of materials available in the market, to reduce the cost. For instance, while making Multiplication Board, the team brainstormed whether to use a cardboard, cloth or a thick paper? Or whether to use bubble wrapper holes or use stand out

paint? Finally, we decided to use 300gsm paper and pasted metal rings to hold beads in order to reduce the cost.

3. Soft copies could be created using pages on mac, or Microsoft word on Windows.
4. A sample piece – First a sample printout of the design can be taken. For example: While designing Cylinder Blocks, the art teacher came up with several ideas for the knobs for Cylinder Block Circle Insets. Finally, knobs were made using paper rolls stuffed with thermocol. The design is workable, when the knob is firmly stuck to the card and when the knob is sturdy enough for the child to hold and work.
5. Once the design is finalized it can be sent for bulk printing.
6. For less than 1000 copies digital printing is the best option. It is a good idea to find out the best rates from different digital printers and decide on the best deals.
7. The soft copies are emailed or shared through Google Drive with the printer. The designs are sorted according to the size of pages and the files are named by the size of the paper to be used for printing and the number of copies to be printed. For example, if Cylinder Block has to be printed on A3 size paper and 15 copies are needed, the file name should be **A3 15 copies cylinder blocks**.
8. Once the printed material reaches the school, the coordinator or the teacher in-charge makes a note of all the prints received from the printer and cross checks with the designer, who emailed the designs to the printer for any discrepancy.
9. The printed papers are then given to the art teacher to give the final shape depending on the type of the material. For example: in case of Cylinder Blocks printout, the outline of Cylinder Block shape and circles have to be cut, knobs have to be prepared and stuck to the circle insets.
10. Final guidelines are to be given to the art teacher. Art teacher trains the supporting staff and completes the material preparation.
11. The art teacher hands over the finished material to the teacher in-charge. The teacher in-charge in turn checks the materials according to the sets planned. She sorts out the materials into groups. For instance: Cylinder Block activity - One Cylinder Block Card and ten Cylinder insets.
12. Now it is time to decide on how to distribute the material. Whether to put all the pieces of Cylinder Blocks in a plastic envelope or make a paper bag?
13. The class teachers are given their required sets of materials according to the level of their children.
14. Thus, all materials required for a month or a term are distributed at the beginning of that month or term.
15. Revised Design – Materials are upgraded and revised depending on the suggestions given by the teachers. For instance, the colour cards were coloured on one side and on the other side white because of technical problem. While presenting, the teachers realized it would be better if the colour tablets had the same colour on both sides as the child turns the cards and observes both sides. The design was changed accordingly.
16. Depending on the work of the child if he needs more help new individualized materials are developed.

The teacher makes note of whether the presentations are given to the child or not, monitors the way the child works with the activity, verifies whether the child is able to choose the activity on his own or by suggestion, whether the child repeats the activity and if not states the reason and prepares a record for each child.

DISCUSSIONS AND CONCLUSION
The challenge to take Montessori online was to keep Montessori principles intact in doing so. The following principles were maintained while taking Montessori online - the children being active around the material using their hands and senses, choose the activities on their own, the activities being presented according to the sensitive periods and extrinsic rewards being avoided. Montessori online did provide activity to the children, enabled them to concentrate and gain control over their movements. They could also interact with other children in group activities to a certain extent.

The motto of providing online Montessori education through low-cost materials was to provide the 'Best Possible Assistance' to the child. To cut the cost and time, most low-cost materials were two dimensional and did not provide the three-dimensional impressions to the child. Hence, the current research, proved once again that the original Montessori Materials are superior in purpose and value compared to the low-cost materials, and concluded that these materials cannot replace the original Montessori didactic materials. They can be used only in unavoidable circumstances.

A significant number of parents indicated that the materials were successful keeping their children engaged and active at home. The parents who used the presentations the way it was instructed reaped larger benefits. The parents

who could not use them the way it was explained in the activity plan lagged behind in presenting the activities to the children and also reported that children were not independent in carrying out the activities.

Working parents were able to understand and comprehend the activity plan, but as they were tied up with their office work, they couldn't present any activity to the child. Such parents were advised to spare at least two hours any day of week for presenting activities to their children. A short webinar was arranged to help the parents understand the importance of sensitive periods and work cycle. The training of parents, empowering teachers, and designing and redesigning of materials goes hand-in hand for successful Montessori online rendering.

Teachers maintained a record of the presentations given to each child and the way they worked with each material after discussing with the parents. Referring to this record and depending on the development and involvement of the parents, the next Weekly Activity Plan was distributed after customizing to the individual need of the child.

