

Learning from the intangible

How can learning based on the three pedagogical principles of Integral Education be assessed?

Maya Shakti

Preface

Gratitude goes out to all the children of The Learning Community, from its conception in 2009 until today, for all that we have learnt through you. To the amazing research team, pulling this work through the year with so much enthusiasm, curiosity, and dedication; to all the parents offering their trust and hard work to this process. To the founders of The Learning Community, for your courage and inspiration; to Auroville, for being a place where this is possible.

Summary/abstract

Today, schools wanting to work with Integral Education are caught between security that the traditional system of social reproduction offers parents and children, and the universal needs of a new global education for human change that is trying to emerge. This pull between the expectations of the past and the aspirations of the future, gives little scope for deepening in the present. This dilemma can be observed in Auroville, International township in South India, created for the purpose of experimentation in collective process working for human unity and sustainability. This is studied by defining the underlying foundations of Integral Education from a universal perspective, thereby identifying perimeters needed for implementation, and by observing practical application in an Auroville school -The Learning Community (TLC) - give clear visibility of its purpose and assessment. The following questions are used to answer the aims of the research: How can Integral Education respond to the universal needs of human change through transformational educational leadership (of facilitators/parents/children) in everyday work with children? How can an education with the aim of individual development and growth be assessed? How can the pedagogical principles of Integral Education be made visible to gain recognition? The study was done through analysis of filmed material and reflective interviews gathered during an entire school year in one of Auroville's schools - The Learning Community (TLC). The data collected, was analysed and discussed through a hermeneutic approach, using a three-step chain of inference, involving children, parents and teachers, to process the material. The results showed that Integral learning is indeed very tangible, made visible through the pedagogical core areas in the TLC approach and methodology, and exemplified through manifestations that can be observed, and results seen through the process over time. It showed that educational leadership is a key both to understanding Integral Education, and working towards recognition based on deeper connection to the practice and its universal intentions.

Key words:

Auroville education, learning process, three principles, assessment, educational leadership

Contents

Preface	2
Summary/abstract	3
Introduction	·····7
Aims and questions	8
Background	8
A universal perspective on education	8
Auroville - a laboratory for educational research	10
Previous research	11
Integral Education responds to the universal needs of human change	12
Global education theory for human change	12
Integral Education - reflective education for social transformation	14
Transformational Educational Leadership	15
Education with the aim of individual development and growth	17
Freedom	18
Learning as a process	18
Curriculum for lifelong learning	19
Three Pedagogical Principles	20
Nothing can be taught	21
The mind must be consulted in it's own growth	22
Working from the near to the far	23
Method	24
Selection and timeframe	25
Data Collection	25
Daily filming	25
Semi-structured interviews	26
Magic Moments collection	26

Analysis2	7
Research ethics	8
Validity and reliability2	8
Results presentation20	9
Educational Leadership2	9
How can an education with the aim of individual development and growth be assessed?3	6
Learning as a process3	6
Freedom3	8
Curriculum for lifelong learning4	0
How can the pedagogical principles of an Integral Education be made visible to gain recognition? .4	2
Nothing can be taught made visible in TLC through Independent learning4	2
The mind must be consulted in it's own growth made visible in TLC through Self-knowledge 4	!7
Working from the near to the far made visible in TLC through Inter-independent learning4	9
Discussion 55	3
Results in relation to initial problem statements of the research study5	3
Insights on the formulated problems as an outcome of the research study5	6
Did the reseach confirm known assumptions?5	6
How does the reseach contribute with new knowledge?5	8
The fractal of large-scale transformation in schools5	8
When learning is visible - assessment/recognition6	0
Contributions this study made in regards to its intensions)1
Gaps that remain for future research6	1
Learning from the research process6	2
References 62	4
Annex 1 A Dream68	8
Annex 2 The Auroville Charter 69	9
Annex 3 Reflection questions	o

Those who don't believe in magic will never find it.

Roald Dahl

Introduction

"When we access our inner capacities for compassion, equity and dignity, spaciousness opens up. Suddenly we have courage to create, to review our assumptions, to be willing to say, 'It was a mistake," to listen, to alter our views, renew our positions and strategies. We discover our capacity and act to create a healthy, vibrant future for all of humanity and for our planet." (Sharma, 2017, p.12)

The unique context of Auroville, an international township in south India, was created and endorsed internationally for its specific purpose of being a laboratory for a new society, including the exploration of a new system of education - Integral Education - to be developed and put into practice (Auroville website). The purpose of such an education is not to repeat what others have done or are doing, but to try to create the conditions for the emergence of a new way of being on Earth (Partho, 2008). Although the world is changing rapidly, educational systems globally have remained more or less unaltered for more than a century (Rich, 2012) Transforming the educational system universally can seem like an unimaginable task. In Auroville, after 50 years of dedication specifically to this task, there are still question marks on how to understand a new philosophy of education, put it into practice and globally assess the progress of the students. In a report on Auroville education (Axner & Grinnell, 2017) it is shared that the day-to-day practice of education in Auroville is accepted for being both demand and supply driven.

"In other words it's a challenge between the ideal, the Dream of tomorrow and the reality, the needs of today; between the 'new education for a new consciousness' and the 'traditional (old) education of a solid foundation for the world of today. Auroville caters to both lines. But it looks like every-day reality and conventions are sometimes stronger than vague ideals. The known feels safer than the unknown. And it appears, at least for the time being, that after 50 years the conventional structures are holding steady." (Axner & Grinnell, 2017, p.36)

This captures a great challenge we are facing when attempting to practically implement an Integral Education. Each of Auroville's schools have a great autonomy where sometimes the functioning of schools in Auroville as separate entities makes them stand in contrast to each other. In this context learning and deepening together towards a common educational aim is easily jeopardized. One outcome of this is that the normative ideals of outside education remain present, parents when they face challenges or uncertainty in one school, move their child to another. An increasingly large number of parents are also taking their children out of Auroville schools altogether, sending them to traditional schools in the surrounding area. This pattern stands out, as under normal circumstances in society, parents choose a school for their children, either close to their home, or with a particular education profile, and the children complete the program offered by the school unless the family moves, or in very extreme cases of it not working for the child (examples could be bullying, or not getting support required for children with special needs).

A survey done on youth growing up through the educational system in Auroville, showed that a large part of the insecurity regarding the Integral Education system, expressed by the majority of respondents was the need of Auroville developing internal forms of recognition and international accreditation of the Integral Education system. They fully understood that this system cannot look like the evaluation systems in the traditional system, but needs to be specifically designed for the type of education offered in Auroville. It was also expressed that in a system like this there is also a need to evaluate Auroville's schools and teachers (Tewari & Clarence-Smith, 2016). This is a strong link to why many parents are seeking an education for their children outside of Auroville, as they want all opportunities to be open for their children in the future, and for them to have the possibility to fit into the systems of the world outside of the Auroville context.

Recognition can only come if there is common clarity on what an Integral Education means, and how it can be put into practice. Auroville education strives to continuously deepen its practices in Integral Education, to enable recognition for what it aims to be, and the value that this has from a global

perspective. Trusting that the system will enable their children with the freedom to connect with national and global higher education, teachers, parents and students will be able to connect to the significant role that education has for social change, and see their individual and collective roles in it as well as actively participate in this transformation. Are teachers, parents and students able to work together toward these common aims, and meet and find solutions to the new challenges that will come with it? Are they ready for these changes? (Al-Khamisy, 2015) Sharma (2017) believes that the answer to these kinds of questions lie in the discovery of our human greatness, our full potential and courage to act. How do we move towards "....strategic action to create a new reality, not from our old ideology and rationality alone, but from our humanity, embodying universal values?" (Sharma, 2017,p.15)

Using a one-year in depth research from the TLC (The Learning Community), one of Auroville's schools, covering more than 400 hours of filmed material together with interviews of teachers, parents and children, enabled the emergence of a material which while not a ready to use format, already makes visible the direction towards such a formulation.

Aims and questions

This study aims to, by defining the underlying foundations of Integral Education, give clear visibility of its purpose and implementation in TLC, thereby identifying perimeters through which it can be assessed. The research questions are:

- How can Integral Education respond to the universal needs of human change through transformational educational leadership (of facilitators/parents/children) in everyday work with children?
- How can an education with the aim of individual development and growth be assessed?
- How can the pedagogical principles of an Integral Education be made visible to gain recognition?

Background

A universal perspective on education

There is an ascending evolution that has taken place in nature, from the very first life forms in the oceans to the vast richness of life on earth today. Although humankind considers itself to be the final stage in that evolution, that can hardly be so, with all the imperfections that she/he shows, and what result we can see in the world today (Aurobindo, 1972). In our present times the world is crying out for change, in every area of human development. Our capacity to communicate and share information across the global is incredible, and through this younger generations' beliefs and perspectives. But the deep rooted prejudice, hatred, violence, and never ending spiral of material consumption, greed and domination cannot be solved by technology. Although there is a decrease in for example child mortality, being half of what it was in 1990, the numbers are still so large that it is clear that whatever policies have been put in place are not solving these issues. Six million children still die every year, before their fifth birthday. The news is inundated with other examples of the humanitarian and environmental crisis we are facing, a crisis created by man, which will simply be passed on to future generations. How can we move beyond gradual changes in the system and society that are taking place today, and make a U-turn towards a better humanity? (Sharma, 2017)

Pedagogy has, since its concept was first introduced, had the purpose of developing sustainable answers to contemporary needs in society, and to school future generations towards this. Each period in history has faced its challenges, and pedagogy has evolved through the ages (Sundberg, 2015). The

educational systems of the world today grew from a need for efficiency of the Industrial Revolution of the 1800's, but a pedagogy designed for that time's all-out economic growth can no longer be seen as the solution to the vastness of challenges the world is facing (Ball, 2003; Delores, 1996; Joshi, 2012). Yet in the world today the role of the market and the economy have become a point of reference against which many educational initiatives are measured. The political agenda in global, post-industrial, knowledge economies and information societies has changed the attitudes and aspirations towards knowledge, education, policies and leadership in the field of education (Ball, 2003). Economic profit is the driver and criteria for successful schooling, rather than the critical reflection and personal growth needed to turn around the current patterns in society towards a sustainable future (Morin, 1999; Uljens, 2018).

We are living at a time where it has become clear that this change needs to come, and we have also seen the frightening movement during the past years, where the western world has started moving from social-democratic towards neoliberal, competition oriented politics. In the field of education there is also worldwide a clear expansion of competency-based curriculum policies, with performativity and qualification as central aims (Ball, 2003). It would seem that the solution to this drastic shift would lie in renewed policies that would promote education towards critical, constructive and responsible individuals of society, a reflected personal identity and a cultural belonging. Yet it is clear that such policies have already been in place for over 50 years in western education. In spite of these policies, curricular developments have still been created towards performative and competitive competencies, and has not been able to stop developments in the opposite direction of the intended ones (Ball, 2003; Sharma, 2017; Uljens, 2018). It is clear that political problems cannot be solved by just putting new educational initiatives in place or by theorizing education through pedagogical concepts such as these policies (Sharma, 2017). Politics and education are two separate practices. Today things are described as they are, with prescriptions of how things should be, without links to each other or to the actual implementation (Morin, 1999; Uljens, 2018). It is clear that simply changing the form of government or the social system is not going to help solve the problems humanity is facing in any way. The root that all our problems spring from is the present state of human consciousness (Aurobindo & Mother, 1995; Montessori, 2007; Sharma, 2017).

Morin (1999) was asked, as a part of UNESCO's efforts to rethink education for sustainable development in a global context, to share his insights. His ideas are based on the evolutionary concept, where he means that the brain and mind have developed to a stage where it carries the necessary resources for creation. Here education has the mission of staying connected to the old wisdom but opening the mind to the new. Education is a means of offering aspirations towards new forms of unity and responsibility, for the creation of actual earth citizenship taking place in the third millennium (Aurobindo, 1972; Montessori, 1989; Morin, 1999). These goals cannot be attained by signing of international treaties (Ball, 2003). Efforts must instead be devoted to finding solutions to the psychological problems that humankind is facing, a threat that can only be fought through the values necessary to bring unity and responsibility. Humanity has reached a point where our present circumstances have no solutions in past practices, and need to be studied as a completely new phenomenon (Banerjee, n.d; Montessori, 1989; Montessori, 2007; Morin, 1999; Sharma, 2017). Politics in the world today need to be put in place for the service of humanity, to show the way towards a civilized Earth. It can only have an impact if these endeavours inter-transform, and the responsibility for each other across the globe is seen, triggering a global transformation of every individual (Morin, 1999; Sharma, 2017). "Mankind and its needs are the same everywhere and truth and knowledge are one and have no country; education too must be a thing universal and without nationality or borders" (Aurobindo, 1972, p. 193).

We need to understand this actual transformation itself, to be able to work towards a global transformation of humanity. How to redesign education with this specific evolutionary purpose? Sri Aurobindo Ghose, Indian scholar, spiritual visionary, revolutionary in the movement for independence from British rule, developed the practice of Integral Yoga (Auroville website). This is precisely a practice towards human progress and spiritual evolution - evolution of consciousness. Aurobindo was

original in his thought, merging the scientific concepts of evolution with the idea of a divine consciousness supporting all phenomenal existence. He came to this synthesis through his own spiritual practices, unfolding higher levels of consciousness and self-awareness (Aurobindo, 1972; Banerjee, 2014). He understood that human beings have the capacity to consciously participate in a process of self-discovery and self-exploration (Partho, 2008). With the use of the will and the intelligence, an individual can choose to be a part of a progressive cosmic unfolding, with the endeavour of human evolution from the ordinary mind, to the conscious mind, individually and collectively. Aurobindo developed ideas of a new universal education - Integral Education, through which children would develop their beings towards this deeper consciousness, to be led by one's inner truth consciousness- which he refers to as the psychic being (Aurobindo, 1972; Joshi, 2012; Partho, 2008). "The chief aim of education should be to help the growing soul to draw out that in itself which is best and make it perfect for a noble use" (Aurobindo, 1972, p. 204).

Such a change in education comes through those who lead it, taking individual ownership of one's actions, with a global responsibility, leading to collective transformation of society. Leadership of the individual needs to be recognized as the key to this movement. In the field of education, such leadership needs to be cultivated and developed by and in the child, becoming the core aim of education (Montessori, 2008). Children growing up in today's world need an education that will make them into responsible, caring world citizens, with the capacity of living together in an inclusive, democratic and pluricultural society, and in an ever-changing social environment (Delores, 1996). An education that reconnects with national and ethnic origins of humanity, with one's own truth, to deepen and expand the movement to connect to one's origins and identity as a human being and global citizen (Morin, 1999; Sharma, 2017).

To effect such a radical change in the way humans live on Earth, from today's dominantly intellectual way of life, lived out of a divisive egoistic consciousness, to a way of life arising from a place of inner truth and unitive consciousness. It is obvious then, that those involved in this work themselves, such as parents and those working in the field of education, need to effect at least a degree of this in their own consciousness and lives (Partho, 2008).

"The point here is not to expect to start with being completely transformed or perfected but to be deeply committed to the transformation and sincere at every step and movement to the deeper demands of the work, to live in a constant aspiration for the inner change and not allow the external work of setting up or running the school to be divorced in any way from the inner work of effecting this profound change in one's own consciousness and life." (Partho, 2008, p.229)

For this work, we will here use the term *transformational educational leadership*, be it on the level of government, umbrella organizations in education, teachers, parents, or for the children themselves, learning to lead their own lives. The term *transformational educational leadership* is coined in this research paper, as a term combining the evolution of human consciousness (Aurobindo, 1972), based on the non-affirmative educational leadership theories within an evolving context of socio-cultural transformation (Uljens & Ylimaki, 2017; Ylimaki, Fetman, Matyjasik, Brunderman & Uljens, 2017) through the methods of radical transformational leadership, seeing individuals as strategic action for change agents (Sharma, 2017). Through transformational educational leadership, radical changes in pedagogy could be put in place that would move educational practices from competitive teaching of content towards developing universal values (Sharma, 2017) and competencies like self-learning and life-long learning.

Auroville - A Laboratory for Educational Research

Mirra Alfassa, (known and published as The Mother), the spiritual partner of Aurobindo, envisioned a living laboratory of evolution, to build a place of research of inner and outer manifestations, which she described in *A Dream* (Annex 1). Sprung out of this vision, The Mother got the support of the Indian government and endorsement of UNESCO to make this Dream a living reality. In 1968, the

international township Auroville was founded in south India. People of goodwill from all the corners of the world, wanting to live guided by the Auroville charter (Annex 2), were invited to come together to build this new society by pursuing self-knowledge, as well as exploring innovative and alternative practices at a communal level, in areas like governance, town planning, economics and in the field of education. At the inauguration, the Auroville charter was broadcast in the All India Radio in 16 languages, and youth from 124 different countries and 23 Indian states brought a handful of their native soil symbolizing human unity to be placed in an urn (Auroville website).

Today, 50 years later, UNESCO recognizes that Auroville is a successful and unique model project, proving the capacity of an international community, and continues to live up to its vision of peace and international harmony. The pillars of Auroville are in strong resonance with some of UNESCO's major priorities and concerns. Among these are dialogue among civilizations, cultures and religions; cultural diversity and culture as a factor for development, poverty eradication, quality education and life-long learning, as well as renewable energies. Over the years UNESCO has passed five resolutions supporting Auroville, inviting "member states and international non-governmental organisations to participate in the development of Auroville as an international cultural township designed to bring together the values of different cultures and civilizations in a harmonious environment with integrated living standards which correspond to man's physical and spiritual needs." (Auroville website)

In the context of Auroville, applied research has a very central place. Its aim is to study an integral transformation of society, in all domains, education and lifelong learning being a major area. Here transformational educational leadership lies at the heart of the work. With five decades of experiments for Integral and Unending Education, this complements the larger goals of the UN 2030 Agenda for Sustainable Development, to ensure inclusive and quality education for all and promote lifelong learning. In 1984 the Sri Aurobindo International Institute of Educational Research (SAIIER) was founded to coordinate and further educational research in Auroville, and channel funding for educational and cultural activities (Auroville website).

Previous Research

Without the conditions needed for transformation, an educational reform cannot take place, neither in Auroville, nor globally. This study will look at Integral Education as a representative of a theory of education that could also be a transformative tool universally (Aurobindo & Mother, 1995; Joshi, 2012). The study will focus on the context of Auroville, as it is a unique effort, created specifically as an experiment towards this coming, universal movement of change (Auroville website). But to understand educational practices in the context of Auroville, this literature review will start from a global perspective, to narrow down towards understanding the necessary conditions to be able to implement Integral Education - its pedagogical principles, curriculum and assessment.

