

CHAPTER 6TH

LEARNING PROGRAMS FOR MIND AND BODY

Curriculum studies in education primarily identify schooling (which plays key role in child development) with learning mainly of, mathematics, science or languages or the skills these subjects focus on (Galton & Patrick, 1990). However, the Mother emphasizes the idea of Integral Education for convenience of common understanding and provides five broad domains namely: Physical, Vital, Mental, Psychic and Spiritual. Mental Education refers to the teaching learning or different ways by which a teacher introduces thoughts, concepts, and skills to the child. Education for body is relevant due to two reasons; one is to work towards the 'perfection' of material life and another is to understand the 'self' both through mind and emotions involved with the body. The present chapter and the next chapter focus mainly on 'learning' of mind and body; which even though separate have underlying continuity.

A 'teacher' plays an important role in designing set of activities or deciding relevant knowledge to be taught to the child (for mind, body and their underlying continuity). Integral Education also values teaching-learning process that children undergo but ultimate value of various learning opportunities (mind or body) is about 'self-understanding' of child (and that of teacher).

Under the backdrop of this understanding, the researcher observed few classrooms, assisted the teachers, talked with them and attended workshops or meetings (formal and informal) at the three schools. The observations focused on everyday activities that happened in the classrooms and elaborated upon 'micro-processes' of schooling which involved teachers and children in the daily practices of the schooling.

This chapter focuses on two important features of classrooms that is teacher student ratio, 'multi-ability' classrooms that allowed the individual teacher to organize learning opportunities in the school. The chapter then delineates the role of teacher in understanding the child, enabling them to choose appropriate content and method for the child. The data collected for this (and next chapter) recount various 'learning opportunities' available in the field in formal spaces like classrooms, sports grounds and the pedagogic aims these opportunities have. The Schools over the years had developed not only curriculum but various 'knowledge forms' relying on different (in case of SAICE at least two generations of)

teachers' abilities and skills. Each school had freedom to utilize the individual's skills of their permanent residents or visitors, which resulted in unique forms of curriculum organization. This chapter discusses the relation between various learning opportunities for an individual's mind and body (domains) and role of 'norms'.

Teacher Learner Ratio

Individual learning is the focus of Integral Education and teachers always gave prominence to this principle in the classrooms. One of the factors facilitating teacher's focus on individual child was the classroom strength, which was minimum seven to maximum eighteen children in the classes observed. During the teaching sessions, teachers split the entire class into small groups as per the 'ability' of the children. The teachers divided the children for differential learning inputs. The students in smaller groups or sometimes an individual child then changed the classroom (spaces) with the teachers for the stipulated learning activity. Hence the number of students in a group were small that is, four to five students per teacher. In many cases with the help of volunteer teacher (or even a regular teacher mostly as in the case of SAICE & LB) T-L ratio was 1:1 when instruction took place. Smaller T-L ratio implies that teacher is likely to give more time to the student in terms of imparting instructions, identifying behavioral or learning difficulties, and making a more individualized instruction plan (discussed in subsequent sections of this chapter). This is one of the factors that would enable the teachers to enrich the learning process. Field observations confirmed the efforts of teacher to enrich child's learning experience along with other issues like choice of the student to choose an activity, the individual physical and mental space given to the child.

Organizing levels and abilities of the learners

Multi-level classroom implies that within a classroom there are students of different learning levels. It also means acknowledging that children have different abilities within similar age groups. This sub-section describes the issue of division of children in a classroom as per the learning levels. I choose not to give episodes of differential learning across the division but explain that how this phenomenon was experienced in different schools. Each school had varying teacher-student ratio (within the limits of five to eighteen as mentioned above) and different ways to divide students in the class. Each school allowed the teachers to divide children based on their learning ability in each 'knowledge area'. Within one class, children

were divided on the basis of their 'comprehension' and 'performance' that is how much they responded to the instructions given by the teacher and how they solved the problems which teachers gave them. Teachers however could move a child from one group (level of learning) to another over the year. Usually the division of children was in the groups but in some cases there was provision for remedial teaching for individual child as well, where a child needed to work upon specific skills- reading, writing or mathematical. This division of children into groups had implications, first on the class the child should be in (as per age), second on child's learning of certain concepts which was cumulative.

At *Delafon* (SAICE) the main idea of division among students was on capacity or level of the child to learn, which the teachers decided after observing the child. The classes were divided into at least two or sometimes three levels apart from individual instruction the child needs. The children in Division A comprehended and responded quickly and were referred as fast or those who respond or understand quickly than the rest. The children in subsequent division (B or C) might learn the same material in longer time; the children were not instructed at the same pace for the same concepts because the child needed to master the skills before learning the material of Division A. Division for 'higher ability' also meant students doing more or different concepts as well.

At the AID individual classes for reading in English were in practice while rest of the students read the textbook or did worksheet as per their age level, few children needed to master the basic skills of reading. Hence those children sat with volunteers like me to read a book in English or to do a phonetic drill prepared for them by one of the teachers.

The teachers at SAICE reasoned that students did not feel bad about being segregated into groups of different levels of learning since in another area they would be in different level of learning. However children were free to differentiate with the teacher's views(read an episode on page no 182).

The 'division system' was followed in sports as well. In sports, the children had different forms of grouping. Therefore, the students interacted across the age groups, learnt and made friends. This was reflected in the friendship of ex-students of SAICE, where they related to an individual as fellow students since they were together in a group mainly sports while they were in the different classes in the school.

At LB, the division of students was not followed in all the classrooms but was there for languages. At LB multi-level ability was a challenge since students came from different parts of the world and had not studied at Auroville. Teachers often mentioned this.

the teacher mentions that how Delafon at the Ashram school managed such well-organized instruction and group division. I told her that they have been doing it from long time and they had good number of teachers to do that. The teacher added that children in this school come from so many different schools within and around Auroville and different parts of the world (during the field work the children were from South Asian and European nations). Most of the children do not know English and it becomes difficult to maintain the groups in the classroom.

Int Nov2011; LB; Participants- researcher and school teacher

The school had come with new group for children who did not know English at all as 'initiation group' (mentioned in chapter 3) while there were several children who could be adjusted in regular classes as per the age level however their level of learning was not the same. A similar interaction over classroom teaching happened like the last one with the same teacher, this time she shared the entire problem of dividing the children in different levels and added

" how to document what children do in class or different groups in the same class ? Since this would substitute for the fact that all children do not learn the same thing at same pace. Then how do we know what the child has learnt?" the teacher added, "children leave or join the school in between. We love to give them freedom but then it becomes difficult to re assign them a class or a group every time!"

Int/ Sep 2012/ LB/ researcher and school teacher

The freedom to join or leave in between the session of the school was initially an asset for the child and their freedom. Subsequently it was challenge for teachers to gauge or at least navigate the child further with her or his learning. It also meant that teachers had to undergo the task of observing the child all over again. The interaction is also an example that how the Ashram school and its practices were 'benchmark' and requirement of an organized learning program required consistent participation of children in the schools.

At AID the children were divided for language teaching but not so strictly for Mathematics, Science and Social Science. In latter knowledge areas, the teachers were aware of low ability

of certain students. However, towards the end of the fieldwork, the classes suspended program of division based on ability. The teacher reported that when the child joined the school, the allocation of classes was still (March 2012) based on level of comprehension and performance of the child and not only age. The method was now that the child participated in the class for trial and then was decided (in consultation with the teachers) that which class level he or she would go.

It was difficult to find the genesis of this idea and it looked as if it was always there. However, one possible link was with the French textbooksⁱ at SAICE, which stated different levels of learning of students in a class. The phenomenon of multi-ability of students was often discussed in the field.

‘Developmentally’ it might help the child only when teachers are able to take appropriate measures after identifying the level of the child. Another issue was that there were no standardized tests against which the children were judged. The decisions of grouping the children in different levels of learning relied on detailed and reflective observations of children by the teachers, which the next section explains.

Knowing and Understanding the Child

Three aspects of Integral Education namely, physical, vital, mental are deeply rooted in individual ‘nature and behavior’ⁱⁱ further leading to inner development of the child. For example, vital education has to do mainly with individual’s understanding of one’s nature and emotions example: anger, excitement, jealousy, boredom, to name a few. Observation of teacher’s reflection revealed that children’s behavior and reactions formed important part of discussion among them. Teachers addressed each child’s behavior and made reference to the same in their interactions with each other and many times with the researcher as well.

Referencing of individual behavior happened at different times and places such as, in meetings, at dining area, outside the class, in the classroom during the school hours or could be when teachers met after the school. The discussion about a child happened in presence or even in absence of the child. Below, we share five observations from three schools that states teacher’s observation of the child and his/her nature. The observations suggested that to know a child and explain his behavior was important for the teachers. The children referred to in these observations belong to different age groups. The small community naturally

facilitated people to know each other and often references were made to an individual's behavior, which at times might turn into gossipⁱⁱⁱ.