LIMITATION AND IMPLICATION
The greatest limitation was cost and quality of the material, as the materials have to be given to all the students and school cannot afford either to hire professionals, machinery or to use better quality MDF board as raw material. Low-cost materials, made of paper were flimsy to handle, which children found difficult to lift or hold. Antigua Montessori School of Guatemala, in the USA, used MDF Board for making the materials which are sturdy compared to the ones mentioned in the current research. Second limitation was parental involvement. It was observed that Montessori online was less fruitful for the parents who were not involved in the development of the child. Third limitation - it was challenging for the teacher to be constantly involved in preparing the materials, assisting the parents and keeping the record of the children's work. Fourth limitation was to stimulate the child to start working in the absence of other children and the conducive environment.

CONCLUSION
The research indicated that it is possible to offer Montessori online without compromising the Montessori principles to a certain extent. The 2D materials satisfied the child's desire to work with his hands and senses but they cannot take the place of 3D Montessori didactic materials. At the same time the value of conducive environment with mixed age group of children cannot be undermined although they do not coordinate and cooperate like in elementary level. Further, Montessori Online is not for ordinary times, when everything is going on well. In situations like COVID – 19, where children are not able to attend the Montessori school, when one searches for the "Best Possible Assistance", Montessori Online can be confidently relied on to keep the learning momentum.

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ANNEXURE – 1

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Weekly Activity Plan for 3 ½ Years to 4 ½ Years

Sensorial

Geometrical Solids Name Lesson
Introduction: Name lessons are offered when we teach names to the children. The Name Lessons have three distinctive periods. In Period 1 the names are introduced, in Period 2 we say the name again and again and child performs the action and gets an opportunity to listen to the name several times, and Period 3 is to check whether the child has learnt the names.

Materials Required:
1. Geometrical Solids cards without names

Preparation:
1. Take the cards sphere and cylinder and keep the remaining in a tray.
2. Keep the tray to your right.
3. Sit comfortably with the child on your left.

Method:

Period - 1
1. Keep the cards sphere and cylinder in front of the child. Point to the sphere with your right finger and say, "This is … sphere". Repeat if necessary.
2. Point to the cylinder and say, "This is … cylinder". Repeat if necessary.

Period – 2

Now give few commands like:
- Give me cylinder.
- Give me sphere.
- Keep cylinder down.
- Keep sphere down.
- Show cylinder to dad.
- Show sphere to mom.
- Keep cylinder here (point at one place on the mat).
- Keep sphere here (point at one place on the mat).

(Do not use both the names together, do not give the cues with hand or eyes to the child)

Period – 3
- Point the card which you asked last and ask, "What is this?"
- Expect the child to say, "sphere".
- Next point at other solid and ask, "What is this?"
- Expect the child to say, "cylinder".

Note: Any correction in the pronunciation could be done at this point.

Language

Sandpaper Tracing
Sound 'm'
1. Place the sandpaper letter 'm', between you and the child.
2. Use the empty space to hold the card down with your left palm
3. Trace the letter with right index and middle fingers. Keep the hand flat while tracing.
4. And say, 'm',
5. Trace 2 to 3 times.
6. Ask the child "Would you like to trace?" and allow the child to trace.
7. After the child traces a few times, tell a few words which have m sound written by the letter 'm'. ex: mango, man, mushroom, uniform, pumpkin, milk, tomato etc., ask, "Do you hear 'm' in all these words?" "That is this"

   Note: Refer to the video shared in WhatsApp group.

Arithmetic

Number Rod Strips Exercise -2

Materials Required:
1. Mat
2. Number rod strips

Preparation:
1. Spread a mat on the floor.
2. Ask the child to arrange the number rods in succession on the mat.

Method:
1. Parent can sit anywhere in the house.
2. Ask the child to bring strip of 7.
3. When the child brings ask what he has brought.
4. If the child says, "Strip of 7", tell him, "Check" Let the child count and see whether it is the right strip. If it is the wrong strip, ask him to put back and get back to you and give a different number. Make a note of it and re-present that number (here 7) some other time.
5. After the child counts ask the child to put back strip of 7 and again come to you.
6. When the child comes back, now ask him to bring strip of 2.
7. In the same manner continue the activity by asking the child to bring rods in random.