Previous research on practices of Integral Education in Auroville are few. The main research done has been through the development of Awareness through the body (ATB), presented in the book Awareness through the body – a way to enhance concentration, relaxation and self-knowledge in children and adults by Aloka Marti & Joan Sala (2006). Examples of smaller studies have been done by Aikya (2015) Glimpes of Wonder: Children in Auroville Creating Worlds on Sand, and by Sanjeev Raganathan (2019) Learning Mathematics concepts through Projects and EBD (Education by Design). Their research are examples of concrete practices through which to work with development of the planes of the being and development of the faculties of consciousness can be translated into hands on practices with children. Only our creativity limits the number of existing practices in the world, and all those waiting to be created. This is a whole new field of research, and will only be mentioned briefly here (Art Studio 12 Qualities).

Very few previous studies have been done on implementation practices of Integral Education in the world. Ann-Therese Barket (2012) in *Integral Education for the Integral Child: A Qualitative Study of*

One Contemporary Experiment in Integral Elementary Education observes Integral Education in a school following the California state standards of learning, and compares the learning practices with the descriptions of Integral Education in Neeltje's (2015) book Psychic Education - a workbook, which also describes the transitioning from a traditional system of education. Antonella Verdiani (2011), in her dissertation Educare alla gioia, looking at the teachers as guides, and at the joy of being in "free" schools. Anne Adams (2006) studies how aspects of Integral Education can be viewed in other integral approaches, such as Montessori and Krishnamurti. She presents this in her dissertation on Education-from conception to graduation a systemic, integral approach. Katakti Modak (2014) presents ideas of how to implement Integral Education in the existing educational system in India, in the research project Principles of Integral Education and its possible implementation in existing educational system.

The uniqueness of this research study is that it is looking at Integral Education as a whole in its implementation, not at the separate practices within it, such as ATB. This study wants to look at the constant, that which defines an Integral Education, whatever, age-group, cultural setting or time it is practiced in. From this perspective understand what makes it a universal system that could support the transformation of education globally. The setting of Auroville does not have the outer pressure of government guidelines, grades, examinations or other restrictions in its implementation of Integral Education. With such restrictions schools can seek inspiration from Integral Education, yet are blocked from developing practices to its true capacities and intentions. Therefore Auroville is the ideal place with the freedom giving the possibility deepen in its practices without the restrictions of the traditional system. At the same time, Auroville has created these limitations within itself, this problematic leading to the need for this study. To build trust and understanding of Integral Education as a whole philosophy, previous research supporting concepts within Integral Education will instead be studied, to give clarity on its underlying educational perspectives, theories and their application.

This study will not go into the details of presenting a description of Integral Education in general, as there are already plenty of books and research sharing about this (Aurobindo, 1972, Aurobindo & Mother, 1995; Banerjee, 2014, 2015; Joshi, 2012; Modak, 2014, Mother, 2012; Neeltje, 2015, Pal & Kaibarta, 2015; Partho, 2008).

It has been difficult to find research that takes a critical stand towards reflective education for sociocultural transformation, or towards Integral Education. The reason may be that this kind of education has not been attempted in full. Critical research could be found looking at aspects that support such an education, such as Democratic education or Montessori education, yet these did not serve the purpose of the larger perspective that a universal educational transformation wants to offer.

The English language does not have all the precise terminology needed when describing a new pedagogy, therefore, some terms will be used that are not in English, or that are less known in English educational terminology. There are also terms specific to Integral Education. Terminology will be explained where it first appears. The term *facilitator* will be used instead of "teacher", as this is the term commonly used in Auroville, seeing the teacher more as a helper and a guide, facilitating learning.

Integral Education Responds to the Universal Needs of Human Change

Global Education Theory for Human Change

The world crisis as it is today, with the current forms of governance following cosmo-politanism and neoliberal policies, is increasing plurality and is bringing curriculums closer together for policy makers worldwide. In the field of education, methods and curricula supporting this movement, are getting stronger in both North America and Europe. Although North American and European educational

traditions are slightly different, historically they have developed with influences from each other. Recent developments where these influences are seen are in the increasing test culture and focus on school leadership in Europe, and state-based curricula in the USA (Uljens & Ylimaki, 2017). These influences also show themselves strongly in countries recovering from colonization, such as India. In ancient times India had a system of Yoga and education, where spiritual ideals were both high and wide, and included the perfection of material life. Modern India, after the rule of the British, has arrived at a system of education that is both lifeless and soulless, the consequences of which one can see in the material and moral health in the country (Aurobindo & Mother, 1995; Joshi, 2012).

In the Scandinavian countries and Germany, the educational tradition is historically quite different to other European and North American educational theories. This tradition is a non-affirmative education theory, based on critical thinking, asking questions of equity and justice, yet it does not have a pre-determined ideal or vision of the future. It aims at individuals making up their own minds, and learning that practices, such as moral and political ones, may and can change over time. Therefore, non-affirmative education theory is not value neutral, but argues for cultural, personal, political selfdetermination. Non-affirmative education theory allows for critical thinking among education leaders, continuously checking educational policies with educational aims. Non-affirmative observations in education functions as a tool to remind that the world and its actors need to be recognized for what they are perceived to be. At the same time this recognition is not an affirmation, as democratic education lies between "norms" and "facts", recognizing both these aspects but not affirming them. Instead, through non-affirmative educational leadership, these are constantly under scrutiny when observing educational practices (Uljens & Ylimaki, 2017). This tradition of thought is based on the term Bildning (Swedish)/ Bildung (German), which does not have an accurate English translation. It is the process of human learning and growth, with focus on reflective identity, personality, character and citizenship, with the final aim of an individual gaining autonomy, independence and growing into responsible maturity. Although the Scandinavian countries and Germany have this educational system of Bildning as its foundation, these countries are still missing the aspect of leadership in the field of education to fully transform the system in this way, and influences of the European traditions have found their way into the educational system as well, pushing towards more standardized testing and comparative studies such as PISA (Uljens, 2018). Finland is the country that has deepened the most in the non-affirmative approach. "The objective of basic education is to support pupils' growth towards humanity and ethically responsible membership of the society and to provide them with the knowledge and skills needed in life." They have shown educational leadership at every level, looking at roles of government, teachers, parents and students (Council for Creative Education). In the curricular reform in Finland, reflection on the changes in the surrounding world and their effect on children and young people, learning school work and life skills played an important part. They are the first country in the world looking at removing school subjects from the curriculum, to replace these with study of events and phenomena (Finnish National Agency for Education).

In resonance with Bildning are also the educational theories of the Enlightenment period. A modern Enlightenment theory is based on democracy, and aims to support the individual's development towards the kind of maturity and independence needed to be able to act autonomously with responsibility in current situations, and at the same time take part in forming the future society with consciousness (Uljens, 2002).

Uljens (2002) looks at identifying a universal theory of education, inspired by the traditions in the Scandinavian countries and Germany, where the theory and philosophy of education characterizes both the individual's development as well as cultural development, and have in common that there is an integral relation of the state to the individual. Yet Uljen's inspiration from the Enlightenment period, and Scandinavian and German theories about a universal theory of education, do not include the spiritual aspect of education of the eastern traditions. There is a need to establish a dialogue between Western and traditional Asian education awareness, and what the foundations in these different views on education are (Uljens & Ylimaki, 2017). Aurobindo supports this idea, asserting that

there is an integral spiritual ideal that harmonizes East and West, by rising above both negations, the one of the materialist, and the one of the ascetic. Both the lower perfection, which is to achieve highest level of development in the present form, to excel in areas like sports, art and literature, to in one's work embody values to perfect the work, like the sense of goodness and charity of the social worker or the perseverance and strength of the farmer. The higher perfection of the ascetic is the spiritual perfection, where all life values are heightened in the light of the spiritual being. A universal theory of education would, according to Aurobindo, be a synthesis of these two, an integral approach of both higher and lower perfection. (Aurobindo & Mother, 1995; Joshi, 2012).

This gap is also supported by Delores (1996), who describes that the sense of responsibility for the solution needs to be placed on the individual, as we can only learn to live together globally if we can live peacefully with our neighbour, our local community, or in our country. The educational system now needs to build this capacity in the students, and for that, a new global pedagogy should take the place of the old, equipping humanity with the awareness and skills to take a right turn at this crossroads (Delores, 1996; Joshi, 2012).

"There is, therefore, every reason to place renewed emphasis on the moral and cultural dimensions of education, enabling each person to grasp the individuality of other people and to understand the world's erratic progression towards certain unity; but this process must begin with self-understanding through an inner voyage whose milestones are knowledge, meditation and the practice of self-criticism." (Delores, 1996, p.17)

So how do we walk the talk and make the change? How do we deal with today's local, national and global challenges? Having great ideas about education that will bring change is useless unless put into practice. "Everyone can create new patterns and shift systems and cultural norms when they choose to do so. Our response can be simple, though not simplistic, and impactful! Sourcing inner capacities - learning and using coherent transformative design and operating principles, tools, and praxies - is the way." (Sharma, 2017, p.25)

Integral Education - Reflective Education for Socio-Cultural Transformation

In the relationship between the aims of society, curriculum, and actual implementation with children, there are two main perspectives in the world, that of social reproduction (which is the most dominant), and that of social transformation. In the first, schools operate within society, transmitting uniform knowledge and values to children who then inherit a largely unchanged society. The second, social transformation, has a normative approach, where the future that the transformation is working towards is already defined, by existing ideals often beyond educational leaders, teachers or students own interests and cultural experiences, such as neoliberal or neoconservative goals (Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017), like privatization in the economic sector, globalization, and promoting democracy and peace through strength in the form of military force.

There is a third perspective, one of *reflective education for socio-cultural transformation*. This differs from the two above as it is non-hierarchical, which means that it assumes a level relation between different social norms and practices, such as education, politics, working life/economy and law. Here schools operate in a distinct separation from society, so as not to be influenced by present expectations and needs of society, and uncompromised be able to strive towards a new education (Joshi, 2012; Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017). An education based on the evolution of consciousness perspective can be divided into four different aspects, the intentional (interior of the individual), the behavioural (the exterior of the individual), the social (the exterior of the collective), and the cultural (interior of the collective). An educational process towards evolution of consciousness needs to include all four aspects (Rich, 2012).

If education has the purpose to prepare the individual for active citizenship and political democracy, as well as working life, aspects to enable this need to be developed *by* the individual. The difference with this perspective is that through education the individual will be prepared to transform the very same

society/culture that the individual was educated in. This neither can nor should be decided upon beforehand, as it is the individuals' new insights and consciousness that will show the way towards future developments in society (Joshi, 2012; Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017). Aurobindo's evolutionary vision is based on his model of individual development. The task of education is to support the individual to transcend the limitations of their present consciousness, so that they can evolve beyond it. According to Aurobindo, a human being has different parts, an outer being, and an inner being. Each part of the being has its own nature, and even within one part of the being different natures can be contained. Developing consciousness starts by recognizing these different parts as the foundation for education, and defining the education needed for each of them. The outer being is the personality of the individual that relates to the material reality through an environmental consciousness. The inner being consists of the physical, vital (energy) and mental consciousness. And at our human centre is the psychic being, our innermost truth consciousness. The goal of an Integral Education and ultimately of Integral Yoga, is to, through development of the faculties of consciousness of the inner being, and guided by one's psychic being, one's highest truth, to transcend the mind and move into a deepening of consciousness guided by the spirit (Rich, 2012).

For transformation of humankind, and with it of society, the perspective of a reflective education for socio-cultural transformation, needs to be the clear, unconditional choice. Only then can one start to work towards an actual educational reform, be it on a global, national, or school level. We cannot change the education that children actually receive as long as we adults stand with one foot still in the social reproduction perspective - which is the reality today. The fear of the unknown pulls us back to reproducing systems for our own security as parents/ educators. But this is stopping us from giving our children what they need for themselves and their children (Joshi, 2012). Monod & Benezech (1972) did a study at the Sri Aurobindo International Education Centre in Pondicherry, in the early days of its exploration of Integral Education. Here they share that the only way of change is an irreversible movement that only a complete renewal of methods can fulfill, to move education in this new direction. This change has to take place swiftly and completely, and this is only possible through mutual understanding and respect of this choice, by all stakeholders, such as parents and teachers (Monod-Herzen & J.Benezech, 1972; Joshi, 2012). Educational leaders at different levels can make a clear decision of perspective, and navigate schools towards this new educational paradigm. In Auroville, securing this first step in its schools is ultimately the responsibility of SAIIER, which has taken on the role of being an umbrella organization that promotes and coordinates most of the educational and cultural programmes in Auroville, keeping them focused on Auroville's aims and ideals of Integral Education. SAIIER receives funding from India's Ministry of Education, the Foundation for World Education (USA), Stichting De Zaaier (Holland), and various units and individuals from within and outside Auroville with this specific purpose (Auroville website).

Although the practices through which Integral Education schools can work with the developing the planes of the being through the faculties of consciousness can vary infinitely, three corner stones set it apart from traditional educational systems, making it a *reflective education for socio-cultural transformation*. These corner stones will be described in the rest of the research chapter, under their headings.

- Transformational Educational Leadership (the prepared adults)
- Education with the aim of individual development and growth (unending education)
- Three Pedagogical Principles (Didaktik)

Transformational Educational Leadership

The radical response that needs to come is based on our ability to see patterns and opportunities for systems change. A conscious full-spectrum response to any situation is described by Sharma (2017) as a fractal of the whole paradigm shift. She explains a fractal as a complete pattern, in itself a full spectrum response, therefore, each fractal adds gradually to the scale of transformation. There are

three components to this: "(1) *sourcing* inner capacities and universal values for action – acting from our oneness; (2) *shifting* systems and cultural norms, creating a new pattern, BEING a principled game changer; (3) *solving* problems" (Sharma,2017, p.211). Transformational educational leadership can be put in place at every level (be it applied by the child itself, or parents, teachers, umbrella organizations like SAIIER, or Governments) (Sharma,2017).

Educational leaders need *awareness* of themselves, the movements that come with stepping into the unknown, their impulses, contradictions, conflicting wills and fear (Aurobindo & Mother, 1995). Looking at underlying dynamics in the field of education in Auroville, we have 50 years of exploration through trial and error to understand patterns and structures that underpin the complex problems that need to be solved. This connects back to the report on Auroville education (Axner & Grinnell, 2017).

"In other words it's a challenge between the ideal, the Dream of tomorrow and the reality, the needs of today; between the 'new education for a new consciousness' and the 'traditional (old) education of a solid foundation for the world of today. Auroville caters to both lines. But it looks like every-day reality and conventions are sometimes stronger than vague ideals. The known feels safer than the unknown. And it appears, at least for the time being, that after 50 years the conventional structures are holding steady." (Axner & Grinnell, 2017, p.36)

Analysing these experiences needs perseverance and sincerity on every level, as in human nature we tend to give favourable explanations - convincing ourselves of why we need to stick to our old comfort zones (Aurobindo & Mother, 1995). As educational leaders, being a part of this reform of humanity means letting go of the traditional patterns of social reproduction that we are conditioned by, which is probably the most challenging, and finding a way to respond to the systemic challenges faced (Sharma,2017). The book *Psychic Education – a workbook* (Neeltje, 2015) offers tools and exercises through which to develop self-awareness. It is the most difficult because we need to let go of the normative of all that schooling is to us. It can be overwhelming to think of creating new patterns and shifting systems. But this can be done by sourcing inner capacities, and by starting to apply them in everyday life. "The unique radical response draws on us our innate capacities and is based on activating the unifying architect within us to design differently and make a difference." (Sharma, 2017, p.25). In this way, transformational educational leadership strives to recreate societal aims, values, content of education, pedagogical methods, organizational strategies and evaluation (Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017).

In the conflict between the safety of the known traditional expectations of education, many parents fail to find trust in reflective educational practices, as they are based on processes, which require time for results to show, compared to the traditional assessment that can be done instantaneously through formalized tests or even in comparison to other children of the same age group (Monod-Herzen & Benezech, 1972). Therefore we continue to see the patterns that we are trying to break from in education, such as children being sorted by age and fed through a set system at a set pace, by teacher led, pre-decided content, tests and exams (Lillard, 2007; Neeltje, 2015).

For a shift of paradigms, all levels of educational leadership, there needs to be a will to wholeheartedly drive this process. Only through this effort will the capacity to implement Integral Education develop and grow. On an organizational level internal valuing systems need to be identified, as well as how these values and ethics influence decisions and actions taken. (Sharma, 2017) How we view this, get to know the organizational reality and decide on the values behind the work, is very important for leadership in schools and educational organizations/institutions (Ylimaki, Uljens, 2017). Leadership then, according to Sharma (2017) has two aspects that together hold such emergence:

- What I stand for, the universal values I embody and manifest through my actions.
- The impact I wish to generate well-being for all and a thriving planet. (Sharma, 2017, p.26)

Through educational leadership we can study how the social interactions around the content and pedagogical work in the schools can bring the philosophy of Integral Education into practice. By applying a reflective education perspective, educational leadership transcends existing norms and values in schools, leaving the future an open question, to be developed by the individual. Here the educators/parents need to be continually cultivating their own learning process, to be able to create the conditions necessary for continuous unlearning, learning and reflection about a future society, that is yet to be conceptualized. Pedagogical practices should focus on creating new knowledge, and new spaces for pedagogical practices, and to fight and overcome resistance and barriers (Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017).

"What you have decided to do, you must do, whatever the cost, even if you have to renew your effort over and over again any number of times in order to do it. You will be strengthened by the effort and you will have only to choose with discernment the goal to which you apply it." (Mother, 2012, p.22)

Children as Educational Leaders in a Democratic Approach

Based on the view of the individual's autonomy, education is only possible if the child is free and self-active, and, at the same time, in order for the child to become free and self-active, education seems to be necessary (Stoll Lillard, 2007). Through this understanding, educational leadership needs to recognize and treat children as if they are already free (or reflective, capable, trustworthy, in order to reach cultural, productive freedom (the ability to act). Educational leadership lies within the child itself, and education is a "recognition-based invitation, intervention, provocation, a disturbance or expectation concerning the child's relation to herself/himself, the world and others. Educational Leadership is, then, to recognize somebody as if they are already capable of doing what they are supposed to become capable of - and to act accordingly" (Ylimaki & Uljens, 2017, p. 214).