We begin with an episode to highlight that how observation of an individual behavior was important:

A student Shiva has not been coming to the (physical education program) group. The interactions begin that the student has been playing truant, ... not coming on timeor not coming at all.... (punctuality and regularity matters a lot in the whole program, there is an award at the end of the year for being punctual and regular) or of strange replies on being queried for the behavior (absence) .the teacher feels that the school will tell him not to continue in the school.

Shiva's classmates and other students, cropped up the topic. "so what happened to Shiva's case, will she continue?" Ashram inmate, the teacher, "seems (she is) not interested and has been not coming to the school. And if you don't do physical education program, you are not allowed in the school."

the teacher commented about the family background and added, "choice of Shiva to be at school was of the family, most likely not her!"

I probed further after initial conversation, "in case of adolescent and young adults who decides that the 'child'/' student' will come to the school or not?" teacher told me, "if the child-young or old does not come he or she is asked to leave the school. Since he or she does not fit into the school and its environment.

Obs/int Dec 2010 place/Golconde- a dormitory of the Ashram/ working for Christmas/Ashram inmates and outsiders/ several volunteers like me.

The Ashram or Auroville or all the three school had their environment, which was created by its rules, rituals, practices and objects. Students or individuals might not identify with all but had to identify with few or the essential rules like participation in the physical education group at the Ashram, so that they are part of collective behavior of schooling. (Refer chapter 5 for more details on rituals and practices.)

Charu is a young teenager has not been doing very well discipline wise, but is otherwise a very bright child. Initially she did not want to study in any school (but made to this school). Due to the child's behavior of disturbing other students and teachers, other teachers think the child does not fit into the school. Over several meetings and discussions we (teachers) decide we would give chance to the student(to decide). So teachers felt if we 'confront' the child (over the behavioral problem).

One of the teachers and I approach the child near the school entrance, the teacher confront the behavior, and told what we think, " you can still make to be in the school, you are very bright and intelligent, but it is up to you to be here or to go out" the child nodded in affirmation. There was no rebuking and with suggestive authority, the child was confronted, in order to know what did the child want. C looks down, is dressed in shorts and t shirt, and continuously moves his foot in the sand. I ask politely to the child to look up. And answer the teacher. The teacher tells "I think there is something in you which tells you to do all which nobody likes, and wants to break everything and not to come to the school, or to be anywhere. (the child keeps on nodding) Do you think you can control that, tell yourself not to do that, and you can try to be here, if you want. I think you can. (a long pause)" the teacher added, " Do you want to be here or outside somewhere, wherever you want(pointing towards the entrance of school)?" Charu replies, "here!" teacher says, "If you are clear. I trust you, (you) can."

Int/ Par/ July 2011 / LB/ teacher, researcher & student

The above two observations were at two different places but the teachers identified some unacceptable action in the behavior or attitude of the child. In both the cases it was felt the child did not fit in the schools. In the first interaction the child was going to be told that s/he should stop coming to the school. In the second observation in a different school attempted to give freedom to the child and talked with him/her like an adult in one to one interaction. However, this case and several others were example of predicament of giving freedom to the children and the role of adults. In second case it was at the stage where the child needed adult's faith and trust to control that 'part' (rebel or unmanageable) of one's self and change it.

However, not all children's behavior was challenging or problematic. In some cases, it was problematic for parents but teachers tried to understand it and accept the child.

During the lunch time a child stops me and tells me, "I am eating more and more these days." He showed me his plate and said, "I have finished all I have taken today. And then he pulled his up sleeves to show me his muscles (a gesture we often indulge in India to show that we are growing stronger). Just then his teacher joined us and appreciates him that he has been eating well. The child has smile on his face.

Later, I shared my experience with the teacher (since I was new in the school and learning appropriate behavior at that time) teacher immediately broke into the detail observation of the child, "he is sweet child and likes to eat but faces pressure to eat more and be strong from the home." She added that she made him comfortable and gave him company since he liked to talk about other things over the lunch. His classmates finished fast and left him.

[Over the time one of us made sure to be with the child concerned and ensure that he finishes his food^{iv} or we just tried to be there to listen to the child.]

Obs- Int /Oct 2010/ dining area/ class teacher, children- 6 to 10 years, researcher

Listening to the child's opinion was an important feature and in some cases it was difficult for the teacher to give answers or arguments to the children. However, school as a policy believed in listening to the child and facilitating, if need be; but not to snub the child. Often during my field work I also made an effort to sit with the child (in this observation) and listen to him.

Teacher's intervention in this case was to give more acquiescence to the child's condition. It appeared time consuming but for teachers it was important that child should feel positive about oneself. Schools especially like LB gave ample time to the children and sometime to their parents to talk and express.

At the AID where children came from local villages, the teachers had seldom time to discuss with parents, but as teachers individual referencing of behavior of each child was very important to understand the child.

Sumanlata is supposed to sit and read an English book with me. She cannot read a passage in an English book properly, she suddenly breaks down and is rather angry, frustrated. It seems not with the teacher but with something, it seems to me what she has been discussing in Tamil with other students is the case of her being disturbed, I felt if the other students have teased her. I try to ask but no one answers, I try to console her, but she runs away crying loudly.

I later discussed with the teacher, the teacher told that there are lot of unresolved things may be due to her home or within her, that she has to resolve emotionally. Teacher added about her that she is mostly a happy child, laughing, helpful, but in some cases the child cannot deal and has to be facilitated, She advised me, I don't have to give up or judge the same behavior.

Obs/ Int July 2009/the Aid /researcher, teacher and the 10 years old child

In this case I was caught unaware of my reaction to deal with the child. However, the teacher knew the problem but did not feel that counseling or intervention could help. She explained me that the school's aim was to provide positive environment so that children feel positive and not to highlight the problem. Acceptance was primal and therefore, in the last two cases children were not confronted about the same.

However, in few cases like the next one, teacher made an effort to put it across a child's strength and weakness.

Malay is a student with whom I have been interacting for several days during the fieldwork. I am observing him in a class. The teacher who teaches French told me, "he is hardworking student, he took the choice of learning French, he had choice between Tamil and French, but decided to take French. He was weak (initially) but progressed well." Teacher added that he also has a weak body...

During this discussion (with the teacher) the test for the language was going on. It was almost break time and the refreshment banana and lemon juice for the children was served there. Malay could not get since it finished, he felt exhausted, and he needed it. The teacher immediately arranged for the same, and she discussed with me that what food items could help him strengthen the body, since he is exceptionally good. The teacher meant the child needs to work on it (strength of the body).

During this discussion the child was present there and was doing the test. In between he smiled back at us to acknowledge the fact that he knew, we were talking about him.

Obs-int/July 09/ the Aid/ researcher, teacher & students

The above five descriptions discussed about the individual nature of child of different age group/ gender/ SES background and reflected that a child's individuality was very important

for the teachers. These discussions and similar kind of interactions were mostly about the children (if need be, many times with them) every day. These consultations were mostly about the children who were studying and rarely about children who had passed from the school or left it.

These discussions as evident were firstly to describe child's behavior for example, in case of the child who was not coming to school and then aimed to find reasons for the behavior; in the first case as per the teacher the child did not fit in the school system. Similar issue was with another child, in second case, which was disturbing and troubling other students and teachers. Consequently, he/she was unpopular among rest of the school. The approach in these cases was also 'problem-solving' that is, how the issue in case of a particular child could be solved whether it was behavioral, emotional turmoil or physical to deal with body (as in the last case).

These interactions became little windows to glimpse the way children peep into their self. In the second observation, the idea to confront the child was over the challenge that the child was posing to rest of the school and to address it. The child was old enough and teachers could tell him/her to make the choice, be clear and guide the child to decide. The discursive practice of identity was to guide the child to be 'oneself' and was established with unique individual personal traits. It was meant to be a continuous process. The child was expected to improve the traits, if the child agreed or to make the choices like in the first two cases shared above.

An important aspect intended through these discussions in interaction with the children was knowledge of various aspects of the self that is, emotional, physical and an ability to observe all these. It intended to develop within the child an ability of self-observation. Gradually, children would be able to look for the problem from perspective of self and improve them. 'Within or inner' development was an implied process and one never found the teachers preaching or dictating the inner or individual aspects of development.

'Knowing the child' was first step towards accepting the child. The interactions showed 'acceptance' of child's nature and their choices. It was also important with reference to the problems teachers or students had been facing with a particular child or simply to know the choice of the student or explain his/her behavior. Teachers' attempted to have a microscopic

view of the 'whole child' which magnified traits, behavior, choices and actions exhibited by the students:

This phenomenon sometimes could lead to gossip, when the discussion either by a teacher or any other adult like parents were meant just to analyze the child without any purpose. In that case, it might not necessarily mean a quick solution or an action in favor of the child. It then had the fear of running into gossip mainly if someone other than teacher used information about the child without any purpose. One of the schools came across such a problem, the child was analyzed in extremity in front of other children, which resulted in non cordial relation of few classmates with that child. The episode is given below:

A teacher brought to notice of other teachers that Ashraf's particular learning traits in a subject have been used to tease him. The teacher (however) added (commented) that it was interesting to see how the child sustained the pressure (due to this criticism) with smile and silence. Other teachers present there added that the child was exceptionally good in sports and mathematics

The child had problem in comprehending how to develop particular skills, the (child's) family was also distraught by conflicts (economical, personal). The school in charge discussed this (information) with other teachers and me. All the teachers suggested that how they could help the child and to bring back harmony in the class.