ANNEXURE – 2

Alternative Materials Prepared

	Sensorial	
Sl. no	**Name**	**Material used**
1	Cylinder Blocks B	300gsm paper
2	Pink Cards	
3	Brown cards	
4	Red cards	Cardboard
5	Colour cards	300gsm paper
6	Touch tablets	sandpaper
7	Fabrics	Cotton, paper, Scotch Brite, Kitchen towel,
8	Sound boxes	Plastic boxes of same size with black paper inserted inside
9	Geo. cards	300gsm paper
10	Geo. cards	
11	Constructive triangles	
12	Blue triangles	
13	Constructive triangles chart	
14	Geo. solids	
15	Five Stereognostic bags	Cloth bags with contents
16	Baric Tablets	Bags of same colour with grains of different weights

	Language	
1	Sandpaper letters	Sandpaper from Kidken Company
2	Moveable alphabet (cursive)	300gsm paper
3	Picture series	
4	Sentence box	
6	Nomenclature cards 3rd set	
7	Reading and Matching cards	Black outline printouts to be coloured by the children
	Arithmetic	
1	Number cards	Cardboard
2	Number cards	300gsm cards
3	Spindle boxes	Cardboard and bamboo
4	Cards and counters	Paper and rajma
5	Decimal Static	300gsm paper
6	Decimal static cards	
7	Dynamic	
8	Dynamic cards	
9	Add. strip board	
10	Add. Charts - 4	
11	Sub. Strip board	
12	Sub. Charts 2	
13	Seguin Board I and II	
14	Multiplication With Colour bead bars	Painted on Ice-cream sticks
15	Multiplication Board	300gsm paper, metal rings pasted for holes, red beads, a red paper skittle
16	Division Board	300gsm paper, paper, metal rings pasted for holes, green beads, 9 green paper skittles
17.	Stamp game	Foam
18	Short bead frame	cardboard
19	Dot game	300gsm

ANNEXURE – 3

Training for Parents to be Shadow Teachers

First Day
1. COVID – 19 and its effects on Montessori
2. Child is the constructor of Man
3. Powers of the child
4. Two Models of education

Second Day
1. Montessori Education
2. Principles
3. Stage of Development
4. Needs of 2 ½ years old
5. Difference between Montessori and Traditional schools

Third Day
1. Developmental Activities
2. Exercises of Practical Life
3. Duties of the Parent
4. Materials to be Kept at home
5. How to display the materials
6. Sample Presentations

Fourth Day
1. Difference between Man and Animal
2. Importance of Education of Senses
3. Senses
4. Difference between Exercises of Practical Life and Sensorial Activities
5. Characteristics of Sensorial Activities
6. Presentation of Sensorial Activities
7. Sample Presentations

Fifth Day
1. What is language
2. How child learns language
3. What is the need of the child?
4. Format language is presented
5. Importance of Sandpaper Letters
6. Cursive and Print Letters
7. Alphabetical order
8. Orthographic Difficulties
9. Writing and Reading

Sixth Day
1. Basic of Arithmetic
2. Numbers 1 to 10
3. Laws of Decimal System
4. The four Arithmetical Operations
5. The Basic Combinations
6. The Traditional Names

ANNEXURE – 4

Sample Material List of Exercises of Practical Life

Sl. no.	Activity	Materials	Size	No
1	Shifting rice	Bowl small	8cm dia. x 3cm height	2 or 3
		Bowl Big	11cm dia. x 6cm height	1
		Tray	Fits three small bowls and a bowl	1
2	Shifting green gram	Bowl small	8cm dia. x 3cm height	2 or 3
		Bowl Big	11cm dia. x 6cm height	1
		Tray	Fits three small bowls and a bowl	1
4	Folding	Face Towel	Folded into square	2 dif. colours
		Face Towel	Folded into triangle	2 dif. colours
3	Pouring millet	Glass	Small glasses	3
		Jug	As big as it holds above three small glasses of water	1
		Tray	Which holds three glasses and a jug	1
5	Pouring water	Glass	Small glasses	3
		Jug	As big as it holds above three small glasses of water	1
		Tray	Which holds three glasses and a jug	1
6	Mopping	Mopping cloth	5cm x 5cm cotton cloth cut using zig-zag scissors	4
		tray	Which holds three glasses and a jug	1
7	Turmeric root grinding	Flat Stone	15cm x 15cm thin flat rough granite stone for grinding turmeric	1
		Turmeric Root	Kastoori turmeric root	1
		Mopping cloth	5cm x 5cm cotton cloth cut using zig-zag scissors	2
		Tray	For displaying the stone and turmeric root	1
8	Collecting dust	Dustpan with brush	Smallest plastic dustpan with bush attached	1
9	Sweeping	Broom	Small broom as thick as child's fist	1
10	Mopping	Bucket	1litre bucket	1
		Mopping cloth	15cm x 15cm moping cloth edges stitched	2