Education with the Aim of Individual Development and Growth

When questioning what it means to implement Integral Education as a reflective education for sociocultural transformation, non-affirmative educational theory can be studied to understand what it entails in practice. The nature of such an education, what it means to become and grow as a human cultural being and citizenship, are questions that this theory answers to. At the forefront of this is how individual learning relates to social change, and offers a starting point to understand curriculum, Didaktik and educational leadership in a process of globalization. Didaktik (which has a different meaning than the English word didactics) is almost unknown in the English-speaking world (Hopman, 2007). Didaktik is "characterized as 'restrained teaching', based on (a) a commitment to Bildning, (b) the educative difference of matter and meaning, and (c) the autonomy of teaching and learning." (Hopman, 2007, p.109). Non-affirmative education theory broadly encompasses educational leadership, curriculum, and Didaktik to be able to create institutional education (schools), building both from an individual and social perspective. The non-affirmative approach not only explains the reflective nature of educational activity, but also provides a much-needed language with terminology that is representative of a new education, thus bridging curriculum theory in the school context with democratic values of society (Ylimaki & Uljens, 2017). It focuses on the aims, methods and contents of education. Three cornerstones of such an education are freedom, seeing learning as a process, and curriculum for lifelong learning (Ylimaki & Uljens, 2017).

Freedom

A non-hierarchical relation between school and society prepares the individual for the existing world, in a problematising, non-affirmative way, by not confirming the present state of things. Education prepares individuals for participation in societal practices and change, and democratic ideals are defended. Human freedom is assumed, from provocation/intervention to self-activity. The question of the good life remains an open question to be discovered by the individual, and freedom is guaranteed on various levels, for the child, parents, educators, and institution. In order for an individual to reach autonomy in their ability of self-reflection, as a child they must already be perceived as autonomous, free and self-reflecting. (Ylimaki & Uljens, 2017) Freedom is not something that can be given, because if something can be given, it can also be taken back. It cannot be conditional, but rather be an unconditional guarantee in this kind of education. Yet Integral education has to start by recognizing the premise that humans are conditioned, and not free. Only from there can an actual evolution towards freedom begin. When the individual can recognise that she/he is not free, the process can start to work towards creating the conditions for freedom. By becoming aware of the external influences and past conditioning, a person can start to recognize their own individuality. (Partho, 2008)

"The act of educating, thus, seems to presuppose the very existence of that which is a necessary condition of education (i.e. autonomy). In other words, in order for education to be possible, there must be a free subject whose reflection is provoked, but simultaneously it is thought that the individual becomes a free subject through the process triggered by the provocation" (Ylimaki & Uljens, 2017, p. 213).

Therefore, freedom is rather something that has to evolve, out of awareness, choice and responsibility. This is deeply linked with learning to discipline the vital part of the being (energy, emotions), impulses, desires, enthusiasm, violence, dynamic energy, depressions, passions and revolts. This is an energy that can set things in motion, to build and to realize. But it can also destroy, and this is the most important, and also the most difficult part to work on in education. The stronger the connection to one's psychic being becomes, the less will be the pull of the destructive energies, and here lies progress and transformation of the human being (Mother, 2012). "Progress may be slow, relapses may be frequent, but if a courageous will is maintained, one is sure to triumph one day and see the difficulties melt and vanish before the radiance of the truth-consciousness" (Mother, 2012, p. 7) It is through this work that freedom can evolve. "Freedom, in its true sense, evolves out of awareness, choice and responsibility. If I am not in a position to choose my course of action out of my own understanding and awareness, and if I cannot assume full responsibility for what I choose, then I cannot be regarded as a free individual at all" (Partho, 2008, p. 285).

Integral Education does not seek to produce brilliant students, but living souls. The process of such an education happens through free progress, where the child "is consulted at every stage, free to express his preferences and his aim, but it is a freedom leading to progress towards full mastery of his highest possibilities not the opposite of these." (Monod-Herzen & Benezech,1972, p.5). By building this capacity from birth, by adolescence the individual will be ready to lead their life from this space in themselves (Stoll Lillard, 2007). This freedom has very little to do with doing whatever one wants, which is where our apprehensions about freedom usually stem from.

Learning as a Process

In the Scandinavian and German traditions, there is a clear distinction made between the theory of education and the theory of Bildning (Swedish)/Bildung (German). While the concept of education is a process that has a clear beginnings and ends, the theory of Bildning refers to both the content and aims of education, but also to the process of human growth in the widest sense of the word, to offer an explanation of what it means to become a person and citizen. Bildning is the enduring process of continuous learning throughout life (Ylimaki & Uljens, 2017). Dewey supports this, meaning that school should not be seen as something children attend as an interruption from their regular lives,

rather their school experiences should be their life and development, without differentiation (Heilbronn, 2018).

A way of structuring such an ongoing learning process is by taking a non-affirmative position, as this approach is one that stands out by staying in direct dialogue with original thinkers and theorists, such as Rousseau, Dewey, Fichte and Herbart. Aurobindo and The Mother's educational philosophy of Integral Education also builds on this view of lifelong learning through an "unending education" (Annex 3). In this approach, education needs to be conceived as a continuing reconstruction of experiences, educating towards a future that we do not, and cannot know (Ylimaki & Uljens, 2017). The aim of a non-affirmative education is personal autonomy, which can be expressed through the German term Mündigkeit, meaning that to prepare an individual for the future life means, to help them command themselves, and to give them the means by which they will have full and ready use of all their capacities. Therefore, when looking at reflective education by theorizing the curriculum, there is a focus on the self-formation as a process (as in the educational concept Bildning), as well as in the process between the self and the other. These pedagogical relations together with an organic emergence of societal aims, translates into the content and educational experiences offered to the child (Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017). It is the process of living that is education, not merely a preparation for future living. According to Dewey, we need to stop looking at education as something preparing for later life, and instead make it the purpose of present life. The aim of education is growth, and education is all one with growing, and to drive this, inside the child, there is a force to grow (Heilbronn, 2018). This vital force, when mastered and channelled by the psychic being, is what will drive the capacity of the individual, to gradually acquire the power to take on even the most difficult things (Mother, 2012). Then the process and the goal of education are the same thing. As the future is undetermined, it's the individual's reflective ability of self-awareness and selfdetermination that are abilities that education must have as a main focus. (Ylimaki & Uljens, 2017).

"Contemporary man is like a child lost in the forest. He is not afraid of the things that he can see nor animals that may be lurking about, but of little things, of the rustle of leaves and the echo of ghostly footsteps. He is terrified of things that do not really exist. Man needs spiritual tranquility and peace: he needs light... who can offer him a little light? In his search for the causes of the phenomenon about him, man has obviously learned an enormous number of things about his environment.... But there is still one thing that remains unknown to him, and that unknown is man himself." (Montessori, 2007, p.86)

Curriculum for Lifelong Learning

Curriculum leadership is a new field that needs great attention, as it will bridge the gap between educational theory (philosophy, social aims, changes) and educational leadership approaches that will support the movement from the theory of education (here Integral Education) into an actual educational practice (Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017). Curriculum leadership is the step that educators need to take to transform ideas into practice - based on the three pedagogical principles of educational leadership explained in the previous section, forming the foundation from which a new way of designing curriculum can evolve (Uljens, 2016).

The word curriculum used in its traditional sense can feel limiting, as it tends to be preset and thus not allowing for the freedom needed for Integral Education. Pinar (1975) proposes a new framework for curriculum, moving from noun to verb, coining the term *currere*. Curriculum moves from one of content, to, in this new pedagogy, a process. The method of currere requires the child to be in an ongoing process of reflection upon their life experiences so far. The framework has four steps to be followed: the regressive, the progressive, the analytical, and the synthetic. These steps help the child in the process of retelling the story of her/his educational experiences, imagining future possibilities for self-understanding and educational practice, and analysing relationships between one's past, present and future life history and practice (Partho, 2008; Pinar, 1975).

The first regressive step encourages the child to remember particular educational experiences and how these past experiences have guided and affected them in their development. This allows the child to understand how the past has not only affected them, but also the people surrounding them. The next step is the progressive step which offers an opportunity for the child to think about the future. After this there is an analytical step to look at the here and now, to create a new, fresh, subjective space of freedom in the present. This allows the child to be able to be in a reflective process, and feel that they are leading their own journey, with the possibility to make new conscious choices to steer the direction. The final step is the synthetic step, which is about analyzing the present in light of the knowledge and understanding gained throughout this reflective process. This individual journey of each child supports the process of becoming - through self-reflection, self-awareness, self-understanding, self-motivation, self-drive, and self-assessment. This is a democratic and child-centred approach to curriculum leadership (Pinar, 1975).

The curriculum, or currere, has the purpose of defining the milestones or areas of work through which the child can develop self-knowledge and self-awareness. Guided by the educators, a curriculum will emerge for each child, offering opportunities for the development of the faculties of consciousness. Here the individual development of the personality is entwined with the social development, and curriculum reflections need to merge these areas. An Integral Education approach would support the complete development of the individual and society, inside and out, and a curriculum would need to support the evolutionary unfolding of an individual and collective consciousness (Partho, 2008; Rich, 2012).

Non-affirmative education theory wants to offer situations to the child that focus on questions to which existing practices, norms or knowledge are seen as an answer. Through this, the child acquires a relation not only to the given answers, but to the questions behind the answers. The child also develops the ability to learn to formulate new answers to old questions as well as new questions to be answered (Uljens, 2016). These questions are guided by the educators through the philosophy (here Integral Education), and considers how the socio-cultural aims of this philosophy are also translated into educational content in the everyday work with the children (Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017).

This approach to curriculum aims to prevent the children from unreflectively dedicating themselves to cultural content, practices, specific skills or concepts, as in the traditional educational system. Instead, a non-affirmative curriculum theory starts by not affirming any ambitions such as learning of contents or learning of generic skills or concepts. Instead, educational activities offered to the child would aim at working on the relation between the curricular aims in relation to the child's experiences (Uljens, 2016). This is also the case in Integral Education, where the curricular aims are not on the acquisition of specific knowledge content, but of development of the faculties of consciousness, the physical, vital (energy, emotions), and mental (thinking, seeing, hearing, speaking) through which psychic and spiritual education will come more and more to the forefront. The stronger this presence grows, the individual will more and more experience that which, in the depth of their being, carries a sense of universality, limitless expansion, and termless continuity (Art Studio 12 Qualities)(Rao, 2019).

Three Pedagogical Principles

Reflective education perspectives suggest three pedagogical principles that can accentuate leadership to influence the educational relation with the child (Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017, p.100). These three principals support the same three principles that are the foundation for implementing Integral Education, both with the aim of the child developing self-knowledge and connecting actions to a deeper space of consciousness (Mother, 2012; Partho, 2008). These pedagogical principles are:

- Nothing can be taught Summoning to Self-activity
- The mind must be consulted in its own growth Recognition
- Working from the near to the far, from that which is to that which shall be Bildning

Nothing can be taught

The child from birth to age three can be seen as a spiritual embryo. It can seem like the infant, at birth, is nothing, without pre-established psychic qualities, motionless and empty. Yet inside the infant are the immense potentialities to determine her/his development, a global power striving for purposeful activity and reasoning, and containing the creative essence of humanity. Real knowledge is already hidden inside the child (Grazzini, 1994; Partho, 2008; Prakasam, 1966). The outer perfection of an individual comes through the realization of the perfection that is within. The instruments for this perfection are that of mental, vital and physical, through development of consciousness. "The more the psychic is in the foreground and developed, the greater will be the perfection that a human being can realize in the outer world." (Neeltje, 2015, p. 133)

There is an educational paradox of being and becoming. According to Plato we cannot search for knowledge unless we know what we are looking for. At the same time, if we already had the knowledge, we would not have to look for it (Uljens, 2002). The educator does not call forth the knowledge that is within the child; she/he only shows the child where it lies and how it can be habituated to rise to the surface" (Aurobindo, 1972; Partho, 2008). Plato acknowledges the answer to the paradox is exactly this - knowledge is something we are born with. There is only one thing that the learner has to learn: to remember that she/he already is in possession of the required knowledge (Uljens, 2002).

But how can education support an individual to become something that they already are? The educator needs to offer the child opportunities for learning, through situations that invoke the inner knowledge of each child, without fixing a general outcome beforehand. The atmosphere needs to be such that it offers a warm and non-judgemental environment, to facilitate the blossoming of the psychic being, through its mental, vital and physical faculties of consciousness (Neeltje, 2015; Partho, 2008). "The three lines of education - physical, vital and mental - deal with that and could be defined as the means of building up the personality, raising the individual out of the amorphous subconscious mass and making him a well-defined self-conscious entity." (Mother, 2012; Joshi, 2012; Partho 2008). Plato meant that such knowledge is connected to the individual's soul. So if nothing can be taught, the learner just has to learn to remember that she/he can strive towards gaining *insight*- the learner has to learn to connect to something that already exists within. So somehow, education is what supports an individual to *come into being* (Uljens, 2002).

The role of the adult is summoning the child to self-activity, through a meditative role in relation to the individual, in order to maintain and develop the child's self-relations (Ylimaki & Uljens, 2017). "The first principle of true teaching is that nothing can be taught. The teacher is not an instructor or task-master, he is a helper and a guide. His business is to suggest and not to impose." (Aurobindo, 1972, p.204). One cannot summon someone to gain a state of consciousness. Summons need to be understood only as an invitation towards the child's self-activity. The role of the educator is to direct summons toward the child's potentiality, and thereby support the child to become aware of her/his own freedom and ability to realize her/his own aims (Ylimaki & Uljens, 2017; Partho, 2008). Aurobindo means that the educator "...does not actually train the pupil's mind, he only shows him how to perfect his instruments of knowledge and helps and encourages him in the process. He does not impart knowledge to him, he shows him how to acquire knowledge for himself." (Aurobindo, 1972, p.204).

The child is the one to initiate the learning process, while the educator's work is to observe the child, to understand the mind of each child, and thereby offer support and guidance that the child needs in a particular time or developmental stage (Neeltje, 2015; Joshi, 2012; Partho, 2008). Growth and

development through self-activity is nature's greatest miracle. This can be seen everywhere in nature. The child is a great builder, with a power, an intelligence and knowledge. The child is the constructor and maker of the adult individual. There is within nature, a divine force that enables the child to make herself/himself (Prakasam, 1966; Stoll Lillard, 2005).

The mind must be consulted in its own growth.

Recognition refers to how the child is, and becomes aware of herself/himself and the other individuals as being free (Ylimaki & Uljens, 2017). This freedom allows the child's mind to be consulted in its own growth (Aurobindo, 1972). The educator/parent needs to recognise the child's realities, and also take into consideration a moral and ethical relation in terms of her/his responsibility for the child's worth, dignity, and inviolability as a person and individual. When educational leaders (educators/parents) recognize the child as a free, autonomous agent, they also foster this within the child. Forms of recognition are respect, esteem, love, friendship - and will influence how the children develop self-confidence, self-respect, and self-esteem. If the educator/parent recognizes the normative status of the child, as a free and equal person, that recognition can transcend normativity (Ylimaki & Uljens, 2017).

Such an education is based on choice, where each child engages in what they are interested in doing. Based on intrinsic motivation, rather than extrinsic motivators of comparison or rewards (grades), the inner satisfaction of growth becomes the drive (Stoll Lillard, 2007). Therefore the idea of hammering the child into the shape desired by the educator/parent is a barbarous and ignorant superstition. It is the child herself/himself who must be induced to expand in accordance with his own nature (Aurobindo, 1972). This means that the educator needs to respect the unique development of each child, allowing each child to follow their own learning path. The educator needs to both pay individual attention to each child, as well as respect and encourage the particular ways in which each child wants to make progress (Neeltje, 2015).

According to educationalist Piaget, who developed theories on children construct knowledge, they learn through a process of assimilation and accommodation. With new experiences, thoughts, and learning incorporated into already existing understanding, new knowledge is assimilated. When the child faces an obstacle in this process, and feels blocked in the learning process, they accommodate by looking for new ways to interpret the experience (Egidius, 2003). The educator helps the child to reflect and look within, so that the child can develop a consciousness of her/his qualities and capacities. To nurture the true growth of the child, educators/parents must dare to differ from the commonly accepted value system and definition of what is important as knowledge (Montessori, 2007; Neeltje, 2015).

Vygotsky, well known psychologist who had a great impact on the history of pedagogy, saw that children learn and develop the most through assistance from others, for example through mediation, cooperation or imitation. He developed a learning theory based on development as a social process, when children learn to do new things through collaboration with others before being able to do it themselves. He shared that even self-discovery is something that is developed with the guidance of someone else, with more understanding, who then functions as a reflection for the child to put themselves in relation to (Silalahi, 2019). The potential educational value of free age mixing between adolescents and younger children has been neglected, because of the widespread tradition of the conventional age graded schooling. When children are allowed to mix freely, regardless of age, it provides a flow of interactions of individuals at different points of maturity. This offers natural interactions with those who are at both directions of the learning journey, just ahead, and soon to be there (Gray & Feldman, 2004). Children are naturally curious about the activities of others, and participate as they can. Vygotsky saw that children often choose to perform new tasks with others, rather than alone, and that together with others a child can do more and get further than alone.

Scaffolding is another related way of learning, when children's knowledge scaffold on each other to enable them to do something that they would not be able to do alone (Gray & Feldman, 2004).

Vygotsky saw that an independent problem solving at one level could be taken to a more complex level and a child's experiences would reach a greater potential in collaboration with peers, or with other people in her/his environment. He called this distance from what the child can do alone, to what the child can do with others, the zone of proximal development (Silalahi, 2019). When you see someone doing something that you almost can do, it motivates you to take the next step. The same way, having someone who has not yet reached the same stage in the learning progression, offers an opportunity to show and explain, thus manifesting the learning in oneself (Gray & Feldman, 2004).

Working From the Near to the Far

Bildning refers not just to the individual's learning capacity of plasticity and flexibility, the ability to change and learn, but also to have the ability to direct her/his activity to make sense of the world and of individual experiences. This concept structures the individual's process of self formation and the actions of the educator. Self-formation (Bildning) can be experienced in an infinite variety of ways, depending on how the experiences of the learner take form (Ylimaki & Uljens, 2017). If education has the purpose to prepare the individual for active citizenship and political democracy, as well as working life, aspects are to be developed *by* the individual. This is done by the individual's own conscious efforts aimed at making sense of the world and experiences (Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017).

The small child starts learning about and connecting to that which is in their close and immediate surroundings, starting in the family. From this the child widens herself/himself into society. According to Hegel, the child develops through reflection, and through physical activity. By setting yourself aside in the world, the individual gets to know herself/himself, and at the same time we get to know ourselves by getting to know the world. How we see ourselves and how we see the world are closely linked (Gustavsson, 2003). "The basis of a man's nature is almost always, in addition to his soul's past, his heredity, his surroundings, his nationality, his country, the soil from which he draws sustenance, the air which he breathes, the sights, sounds, habits to which he is accustomed." (Aurobindo, 1972, 204-205).