Int/LB march2011/ various teachers

In this case, the approach was to empathize with the child. At the same time the teachers were observant enough to see that child was doing well in all other areas except one and was dealing with this problem with a poise, confidence and non-reaction.

Role of teachers was critical in analyzing the child. Teachers took responsibility to be analytical but with care to protect the child as well. Similar attitude of acceptance and protection was reflected in listening to the child who was concerned over his health and eating habits (episode 3 in this sub-section); or in arranging refreshment for the child who needed to eat something (episode 4 in this sub-section). The next section shares more examples from observation and interaction where a teacher's role and reflection mainly with reference to children becomes clear.

Teacher's Role and Reflection

Teachers played various roles as an individual other than teaching even in the administrative works of the schools or some other jobs at the institutions. They were not restricted to their role in the classrooms. The schools had mixed set of regular and volunteer teachers (even the researcher). The regular teachers were the Ashram inmates, or Aurovillians or people associated on long term basis with the two. The schools also welcomed volunteers, Indian and Foreign nationals for remedial classes, workshops, presentations and other curricular areas like gardening, martial arts, dance to name a few.

Teachers did not undergo training or produce certificates of their training. Apart from two teachers at Auroville schools who were trained at *Mirambika*^y, Delhi, rest of the teachers had studied at the Ashram or Auroville or had done their formal schooling or graduation from recognized by the 'states' of different nationalities. They studied, did various jobs like business, artists, administrative work at office other than Auroville or Ashram, and at the time of the fieldwork reported that they had settled here to teach. Teachers made the choice and volunteered to teach. The idea was to have teachers who wanted to learn and shared their passion of subject, skill or concept with the students.

Role of a teacher was considerable as they enjoyed relevant freedom to design the curriculum in absence of affiliation (or in case of the AID absence of strict adherence) to any School or University board of Examination and Certification. The freedom entailed hard work and responsibility to choose the content of knowledge areas and organize relevant teaching learning material. Most of the teachers in all the three schools apart from their teaching time spent considerable time in the preparation for the classes. Preparation for 'new' learning opportunities was relatively less at SAICE, its long history had led to lot of organized course work; teachers had experience of teaching in the same section for nearly three decades and relevant materials available for teachers to choose. However, many teachers at SAICE still formulated new learning opportunities.

At LB and the AID these opportunities were also immense but more in interaction with the community and freedom to welcome others. LB being the youngest of three and the AID had new set of teachers. Relevant themes for the role of teachers will emerge in sections below where learning opportunities and focus of these have been explained. Teachers (reflections

and their background in terms of engagement with various issues of life and learning opportunities) had been the basis of what and how had been taught in the class.

Reflective practitioners

Teaching in an Integral School is instrumental to reach one's inner self, to know oneself and ultimately to get in touch with one's soul^{vi} (Patel, 1986; Adams, 2006 Smith, 2010). The education that looks into individual's choices aims at self-development of the teachers' and of the child. This section brings forth observations and interactions with the teachers about the experiences of the different classrooms at the three schools. Episodes in this section primarily highlight how teachers reflected about the process of teaching and learning. These observations would also indicate how teachers dealt with issues of child's nature, problems they faced with children and how they organized nature of teaching and learning opportunities.

This is an arts class, where ten years old have been send to explore their interest in arts and crafts, so that they can choose this work later on. The teacher shares with me his observation and reflection about the group, (he commented) the group is little aggressive (throw things on each other or fight or argue), does not follow instructions hence (there are) constant disruptions. However he does not lose patience or get frustrated, instead there are constant, polite and sometimes firm reminders (from his side)- "keep that from where you pick up. you don't do it this way. Hey stand properly, don't move, don't argue." the teacher devises mechanisms to involve them in small games, in which concentration could be developed. The students do not know this (teacher's intention), they continue to do what they are told, but sometimes they did not follow, but the teacher continued to engage them in games, activities or other chores in the class. (These observations happened over the time of two classes and detail interaction with the teacher.)

Obs/ Int March2011/ classroom/ teachers, group of ten years old, and researcher

The teacher in this episode observed and reflected about the behavior of children (which otherwise would be a 'difficult' class) and devised techniques to deal with them. The reflection involved identification of the problem and specific steps to change their current aggressive behavior to the behavior where they could learn amicably. The teacher did not show anger, frustration or complained over the children's behavior. Longer association the

teacher had with children and the freedom he had to deal with them allowed him to do what was appropriate (also the sheer faith, trust or courage of the teacher to do such things in class, where other young teachers were found to be in conflict over the same). Children enjoyed the games while they learnt to take instructions and later on participated in collective assignment which teacher gave them. As a result, of the teacher's effort there was constructive learning that the children engaged in.

A similar episode of a teacher's reflection of six years old:

A very senior teacher shares with me about her pedagogy and observation of children. She said, "I allow the children to express freely over a theme or topic from the story, then notes down their expression, choose the best one and give them situation or theme to enact.....it is important to look at response of the group. " She added, " this year it is slow. Last year children responded well. But it is all right as long as children are learning (and) making progress. "

Int/July 2009/SAICE/teacher and researcher

The interaction^{vii} indicated two important aspects of the pedagogy one was her method of observing the children with respect to theme based learning which she followed with the children and another a comparative 'norm' about child's development; which according to the teacher was, children's pace of learning, which was different that year from the previous year. This comparison indicated understanding of norm that the teacher did not detail out or write off somewhere in the certificate or report, but carried in her mind as result of her years of experience.

The oral creation and understanding of norms can have advantages and disadvantages; here I share the advantages that teacher reflect in order to form the norms. The teachers are free to build their norms. There were no frequent or regular meetings to discuss these issues with the parents. The teachers continued to address various issues with the children and assigned them the required activity.

The only seemingly disadvantage oral norms might have: first, it makes learning, individuals, classrooms quite dynamic and variable. The dynamism might look unorganized, non-iterative and inconsistent. But the teachers might find it useful to give freedom to all the children, in the words of the teacher who makes sense of this dynamism:

Bobby is a volunteer teacher at LB has been working with the school and has been in Auroville for more than an year. Bobby is a foreign national. She is supposed to take the classes on French, which is her native language. [later on I observe the class she took on her native language] We introduce ourselves and she invites me to her class. She adds, "class here (at the school) are different each day, one has to enter and see what the class demands and hence introduce the lesson or activity." She told me, " so each day is different." Later on talk with Bobby revealed that this group of children needed continuous attention. She said, "it's like you start from the beginning of the class, else they will lose it. She said that she felt exhausted at the end of the class. She also mentioned, "This is not like outside schools that you plan and teach... here you come in the class feel it, like you check the temperature and you adapt...."

Int/ Oct 2010 / LB/ teacher and researcher

Teachers' reflection of her classroom, children's learning and behavior revealed that learning environment, individual child's behavior and group dynamics varied each day; as a result children's pace of learning, attending to information, grasping it and responding to the same could vary each day. This was not temperamental but more expressive for the children. The 'environment' of the class varied and mattered each day. A flexible understanding of norms, which emerged from the teachers' reflections were also relevant for the classroom environment. Therefore, norms were 'flexible benchmarks' which gave a learner 'freedom to be'^{viii} and respond 'relatively' in free manner, which is not bound to set behavior. Another example:

Soumya has been teaching at the Ashram School for three decades teaches different age group. In his first meeting with me he speaks about 'on loving' and listening to the children. In subsequent meeting he shares his experience with the six years old at the Ashram school. Another day, when he talked to me it was his class with seven years old, with all delight he told me that he found one child telling another child about his factory which is collection of stones in the garden. T smiles and breaks into laughter, his eyes full of spark, while he spoke that children are so innocent, as they grow up they may never know what treasure they cherished and had.

Int/may2011/ SAICE/teacher and researcher

The teacher made this observation during his class while he was teaching them about plants in the garden. The teacher paused, took time to observe and appreciate what children were doing. That was his valuable sharing from the class that day with me. The teacher similarly shared many such anecdotes from his teaching experience that formed his idea of how children learn and react.

To conclude the teachers would always start with an anecdote; described the details of a child's behavior and their understanding about their learning or personality. If needed drew the generalization about child's nature. Teachers also considered the 'group dynamics' in a class, through the year and each day. Variability of child's level and behavior each day may give puzzling feeling at first go, but observations had firm creation of patterns of 'individual-group' and 'specific-general' features of child nature, if understood empathetically.