In childhood, development has its starting point in experiencing the immediate, without reflection. This then leads the child through a process of first experiencing a sense of fragmentation and differentiation, and then leading forward to experiencing harmony, synthesis and reconciliation with that which was experienced. The world is in a constant process of being interpreted through thoughts and actions stepped out into, for the individual, an unknown world. This process never stops, throughout our lives, in a constant dialogue between the individual and her/his experiences/thoughts (Gustavsson, 2003). Free and natural growth is the condition of such a genuine development. Learning opportunities must be carefully offered by the educators, so that explorations match the age, level, need and interest of each individual child. The child should be an active part of this process, also creating their own learning opportunities. The adult should invite but never impose (Neeltje, 2015; Stoll Lillard, 2007; Partho, 2008; Aurobindo & Mother, 1995).

Dewey, from the school of pragmatism, with a profound belief in democracy, has been very influential in educational reform, and has had a great impact on how we look at knowledge, learning and education. He meant that we don't just learn through our interpretations, but also through our actions. His theory was that when we do things the way we are accustomed to, we bump into problems or get surprised, and this leads us to try to do things differently (Gustavsson, 2003). By doing so, Dewey meant that if the child's image of reality is the starting point for learning opportunities, from there one can expand learning outwards by through the child's own curiosity and questions (Egidius, 2003). To be able to act differently we need to reflect on our actions, and find new ways. In this way, through the relations one has to another person, the child develops self awareness. It's a journey back and forth

between the universal and the particulate. Existing oppositions help to produce new understanding (Gustavsson, 2003). Aurobindo states that education is to work from the near to the far, from that which is to that which shall be. The children are the carriers of the past, the possessors of the present, and creators of the future. "The past is our foundation, the present our material, the future our aim and summit." (Aurobindo, 1972, p.205).

In Integral Education this process is described further, at a deeper plane of the human being, as a threefold process: self-knowledge, awakening of the true centre of one's being, and an ongoing process of integration and harmony. The work of the individual is to analyse the psychological movements that occur inside oneself, and to understand these with a sense of accuracy, to know which part of one's being they are coming from. The inner psychological dynamics together with the work of the personality will be the first didactic movement of Integral Education, and an essential movement for integration and harmonization. In this form of education, it is not traditional pedagogical tools such as lectures, experimentation or text study that can be used, but instead psychological tools such as self-observation, introspection, mindfulness to gain self-awareness, self-understanding and self-mastery which are core aims of an Integral Education (Partho, 2008).

Method

The aim of this study is to define the underlying foundations of Integral Education, give clear visibility of its purpose and implementation in The Learning Community (TLC), one of Auroville's schools (The Learning Community), and thereby identify parameters through which Integral Education can be assessed. Hermeneutics was chosen as the methodology through which to conduct this study. Hermeneutics is a methodology of interpretation, theoretically having the purpose of understanding, interpreting and mediating experiences and phenomena (Fejes & Thornberg, 2105). As a methodological discipline for qualitative research, it offered a toolbox with which to study problems that arose when dealing with the meaningful human actions and interactions in the school environment, and the products – the learning outcomes of these. Hermeneutics has three possible entry points. To answer its research questions, this study used all three areas as entrance points.

The first of these, existential hermeneutics, was used to understand what lay behind the literature on previous research that was being studied, on theories and practice of global education, with the purpose of understanding the intentions of these authors, pulling out a clearer understanding of Integral Education as a universal tool for human change. (Fejes & Thornberg, 2015). This was used to lay the foundation for the underlying purpose of this research - of working towards a deep shift in the educational systems in the world. This is linked to Aurobindo's work on evolution, and on the purpose of Auroville. This is presented in the Background chapter.

The second, hermeneutics of suspicion, was used to try to understand the phenomena that were being studied, here assessment of learning (Fejes & Thornberg, 2015). Through this entrance point, the methodology was used to interpret the foundations of Integral Education - to better understand global education theory for human change, and Transformational Educational Leadership, three Pedagogical Principles and theories supporting education for individual development and personal growth. This is presented in the Result Presentation.

The third entrance point, general theory of interpretation, moved from the explanation of the phenomena that were being studied, to an understanding of them and their messages. (Fejes & Thornberg, 2015). This was used in the third, final step, where Integral Education was looked at through the experiences and reflections of children, facilitators and parents in TLC. TLC was started in 2009, by a group of adults -parents and non-parents-, who wanted to use children's education as a means for their own personal growth. It has an international spread, with families and facilitators from all the corners of the world. In TLC the methodology is based on the three Pedagogical Principles of Integral Education, implemented through a system aiming to prepare the children for free progress

throughout their lives. Today TLC works with children ages 5/6-14/15, but is striving to start working with families already during the children's early formative years.

The research study in TLC was conducted as a participatory research project, and being a small international community, children, parents and facilitators were all interested in this study and took active part during the full school year. This process was done through ethnography, a firsthand study of society and culture in action, in the context of the school, which included filming. Through analysis of their reflections, parameters from which an Integral Education can be identified and assessed, was distilled. In their unique position as participant- observers, the facilitators became the primary research instruments. As ethnographers, the filmmakers and main facilitators collected data by observing behaviour (daily), conducting interview reflections (weekly)(Annex 3) and paying close attention to changes that occurred in the children (magic moments) (Murchison, 2010). The facilitators documented the weekly interview reflections, and an average of 2-4 reflections were filmed each week. As all the reflection interviews took place on Friday mornings, so it was not possible to film them all. Some children also requested that their interview reflections not be filmed. One of the facilitators took the role of interviewing the main facilitators once monthly. Most of these reflection interviews were filmed.

Selection and Timeframes

The Learning Community (TLC), started in 2009 in Auroville, is an action research experiment actively exploring Integral Education. Today TLC offers integral learning opportunities for children between 6-14 years old, as well as co-education of their parents.

The possibility of a long term study over a full academic year was possible, as the filmmaker, with a background in education, and new to Auroville, had a special personal interest in following a deeper educational project over time. All other involved individuals (children, parents, facilitators) are anyway committed to this timeframe. The idea around the study evolved already before the academic year started, so it was possible to schedule fixed timings for weekly child reflections, and put other things in place needed for the research.

Material was intended to be collected during the full academic year, which in Auroville is from the beginning of July to the end of April, to be analysed in May. This was cut short because of the corona epidemic, as March and April were in lockdown. With some adaptations in terms of the number of people in the gatherings to process the filmed footage, material was collected, and could be analysed during May as scheduled.

Data Collection

Daily Filming

A professional filmmaker spent the entire academic year present in the different TLC learning environments, and captured over 400 hours of daily interactions, learning situations, interview reflections and magic moments as they happened. A selection of all the filmed material was made, representing different contexts/children/time/other. To have some parameters to go by when making a content selection and first subjective coding of the material, the filmed material was sorted into four 30-minute films according to UNESCO's four categories of learning. These areas were chosen because they are quite open, with a language familiar to most. As it was not known how deep the parents and children's understanding of Integral Education was, it was decided not to base reflection questions using too specific terminology. The study also did not want to impose an educational philosophy in its analysis, but rather observe what would emerge. The film categories were:

- Lifelong Learning/unending education (developing skills such as learning from life, self learning, learning how to learn, the will to learn).
- Problem Solving (developing skills to be able to react to diverse and concrete situations, such as creativity, initiative, critical thinking, and decision making).
- Self-Management/ Self Perfection (developing skills to become independent and self driven, such as critical, reflective and independent thinking, decision making skills, and self directed learning).
- Teamwork/Collaboration (developing skills for autonomous thinking and learning, such as communication skills, self confidence, tolerant and democratic attitudes, sharing of information, and others that allow for team work and living together). (Munoz Villanueva, n.d.; Delores, 1996).

Semi-Structured Interviews

The semi-structured interview reflections with children (weekly) and facilitators (monthly) (see Annexe 3), offered a regular opportunity for introspection and reflection on individual and collective processes. These semi-structured interviews were used to give space for the respondents to share in a deeper way about their experiences, something that is easily lost if interviews are more structured (Fejes & Thorberg,2015). Friday mornings were scheduled for these interviews, throughout the school year. It became an integrated part of the work with the children, who showed interest in taking part in these, to share about things that were alive for them, and be able to look back and reflect on past processes, as well as look ahead with new aims. Each interview would take 10-30 minutes depending on the child's needs to share in the moment. Five facilitators took part in holding the interviews with the children, to be able to cover all the interviews each Friday morning. One facilitator took the role of interviewing the other facilitators once monthly.

When conducting these interviews reflections, it was required for their role as ethnographers, that the facilitators be good listeners and to be able to pick up on cues offered by the child/facilitator being interviewed. By being very present and focused, many new questions emerged in the conversations, based on the experiences being shared, and new connections that there was unawareness of emerged. The questions were open-ended, offering a lot of scope for expansion and diversion depending on what was alive in and for the respondents. Follow up questions and hypothetical questions helped create depth, and dig to the root of what was being shared. This made the interview reflections very rich (Murchison, 2010). The interviews offered a moment to talk about learning, challenges, magic moments, home/school social realities, allowing the child/facilitator to describe and share their experiences.

Magic Moments Collection

Magic Moments is a terminology created in TLC that defines a moment of shift leading to growth. It is a moment when a clear shift can be observed in a child, it can be one of joy, an Aha! moment, or a moment of deep challenges that the child works through. Magic Moments are milestones that show themselves along the journey of learning, to identify what is driving the process of learning and growth forward. A TLC WhatsApp group was created where all Magic Moments observed with children are shared. This WhatsApp group contained all parents and facilitators. The purpose was to have a second tool other than the daily filming, to observe and catch when a child reaches a milestone, or events that lead up to a milestone, and to share and document this. When a Magic Moment happened for a child, the person observing this (parent or facilitator) shared this in the WhatsApp group. The child's anchor facilitator, who would mentor the child throughout the year, would then contact the person reporting the Magic Moment to understand more about it and document it in the child's reflection folder.

Analysis

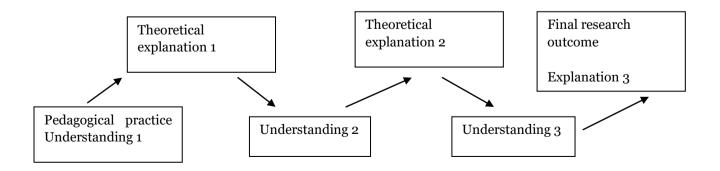
For Integral Education in practice to be internationally recognized for what it aims to be, it needs to be clear what a child educated through such a system will carry with them from it (with well established educational practices such as Montessori, Waldorf, Krishnamurty or other this is very clear). Moving from understanding the theory, as presented in the section on Previous Research, into learning from practice, this is studied through the experiences of various stakeholders in TLC. Through comparative research, where time, place and context were taken into account, the process aimed to look at the data collected from the different stakeholder groups – children, parents and facilitators – through a process of content analysis (Sundberg, 2015).

Three groups (10 children/10 facilitators/10 parents) were independently shown the same four films. Each film (about 30 minutes long) contained a selection of footage categorized based on the four different categories of competencies/skills as presented in the report to UNESCO "Learning: Treasure within" – Lifelong learning, Problem solving, Self-management, and Teamwork (Delores, 1996). The children/facilitators/parents watched the filmed footage, and after each of the four films they were asked open questions on the theme of the film. Their reflections after each one were recorded and transcribed. This material was merged with material from the weekly children's reflections, and analysed through a three-step chain of inference.

Chain of inference is an analytical tool used in scientific methods to, through a chain of steps, lead towards a more distilled end product. This was decided upon as a good method to process and analyse the filmed material and reflection interviews through the continued input of facilitators, parents and children in the analysis steps. Using this research strategy, that through steps comes to new conclusions (with the help of the children/facilitators/parents), the method helped find an in-depth explanation of the posed research questions, and enabled theoretical generalizations identifying the areas of learning taking place in TLC, to end product.

Through a subjective coding of the material (reflections from the stakeholder groups), and through the analysis of the steps of inference, a model of theoretical coding and themes that could be used more generally to understand the milestones in an Integral Education emerged. The codes helped create a structure, from which the analysis process took form. Analysis of qualitative data can enable unexpected patterns or groupings to emerge, something that was seen in this study. (Hjerm, Lindgren & Nilsson, 2014) Code families that were visible were categorized and grouped, by comparing the collected data through the steps of analysis. (Fejes & Thornberg, 2015). Using an abductive chain of inference, the argumentation was constructed through a refining of the understanding, by narrowing the theoretical explanation through each step (Sundberg, 2015).

The overall research process could be described in the following steps:



Through the coding several themes emerged: The role of the facilitator, Assessment, Learning as a process, Independent and Inter-independent learning. The material was compiled based on these themes into one document (theoretical explanation 1). It was done through a second degree interpretation, as a mirroring of the reflections shared, yet merged into one with the intention of keeping the same content. As the film reflections were about individual thoughts, experiences, motives, etc, it was always easy to separate and categorize (Alvesson & Sköldberg, 2015). Materials from the weekly reflections and magic moments were integrated by the facilitators. Theoretical explanation 1 was then shared with the three stakeholder groups, to read and give input on, and their feedback was then integrated, this new compilation becoming Understanding 2.

In the last step, when looking at how to answer the research question "How can the pedagogical principles of an Integral Education be made visible to gain recognition", facilitators, analysed the themes and subthemes that had emerged, looking at how each could show itself through manifestations in the children. This meta-perspective made it possible for the facilitators to think in ways that were more encompassing and more systemic. Because of this step, the understanding leading to the results became more complete, done with the integrated capacities and knowledge of the facilitators. This analysed material was theoretical explanation 2, which after another round of feedback from the stakeholders, and the integration of these became Understanding 3. The final answers to the research questions could be found in explanation 3.

Research Ethics

All members of TLC have received information about the different parts of the research. One child has chosen not to be filmed. All others have decided to be part of all parts of the study. Each week children are asked if they want to participate in the weekly reflection interviews. Sometimes children choose not to take part that week. Consent has been given by children and parents for the filmed material to be used for the purpose of research. Parents have signed a minor photo/video release form. All material is kept confidential and will only be used for the purpose of research (guidelines by Vetenskaprådet, 2002).

Validity and Reliability

The research process is characterized by an awareness of validity and reliability both in data collection and analysis. The tools for investigation (filming, recording interview reflections) offer accuracy of the research data, and the continuous involvement of the respondents throughout the chain of inference used to analyse the material collected gave many opportunities to make sure that the content remained precise to its meaning along the way.

Because this research is valued by all stakeholders in TLC, children, parents and facilitators, it also makes the loss of participants small. Especially participation of children and facilitators can be seen as being high throughout the year, while it was more challenging to keep the parents' response rate high until the end of the year. But even if the parent response rate decreased over time, the more stable student-facilitator participation will provide data to answer all but one of the research questions (Bryman, 2008).

There was awareness that parents, facilitators and children's reflections could be impacted by a feeling of inspiration and joy when watching the filmed materials, and that this could shine through in their answers. The reflections would be different depending on who chose to take part in the study groups, but this was not a concern for the results of the study, as it was the themes in general that needed to emerge, not the individual opinions about each one, good or bad.

Results Presentation

In the coming chapter, the results that have emerged through the interviews are categorized and presented through the three research questions:

- How can Integral Education respond to the universal needs of human change through transformational educational leadership (of facilitators/parents/children) in everyday work with children?
- How can an education with the aim of individual development and growth be assessed?
- How can the pedagogical principles of an Integral Education be made visible to gain recognition?

These criteria are exemplified below in summaries drawn from the interview reflections. In keeping with the philosophical standpoint of realism, these summaries have been formulated based on the language used by the respondents in their interview reflections (sometimes quotes are shared), and the discoveries leading to the identified themes are shared as facts. The material is consolidated where several respondents have shared the same content. But so as not to rewrite the answers, some parts of the results presentation is intentionally left in a raw state (Hjerrm, Lindgren & Nilsson, 2014). These are supported by the more detailed formulations from the interviews. This refers to all the result presentations.

How can Integral Education respond to the universal needs of human change through transformational educational leadership in the everyday work with children?

The aim of the research question was the study of how the bigger goals of Integral Education as a universal educational theory can be brought into practice through educational leadership of facilitators, parents and children. The research question wants to crystallize the essence of educational leadership in this context, and this has been done through a three-step process using inference as an analytical tool, in order to draw the essence from the overall experiences of children/facilitators /parents into more concrete sharing. These results are of interest for us to understand the experience of the different stakeholders in their everyday lives, and how this has been supported by the educational theories, and application of Integral Education. Linking to the themes of the research questions, the results are presented under the headings of the three pedagogical principles: Nothing can be taught, The mind must be consulted in its own growth, and From the near to the far.

Educational Leadership

The coding of the material allowed for several themes to emerge, showing criteria for educational leadership. The theme that through this research was labeled as *Independent Learning*, holds the pedagogical concept that *nothing can be taught* (Aurobindo, 1972), or as it is described from a perspective of reflective education for social-transformation - *summoning to self activity*.(Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017). What came up as a key to this in the reflection interviews in TLC, was how, in order to cultivate the attitude of facilitation, as opposed to teaching, the adult needs to develop a deep connection with the child, which will enable the drawing out of what is within, rather than feeding from an external source.

Long-term Commitment

Facilitators take substantial time to build these personal connections with the children, and the aim is that the same facilitators work with the children throughout their years in TLC. With such long-term

process, and close work/collaboration between children, parents and facilitators, is made visible in the depth of independence manifested in the children, their self-empowerment they are, and the extent to which they are in charge of their own learning.

"How do facilitators facilitate? The role of the adult needs to be clear, and needs to be guided by the three principles of Integral Education." (parent)

In the reflection interviews it was shared that if the child feels safe and comfortable, from within this safe space, facilitators can find the entrance point to the child's inner world and access true motivation. This approach will enable the child to feel ownership of his/her own learning, and will give the child a sense of her/his own learning as opposed to being "taught". Facilitators and parents can support this development this by:

- Connecting to the child.
- Facilitating towards magic moments.
- Scheduling to give uninterrupted time.
- Giving time and space for the children to connect with their psychic being.

For new families joining with older children, it was seen to be more challenging, especially for parents, and children were affected by their parent's unease in the transitioning process of the child. In these cases, the child needs space and time to build their independence and it usually takes a year or two before a child is in charge, able to listen to their inner drive and manage their own learning. The child that transitions from a traditional system of education into TLC, often goes through phases like boredom before developing curiosity, learning to self-motivate in starting and completing activities, to finding their work cycle, listen to inner needs and structures instead of outer ones... bringing them to a point of independent motivation to learn. It has been seen over the years that parents want/expect their children to integrate and fully adapt to the new system within a few months, not fully understanding the different stages that the child will need to face in herself/himself to achieve this, and the full support which is needed in this process. It has become recognized that much more work and information is needed sharing this with parents, so that they feel comfortable and secure in giving their child the individual time and process needed.