Challenges of an Integral teacher

Teaching was often a serendipitous process that all teachers had to pass through, in the light of the principles of Integral Education. Many teachers at LB and the AID said that teaching was rather a difficult and challenging process that they had taken up (and they were conscious^{ix} of their choice). Absence of written norms made teaching a dynamic and challenging process. A teacher was answerable to oneself, to the child, responsible for positive change in her/his own nature, contents and method of teaching. There was no external monitoring or generalized reward one expected for (pay rise or awards). This process demanded substantial reflection from the teachers.

A general notion of innovation is that it is a panacea and hence, there would not be any problem. Observations and interactions rather revealed another perspective that innovations at Integral Education meant. It meant facing challenges consciously and questioning some popular conceptions like the hierarchical role of an adult in a child's life, accept the choices of children and learn from a child.

Schools were places where both teachers and students thrived, made effort to learn, utilized objects, participated in the activities and learnt from teaching learning content and activities. There were occasions where teachers and students participated together to learn something; these were the instances when there was a third resource person involved and both teacher and student were learning. This section discusses different observations and interactions highlighting the varied challenges of being an Integral Education teacher. Following episode

offers a contrary image to the popular conception of adult-child relation that implies adult as giver and child as receiver of knowledge.

The teachers had started a project of making musical instruments with the students. The teacher and students went to the musical instrument department at Auroville to learn to make chimes and other musical instruments. I found the teachers were tying pieces of leaves and barks; they told me they were finishing making the chimes, they added that their students started it gladly but then left in the end, that is, after the major work they did not finish all the chimes they had started making, so the teachers were finishing it. Teachers felt that the students had learnt what they wished to, but it is their choice to finish it.

Obs/ IntNov2011.LB classroom of 7 years/ teachers and researchers.

The teachers and students in this episode went to the department other than the school to learn a skill from an expert in music. The students seemed to have 'lost their interest' or in the teachers' opinion, "*they learnt what they wished to*", while teachers decided to continue because they wanted to finish what they and students had initiated. Many similar learning experiences were possibilities for a joint exercise of adults and children.

Students initiated different projects and also got platform to share their work or learning with the teachers. As a mark of acceptance to child's work, there were opportunities to learn from them or thank them. One such incident where I also participated:

The children have got rings of different sizes (may be part of ATB^x program) and in any free time the rings (hoola-hoop) are taken out and few children start playing with it, mainly to move it around their waist. This is what not all the students know and no teachers know. During break time, I stand with another teacher and a student, eight years old, is moving the ring catches our attention. We observe her, discuss her style of moving the ring and approach her while she is moving the ring. The two (teachers) of us try to learn it. My colleague is able to learn it, while I have to start with smaller ring and then might do the movement with a bigger ring. I learnt to manage few rounds with the ring while my body lost the momentum and the ring went down. The student suggested me to move my body in certain manner and sustain the movement throughout the body so that ring can maintain the momentum.

The student very confidently explained to us to use the ring and guided me so that I could do it. Another teacher was a quick learner due to his participation in sports while I took time to learn the same.

Obs-int Oct 2011/ LB/ near the pond/ teacher, student, & researcher

Teachers also showed their gratitude when children performed or shared their finished products mainly from garden etc. LB and the AID had garden where children grew plants. At LB, as part of gardening project, children liked to grow rosella, chilies, tomatoes and few other vegetables.

Today at the dining area at the serving area, ripe and fresh chilies are also kept. The teacher who serves the food tells me that this is what their children (at the school) have grown. "You may like to have some!" The children also told me that this is from their garden and if I would like to try some. All the teachers thanked the children as they took chilies to savor with their lunch.

Obs/ March 2011/ Dining area/ Students and teachers

On other occasions, children liked to cook something special and shared it with rest of the children and teachers.

However, the idea to let the child 'be' or to offer gratitude to children was not same in all the situations. In few cases, teachers felt their traditional role of adult to guide and children should obey them at least in the classroom was questioned. Teacher faced more challenges with older children to take decision and overt 'negotiations' took place between teachers and students. The teachers' task often meant 'negotiation' with themselves, among each other (teachers) or with the child's reality and needs. It was a predicament for the teachers. they voiced "*what they should do or how to keep the divide between a child's choices and an adult's decision based on experience.*" Discussions happened to address this often in meetings and each teacher was supposed to find out the answer of challenges faced in a classroom as an adult.

The issue of discipline among students remained a consistent topic of discussion at the AID and at LB. Teachers raised problems at different times more with the older children. I share an interaction with the teachers who shared her own predicament over the conflict she faced in dealing with a group of children.

The teacher(A) reported that she had one of the most challenging groups of children to manage; the children were under constant arguments or conflict with her. the teacher's concern was supported by another teacher who teaches the same class. The two teachers discussed with the third teacher and me that how one student's remark just offended the teacher A , but the teacher A does not feel it is all right to lose temper or dictate the child. The insight of teacher was based on quote of the Mother that all the problems 'outside' have root inside the person. The teacher said she believed that the Mother guides her and she was right in not losing the temper on the child, and she shouldn't even not to be offended by child's remark but then she is perplexed how to guide and be polite.

Int /July 2011/ LB/ three teachers & the researcher.

In this episode, the teacher was unhappy that she did get frustrate even if she was not angry. The insight in her predicament in her opinion came from the Mother's statement that she summarized as "*root of all the problems outside is within an individual.*" Teacher also reported to bring this quote true in her life that is, solve her inner predicaments about her role in the life of children. Older children more often questioned the teachers. They wanted to exercise their choices, which challenged the teacher or the time-table.

Another episode where a teacher realized and acknowledged her mistake:

This was my first entry in the class and the teachers, after the break, were trying to look for set of cards to start an activity, but they could not find it anywhere and one of the teachers was very upset and started asking the children since they might have thrown it somewhere (while playing) or might have hidden it. The children denied politely and sat quietly. It was unusual to reach the class for the first time and acknowledge the rift. I felt out of the place, others were comfortable with my presence and started to trace the cards. It was more than ten minutes and activity could not be started without the cards. The teacher was upset with the students, asking them to tell where the cards were. But students were quiet. The other two teachers searched quietly (that is without blaming the children). One of the teachers finally found the cards, somewhere and commented it must be squirrel or crows; the teacher who was doubting the students, turned apologetic with a laugh for losing temper on children. the class finally began and returned to normal.

Obs/ Feb2011/Delafon, SAICE/ children, teachers and researcher

In the last two observations, teachers' responses and reflection indicated a challenge to the expected roles of an adult, which is to authorize and guide. Integral education advocates the idea that learning is mutual and reciprocal between teacher and student as individuals; the two could be categorized by their external age. The idea of teachers who learn struck the researcher in the field when at The AID the two boards were hung and displayed the words of the Mother on ideal child and ideal teacher^{xi}. As a result, I as a researcher also learnt with the teachers at SAICE.

Researcher's growth and learning

As a researcher apart from learning the ways of life at the field, one of the learning experiences, for a young apprentice at *Delafon* who just managed with basic French, was to learn the language with children. A teacher suggested me to read children's books. She mentioned that few of which have been written by children (not *Delafon*) and were interesting to read. She commented on my learning that several years back she had also learnt French, this way. She told me that she did a formal course but learnt to speak in French during her apprenticeship at *Delafon*.

I discovered my own learning capacity to speak in French while observing and apprenticing with the children. Interesting part in learning to speak a language is to know the contextual validity of a word that one can learn only through interaction. To quote:

In my first tasks of apprenticeship at Delafon I was supposed to assist the teacher in helping children color a lotus flower. Initially children were supposed to paste paper which were cut like petals of lotus and some were cut like leaves on a square shaped paper, color the leaves and write the name of the child and it was done. I wanted to remind the students to 'color well, color slowly' and I landed up saying 'fais les couleurs'. Quelle couleur? et colorizer doucement.....Most of the time I used gestures to help the children understand. They followed well despite my confusion over how to give them instructions.

.....Everything else was fine except that 'coloriet doucement' was meant to be colourier lentement. Both the adjectives have same meaning but 'doucement' cannot be used here. I checked with my French teacher who has studied here and he corrected me. I managed with telegraphic sentences, one mistake and speaking with actions which children followed well.

Obs April 2011/Delafon SAICE/ children, researcher

Experience of learning a foreign language and interacting with other Indian languages formed part of my growth as a teacher. I also learnt that learning can be outer that is learning skills like language etc. and it can be inner when reflection is about one's 'self' - cognitive, emotional or physical. The outer and inner growth was complementary. I underwent several such experiences in the field and learnt to reflect on the self is the best teacher preparation. Teachers also reported their reflection when designing the curriculum and pedagogical experience and many times sought his or her growth too. Next section mentions learning opportunities, their focus and content which were effort of teachers.

Nature of Learning Opportunities

'Nature' of a subject or discipline means its aims, the way it is taught and who teaches it. The schools dealt in their respective ways about issues of appropriate 'knowledge' and various suitable methods to teach it. I choose not to call availability of 'knowledge areas' as 'subjects' since subjects^{xii} are drawn in relation to a discipline. These can be suitably called 'learning opportunities^{xiii}' instead of subjects mainly for three reasons. First, the teachers focused on skills and method of learning, instead on learning information as concepts and contents. A child's pace of learning various skills was primary over the 'amount' of content and concepts. Second, the schools had variations in knowledge forms which cannot be classified as subjects. There were various learning opportunities available in the schools for individual development. For example, workshops or classes on 'film making', 'body-awareness', 'life sciences section', 'play of painting' to name a few. The variations in knowledge forms were due to the teachers' efforts and not merely teaching of concepts and syllabus made in the light existing discipline. Third, teachers adopted new 'learning opportunities' and discontinued others in each class (within divisions and across). Teaching of 'learning opportunity' at a level (or class) depended on the availability of teacher, teacher's capability to teach, resources available to organize the learning experience and often students' choice or interest.

'Learning opportunities' are also categorized as formal and informal. 'Formal learning opportunities' taught in the class were closer to the existing disciplines, evaluated with the help of test. However, it is important to note that to qualify a test was not a criterion for any learning opportunities in all the three schools. A complete focus of 'delinking' of jobs with

education was focus at all the levels that is, upper primary, secondary and even undergraduate level^{xiv}.

'Informal learning opportunities' were mainly teachers' effort to organize the existing forms of knowledge available in the community like expertise of a person in any area, departments etc. These areas might or might not be coupled with existing discipline. These were completely free from tests and were taught outside the classrooms or in the community setting. Nature of 'informal' learning opportunity which were slightly more organized and consistent. For example, Capoeira^{xv} in LB or Aquarium section at SAICE had no tests or practical exams that students need to appear.

Learning Opportunity and a Knowledge Area

The schools introduced Languages, Mathematics, and Sciences from initial classes and then Social Sciences at subsequent level. Schools followed broadly an organized and subject based pattern. This meant that arrangement of information and concepts were from simple to complex keeping in mind the learning ability of the child. Teaching in these schools did not completely do away with form of identified subjects and learning opportunities. It is important to mention that LB and SAICE did not offer social sciences to students, while the AID did teach as part of the curriculum followed due to affiliation with Tamil Nadu board. This attempt of SAICE and LB made them more as a social structure separate from the word 'outside'. Schools had their own rules and social challenges to deal with.

The key factors of formation of a 'knowledge area' could be summarized as, teacher-student interaction, community and in relation with the school ethos. For example, Aquarium Section at SAICE with flora and fauna of sea and Solar Sciences was one such example. It was center of attraction for tourists and children. Students did not ascertained it 'formal learning opportunity' as clear from a student's comment '*Now they (SAICE) give prize for Aquarium Section*', indicating it is not something formal to give 'prize'^{xvi}.

The Aquarium section held and indicated aspirations (interest, engagement) of human learning and organization of that learning into a knowledge form. Its description around following points delineates this aspect:

- Location- Situated in the main building at SAICE it was effort of the teachers and the students couple of years back. Huge Aquariums which were made at the school by teachers and students were placed and named.

- Age group of children involved were 10 to 21 years old.
- Skills required- making aquariums, maintaining them with flora, fauna, water, electricity, cleaning and feeding various sea-creatures. The older Students also taught the younger students about the aquariums (cleaning, maintaining, about the animals) and guided the visitors who came there. Sea-diving to get the organisms- turtle, lobsters, fish, crabs, anemones to name a few.
- A small room adjacent to Aquariums had all the literature available to take care of sea animals. It also stored material that was used for the maintenance of the section. I saw net meshes from filters of an RO machine. On enquiring I was told that these could be used as filters for the new aquariums.
- Literature evolved- with the help of one of the visitors at the Ashram and the teachers at the section had done a research to document all the shells found around Pondichéry shoreline. The research was published as a book later on with the help of grant from a Government body. Evolving of literature is a sign of formalizing.
- Link with Further Studies- Two older students were apprenticing (during the field work) even after finishing the main course of study program. They had chosen course related to the marine life sciences for their further studies.
- Diffusion of idea- LB at Auroville also took up the idea of developing the aquarium section as the life sciences section. There was snake pit, geese corner to make it into a full life sciences section. Different group of children from LB visited the Aquarium Section at SAICE.

Explanation of Aquarium section along these parameters is a clear example that how a learning opportunity evolved to a 'knowledge form'. However, it had the scope to be in 'dialogue' with existing discipline. It shows the dynamism of knowledge that these centers are capable of originating.

Several examples of new learning opportunities came with new teachers joining LB and the AID. LB's new teachers experimented with non-renewable energy sources. The teachers with the help of resource persons and material from Auroville community carried out projects on solar energy or windmill for electricity generation with the older age group.

I conclude this subsection with the observation that cites the growth of a new school in Auroville and example of its content. On three occasions, I interacted about the curricular

component of the school. I share my last interaction with one of the teachers of the new school.

While talking to a new school in Auroville which focuses on community based learning, one of the prominent resource person and a teacher explained to me that they had no building and no one place or space to function. they move around- at gardens, nursery or to any community (in order to learn from an individual) ...he added that however children learnt some math, gymnastics, languages theater. for this they went to one assigned place, which was shared with another school. The school basically has no building.

Int/jan 2010/ le terrace above solar kitchen, Auroville/ researcher & teacher.

By the time I was finishing my fieldwork I was informed the school has found some two rooms to study and keep books, more or less the classes were still movable.

To conclude the three schools in the field had been undergoing changes in terms of organization of learning. The organization is with respect to age but the schools had made it flexible for different age groups to learn the age appropriate content. The program for learning of mind was navigated by several opportunities that remained relatively free from the burden of concepts of subjects or disciplines. The child might specialize in a knowledge area later or not at all. Learning opportunities became opening for learners for exposure to wide variety of content and skills.

Foci of content and method

Focus implies aims or objective of any teaching learning activity with reference to content, learner, information to be learnt, and method. These aspects were aims instead of course completion especially pertaining to formal learning opportunities. Teachers taught the content with wide range of activities that focused on number of skills and concepts. I choose few examples from each school to highlight that how content, learner, information and method varied. However, there were several such activities observed, indulged in (and even created by the researcher).

The examples have been taken from Mathematics from SAICE, Languages (English) from the AID and French Language and Sciences from LB.

One of the teachers sits at the back of the classroom and she is noting down something in a thin booklet. Rest of the class is divided in groups and children are working with respective teachers. I sat near the teacher who was managing some cards and noting down in the booklet. I saw the names of the students were written in the cards and across that was number of cards. I picked up the cards after asking the teacher. The cards had exercises of mathematics concepts which children were doing simultaneously in the class as group. Each student was supposed to take the cards home and do them in their notebook.

Some of the examples of exercises that were there on the cards

Quel est le chiffre suivant? (What is the next number?)

9.....; 12.....;

Quel est le chiffre manquant? (What is the missing number?)

Quel est le chiffre précédent? (What is the previous number?)

...9;....8;...10

Compte à rebours (Count in the reverse order.)

26, 25

Quel chiffre vaut plus? (Which number has a greater value ?)

32 ou 28

35 53 ou 45

Quel chiffre vaut moins? (Which number has a lesser value ?)

Quel est le chiffre plus petit? (Which number is the smallest ?)

Fais l'addition? (Do the addition)

Quel est le total? (What is the total)

Quel chiffre faut-il mettre dans le carré vide? (Which number should be in the empty square?)

Dizaine et unité? (Units and Tens : Place Value)

3d+2d=

Range ces nombres du plus petit au plus grand? (Arrange these numbers from the smallest to the biggest.)

Soustraction et Addition (Subtraction and addition)

After around 50 cards there was no title on the cards but only exercises that grow in complexity. The children were supposed to do the same thing with one digit and then subsequently the number of the digits increased.

Anl-Obs/May2011/ Delafon/ teachers of 6 years old students

This was an example of how teachers organized Mathematics teaching and learning of 6 years old. The focus was revision of the concepts they had been doing in the class. The idea was that the children should be able to do this independently. This example also indicated that focus was not only to learn Mathematical concepts but also to learn French. This was one of the ways by which teachers ensured the possibilities of speaking French. Most importantly, it also indicated that Mathematics did not mean just doing certain concepts or following algorithm but teachers tried to give the same concept in different forms so that the child formed the logic aptly.

I could also observe how the teachers taught few exercises as they explained the pedagogy.

I sit at the back of the classroom; six children of Div A (that is the children with higher ability) are sitting in front of the blackboard. Teacher start writing on the blackboard
 $6+7+ \dots 4+8=\dots$

The children respond and teacher give them more numbers which she chooses randomly (teacher explained this to me later). Then as she gives them the assignment to work and comes at the back of the class to plan for their homework... she tells me, "you see children have got this concept. It is only I am making them revise so that they can do the carry over problems." The teacher has introduced units and tens, simple borrow over with single digit and single unit in two digit number, now they will gradually move on to carry over in both the places.

As the children finish the addition and subtraction, they come with their notebook one by one to the teacher. The teacher explain the mistake if any to the student and asked them to re do the same. The children quietly go back to do the same after having understood it.