Co-education of Parents and Facilitators

Analyzing these experiences needs perseverance and openness of approach on every level, as in human nature we tend to justify and give favourable explanations - retreating back to our old comfort zones (Aurobindo & Mother, 1995). Children and facilitators comment on this in the challenge of new children often moving through TLC, staying for a shorter period, and then moving on, which disrupts the group dynamics, friendships, and collective learning processes. The parent, as Sharma (2017) expresses it, needs to source inner capacities and universal capacities for action - acting from oneness. Oneness of purpose and action. This can only be done if it is done in full collaboration -child, parent-facilitators. When parents get a deeper understanding of the challenges as well as strengths of becoming an independent learner, and come on board with their child in the process, taking in what it means that nothing can be taught, the rewards of this as observed by facilitators fully endorse the positive outcome of parents holding this same approach at home. TLC is in a continuous process of deepening the dialogue with parents, which today still has gaps. Facilitators share that, ideally, to enable co-education of parents, it needs to start at pre-school level, or ideally during pregnancy, to set the foundations for a new paradigm of learning from the beginning. Although there will always be children joining at different levels, with whom theories and methods need to be explained and introduced, this would help the stability of growth in the educational approach. Educational leadership brings this process about by:

holding the right attitude

- · stretching and giving time
- · having full trust in the child's learning journey

Since the start of TLC, in 2009, long term facilitators observed how each year adaptations and changes have been made, responding to emerging visibility of patterns and responding opportunities for change and deepening of the work. As TLC works with a clearly defined vision, there is an ongoing learning, adaptation and creative approach based on observation of the children, their difficulties and their progress. Sharma (2017) states that a conscious full-spectrum response to any situation, needs to be done also in the smaller components of it, holding the values and intentions of its totality throughout. In this way, each part/each step adds gradually to the scale of transformation, which describes the journey of TLC well. Partho (2008), who was a driving force behind the initial start of TLC, has a chapter on "The Learning Community" in his book, from where TLC (The Learning Community) took its name. Partho describes how an integral system needs to create a learning community of individuals who are directly connected to its evolutionary source "who are themselves examples of the ideal and have a vision that spans generations" ..." This is a profound aim, but having anything short of this would once again stymie the evolution of a unitive consciousness in humanity" (Partho, 2008, p.241). It is clear that, as shared by Aurobindo & Mother (1995), educational leaders need awareness of themselves, of the movements that come with stepping into the unknown, their impulses, contradictions, conflicting wills and fears. Facilitators in TLC experience a need to as a community, keep the vision of TLC in clearer focus, from the perspective of working towards something that will span generations. It is a challenge not to get too absorbed by the everyday issues, with personal and emotional reactions, losing touch with the bigger purpose which, as part of our human nature, easily happens. When this happens, it is necessary to bring awareness to these movements. Partho (2008) shares that for children, parents and facilitators in a school based on Integral Education, it is important to establish a movement towards the principle of universal goodwill, always keeping an attitude of goodwill for all, without judgment, expecting nothing, bearing no grudge, and criticizing noone. Together with compassion and generosity, these psychic qualities are at the forefront of the relations that lead the work forward.

Offering an Integral Learning Environment

Children, parents and facilitators share about the need to create the right learning environment for independent learning. They describe that the learning atmosphere needs to be calm, with facilitators cultivating a quiet presence, being present in the moment, in order to follow what is happening for the child, allowing time for explorations to happen, during an uninterrupted period of learning time. Presence is described by Gonzales (2015) is something we allow, not something we do. It is a watchfulness, non-judging, discerning awareness. This leadership from the adults is essential for independence to develop in children (Neeltje, 2015; Stoll-Lillard, 2007). It was expressed in the interviews that this discerning awareness of the present adults fosters a space for children to problemsolve on their own, rather than have issues solved for them. The facilitator's task is to be receptive and offer space for the children to express freely, both joy and frustration, and when appropriate, to stop and encourage reflection from the child about what is going on for him/her. Krishnamurti (2008, p. 147-148) describes this educational leadership "there is an observation which is not controlled by words, shaped by words, twisted by thought. And that is the only - I don't like to use the word instrument – observation: to look, to observe without any word. This is most extraordinary, it demands watchfulness: to look, to observe, without a word, without opinions, prejudices, and all the activity of thought. Then such observation, because it is not shaped by thought or driven by thought, is holistic, whole, not limited as thought is limited."

"So much presence is required. To also accept the "not understanding" within each of us. To be the listener, not understanding, not trying to solve, but giving presence. Always." (facilitator)

"We know that when we, adults, concentrate on ourselves being present, children also can more easily concentrate on what they do. I think it's an important factor that keeps children away from focusing on their work and also it creates an unsettled and floating atmosphere or energy." (facilitator)

"Because we're the most important environment itself for children." (parent)

"When there are blockages, just to be in the surrendering attitude of an aware presence, listening, maybe an arm around the shoulder. Just to be there and deeply understand" (facilitator).

In the reflection interviews it was also shared that it is vital that facilitating adults recognize that they can deeply impact or condition the children through their own attitudes and reactions, which is why a calm, observant presence is all the more important. The facilitator's role is to be the listener, not always understanding, not trying to solve, and simply giving presence. Educational leadership can come through:

- creating an environment and atmosphere
- being a present observer
- being a supportive listener

Supporting Children in Making Decisions for Themselves

Children in TLC expressed that they are allowed to make decisions for themselves, and also be a part of taking decisions for the whole community through the weekly community gathering. This builds on the educational leadership being seen as something that lies as possibilities within the child itself. If education is seen as a "recognition-based invitation, intervention, provocation, a disturbance or expectation concerning the child's relation to herself/himself, the world and others" (Ylimaki & Uljens, 2017, p. 214) then the educational system and the adults in it need to recognize the child as if they are already capable of doing what they are supposed to become capable of - and to act accordingly. (Ylimaki & Uljens, 2017) Facilitators shared that this is indeed a challenging path to take as adults. We want efficiency and perfection right away. Through the research interviews it became clear that although TLC strives to include children in all processes and decisions, it still happens that in the haste of the moment adults make decisions of overall organization and functioning without including the children in a longer process. By defining the pedagogical projects that TLC works through, and more clearly including the decision making process as belonging to the children, facilitators hope to see more adult awareness and inclusion in this area. This will bring more clarity in the field of assessment.

Consulting the Child's Mind in its Growth

In relation to the theme self-knowledge that emerged through the research, the coding of the material allowed for several sub-themes to emerge relating to learning as an individual process. This criterion for educational leadership links directly to the pedagogical principle *the mind must be consulted in its own growth* (Aurobindo, 1972), or as it is described from a perspective of reflective education for social-transformation – *recognition* (Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017) - is also looked at transformational leadership of the adult. Here, transformation can come through the shifting of systems and cultural norms, creating new patterns, BEING a principled game changer (Sharma, 2017). To lead the child's mind in its own growth, the facilitator/parents need to shift their normative thinking that education is something that should follow predetermined patterns and structures, like sorting children by age, following fixed curriculum content, or using tests or exams to measure the children's development (Neeltje, 2015).

A Choice of Educational Perspective

Through the reflection interviews in TLC, the view that learning is a journey that cannot be predetermined, and it is important to acknowledge that we are in a process where both learning and

making mistakes will take place, was shared by parents and facilitators. It is an unfolding journey which requires full commitment and participation, and above all trust, from both parents and facilitators - in the children's ability to guide their own learning. This can be referred back to the conflict of interests leading to this research paper, where Auroville stands with one leg dipping its toes in the unknown waters of a new education for a new consciousness and the other leg clutching the seemingly safe ground of traditional education (Axner & Grinell, 2017). In the conflict between the safety of the known traditional expectations of education, many parents fail to find trust in reflective educational practices, as they are based on processes, which require time for results to show, compared to the traditional assessment that can be done instantaneously through formalized tests or even in comparison to other children of the same age group (Monod-Herzen & Benezech, 1972). Facilitators share about the challenges parents can face when caught in this dilemma, some to the point of giving the children the free schooling the TLC offers in the days, and then homeschooling in the evenings to keep their child up to the level of specific subjects in the age-standards of the traditional school system. Here it is important to reconnect to the concept of the Learning Community, as explained by Partho (2008), as being an intentional community, for those looking to explore a new paradigm of education, and are deeply connected to this intention. Educational leadership can work towards this by:

- understanding that learning is a journey that cannot be predetermined
- allowing space for emergence instead of prompting and feeding
- offering time and space
- trusting in the process

Ylimaki, Fetman, Matyjasik, Brunderman &Uljens (2017), explain that, by applying a reflective education perspective, educational leadership transcends norms and values existing in today's traditional school systems. This leaves the future an open question, to be developed by the individual. Facilitators and parents need to continually cultivate their own learning process, to be able to create the conditions necessary for continuous unlearning, learning and reflection about a future society, which is yet to be realized.

- learning from the children
- getting to know the children deeply
- allowing emergence

Developing the ability of deep listening and observing

According to the facilitators and parents in TLC, deep listening is a prerequisite, and this was shared in the interview reflections. Children have profound understandings, and they need to be acknowledged. The question has to be asked: Are we learning through and together with the children? In order to really allow the deeper mind of the child to guide his/her learning, predetermined syllabus needs to be avoided, as it breaks the presence in the moment. Having the courage to stop prompting and the feeding of ideas to the children, as opposed to observing and listening, these will hinder the emergence.

"If a child is not given the space to problem solve on her/his own, if the facilitators do it instead we do not foster competence in problem solving." (facilitator)

This year both children and facilitators deepened their awareness and skills in compassionate communication, through tools from Non Violent Communication with the support of the Restorative Auroville team. Exercises to identify feelings and needs, to see these in oneself and others, and to learn to express were part of the schedule. It was observed by facilitators how children and adults started to use these tools in their everyday lives, and parents shared that they had also observed this in their children at home. Gonzales (2015, p.19) expresses the aims of this work beautifully "The quality of

compassion and the living reality of compassion is more than something I feel. It's more than a kind of warmth of caring that I feel for someone. It's more than seeing someone in distress in their needs, and taking action towards them. It's a prior condition. It's a prior reality. It's a quality, an awareness that's alive and present, out of which compassionate action and speech emerge".

Creating New Structures

Facilitators in TLC shared about the importance of clarifying the role of facilitators and parents as well as the structures available that can help the children to find their own path in their learning and seek support when needed. There is a need for structure, yet the structures of a new education are very different from those of the traditional system. Because of this it can be difficult for someone who is not involved in the everyday education, to see and understand the existing structures. TLC is often referred to from outside onlookers as having no structures, or much less structures than other schools, the structures of the traditional system, indeed, do not exist in TLC. A network of structure emerging through educational leadership, its systems and environment are in place, to hold and contain the flow of both individual and collective learning processes. There is also the inner structure of the child, as well as social and material structures in the environment. How to find ways to stay connected to the bigger vision in everyday work. Sharma (2017) means that, as leaders, being a part of this reform of humanity means letting go of the traditional patterns of social reproduction that we are conditioned by, which is probably the most challenging task, and finding a way to respond to the systemic challenges faced (Sharma, 2017). Responding to this, educational leaders can:

- offer new systematic changes and structures.
- Self-reflect when challenged instead of projecting fears on the children.
- stay connected to the vision of global transformation, and how this connects to the everyday work on yourself as a parent/facilitator.

Holding the Vision

Although, from its conception TLC has held its vision strong, this has also led to challenges and conflicts along the way. Facilitators share about these experiences, where strong educational leadership has also led to separation, pulls in different directions, and challenging conflicts. The number of children in TLC went up and down in waves, families joined and then left. The challenges with this shifting between the various schools in Auroville was described in the introduction of this paper. What TLC offers is the strength of its community, and it is made clear that in joining The Learning Community one has a shared responsibility in one's own educational leadership as an adult – equally parent and facilitator – to make it possible to put Integral Education into practice for the children. It has to be co-created, needs full participation and support of both parents and facilitators. (Partho, 2008) This way, pedagogical practices can focus on creating new knowledge, and new spaces for pedagogical practices, and to fight and overcome resistance and barriers. (Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017).

The coding under the theme Inter-independent learning showed criteria of how educational leadership offers the children opportunities and an environment through which they approach learning in multiple ways, individually and collectively, and see learning as a process. This was the theme with the most codes and categories, and strongly expressed especially by the children in their reflections. It showed the importance that collaborative learning has to the children, and the value they see in learning together with content emerging from their close environment and needs. The criteria for Inter-independent learning links to educational leadership through the pedagogical concept that working from the near to the far, from that which is to that which shall be (Aurobindo, 1972), or as it is described from a perspective of reflective education for social transformation, Bildning, which structures the individuals' process of self-formation (Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017). Transformational educational leadership is, here, about solving problems (Sharma, 2017), and the task of the facilitator/parents is to respond to this by offering the child situations and opportunities

that allow for such a process to unfold. As this, based on the reflections of the children, has a clear collaborative nature, educational leadership now has the task to gain more understanding of this area for the children to deepen in these kinds of learning experiences.

Provide Opportunities for Children to Learn From Each Other

Through educational leadership we can study how the social interactions around the content and pedagogical work in the schools can bring the philosophy of Integral Education into practice. Through the reflection interviews, the children shared how much they learn from each other, often even more so than from adults. Facilitators were aware that they should encourage more situations where learning happens from peers, encouraging self-management. They shared that when a facilitator anticipates and intervenes in a situation without fully understanding it, this can hinder a deeper learning process. Intervention in TLC should be in the form of offering possibilities, a panorama of perspectives, choices, methods, options, methodologies, strategies, enabling and empowering the child to choose from a place of understanding of the self and what will nourish his/her learning process. By applying a reflective education perspective, leadership transcends existing norms and values in schools, leaving the future an open question, to be developed by the child. Here the facilitators and parents need to continually cultivate their own (un)learning process. Ylimaki, Fetman, Matyjasik, Brunderman &Uljens (2017) share that pedagogical practices should focus on creating new knowledge, and new spaces for pedagogical practices, and to fight and overcome resistance and barriers that block this evolution.

Living Together

In TLC, the starting point is in the direct reality of each child, expanding outwards. Facilitators shared that what emerged through this research is that the third Pedagogical Principle, which in this research was themed as Inter-independence, is deeply related to the human interactions, through which the expansion of the individual manifests. From the children, it was shared that this was without doubt the area through which they learn the most, through their shared learning experiences, and in the interview reflections the children shared many examples of learning to live together, most of them about how they are learning to solve their own conflicts together, how they are a part of decision making, concluding how this kind of learning brings responsibility and togetherness.

"To see that maybe other people have problems and not only you." (child)

"Understanding the others and taking a responsible position. To see other people's needs and to listen to each other." (child)

"Understand the situation of others, for example if they have a hard time." (child)

"Learning to cope with people on good days and bad days, for you and for others." (child)

"Need for patience and understanding everybody's different timings." (child)

In TLC, the pedagogical principle *from the near to the far*, was earlier understood in a more isolated way. The huge number of reflections from the children, describing working from the near to the far, from that which is to that which shall be, was all linked to cooperative learning together with other children of different ages. Thereby the word Inter-independence was used for this theme, as although the growth of the child individually expands outwards, yet this happens also through the others. The children shared about their experiences of learning together, of learning from someone older, of sharing something with someone else. This could be observed, by the parents and facilitators, as an interconnected flow of organic, joyful, meaningful collaborative learning in the children. This can be done through educational leadership by:

- children learning from each other
- facilitators/parents learning from the children
- allow time and space for children to figure things out themselves, and find solutions to their problems
- not having a set plan

This research showed that, on an organizational level, there is a need to allow much more value and space to the children's own free collective learning, and community processes, and this, just as previously the independent learning, needs to be recognized and given space based on the values behind it. These discoveries, and how we view them, include them in the organizational reality, and decide on/recognize the values behind the work, are very important for leadership in schools and educational organizations/institutions (Ylimaki, Uljens, 2017).

How can an education with the aim of individual development and growth be assessed?

This research question aims to study the journey of Integral education, and how/if/when an individual's process can be assessed. To understand what this meant to children/facilitators/ parents based on their experiences, the coded material was themed into the areas: Learning as a process, Freedom, and Lifelong learning. The content from the transcribed interviews have been shared as facts, and are supported by consolidated formulations from the interviews. Manifestations that can be assessed are shared.

Learning as a Process

In the reflection interviews parents and facilitators shared that so many things impact a child. Therefore assessment of learning as a process needs to take into consideration all these aspects when trying to understand the learning journey of the child. Through parenting (are the conditions right from home to support learning?), through facilitation (are environments and activities offered that meet the needs of the child and group?) by peers (how are the child's social relationships?) by the self (self-motivation). Is the child responding well or not in relation to the aims, if not, what change is needed? All these things impact the development and growth of the child, and will have an effect on the her/his learning. These are examples that can describe aspects of the theory of Bildning, that refers to both the content and aims of education, but also to the process of human growth in the widest sense of the word, to offer an explanation to what it means to become a person and member of society. (Ylimaki & Uljens, 2017).

Facilitators describe the time it takes for new children to land when joining, as there are so many set patterns and behaviour to leave behind before being able to move into an integral approach. Many children who come to Auroville need to process traumas of separation, and need time and support to mourn their losses (leaving their old school, friends, home, grandparents, family etc in their home country when parents decide to move to Auroville). New families have joined and then withdrawn their children from TLC over the years, as parents saw the school as something separate from the rest of their lives, a place which should function for the children irrespective of all else that was going on in their lives. There needs to be more sharing in order to hold a child in a holistic process, and one must give the child the time needed. Seeing the child being able to deal better with similar situations when they arise, one is able to identify that they are learning from those situations, and getting better. Bildning is an enduring process of continuous learning throughout life, and does not have a start and

finish point (Ylimaki & Uljens, 2017). Dewey supports this, meaning that the school should not be seen as something children attend as an interruption from their regular lives, rather their school experiences should be part of their life and development, without differentiation (Heilbronn, 2018). With the interactions that the children have going on, defined by the way they react, observations can be made and shared by the adults, and although this happens on-going, it needs to find deeper processes and better ways of communication. This can be seen when:

you observe a release in tension when the child can solve or overcome a challenge.

Parents and facilitators shared in the interviews how they really need to be attentive when observing the children, to be able to catch the progress. To be present in the moment, and open for the unexpected, but also to have a larger understanding of the child's journey. It is both assessing what the child does, as well as the means to get there. The assessment for each child therefore has to be designed specifically for that child, as no children can be compared with each other, each of their journeys are different. In a non-affirmative approach (such as Integral Education), education needs to be conceived as a continuing reconstruction of experiences, educating towards a future that we do not, and cannot know (Ylimaki & Uljens, 2017).