Obs/May 2011/ Delafon/ teacher & 6 years old

This example highlighted that teacher's technique in 'revision' of certain Mathematical skills by the children needed for particular problem. Due to small number of students, teachers corrected their mistakes. There was ample time with a teacher to identify the pattern of mistake, explain the logic to the child and then ask them to correct the same. There was no time limit even in the class, if one child took time he or she stayed back to finish it while others moved on to next activity or the child could choose to finish an activity later.

I quote another example from LB of 'Science education' in order to explain the variation in content, method and pedagogy.

The teacher had decided to talk about Indian cobra in the classroom. Since he had found it hiding somewhere in his garden at his home. As he entered the class he announced his idea. Children were filled with excitement, "oooo cobra" "will it bite?" "No! It doesn't bite,!" "is it poisonous?" "you are scared!" "I want to hold it" "will we get to touch it?" the teacher replied each question and told them to calm down, since their behavior could affect the mood of the snake. He carried the snake in sack to the 'life sciences' room and asked the children to stand at a safe distance. And as they held their breath, teacher with full concentration emptied the sac in the glass box around 1 m long. The children were silent. The snake slithered away in the box and was lazy, hence the hood was missing. The teacher highlighted this fact and told the children not to provoke the snake.

Children asked questions about the cobra which teacher answered and then it was teacher's turn to ask the questions. The teacher asked them to guess the length of the snake. Students guessed and then teacher told them that they could get a hint from the length of the box.

Children quickly asked the length of the box, to which teacher asked them to get the scale. Children went to the office and got the ruler. I was told by the teacher to help them measure the box. I divided six of them in team of three each, so that if two students measured the length, the third could check the reading and note it. similarly the next group of three students can repeat the activity.

As the group did this activity the snake went into hiding, teacher explained since it was cold and snakes don't like to be out in cold weather and search for corner to hide and keep them warm. I also suggested the children to make set of questions which the teacher can answer for them.

**the class was followed by video on Snakes by Whitaker (snake expert) and browsing through his book. The children were given a set of questionnaire to answer based on the video. Snakes remained in the lab throughout that session and various levels of children (if liked) came and observed it.*

Obs & part/ Feb 2011/ LB/teacher, researcher and 9-10 year old students

In the activity mentioned here the focus was to study an important local snake found in the environment. The focus was to make children feel comfortable emotionally with the idea of poisonous snake and also to be aware about all the necessary information required to deal

with the organism. Researcher made the set of questions (Annexure 6.1) for the children, which were based on scientific and linguistic information in the video.

I now mention the activities to learn English at the AID. Since it was school for children from the adjoining villages, language policy of the school that they should be taught in 'English' and the reason was that this would help them in further education and most of them needed the same. However, the students preferred to talk in Tamil and were not really affected by the policy of the school that they should talk in 'English'. Efforts to make them learn English were one of the prime focuses. The school followed 'Non-Detention Policy' as per the state's rule and no child was 'failed' or stopped from promotion. Children who needed to work on their reading and writing skills, used to sit with individual volunteer. An example of the same,

I went with the children to pick up the book they would like to read. I was told by the teacher that if they pick up an easier book for their level, let them to do that and I should gradually increase their level. The girls picked up a big fairytale book 'Thumblina'. I made them read one by one. As one student read word by word I asked another to listen. One of the students could read fast and other was quite slow in reading. But both of them got confused with correct pronunciation of words. As a teacher like rest of the teachers, I also had to devise my own technique or just made them repeat the sounds. When students found difficult words they did not wish to continue reading at that time. I wrote the sounds they were confused in and instead of repeating the same word I tried to show them different examples

'eat' read as 'it' or left

Wheat, Neat, Meat, Beat, Cheat, (ALSO) Feet

Talk could not be read

Talk, stalk, walk

Stack could not be read

Stack, sack, pack, back, black

Int-part/ Dec 2009/ the Aid/ researcher and two children of 10 years age

Over the period of a month, I sat with each child to improve their reading abilities and correct the mistakes or help them read. I devised my own way to help them. The teacher was comfortable with this. It cannot be said that what effect I could make in the limited period.

This is another example of a strategy focusing on content and skills in this case French at LB.

A teacher Nana's class is learning the conjugation (verb forms) in French. In the class, there are four children, and the class begins with the introduction Je suis, Je m'appelle. And moved to another lesson. It took me few minutes to realize that she is doing 'future simple' (tr. Simple Future tense) danser....(tr. dance)

Je danserai (tr. I will dance)

Tu danseras (tr. You will dance)

Il/ Elle/on dansera (tr. He/she will dance)

Nous danserons (tr. We will dance)

Vous danserez (tr. You all will dance)

Ils danseront (tr. They all will dance)

With lots of repetition and drill. [as teacher wrote on the black board she made each child to repeat what she was writing for the pronunciation and made them write in their notebook, again with repetition. Entire class lasted for forty minutes, Nana moved around to look at the notebooks of students and help them correct if required.

Obs-Int/Oct 2010/ LB/ Researcher, six 10 years old children, teacher

This episode indicated that how drill and practice was important to learn a language with focus on each child to practice the sound. The other half of the class was doing advance learning in French.

All the six examples looked at various skills imparted to the learner. Apart from the regular teaching, teachers decided to bring in a new change, which could be visit to a place or visit by a person. In the example at LB it was a snake and the teacher organized a class around the same.

Co-curricular learning opportunities

Each school had its respective ways that is, infrastructure, choice and teachers to organize co-curricular activities. These activities were given substantial time with respect to other knowledge areas. Children always liked to participate in co-curricular activities and did it most diligently. This was also a chance for them to experiment with their skills, interests, creativity and freedom other than the curricular areas mentioned above.

At The AID there were other activities apart from making Mandalas, Marbling and paper folding that children did.

As soon as 'Mandala' (activity) was announced children knew from where to pull out the table, get the colors and paper, to sit and start making it. On my first confrontation with mandala I asked what is it? And the teacher explained to me that since she believed that mandala drawings would help children concentrate, harmonize the self and express their creativity, she had been doing with them in the class. These activities gave children a chance to be quiet and work alone on circles known as mandala. Children did not show these to the teachers for approval or suggestions but sometimes for appreciation or just for sharing. I don't know how it started but during the field work children already knew about it. The teacher also requested me draw the mandala as she herself started to make one. Children set out with crayons and pencil and on one side used sheets they made a big circle (using the objects available in the environment), there were patterns, motifs, flowers, leaves to decorate the circle, as each child was left free to imagine and express. Teacher felt it help all of us harmonize and concentrate.

Obs June 2010/ the Aid/ teacher, researcher and eight years old/ co-curricular activity (see: annexure 6.2)

Another activity that I observed was Marbling,

One quiet afternoon, as the class set for afternoon games and activities, Class five and teacher has decided to do marbling. Oil paints, a broad rectangular plastic tray to hold water say four to five inches, one side used A4 size sheets. The afternoon was quiet as teacher helped by the students set the table, put the wide trays with two inches of height. The water was put in the trays. The teacher put the paint over the water in three four trays and oil colors formed a thick slick and patterns on the water. then he brought the paper and with almost holding the breath put one side of the paper on the tray for few seconds. as the patterns of oil paint got stuck to the paper, it was gently lifted, and precariously put on the sandy ground to dry. In between students suggested which color they want, or waited for the pattern to emerge. I also participated making a marbling pattern.

Obs/ june 2010/ the Aid/ teacher and ten years old

Another teacher had self-developed skill of paper folding which inspired the students:

During the tiffin break at the school I found Sukumar, one of the teachers of class V and an Aurovillian busy with paper folding, the children jumped with joy, seemed they had been doing this and would love to do it with the teacher once again. The teacher told that a group of children would be visiting their community, and their method of learning was to learn from the skills a community could offer as a group or as an individual. The teacher had been doing paper folding, and he had been trying a design from the book, which had been difficult to make. Sukumar told me he was self-taught. He had been doing it for several years and had done it with different age groups. Children observed him fiddling with new toy of paper folding and they insisted him to start with them as well. After the children insisted he re started this project with them.

And during the following month children could be seen (those who had interest) to patiently learning to get the toy right from looking at the book.

Obs/June 2009/The Aid, Open Dining Area/ teacher and students

At LB there was less divide between curricular and co-curricular areas. Somehow there were more opportunities for children to indulge in co-curricular activities. Co-curricular area could be used in mainstream teaching as well. 'Cooking' (especially at LB) described in chapter 7 is an example of the same. The students were also involved in 'cooking' as part of their interest, which they wanted to explore. Sports is explained separately and not under co-curricular activities in chapter 7.

Co-existence among the learning opportunities

This section discusses the relationship between different curricular areas^{xvii}. Teachers never compared the importance of one knowledge form with another especially at primary level. They mostly insisted on relevance of all the knowledge forms. A relevant feature to do away with the hierarchy in subjects completely owes to several factors like equal allocation of time to different activities, individual freedom to choose, and no compulsion on following syllabus and no examination or certification policy. But schooling process to some extent reflected hierarchy either due to their policies and way of teaching, another due to the conceptions individual parent or child had.

Language policy of schools was one example that resulted in different capacities in different languages children learnt at three schools. At SAICE, French was the medium of instruction

for teaching and learning for Mathematics and Science and the mother tongue was introduced last to the students at the age of 7. Due to the status of French in the school and more exposure to English at home and other places, the teachers reported that the students learnt French and English efficiently than their mother tongue. A student had spent 4 years with Sanskrit and French in the classrooms before he/she officially learnt the mother tongue. During Interviews with ex-students at SAICE, they reported to make effort to improve their Mother Tongue later if it was not possible at the school. Few students also 'regretted' for not taking it seriously. To quote, a response, a 36 years old ex-student shares with me about her proficiency of her mother tongue

"Reading and writing is quite poor. I feel very sad about it....I Feel embarrassed of not doing it, would like to master one Indian language which is preferably my mother tongue."

She added that she has done the mother tongue till her school at SAICE and at graduate program 'Knowledge' once a week but she was not serious." (because of the freedom school gave them)

Other students reported to be more acceptable about the fact that they did not do well in their mother tongue. Especially languages like, Sindhi or Punjabi for which teachers were rare, students could not develop proficiency beyond listening and rarely speaking the mother tongue. Nonetheless, the students reported to have basic proficiency in two to three Indian languages, at least one foreign language and English^{xviii}. Mother Tongue shared an unclear status in the development of Individual. There were sufficient opportunities to learn including organized efforts but it was an individual's choice to use them.

Differential treatment was also reflected when students highlighted their choice of a knowledge form over another. They felt that some subjects were good and more important to perform than others. The teachers in discussion with the teacher however, did not conflict with the students but offered their viewpoint.

One such conversation indicating the same is cited here-

As we sat after finishing the dinner, the topic went on to importance of learning pottery with the teachers. Why pottery is not a subject to study like science and math?

Teacher: you do well at pottery? Do you wish to take it up later on?

Student: yes but it is important to be good at math and science? Not pottery! This I do just like that.

I- why? (I was bit surprised to see that artistic education which is meant for inner growth is rendered not a knowledge or subject area.)

Student- because these are good subjects, pottery is not a subject? Science and maths are important to do job.

I- why do you think there is no science or math in pottery?

Student was bit puzzled.

Teacher(supported my argument): one of the science teacher who is a scientist too, mentioned (who is not present in our discussion) to me that one could learn science through pottery. He said, he wished he learned pottery through Science.

The student was listening to the conversation and left with a thought.

I: why students have this kind of opinion over knowledge and subjects.

Teacher: they bring it from their homes. We were never raised like that here.

The teacher has studied at the Ashram school. He seems not to be affected much by the opinion of the students and wish to work, believe as he has been taught.

Obs/ May 2011/ Corner house, SAICE/ researcher, a student of SAICE, two senior ashram inmates who are teachers

This episode is also an example of such discussion happening between teachers and older students. And it was an example where ideology was not forced but brought about in discussion with the children. It is also a challenge for the teacher since the child could not be convinced of the same and yet has to be accepted.

Features of an 'alternative inside' world

Till now the chapter has explained the alternative organization of content, of classrooms and methods which are strong features of these schools. Participants also reported to comment on 'overview' or features of alternative world. For example, numerous learning opportunities resulted in less focus on content information of each learning opportunity^{xix}. At SAICE most

parents and teachers were aware that level of learning of the content was not at par with the standards in any other school. Most of them preferred the method, environment and faith over mastery of content. A Grandparent has just admitted the grandson in SAICE.

Grandparent- Oh! He is very good with Math, they do so much 'outside'. Here it is slow. I heard silently and then asked, "it does not bother you that your grandson is learning less?"
Grandparent- No! Not much But it is good as long as he is here in this environment.

Int July 2011/ Corner House SAICE/ Grandparent and researcher

At LB during one such discussion, where teachers also felt the school was not at par with schools outside for the content they taught.

I - Do you think it is justified to do that?(not giving the same content of subjects as in other mainstream schools)

Teacher- no since we are doing different activities here, we have different approach of learning and knowledge.

the teacher added, "I wonder people 'outside' are ever prepared to deal with inner crisis as we are here. Its ok we don't do the subjects and degrees as they do."

**By inner crisis the teacher meant existential issues of life- pain, death, sorrow, failure*

Int/ Aug 2011/ LB/Teachers and researcher

However, at LB parents raised the issues 'were children learning enough and was it too many activities?' Few parents questioned relevance of content at LB and amount of freedom children enjoyed. (At SAICE and AID there was no such scope and so parents never asked openly about what happened at school in order to monitor the progress of their children.)

'The children have too much freedom, too many activities and are not really learning anything!' This came as a reaction to one of the girls from Europe, who was not put in higher-class level where she wished to be. Also as per her parents she should be in that class since that was the content she should be doing as per her age. A lower class level meant too much of freedom and not appropriate content. The class she was put in, the parents complained that it was much below her level. The school especially the teachers justified since her language skills (especially in English) needed some improvement before she could move with another group.

Int/Jan 2012/ LB/ researcher and other teachers

Eventually the parents opinion on what children learnt mattered considerably in case of LB, since there were new visitors from different parts of the worlds and at times their comparison with the schooling their children had been undergoing in cities and with LB met with conflict.

The discussions and arguments that issues of curriculum underwent were likely to make it difficult for the outsider like me to conclude and interpret it. The caveat was put forth in the field especially by teachers at SAICE-

The teacher was not keen that I should come to his class for the observations. While he was all right if I want to do something with students, I asked him what his discomfort about?

T- You would think that nothing is happening in the class.

I- And why would you think so? (I thought maybe he thinks I am there to judge him or the class)

T- Because we function in a different way. There is freedom and students have their way. (he meant which is not like the schools outside) And you may think nothing happens here.

I-(after a pause) if you could leave that to me and trust me that I would find out what is happening in your class!

He agreed to what I said and allowed me to come in his classes.

Int/ SAICE/ Young ashram inmate, a teacher & researcher

I went to observe his classes and even sat to analyze the lessons he was taking in order to see that how instruction and content was organized for the learners.

Relevance of age, learning and content appropriateness

The last section highlighted that how teachers, students and parents were aware that the functioning of the innovative set up might not be at par with the mainstream in terms of content with respect to a age group. This section highlights that issue of norms and age specificity is complicated in the field. 'Was learning the focus or it struggled with age appropriateness of the learner?' For example, the age group flexibility in a class was usually one or two years and rarely three to four years. The movement within the multi-groups in a classroom was flexible in some case and strict in others. There was movement of children within classes at LB especially at older age group. The movement was dependent on their performance in each learning area. However, at SAICE children when reported the movement from lower division within one class to an upper division,

Swami, a 12 year old boy one day came rushing to me, and shared with me that he has been promoted to 2nd division, he told me that it was lot of work now for him, earlier in third division there was hardly any work. He asked me with surprise and pride that did I know how many pages he had to write. And then added, "three pages man! And I have to wake up at 5 in the morning to do it!" He looked pleased and satisfied that he has been promoted.

Int/ Mar 2011/ CH-SAICE/ Researcher- 12 years student

This episode is an evidence of relevance of oral norms of age appropriate learning.

Therefore, the teachers in their attempt to defocus from age and focus on learning, chose the norms (age specific) available and then adjusted those to the individual level by considering the ability of the child.

Initially in choosing the norm in form of textbook or content, there was also compliance with 'age' and could not be 'completely' done away with. A complete doing away with age would mean focus entirely on content and individual and the age would not matter. To quote:

The meeting proceeded with various issues that concern the school, it ended with one of the teacher, who has studied at Auroville that should not we completely do away with age groups and do 'ability' grouping. Since free progress should mean that biological age does not matter, and therefore an adult can also be with an adolescent or a child to learn something. This would mean wider difference in age groups.

Principal, "no. since there are age group differences in learning abilities, one cannot have adults or a very wider age group difference in a class."

The teacher insisted that if it is free progress and by soul, it should not matter what is the age. Teacher's view was not acceptable to the group but also not denied fully.

When I was asked, I added two points that one I agree with the principal that learning and curriculum is organized and delivered age wise. The textbooks are like that and at practical level there could be a difference to manage the learning in classroom. But I added my opinion based on interaction with one of the ex-students of SAICE who passed out three decades back, that back then, flexible grouping was there and some individuals in late adult hood (mainly ashram inmates) may find way into the classroom of young adults.

Int-disc march/2012/dining area, the LB school/- six teachers of few classes of LB, the team leader of the school, & researcher.

The nature of interaction at many forums is not to make decision or prove right or wrong but it is only to mention the different viewpoints and then the decision would follow when required.

Conclusion: Learner and the Knowledge Forms

Through the lens of individual and collective development, one can explain the themes that individual teachers, students interacted with different knowledge forms. These three proliferated dynamically in the field leading to wide variety of age specific learning opportunities. While the outside world ushered inside in form of norms reflected in the curricular materials like textbooks, puzzle games and other learning material, which were re the teachers re organized.