Something that is very much at the heart of TLC, is each child taking charge of their own learning journey. The work they engage in is also built on real life projects, democratic functioning, travelling. Facilitators share that they observe children apply theories in practice, think creatively to find solutions on their own. Montessori (2007) describes how the child builds their consciousness, little by little, through experiences in contact with the world, using inner wisdom, and following the rhythm and nature of the activity. This also builds on the concepts of a non-affirmative education, with the aims for the child to develop personal autonomy, preparing the individual for the future life means, to help them command themselves, and to give them the means by which they will have full and ready use of all their capacities. (Ylimaki & Uljens, 2017). This growth can be visible in children in different situations, when:

- children apply something they have learnt in a practical situation.
- learning from one situation is used in another.
- they find strategies or practical solutions.
- they use skills that they have learnt.

In TLC, facilitators can observe children applying skills from one situation, in another. It can be observed when knowledge has become interiorized-a part of and owned by the child. It means that the child has integrated what they presently see and face, with what the child has experienced before. Assessment of the learning process also shows itself through a lot of repetition and deepening, when the child grows in confidence in a specific area. This is often observed by both facilitators and parents. This is supported by Ylimaki, Fetman, Matyjasik, Brunderman & Uljens (2017), who describe the reflective educator, where there is a focus on the self-formation as a process (as in the educational concept Bildning), as well as in the process between the self and the other. These pedagogical relations together with an organic emergence of societal aims, translates into the content and educational experiences offered to the child when:

- they share what they know with each other.
- collaborative moments without a single word being said happen.
- the children have lively discussions.
- the children use skills they have learnt.
- the satisfaction a child shows when she/he finds a solution.

Something that was observed throughout the reflections, was how the children, when observing themselves in the filmed material, expressed so much joy about the moments of learning and being

together. Parents and facilitators could share about how present the children were in what they were doing, absorbed, engaged, joyful, bubbling with ideas and thought. They valued what they were doing, and saw the learning in it. What TLC has at its forefront, is to put great value to those spontaneous learning opportunities that emerge all the time. It is through the everyday process of living that is education unfolds, it is not merely a preparation for future living. This can be seen when:

• a deeper understanding, a clear flow which simply happens in a way that needs no direction, no plan, simply allowing the happening.

We need to stop looking at education as something preparing for later life, and instead make it the purpose of present life. The aim of education is growth, and education is all one with growing, and driving this, inside the child, there is a force/an urge to grow (Heilbronn, 2018). Then the process and the goal of education are the same thing. As the future is undetermined, it's the individual's reflective capacity/potential of self-awareness and self-determination that are abilities that education must have as a main focus. (Ylimaki & Uljens, 2017).

Freedom

Through the reflective interviews, the non-hierarchical relation between school and life came through, and all stakeholders, parents, children and facilitators in TLC shared their need to be a part of this journey. It was expressed that the focus may be different for each stakeholder, yet each one's involvement and freedom is as important. This area facilitators express as a great challenge, as there are often tendencies of parents not having enough trust in the capacity and individual process of their child.

Are parents, facilitators and children connected strongly enough to their roles in the work towards social change, to allow the individual freedom needed to pursue this character development? Are facilitators, parents and students able to work together toward these common aims, and meet and find solutions to the new challenges that will come with it? Are they ready for these changes? (Al-Khamisy, 2015) A question that arose in relation to this in the interviews, was how a system such as a school, can allow for this participation, and follow up on it. What is needed and how can such manifestations of growth (in trust in the child from the point of the adults, and in trust in the self by the child). This can show itself when:

• a child shows the ability to choose what is good for herself/himself, taking into consideration the bigger context of others. And it is allowed to do so, by parents and facilitators.

If education is there to prepare the child for the existing world, in a problematising, non-affirmative way, by not confirming the present state of things, (Ylimaki & Uljens, 2017) how can this be looked at from the point of a child? Facilitators expressed that they observe how children relate or don't relate to the environment. If the environment is functional for the growth of the children, they show concentration, coordination, relationships with nature, and an awareness to follow rhythms of themselves and of others. This can be observed when:

• a child shows self-awareness, moments of deep insight about themselves in the moment.

In TLC the practice of community gathering is a part of the tools for shared decision-making and collective processes. Participation both brings learning though the actual challenges that holding community meetings bring (with all its dis-function coming to the surface, but also a feeling for the children that it is in their hands to be a part of these challenges. Many children shared about the importance of the community gathering, but for parents this was still a part of TLC that they were not closely in touch with or really grasping as a long-term process (most parents would take part in the community gatherings only on rare occasions, and were not able to put their observations into a larger

learning context. If education should prepare the child for participation in societal practices and change, these kinds of democratic ideals need to be defended in schools (Ylimaki & Uljens, 2017). What can be manifestations shown by a child in the context of the collective democratic approach? This can be visible when:

- a child can sense when it is good to leave the group when needed, as not to disturb/break the concentration for others.
- a child shows the ability to wait for her/his turn, and meanwhile really listen to the others.
- a child shows the intention of working toward consensus in decision making.

Giving freedom is something that is easier said than done. What was shared through the interviews was the need for a long term process, full trust and dedication to this kind of educational approach, as a part of unending education. For parents this is more challenging than for facilitators. Past experiences in TLC, shared by facilitators, have shown that when parents see their children facing challenges, there are tendencies to overstep the process and freedom of the child. Freedom is not something that can be given, because if something can be given, it can also be taken back. In order for an individual to reach autonomy in their ability of self-reflection, as a child they must already be perceived as autonomous, free and self-reflecting. (Ylimaki & Uljens, 2017) Therefore, for most children, freedom is still conditional. As the child's learning journey goes up and down, the effects this has on the child or parent, often can be seen by restrictions or expansions of the child's freedom. This is the first challenge we face, as adults trying to implement Integral Education. To recognize that we humans are conditioned, and not free. Only from there can an actual conscious evolution towards freedom begin, from the adults to start with. By becoming aware of the external influences of our past conditionings, adults can start to recognize their own impact on the child's education, the process can start to work towards creating the conditions for freedom (Partho, 2008). An interesting question that arose in the parent reflections was:

"Is it more because of our conditioning, or way of seeing learning, that we try to measure and assess it?" (parent)

Parents and facilitators shared that it is through freedom that children on a deeper level can evolve through values, connection to key skills such as endurance, growing resistance to obstacles, and tolerance of frustration. It was also observed in how children deal with their emotions, impulses, and how they learn to persevere. There is often a misunderstanding when defining freedom. Freedom in Integral Education has very little to do with doing whatever one wants, which is where our apprehensions about freedom usually stem from. In Integral Education freedom is rather something that has to evolve, not be given or taken away, and comes out of awareness, choice and responsibility for one's actions Being truly guided by the psychic being is being truly free (Partho, 2008).

Parents and facilitators in TLC shared that they observe that children are in closer influence of their psychic being, which can be glimpsed, shining through, here and there. It manifests in intangible, magic moments. This year was special in TLC because of this research process, and parents and facilitators were sharing these observations of the children with each other throughout the year, and observing the freedom. As it was spoken of by the adults, it also helped to bring awareness of this in the children. The more this freedom is allowed space, the stronger will be the connection that the child will have to her/his psychic being, and the less will be the pull of the destructive energies, and here lies progress and transformation of the human being (Mother, 2012).

Facilitators and parents described the need to be very attentive, to be able to observe the children. To see moments when a sense of universality occurs in a child, a oneness, and to help bring the child's awareness to this experience. There was agreement that this was not something that could be assessed or measured, but rather observed to acknowledge its presence. The question of spiritual development

is to be discovered by the individual, and needs this kind of freedom to be guaranteed on various levels, for the child, by parents and facilitators (Montessori, 2007). This can be visible in:

• moments when one observes that a child connects to the oneness of the universe, the interconnectedness of things.

Curriculum for Lifelong Learning

Facilitators in TLC share about the curriculum development, that each year defines and deepens the clarity around its pedagogical projects. Real life projects like the running of a Tea Shop, The children cooking their own food, gardening, and visiting farms, travelling, cleaning, running a weekly community gathering and free exploration in nature, are well established by now, transforming core values of TLC into educational practice. This way, the socio-cultural aims of Integral Education as a method for universal change are also translated into educational content in everyday work with the children (Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017). Uljens (2016) describes the work of curriculum leadership as much needed for a new education to be able to emerge, supporting lifelong learning.

In TLC termly and weekly sessions of planning and reflection from the structure for each child's work. Facilitators share the benefits of the research this year, as the time was extended, and each child was offered a longer and deeper reflection than previous years. Another difference this year was that, because of the research, the facilitators took notes during the reflection interviews, something that the children had to do for themselves previous years. The facilitator notes helped deepen the circle of weekly reflection for the child, and these moments were valued by both children and adults, getting a more complex understanding of the child, and linking the dots between home and school. This way of building curriculum through process is called currere, and requires the child to be in an ongoing process of reflection upon their life experiences so far. The framework has several steps to be followed, to help the child in the process of retelling the story of her/his educational experiences, imagining future possibilities for self-understanding and educational practice, and analysing relationships between one's past, present and future life history and practice. This individual journey of each child supports the process of becoming - through self-reflection, self-awareness, self-understanding, selfmotivation, self-drive, and self assessment. It is a democratic and child-centred approach to curriculum leadership (Pinar, 1975). Children's growth in their process of currere can be seen in different ways when:

- they start applying structure to their learning.
- they show awareness of their work cycle and working style and act on this(ex. to know when they need breaks in between work to be able to find focus).
- they have self awareness to self assess.
- they can reflect on their learning.
- they themselves express that they have progressed and moved forward.

The currere, has the purpose of defining the milestones or areas of work through which the child can develop self-knowledge and self-awareness. In TLC this starts with the child creating a Lotus Diagram, (a form of mind map) at the beginning of each term. Facilitators describe this as a time to sit together and make a bigger plan for the term, based on the interests, needs and challenges of each child. Within this main structure, the child is free to flow and follow that which is alive, coming from their needs or curiosity. Weekly planning and reflection help put the bigger goals into practice. Guided by the educators, the currere forms for each child throughout the year. The individual development of the child's personality is entwined with the social development, and the collective processes. An Integral Education approach would support the complete development of the individual and society, inside and out, and according to Partho (2008) a curriculum would need to support the evolutionary unfolding of both an individual and collective consciousness.

In the reflection interviews, parents and facilitators shared about unending education in TLC. As learning never really ends, or finishes or completes, there is so much more that everyone, children and adults alike, can learn about anything and everything. Every new question is looking for an answer. According to Uljens (2016), non-affirmative education theory wants to offer situations to the child that focus on questions to which existing practices, norms or knowledge are seen as an answer. Through this, the child acquires a relation not only to the given answers, but to the questions behind the answers. The child also develops the ability to learn to formulate new answers to old questions as well as new questions to be answered. This describes the real life learning situations in TLC quite well, and facilitators and parents had many reflections and open questions around the process of starting and finishing something. What does it mean to complete a task? When is a lesson complete? Can we say that when a predefined lesson limit is reached, is when the children have learnt something? Although completion cannot be seen as an end-mark, it is measurable when a child shows self-confidence, pride, happiness within a given task or activity? Then there is also the growth of the psychic being, the individuation in connection to creation and fields of interest. Perhaps what is measurable here looking at the child's growth, is rather something else... It can be visible when:

• you see enthusiasm in a child and there is engagement.

Parents and facilitators share that learning may happen forever, and that it happens all the time, in the present moment. What the children are really learning is how to cope with life itself, life as the greatest teacher. To learn how to learn, to be aware of what she/he is learning, to be aware of the process, the goal. Having questions, finding solutions, and going through the process of finding them. A non-affirmative curriculum (such as that of Integral Education) starts by not affirming any ambitions such as learning of contents or learning of generic skills or concepts. Instead, educational activities offered to the child would aim at working on the relation between the curricular aims in relation to the child's experiences. This approach to curriculum aims to prevent the children from unreflectively dedicating themselves to cultural content, practices, specific skills or concepts, as in the traditional educational system. (Uljens, 2016). This can be seen in a child when:

- they recognize limitations and abilities in themselves and in others.
- they listen and follow the advice of expertise of another child or facilitator/parent sharing their knowledge/skills.

In an Integral Education, where the curricular aims are not on the acquisition of specific knowledge content, but of development of the faculties of consciousness, the physical, vital (energy, emotions), and mental (thinking, seeing, hearing, speaking) through which psychic and spiritual education will come more and more to the forefront. Facilitators in TLC share that it is clear that each child can be assessed only towards her/his own individual journey. Assessing towards anything else makes no sense. As adults we want to observe when the children get to a point from where they can get to a next level of deepening. It's difficult to assess situations because each child will be at a different place at a given time. How can we define the progression that comes from assessing Magic Moments, Aha! moments, and by assessing manifestations that make themselves visible? It is only those learning processes that we can perceive at all, that enters the parents/facilitators' awareness.

Facilitators share how development of the faculties of consciousness is a progression, where the child moves through different levels of deepening, but how these weave in with each other, in a process of expansion and contraction is an intangible process. After starting the research with a feeling that learning in this way is so intangible, through this research, a new awareness has come that actually all is tangible that resonates with or confronts our values, educational targets and expectations. The stronger the deepening of values through the work becomes, the psychic presence grows, the child will more and more experience that which, in the depth of their being, carries a sense of universality, limitless expansion, and term-less continuity, and has no need for assessment as its presence manifests (Art Studio 12 Qualities). This can be visible in:

• moments of self-knowledge or self-reflection in the child

How can the pedagogical principles of an Integral Education be made visible to gain recognition?

To answer this research question, as the last step of inference, the sub themes that emerged through the research were discussed by facilitators, with the aim of identifying when each of these sub-themes is visible in the children. For each sub-theme, visible manifestations through which the children's learning is visible/brought to the front and can be assessed, were listed. These were presented to the parent and facilitator groups for feedback. These manifestations are presented here, under the headings of the three Pedagogical Principles, through the three themes: Independent learning, Self – knowledge and Inter-independent learning.

- Nothing can be taught –Independent learning
- The mind must be consulted in its own growth– Self-knowledge
- Working from the near to the far, from that which is to that which shall be Inter-independent learning

Nothing can be taught made visible in TLC through Independent learning

Here the sub-themes that emerged from the coded material under the Independent learning are shared.

Real life

In the reflection interviews, parents and facilitators shared how they see that children can learn from every situation in life. There was a shared sense that there comes a different quality and meaning to learning when all life is seen from this perspective. If the child is the one to initiate the learning process, then the facilitator's work is to observe the child, to understand the mind of each child. With this in place the support and guidance offered to the child, will be that which the child needs at that particular time or developmental stage (Joshi, 2012; Partho, 2008). It was shared that in TLC it can be observed, that when the children are in a harmonious relationship with the environment and with nature, then life as it comes offers the emergence of endless learning situations. The children are then driven by their own interest and curiosity for knowledge. Prakasam (1966), Stoll Lillard (2005), Montessori (2007) and Aurobindo & Mother (1995) all mean that growth and development through self-activity is nature's greatest gift. This can be seen everywhere in nature. The child has an inborn power, an intelligence and knowledge. There is within nature, a divine force that enables the child to construct herself/himself.

Parents and facilitators in TLC mean that through this way of working, the children have their own open questions, ways of learning to solve problems, making their own connections, and doing things by themselves. Their learning happens through many means serving/towards the same purpose. It is about learning how to apply knowledge and skills in practice. From questions in their close environment, their curiosity and exploration help them reach out and expand their knowledge. In order to increase the suppleness and comprehensiveness of the mind, Mother (2012) emphasizes that a single subject should be approached in various ways. Then the child can understand, in a concrete way, that there are many ways of facing, considering and solving the same problem. Learning is visible when:

• a child looks for answers when her/his curiosity is triggered.

- a child connects previous knowledge or experience to develop their own answers to problems/questions they face.
- a child seeks to find.

Planes of the being

This forms a large section in this chapter, under the sub-headings: Physical, Senses, Vital (emotions), Mental, Psychic and Spiritual.

"Learning happens when the children engage with all their senses and all the planes of their being, vital; physical, mental; they were directing their learning through the hands-on exploration of something they themselves have discovered and they themselves are initiating and guiding." (facilitator)

Facilitators in TLC share how children in TLC are learning how to engage and learn with all their senses. They are offered opportunities for this though all the planes of their being: physical, vital, mental, psychic and spiritual. Through the work on these inner faculties of consciousness, comes the outer perfection of the individual. Instruments for this perfection are the five aspects of their being, that of mental, vital and physical, psychic and spiritual through development of consciousness. (Aurobindo & Mother, 1995) Each of these will be presented separately below, as we in this study are looking at how Integral Education can be assessed, based on how learning is made visible.

Physical education

In the reflection interviews, parents comment on how children have no restriction of movement, they move freely in and out of and choose their learning spaces. They choose where they want to work, and in which positions and places. Then they can feel what is good for them. This freedom supports a harmonious development of the body, and avoids any defects of deformities that could come if the child is not in listening to in connection to their bodies (Mother, 2012). Facilitators share how children in TLC learn to think about what they eat by going to farms, doing gardening and cooking, to understand and know where their food comes from, and the nutritional benefits of it and to develop sustainable and healthy habits for life. According to Mother (2012) one should learn to distinguish desires from needs, and should be helped to develop a taste for food that is simple, healthy, substantial and appetizing. With the international context of Auroville, this offers an endless learning journey, creating international dishes with local produce. The children show a deep connection to gardening, understanding the needs of plants and caring for them, which also offers many opportunities for hands-on work. Parents share the joy they see when they observe the children working in the school garden. As there is no clear boundary between in and out-door, the children use their bodies a lot, moving, climbing and running. Swimming skills are something that all the children in TLC develop, but also many other types of physical activities (sports/dance) of their choice. Learning is visible when:

- a child becomes aware of their body (strength, self-confidence, elasticity, weakness or limitation, block).
- a child takes care of her/his body (physical activity, food, hygiene).
- a child becomes aware of when she/he needs to move.
- a child becomes aware of her/his movement and adjusts herself/himself based on their need.
- a child improves progress on their fine motor skills.
- a child becomes aware of their non verbal communication (body languages)
- a child shows awareness of her/his breathing patterns.

Facilitators share how the nature trips, travelling to different parts of India, both near and far which has been a core part of TLC since its start, takes the children out of their comfort zones in many ways. They get to experience different ways of sleeping (sleeping outdoors, on trains, camping), different food (eating what is served and available where they go, simplicity, gratitude for this). In the trips the

children also push beyond their known capacities, going for long challenging walks, climbs, swims, or other. Going into the unknown, and pushing oneself through it. Learning is visible when:

- they become conscious about their body space in relation with other
- a child shows endurance and perseverance.
- a child learns how to use her/his body in different situations (gross motor skills).

Sensorial education

When watching the filmed footage, parents share how they see children working with concrete learning materials, for example mathematical explorations, to offer a sensorial and experimental approach to learning. Self-learning through questions the children face, and figure out their own ways of solving, using tools that they have from for example mathematics or language. The training of the senses has an important impact on the organisation and development of the brain. By developing awareness of the senses, the child can make perpetual judgements while acting on the environment. The body becomes an active entity that is in service of the developing mind. In the example of mathematical explorations, the child can, through concrete sensorial explorations gradually be introduced to more complex concepts, holding the mathematics in their senses, rather than something abstract (Stoll Lillard, 2007). Learning is visible when:

- through concrete exploration with the senses, a child understands abstract concepts.
- a child expresses curiosity through sensorial exploration.
- a child shows connections to situations through sensorial landmarks that are evoked through sensations.
- a child recognizes and distinguishes material/concepts/situations through sensorial input discernment through sensorial input.

Vital (emotions) education

Many reflections are shared about the work with vital education in TLC, as this is a main area that is worked on. The children are encouraged to reflect on their desires, such as likes and dislikes, and what brings enthusiasm. It is important to follow through a chosen process without being pulled by the vital. Mother (2012) describes the work with vital education as the most important, and that it should start with the very young child. But it is also the most challenging, and without outer discipline, easy to avoid. The vital can be cultivated and developed through methodical and progressive exercise, but once one opens up to start this work, one must continue. Facilitators, parents and children all share about this work, and it is clear that it is at the forefront on the learning journeys of both adults and children.

"In both, the child was clearly dealing with an issue within himself, and in both, a quiet moment (alone or with a caring other) helped him to move out of a seemingly stuck situation into being more centered." (facilitator)

"They are in nature a lot, and initiate exploration as through their observations questions arise. Also gives the opportunity for developing the faculty of sight, with all its richness." (facilitator)

Learning in TLC is also a journey of connecting to one's emotions and developing qualities in oneself, through real life. To observe and learn what learning makes someone happy. To understand the needs of nature (plants and animals), of others, and of oneself. Learning how to take responsibility, by expressing and transforming one's emotions, apologising, taking responsibility for one's actions and the consequences when this is not done. Children are drawn to nature, when they are happy, and also when they are angry or sad. To sit in a tree, on the earth, and become quiet and calm. Learning is visible when:

a child expresses joy and connection.

- a child observes the needs of the other, and reaches out with care.
- a child can express needs and feelings of self and others.
- a child takes responsibility for her/his actions, and consequences of these.
- a child acts from a place of responsibility.
- a child is aware of their reactions and impulses.
- a child overcomes her/his fear.
- a child is disturbed by inner feelings and unexpressed emotions.
- a child shows awareness of her/his emotional state, which can either be a hindrance or a positive acceleration of their ability to learn. For example joy.
- they can express what they like or dislike.
- a child integrates knowledge about themselves and can act differently when facing a similar situation.
- they manifest new quality in their being.

Mental education

In the free learning spaces offered, because time and space are open, it gives the possibility to focus and follow that which is alive in the child/children. Facilitators share that in TLC the children are given long uninterrupted time to be able to find and follow their own work cycle. This individual rhythm is something that has been observed as absolutely necessary for concentration, and great care is given not to interrupt the children. According to Maria Montessori, who studied how children develop their ability of concentration, without developing concentration, children are unable to tune into and listen to their inner guides that help them make good choices. She means that every adultimposed interruptions/breaks disrupts their possibility to develop concentration (Stoll Lillard, 2007). To avoid breaking the concentration for the children, each child takes breaks, including snack, when it is suitable for them based on where they are in their work cycle. Only for lunch does everyone come together for a common meal.

The Facilitator's role is "...to give help to find concentration." (child)

"I like to do one thing at a time to focus." (child)

"Concentration can happen because the children are not interrupted. They also choose what they want to work with themselves which helps keep their motivation and interest alive, and a wish to go deeper." (facilitator)

"Sometimes it's hard for children not to interrupt each other's concentration." (facilitator)

"Being happy helps me focus." (child)

"Through observation the children develop their thinking."

"To learn to identify things in their environment and lives and to integrate these into themselves."

A facilitator shares about the many situations in which children learn to concentrate, to observe, to reflect and to express, or find silence. This helps them see the interconnection between all things, and how then can move things from a thought to a manifestation. From intention to action. Their intentions and ideas are given space/ time to be initiated through situations like the community gathering and planning/reflection. There is a clear progression in mental education, described by Mother (2012):

- 1. "Development of the power of concentration, the capacity of attention.
- 2. Development of the capacities of expansion, widening, complexity and richness.

- 3. Organisation of one's ideas around a central idea, a higher ideal or a supremely luminous idea that will serve as a guide in life.
- 4. Thought-control, rejection of undesirable thoughts, to become able to think only what one wants and when one wants.
- 5. Development of mental silence, perfect calm and a more and more total perceptivity to inspirations coming from the higher regions of the being." (Mother, 2012, p.24-25)

In TLC, to map and identify the work with this, as well as the overlaps between mental education with physical and vital education, pedagogical projects are structured/designed around the faculties of consciousness of thinking, seeing, hearing and speaking. These also function as markers when learning is made visible:

- Thinking: When a child shows awareness of something; When a child shows the ability to hold something in the mind; When a child shows concentration; When a child is able to identify something; When a child observes details;
- Seeing: When a child can recognize and distinguish (light, forms & shapes, colours, volume, size, composition, edges, spaces, relationships, shadows, intensity...)
- Hearing: When a child is able understand; When a child knows the true place of something; When a child can understand the meaning and quality of something; When a child can name something (sound, duration, rhythm, height, volume, harmony); When a child sees intention and connection between things.
- Speaking: When a child can express herself/himself; When a child manifests her/his will/intention/idea/self-expression...); When a child uses language and speech as ways of self expression and communication.

Psychic and Spiritual education

How can education support a child to become something that they already are? Facilitators describe that sometimes an awareness of inside/inner recognition can be seen in a child, in a glimpse, when an achievement or connection happens. An Aha! Moment. Facilitators share how offering the child opportunities for learning, through situations that invoke the inner knowledge of each child, without fixing a general outcome beforehand supports this emergence. Neeltje (2015) means that for this to happen, the atmosphere needs to offer a warm and non-judgmental environment, to facilitate the blossoming of the psychic being, through its mental, vital and physical faculties of consciousness. The children in TLC are aware of the existence of the psychic being through their explorations in ATB (Marti & Sala, 2006), but facilitators feel that they need to find ways to, like in ATB, to speak of and relate the parts of the being more in all the different learning situations in the child's life.

"When inside and outside me is quiet." (child)

As Uljens (2002) shared - education is what supports an individual to *come into being*. This captures a facilitator's description that sometimes, one can see a child connect to the oneness of everything. See how everything interconnects. Moments of concentration, silence for going within, finding their inner quiet, inner peace... be in contact with their psychic being . When a child becomes aware of the different planes of the being and their inter-relation.

Self drive

The children in TLC express that they are learning how to learn. It brings us back to Plato's paradox of being and becoming. As Plato stated, we cannot search for knowledge unless we know what we are looking for. But if we already had the knowledge, we would not have to look for it (Uljens, 2002). This links closely to the principle *that nothing can be taught*, and facilitators see that when children start

their engine of learning how to learn, the boundaries of what they know and what and how they and learning is erased. They both are and are becoming at once, through their own process.

"When one learns by oneself, one does not need to have a teacher to tell you what to do. Instead educational materials are self directing so one can figure what to do next." (child)

"We do what we need to do in our learning, to grow up and say that we are self-taught." (child)

"When other kids or facilitators are doing the work for you and you're not trying by yourself, it's better to always ask for help only after trying on your own first." (child)

"Working independently can also be done together with a friend, sitting together and supporting each other. The joy of being together and working together is equal." (child)

"Even though she is better than me, we work really well together and I feel like I work so much better when I'm with her" (child)

"To learn how to write to learn how to read to get to know how to manage ourselves otherwise you feel miserable because you're always dependent on someone else. This limits you are you're not happy to learn" (child)

A parent shares that in TLC, children learn without being taught how to do something, instead they learn from what they see. The children learn through their own experiences and explanations, and it happens from concrete experiences transforming into knowledge. Basic tools and skills are needed for independence to be possible at different ages, and phases of development. That the children learn to only ask for help when needed builds independence. Self-drive is visible when:

- a child shows initiative in different situations and the choice of their own work.
- a child tries on her/his own and only asks for help.
- a child is focused and concentrated.
- a child asks questions out of curiosity to know.
- a child/children plan, organize themselves to do what they want to do.
- a child shows awareness of interests, working style, affinity of work environment and people to work with.
- a learning moment has presented itself and the child has grasped it.

The mind must be consulted in its own growth made visible in TLC through Self-knowledge

Here the sub-themes that emerged from the coded material under the theme Self-knowledge are shared.

Self-awareness

Facilitators in TLC shared that at the core of Integral Education, is for the child to know herself/himself. To become aware of strengths and challenges, of learning and growth. When a child experiences a moment of deeper knowing/realization/insight, the energy created in these moments tangible. The facilitator and parent needs to help the child towards this awareness, through reflections and looking within, so that the child can develop a consciousness of her/his qualities and capacities. Supporting the child in this means daring to differ from the commonly accepted value system and definition of what is important as knowledge, where self-awareness is usually not included. (Montessori, 2007; Neeltje, 2015).

"I just realized that it was just my pace, and it's got nothing to do with me or with anyone else." (child)

Learning by doing something that one loves, feels really good. Parents shared about the role of the adult when bringing awareness to the child around things that work well and how in more challenging situations to guide the child back to that space. By being flexible emotionally and mentally in interaction with the child, in order to handle all the changes that come, and to guide each child towards what brings passion to them. For the children to recognise themselves learn to understand their unique role in different situations. This is an example of the kind of recognition that Ylimaki & Uljens (2017).refer to, that supports the child to become aware of herself/himself and the other individuals as being free in finding individual solutions that work for them in different given moments. Self-awareness can be visible when:

- a child shows awareness of her/his work cycle and working style and acts on this (ex. to know when she/he needs breaks in between work to be able to find focus.)
- a child shows awareness of her/his interest, affinity/connection to people and place/environments.
- a child herself/himself can express that she/he has progressed and moved forward.
- a child can reflect on her/his learning.
- a child has the self-awareness to self assess.
- a child recognizes the challenges/difficulties/blocks she/he faces.
- a child shows awareness of how to overcome her/his challenges.
- a child recognizes patterns in herself/himself.

Self-acceptance

Children share that one needs to accept that all people are different with different needs and that at the same time one needs to see the differences and understand one's strengths and challenges. Parents and facilitators need to recognise the child as a free, equal and autonomous individual, which will influence how the child develops self-confidence, self-respect, and self-esteem. If the educator/parent recognises the normative status of the child, as a free and equal person, that recognition can transcend normativity (Ylimaki & Uljens, 2017).

"Comparison can be challenging, when one child sees another child who is more advanced in an area. At the same time it gives the child a goal and aims of where she/he wants to reach." (child)

"It's okay to be different it's fine to be slow or fast I'm not taking anything personally or thinking that they're better than me in anyway because they're just different" (child)

Manifestations of self-acceptance can be visible when:

- a child shows awareness of the need for patience and respects everybody's different timings.
- a child shows the ability to listen to self, to express, to understand themselves and others.
- through self-reflection the child can see herself/himself and is able to express what she/he sees/feels/thinks.
- a child can make decisions about what she/he needs, when she/he needs it.
- a child asks for help; and knows what help is needed.
- a child shows self-confidence when an activity is completed.
- a learning moment has presented itself and the child has grasped it.
- a child shows an awareness of recognition inside, when an achievement or connection happens.
- a child creates something, and sees something of herself/himself in her/his own creation. To be visible in/through one's own creations.

Freedom

Facilitators share that in TLC children are given a lot of space for spontaneous learning without external direction. There is free, uninterrupted time for practice and exploration. Stoll Lillard (2007) means that such an education is based on choice, where each child engages in what they are interested in doing. Based on intrinsic motivation, rather than extrinsic motivators of comparison or rewards (grades), the inner satisfaction of growth becomes the drive. The value of this, according to the facilitators, is that, that which the children engage in, is integrated into their being, through their own curiosity. The freedom allows the children to go further and deeper, and to develop concentration and work with perseverance. The children also have the freedom to work with something deeply over longer time (days/ weeks/months), or to work with many different things at the same time, and sharing the time between them according to needs/interests. They also have the freedom to follow the needs of their body, to move, be still, sit, lie down, stand up, and take breaks when needed. This means that the facilitator needs to respect the unique development of each child, following their own learning path. The facilitator needs respect and encourages the particular ways in which each child wants to make progress (Neeltje, 2015). Freedom is visible when:

- a child chooses to go deeper.
- a child shows joy and happiness.
- a child chooses to work with things that are appropriate for where she/he is at in her/his development.
- a child respects her/his physical need of movement, stillness, lying down, sitting up, standing which manifests through her/his ability to focus.
- the child shows the ability to choose when to work alone or when to work with another.
- a child becomes aware of her/his work-cycle and is guided by it.
- a child shows awareness of a need of deepening in one area, and can adjust her/his plan/schedule accordingly.
- a child can organize her/his schedule to integrate the different areas she/he is working with.
- a child can adapt her/his plans according to emerging circumstances.

Working from the near to the far made visible in TLC through Inter-independent learning

It stood out strongly that this principle was by far the one recognised the strongest by the children in their learning in TLC. This was a great surprise, as more focus has always been on the previous two principles, giving less reflection and deepening of understanding to this principle. Cooperative learning, from that which is near and alive, is how the children in TLC like to learn, and feel that they learn the most. Real Life situations, which in their world are interactions with others, is the starting point. This also links to the universal goals of transforming education, where this kind of learning needs to hold forth equally with the development of the individual's consciousness. This beautiful realisation was brought to awareness through the analysis of the material. Four sub-themes emerged from the coded material, Cooperative learning, Learning from peers, Democratic processes and decision making, and awareness of others. They are presented here under these headings.

Cooperative learning

When watching the filmed footage, it was shining through/made very visible to facilitators and parents that the children realised that they were individuals, who were part of a group, living/working together. That they were all inter-connected in a community, teamwork needed to achieve goals. Cooperative learning in this sense, is different from what is usually considered group work in traditional school systems. It is based on five principles: positive interdependence, individual

accountability, promotive face-to-face interaction, collaborative skills and group processing. The positive interdependence is the most important aspect, as everyone in the group is needed and useful. It functions through trust and support. Through mutual dependency, the children can develop interpersonal skills, support and motivate each other with their efforts towards a common goal or exploration. (Fohlin, Moerkerken, Westman & Wilson, 2018) What was observed in the children's cooperation was the quality of the interaction, human relationship, their sharing and responsibility for the collective. It also offers a learning that everybody expresses differently. Understanding your and others needs and feelings,, to develop empathy

"Taking into consideration other people's needs and what they want and then looking at what you need and what you want to find a compromise so that everyone is happy." (child)

"If one doesn't do the work nicely in the group then it affects everyone." (child)

"It feels alone when you are supposed to be in a team but you end up finding yourself doing the work all by yourself." (child)

"Either you can do what you want, or you can give up on what you want and do what the other one wants, or you can compromise with the other." (child)

"Doing something together doesn't mean its teamwork, if you don't take your responsibility." (child)

Example in the field trip: "We're doing things really nice, like, responsibly, and we were all so happy together and then there were some bad times with a kid but then we managed to get over that." (child)

Cooperative learning is visible when:

- children know to split the work between themselves, based on the capacity and abilities of each one.
- the children know to work, have fun, and share the joy of being together.
- questions in the children's close environment trigger their curiosity, and exploration helps them reach out to expand their knowledge.
- children brainstorm to find solutions together.
- children try to give their best when working with others.
- children who don't want to do the work, communicate this and reassign commitments.
- children share and connect to others.
- children are talking to each other and working to solve their problem.
- children show recognition/appreciation of efforts and good results of teamwork.
- children follow through with their commitments to the collective.
- children show the ability to compromise.

Learning from peers

The children expressed how they like learning together, and from each other. Facilitators could observe how the children self-organise their peer learning, knowing whom to ask for help, who to observe, who to sit next to get help, or to get inspired. Knowledge and experience flows from one to the other, and back. Each one has something to offer to another, in some situations, and the children figure this out by themselves. Younger children look up to the work of older children, understanding what skills they need to be able to do something more challenging. Older children get to help by explaining things they have learnt to younger children, both keeping this content alive, and establishing it stronger in themselves through the act of explaining to another. Care, and understanding of each one's differences and individuality are natural. Facilitators share that although children of similar age still tend to compare themselves with others, this is less prominent, as there are so many strengths and weaknesses and differences within the group.

The developmental theorists Jean Piaget and Lev Vygotsky both assigned peers a prominent role in the development of children. Piaget meant that peers are important, both because they present different ideas, and because they create a state of disequilibrium in the child. What he means by this is that mental development takes place when a child has to resolve a disequilibrium by changing her/his mind about something, or by accommodating to incorporate new ideas into an already existing understanding. Vygotsky saw that learning occurs in a zone of proximal development, where the child can do something together with someone else, that they are not yet able to do fully on their own. Children also learn by observing and imitating others. Maria Montessori saw that children structured their interactions and chose social interactions depending on what suited their needs developmentally, or based on their abilities or motives. (Stoll Lillard, 2007). That children are learning from peers can be visible when:

- children help each other to go through difficult moments.
- children care for each other.
- children can give each other space when needed.
- children can hear each other's needs and feelings.
- children can express their needs and feelings.
- children show empathy.
- children show consideration.
- children show understanding.
- children offer support to others.
- children can seek help to mediate when needed.
- children can give to everyone the chance to talk and listen (example in a circle time).
- a child can apologise.
- a child shows patience, and lets the collaboration evolve slowly.
- children seek help from their friends.
- a child can explain something that they have learnt to somebody else.
- a child shares knowledge.
- children are observed scaffolding their knowledge and skills and come up with answers/solutions together.
- children, learning from the mistakes of others can find different solutions for themselves.

Awareness of others

By working together, from that which is near and present in the day to day work with the children, facilitators can see that the children develop positive leadership qualities. Awareness of how to realise the sense of community and belonging through practical examples/work with the children in their reality. There is an organic interaction between children and adults, with an energy of togetherness. There is flow, knowing when one can connect with another or not. Knowing that one can do things better with those you connect to. But there are also patterns of exclusion, and sometimes there is resistance and difficulty to include new children. As it is a small community, with between 16-36 children over the years, with children of mixed ages, the friend dynamics are precious and easily shaken when new children enter or when children leave TLC.