Several models raise the thoughts on relevance of different disciplines, knowledge forms^{xx}, subject organization and learning in schools. It won't be in the purview of research to review them or make case for them however they all contribute to the understanding of organizing knowledge for learning in their respective capacities. Classrooms evidently deal with what is to be taught for individual development and learning. However, it is evident from review and observations in this chapter that the origin and application of knowledge is not the classroom alone. The origin and application both are in link with larger ethos of the schools, ideas schools are part of, individuals carrying it out and the larger world. The schools also maintained their link with each other due to the link between individuals and exchanged curriculum. The overall curriculum was different due to enough individual freedom and needs of each school.

Curriculum in these schools is similar to curriculum of 'small schools' (Galton & Patrick, 1990). Small schools have small number of students in the class and in the school as well. Due to this teachers could arrange good range of learning opportunities for students. In fact, it is relevant to view learning opportunities as differentiated from 'standard' subjects and discipline. This gives freedom to the learner and teacher to engage with the subject. As a result, a school culture forms its own norms as learning expectations from students about different tasks like it happened in our schools. One cannot say there was integration of skills in various learning opportunities an argument Galton in Galton & Patrick (1990) gives with reference to learning in small schools in UK. But there was focus on development of 'general

skills'. Relational aspects of various skills in different learning opportunities might need separate study to know the opinion of students on various learning opportunities.

Galton in Patrick & Galton (1990) offers three views of knowledge organization, namely conservative approach where knowledge is bound by educational ideologies, second is the romantic view where learning should be 'child-centered' inspired by Piaget. And third view of Lawton (1983) and Skillbeck (1976) '*reconstructionism which sees education as means of improving society.*' (p. 49, Galton, 1990). These Schools show a mix of these three views as there was presence of subjects in the light of disciplines, second, there was ample effort to understand the pace of learning of the child. Thirdly, there was ample reconstruction of knowledge forms since teachers focused on 'learning opportunities' and development skills. This becomes a means to defocus the authority of discipline-based learning and hence create a society, which is relatively free from this.

It is relevant to mention that the issues of knowledge forms have not been judiciously discussed by developmental psychology, rather discussion is through the learning patterns of individual. Case (1996) discusses three forms of learning (and views of knowledge)-

- Empiricist tradition which has roots in British thought.
- Rationalist tradition that gives ample scope to human mind.
- Socio-historic tradition where link with the community is imperative along with the cultural forces.

He also insists on 'dialogue' (p.93) between these three approaches. As per me these are forms of acquisition of knowledge but not 'view of Knowledge' as Case claims. Not that two are completely divorced that view of knowledge and ways of acquiring knowledge but the former can be better understood with views of Apple (1976) which aims at political agenda and ideologies behind the 'knowledge forms'. Developmental psychology has to still cognize the latter view. In the light of discussion in first two chapters and the arguments presented here, these schools offer a strong platform for 'dialogue' between various forms of knowledge and ways of acquiring the same.

This help us conclude even about the view of learner, learning and individual development in the field, since observations of learning are strongly tied with 'view of learner' (Olson & Torrance, 1996). Learner in these schools even if living in group (family, classroom), following a form of curriculum was largely individualistic whose learning experiences were

related to his/her individual nature. This is detailed in the first few sections of the chapter, which elaborated the challenges of teacher to accept and understand the child.

The relation of teacher-student or adult-child has implications on learning. There are very few thoughts stating this transition from traditional or hierarchical roles to 'self-reflective' roles.

Endnotes

ⁱ Fontaine & Tomasino (1987) in The book *Chimie 2e*. mentioned in their introduction
"Un livre a deux vitesses: Le cours comporte deux vitesses"

- *Le Premiere vitesse constitue la charpente du livre; elle correspond au savoir de base que tout eleve de seconde doit acquerir.*
- *Lea deuxieme vitesse apporte un plus au savoir de base, sans jamais sortir des limites du programme. Les eleves, notamment ceux qui desirent poursuivre leurs etudes dans un secteur scientifique, trouvent la matiere et idees pour satisfaire leur curiosite'*

Translation

A book for two speeds: the course comprise of two speeds:

The First Speed comprise of the outline of the book; it corresponds to the basic knowledge that every student of 'de seconde' (level of classroom in the French Education System) should acquire.

The second speed brings more to the basic knowledge, without ever crossing the limits of the program. The students, mainly those who wish to pursue their studies in the scientific sector find the material and the ideas for satisfying their curiosity.

It gives an idea on the view of learner and its motivation. That few learners have more curiosity and interest and only they should be made to the activities of one higher level. It implies for the division of the curriculum and also segregation of the individuals. This thought needs more probing.

ⁱⁱ These are not theoretical terms but used widely in the field and can refer to the temperament, choices or individual behavior of the child. Words like personality have been avoided since they have theoretical connotations, which may not be same in the field.

ⁱⁱⁱ Living in small community has two aspects- first most of the people know each other and the families, their problems and second many of them lead to gossip as well. There were several times when I found a piece of information completely twisted from what I knew from the person about whom information was spread around. It was strange to discuss individuals and their issues as if one is analyzing oneself. It was not only about someone's behavior but about particular skills- language, sports, acting. The feedback or rather critical feedback was instant like fast food! For details refer chapter 3 methodology p.no

^{iv} Viruru, (2001) mentions in her work that first thing she found in the school was that to parents it really mattered that they really finished their food. An observation that surprised the teachers and principal since they knew this was important but never acknowledged the same. Eating was not relevant in the same manner for schools as Viruru mentions but held as relevant for healthy eating and source of learning refer chapter 7 for details.

^v Refer Sibia (2006) for qualitative study of Mirambika an Integral Education School.

^{vi} An aspect the present research did not overtly studies or mentions. But surely it is somewhere very strongly in the environment. The outer responses of the teachers also have somewhere link with the inner aspect- a movement towards the soul. As mentioned in the last endnote, endnote vi.

^{vii} Interaction with very experienced teachers is a practice at SAICE. Many earlier researchers report the same- Patel (1986) Adam (2010) And Marshak, (1997). it establishes one of the practices at the school, for the visitors who have interest in education and views innovation as some benchmark to understand. By benchmark I mean which is taken as the participants report, but not looked at critically or try to raise some argument.

^{viii} International Commission on Education (1996) states one of the four pillars of education as learning to be.

^{ix} Being conscious in more than being aware- it is do a task with full and wide knowledge of their likes, dislike, preferences, avoidances and see how they play with the teaching learning process.

^x Refer Marti, Aloka (2006) *Awareness Through the Body: A Way To Enhance Concentration, Relaxation and Self-Knowledge in Children*. Auroville, Auroville Printing Press.

^{xi} Ideal teacher & Ideal child are set of instructions, expected behavior often quoted in the discussion on Integral Education. the source quoted is the Mother, any further reference could not be found.

^{xii} in the field there was mention of this word by the teachers and students in English language and in French *le sujet* sing. Or *les sujets* pl. indicating that these are treated like 'subjects like in most of the schools.

^{xiii} As per background document on 'World conference on EFA' (1990) '*Learning opportunities*' refer to wide range of educational activities organized with intent to promote or facilitate learning.' p. xi

^{xiv} The study does not analyze the data about knowledge linked with middle and secondary sections where tests would be more frequent. Most of the students worked after they completed studies or went for further education after completing school. In all the three schools the students had different questions with respect to choice of discipline, jobs they would take up..

However, It reminds me of question pose to a young child in middle class families, "*bade ho ke kya banoge?*" (what will you become when you grow up?). The children at LB especially refuted such questions and no one at SAICE asked them especially in and around the school spaces.

^{xv} A Brazilian tribal dance with tribal songs and music.

^{xvi} Students got prize (token of excellence) at SAICE mostly in the subjects like English, French, Mother Tongue, Mathematics, Physics, Chemistry, and Biology to name a few; as suggested by the respective teachers at SAICE. LB even developed an aquarium section on similar lines along with ecosystem for some other local animals.

^{xvii} Different curricular areas highlight different domains of individual learning which need to be worked out rather to be missed in the holistic development of the individual child.

^{xviii} English is considered as second language as per India's policy however for Pondichéry English definitely would be Foreign language and French being taught as second Language other than Tamil. The fact is strengthened in description of a person who grew up in Pondichéry. He reminisced that how local Tamils even the vendors, policemen and auto drivers in the streets spoke in French. This was definitely not the Pondichéry now when fieldwork was done. Traces of French was among the groups who spoke or some signboards with a French word indicating the French-Tamil connection.

^{xix} 'Completion of Syllabus' in a semester or year as we understand in colloquial terms was never an issue. There was no syllabus just content with focus on thinking or skills to be engaged with.

^{xx} Apple (1979) uses the term 'knowledge form' in his introductory chapter on Ideology and curriculum. Or Dearden (1976) cited in Galton & Patrick (1990) calls it 'forms of knowledge'