"When we see each other we learn, and we see what hurts somebody else. And then we know we don't want to do it again because we don't want to hurt anybody." (child)

"To be open by giving a chance to someone was maybe not your best friend in the beginning but you get to know them and maybe they will become your best friend. And that exclusion is difficult and you'll learn more about inclusion." (child)

Over the years inclusion has been an ongoing work with the children in TLC, to develop their awareness of others more deeply. Facilitators share that they want to work more with how children

can give each other space, have more acceptance of diversity/"differences," and recognise patterns of discrimination/ intolerance/exclusion. This also connects to the core values of TLC and the bigger goals of Auroville. Awareness of others can be visible when:

- children become aware of their own positive leadership abilities and acknowledge when it's time for someone else to be the leader (child/other adults..)
- children show humility and recognition of others needs and difficulties.
- children help each other to solve conflicts.
- children make an effort to become friends again after a conflict.
- · children make new friends.
- children show openness towards new children and facilitators.
- children can adapt games to include someone who was not there from the start.

Democratic processes and decision making

The children share that they decide what they want to work with and how they want to learn. They set up their own goals with the support of facilitators. Some children ask for facilitators to guide them more through their every day work, needing more short term goal to work towards. Other children like to have less adult involvement in their planning. Dewey meant that if the child's image of reality is the starting point for learning opportunities, as in this case, from there one can expand learning outwards by through the child's own curiosity and questions (Egidius, 2003)

"When the kids are not managing themselves, then it becomes challenging for the adults because then they have to step in and manage the kids." (child)

"So it's like, for example when you're alone you can just do whatever you want. But when you're together, you have to compromise. But there's so many more things that you can do when you're together. And I think there are challenging moments of being together and they were also very nice." (child)

The children also decide on things related to everyday running of TLC, and through the weekly community gathering they present ideas, make decisions, and process issues. The meetings are facilitated by the children. According to Gutmann (2020), students in a participatory approach are more independent, reflective and insightful about their education, and also showed themselves to be more responsive to the activities and conditions in place to work towards the aim of a democratic school. Allowing children to participate in determining aspects of their education generally serves to develop a commitment on their part to learning.

"It's nice that everyone can decide about the rules and stuff and it's not just the teachers saying do this do that." (child)

"Learning how to facilitate a meeting and help everybody feel heard and understood. "(child)

"Take your own responsibility for what you say or do, and the consequences for not taking your own responsibility." (child)

In the reflections, facilitators shared that sometimes the democratic approach can create an attitude of empowerment in the child, leading to the child actually not taking part in community gatherings or by showing interest in their work. When working with children over time, it is visible that some children need to use this power of choice to rebel and work against the system, to later be able to come to a point when they can see its value and choose to take part in it in a meaningful way. This kind of behaviour has caused questions, both from children and adults, if certain things should be expected of everyone in TLC, like taking part in meetings. Through the community gatherings decisions have been both for and against this many times over the years, a process that is of value in itself as it questions the systems in place. Gutmann (2020) is critical to the democratic approach in certain setups, as it can

give priority to cultivating self-esteem and social commitment over humility and order, stating that democratic values should not be overridden when disorder and arrogance become so great as to threaten the very enterprise of the education in the school. This balance is also described by the facilitators in TLC, where the democratic processes have worked very well some years, while being very challenging at other times, depending on individual and group dynamics. Democratic processes and decision making can be visible when:

- children endure the process of finding collective solutions.
- children show the ability to see and integrate different perspectives.
- children show the ability to hear/listen to others.
- children can express their opinions/ideas.
- children can disagree and argue for their stand.
- children can compromise.
- children understand and allow time for process.
- children show the intention to work towards consensus.
- children offer solutions.
- children can communicate compassionately and constructively.
- children show the ability to facilitate a meeting.

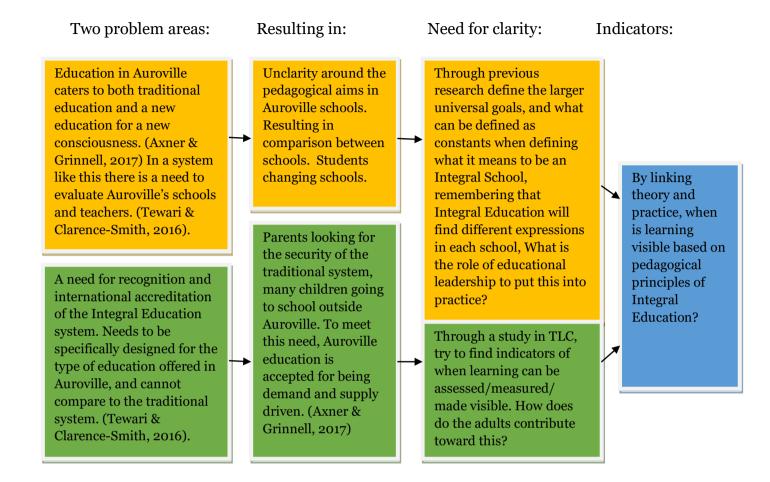
Discussion

Results in relation to initial problem statements of the research study

This study in TLC emerged from a need to gain more clarity on the theoretical foundations of Integral Education, with a universal perspective, identify common foundations of such an education, to find new tools to relate to existing and repeating challenges and understand how, through transformative educational leadership, this can be brought to the forefront in the everyday implementation with children/youth. Through this perspective, also give insight in and document what is needed for a school to call itself an Integral Education school, be able to get recognition/ international accreditation for the education given to the children learning and growing in such a system.

This was done by addressing the two initial problem areas identified, studying one through previous research, and the other through a one year qualitative study in TLC. The results of these two were merged through the analysis process, to answer the aims and three research question of the research.

- How can Integral Education respond to the universal needs of human change through transformational educational leadership (of facilitators/parents/children) in everyday work with children?
- How can an education with the aim of individual development and growth be assessed?
- How can the pedagogical principles of an Integral Education be made visible to gain recognition?



This research, initiated at the end of the school year 2018-2019, grew from a need of all stakeholders in TLC, children, parents and facilitators. A continuous flow of families coming and leaving in TLC needed to be addressed. It was affecting the children through loss of friendships, changing group dynamics, and building insecurity, for some questioning if the alternative way of working in TLC was actually good because of the outer aspects impacting it. This also built comparison between children, parents and facilitators in different schools, especially in regards to measuring/assessing children in TLC against the goals of the traditional system of education.

This aspect is challenging to address, as it is in our human nature to fear to step out of the known into the unknown, and to want to relate to and think of this in relation to that which we know. When we speak of schools, we are conditioned to a clear understanding of what this entails, it is a ready product that can be reproduced by society, with similar structures, goals and aims, wherever it may be in the world. Just as with the term "teachers" that identifies with the act of teaching, in Auroville/TLC the term facilitator is used instead, to emphasise the role of the adult in regards to the first pedagogical principle – *nothing can be taught*. In the same way, TLC does not call itself a school, but a community of learners as described by Partho (2008), to help to step out of the preconditioned expectations that we have of what a "school" should be. As TLC works towards the fundamentally different educational goals of a reflective education for socio-cultural transformation, it does not develop in the same way, what one is looking for in the traditional sense of a "school" may not be visible if looking with the lens of the perspective of education for social reproduction, that the world is conditioned to identify education as. (Joshi, 2012; Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017).

A lot of adult time and energy in TLC has, since its early years, been directed towards trying to convince and explain the pedagogical approach to different stakeholders. But because the explorations in this approach are still so new and unexplored, and every year of trial and error brings new insights

and understanding, the facilitators in TLC do not have the capacity to hold the level and depth of communication and co-education for parents that is needed and share about the work in a, for the stakeholders, satisfactory way, especially those who are relatively new to the ideas of an Integral Education theory. It must be acknowledged that in Integral Education facilitators and parents themselves are learners, consciously discovering and co-creating how to build and contain a new education (Partho, 2008). TLC is an open invitation to parents and facilitators to join in this journey, with long term commitment and dedication. With an understanding that the education we are aiming for is an evolving process of learning and insight, as it is based on the active involved individuals working on their own human evolution, through which they gain the capacity to deepen the implementation of this new education. It is therefore impossible to assess the work in "schools"/centres/communities working with Integral Education over short periods of time, as it requires long term investment to with courage and perseverance go through the growing pains of the slow delivery of an education for a new world, (Montessori, 2007, Partho, 2008). It is rather with the perspective of being in an evolutionary process in steps leading towards future realisations. This is a large challenge as when most parents send children to school they expect that a school is a ready product, stable and knowing fully what it is doing and how and able to deliver immediate visible results. In TLC, clearer communication of the aims are needed, what it means to join, linked to expectations of oneself and of others, of sharing of the ongoing journey of adults and children, in a way that parents feel inspiration and trust in joining this unfolding journey with their children. This research also aims to help bring understanding of where the gaps are and how to bridge them.

There is a shared need to understand the assessment of Integral Education better, to have common points of reference and understanding in relation to Integral Education and the learning environment in TLC. To build a strong foundation to stand on firmly based in the vision and ideals of Auroville with its founding aims of human transformation, so that this carries through even in times of uncertainty, struggle, questioning, judgement and criticism. There was a need to start to look at the work with a critical eye, to confirm if TLC is on the right course or not, to be able to stay focused on the vision, and secure the inner strength and beauty of the project. This research started very naturally, trying to find ways to capture the process taking place over a school year in TLC. Documenting what was taking place without having a preset goal or outcome. Capturing everyday life in the school, with its good and challenging moments, for both adults and children. Thought regular deep reflections with children, parents and facilitators, research meetings, and the process of gathering and analysing the data for this paper, the yearlong study aimed to clarify and illustrate the way of working. Trying to capture the process of children's learning and growth over the year, that which cannot be shown or assessed in single moments...the seemingly intangible and still so materially profound and real.

The facilitators in TLC were aware that learning happens all the time, and in so many moments/movements/ways the growth is/becomes visible in the children. Yet it is often impossible to catch this, to document it, and share it in a comprehensive way with parents, so that they can follow the development and growth of their child and feel trust in the system, allowing for the child to have the time needed for this kind of education to root itself in and be brought to blossoming.

The research team kept coming back to the topic of how to make learning that can seem intangible, tangible. The term Magic Moments was coined as a reference when talking about milestones or manifestations in a child's learning journey. A professional filmmaker agreed to join the team for the entire year, trying to catch magic moments as well as the children's development over time. The research team also wanted to study how learning based on the three principles can be made visible, in order to identify perimeters of assessment.

Insights on the formulated problems as an outcome of the research study

This three part study in TLC (Magic Moments, deep interview reflections, and daily filming) brought a lot more newly awareness in the day to day work with the children, when looking for moments of learning manifestation. Not just within the research team, but for the whole community, children, parents and facilitators. Suddenly everyone was looking consciously for Magic Moments, and eager to share them in the Magic Moments WhatsApp group. It made it visible to everyone. This showed quickly that learning is not as intangible as previously thought. The weekly deep reflection interviews helped map the development and growth of children and facilitators over the course of the year.

The method used for the research was very supportive of the live process in the school (community), and inclusive of all parties, children, parents and facilitators, with them all taking ownership of the steps of the research throughout the year, as well as of the more intense work with filmed reflections and participation in the analysis process. In this way the research was not something imposed from the outside, but actually an internal study of TLC through educational leadership at different degrees of all those involved. This gave a depth and willingness to participate, with the stakeholders connected to the methods used, like filming and reflection interviews. Having an active and ongoing research involving the whole of TLC thereby helped propel the individual and collective awareness and engagement both in the everyday work and bigger aims of the project. So without looking at any specific outcomes of the research, the process of the research was an outcome in itself. This showed the beauty of hermeneutics, the chosen methodology through which this research was done. As a methodology of interpretation, it has the purpose of understanding, interpreting and mediating experiences and phenomena (Fejes & Thornberg, 2105). There was also great strength in pursuing this as a participatory research project through ethnography, studying the work in action, over time, and by putting oneself as facilitator in the unique role of the ethnographer (Murichison, 2010). This was a great support in the professional development in regards to transformational educational leadership, developing skills in areas like observation, and reflection on learning processes.

Although there is very little previous research done on the implementation of Integral Education, there are many theories of education and methodologies that support this pedagogical approach, strengthening different aspects of it. Looking at Integral Education through a wider international perspective, and showing the range of research that has been done in the direction of this kind/type of educational approach, was very supportive for this study, validating it from a universal perspective, as contributing towards change. Implementing the research itself as a learning process, showed the importance of having an ongoing reflective process of the adult leadership (parents and facilitators), and understanding its impacts when creating an educational system that allows the child to take leadership of her/his own learning journey. The research allowed TLC to view itself from a meta perspective, looking at universal intentions transforming into everyday practices. It brought up beauty, strengths, weaknesses, challenges, changes needed, and new areas to explore and research for the coming years.

Did the research confirm known assumptions?

The topic of how integral learning can be made visible or assessed, took a stunning leap when the research data was analyzed it was decided not to look at the interview reflections from a pre-position that TLC *is* working with foundations of Integral Education, but rather just to look at what emerged in the field of learning, and how that could be assessed, in its relation to itself. In the coding and analyzing of the data, three themes emerged – Independent learning, Self-knowledge and Interindependent learning, each with sub-themes.

In parallel, done separately, the study of previous research showed that the three pedagogical principles of Integral Education were fully aligned with the three principles of reflective education for socio-cultural transformation, as well as the clear match in it as a response to the universal needs of human change, through a new transformational educational leadership. Lastly, these three pedagogical principles were also coherent with the three transformation tools of transformational leadership practiced by Monica Sharma (2017), one tool relevant for each of the three principles.

At the next stage of analysis, these learnings from previous research were studied in relation to the material that emerged through the study in TLC. What was seen here was that the three themes Independent learning, Self-knowledge and Inter-independent learning with their content, matched with the theoretical descriptions of the three principles from the study of previous research. When looking at the concept of learning, the three areas that had emerged through the research study in TLC also related directly to the implementation of the three pedagogical principals. These strong links are extremely interesting, and would need/deserve to be studied more deeply in a continued research. This supports the supposition that TLC indeed has the foundations in place to allow the evolution of an Integral Education through transformational educational leadership. The assurance that TLC is indeed on the right track, has given new confidence, and although the work can often feel challenging, often with a sense of swimming against the current, it is clear that TLC is indeed swimming up the right river.

WHY		Integral Education as a universal theory for human change			
W H A T	Themes on when learning is visible, that emerged from the reflective interviews with children, facilitators and parents in TLC	Independent learning • Real life situations • Different planes of the being • Self-drive	Self-knowledge Self-awareness Self-acceptance Freedom	Inter-independent learning	
	The three Pedagogical Principles of Integral Education (Aurobindo,1972, p.204)	The first principle of is that "nothing can be taught. The teacher is not an instructor or task-master, he is a helper and a guide. His business is to suggest and not to impose"	The second principle is that "the mind must be consulted in its own growth. The idea of hammering a child into a shape desired by the parent or teacher is barbarous and ignorant superstition. It is he himself who must be induced to expand in	The third principle is "working from the near to the far, from that which is, to that which shall be. The basis of a man's nature is almost always, in addition to his souls past, his heredity, his surroundings, his nationality, his country, the soil from which he draws sustenance, the air which he breathes,	

M E T H O	Reflective education for socio-cultural	The role of the adult is summoning the child to self-activity.	accordance with his own nature." Recognition refers to how the child s, and becomes aware of	the sights, sounds, habits to which he is accustomed. " Bildning are the self- formation structures that support the
O L O G Y	transformation (Ylimaki & Uljens, 2017)	The role of the adult is to direct summons towards the child's potentiality, and thereby support the child to become aware of her/his own freedom and ability to realise her/his own aims.	herself/himself, and other individuals as being free. If a child is recognised by the other as being free and equal, that recognition can transcend normativity.	individual's process of self formation, and can be experienced in an infinite variety of ways, depending on how the experiences of the learner take form.
	Transformational Educational Leadership (Sharma, 2017, p.211)	"Sourcing inner capacities and universal values for action – acting from our oneness."	"Shifting systems and cultural norms, creating new patterns, BEING a principled game changer"	"Solving problems"
н о w	Learning	Learning Process	Freedom	Lifelong learning

How does the research contribute with new knowledge?

The fractal of large-scale transformation in schools

Answering the research question: How can Integral Education respond to the universal needs of human change through transformational educational leadership (of facilitators/parents/children) in everyday educational work with children?

A great insight that came about when deepening our understanding in the area of educational leadership. As Integral Education is a reflective education for socio-cultural transformation, the concept of transformational educational leadership that has been used in this research to refer to leadership in education that is actively working to, though individual transformation, transform society in the context of "school". The term, through this research, is inspired by and finds strength in Monica Sharma's (2017) theories. "The pattern of the conscious full-spectrum response is a fractal, and when repeated in its numerous application irrespective of the theme or topic, it generates paradigm shifts at scale" (Sharma, 2017, p.210). She describes a gradual change as needing to be complete in its intentions and values; it cannot be done in bits or pieces. She refers to this as the fractal model of transformational leadership. Each complete transformation, however small, adds to the bigger picture which can slowly

expand out wards for a more total transformation of society (Sharma, 2017). Putting this in the context of transformation of the educational system, a change cannot come unless its true intentions are implemented in its full and complete form. Coming back to one of the intentions of this research, was to try to identify what this fractal of Integral education implies, so wherever in the world it is recreated, it can be recognised as Integral Education. And more and more such fractals, in action — will over time transform the system.

This stands in contrast with the concept of being "inspired' by an educational approach, where some aspects of an alternative educational theory are merged into the traditional reproductive perspective of education. A common example of this are Montessori inspired schools, who, functioning within the guidelines of the traditional system, apply aspects like free movement, materials for sensorial exploration, or mixed age groupings. This can work well, but as Montessori education is an education with much bigger goals of world peace and autonomy of the child, this kind of merging actually works very little towards the universal goals of Montessori Education, thus unclear what the term "inspired" refers to.

Another example of this are democratic schools, trying to function under the regulations of national school guidelines. Such schools are also trying, to the extent possible, to function under democratic principles, yet at the base line they are locked by the countries guidelines for a standardised educational system. Gutmann (2020) studied various schools in the USA calling themselves democratic schools, and what her research saw was often more negative than positive, especially in many aspects related to the role of the teacher, which became very challenged in these schools. While the democratic approach needed the teacher to have a certain function, the board of education still had very different requirements. In these cases the two-sidedness showed itself in the behaviour of the children.

These learnings bring us back to the two lines of education implemented in Auroville, as described by Axner & Grinnell (2017) "... as every-day reality and conventions are sometimes stronger than vague ideals. The known feels safer than the unknown. And it appears, at least for the time being, that after 50 years the conventional structures are holding steady." (Axner & Grinnell, 2017, p.36).

TLC has faced the challenge of this pull in different directions, with parents and children feeling insecure, wanting both the education that TLC wants to offer, but at the same time the recognition of the traditional system, security to fit into the existing traditional systems of world. Ongoing requests to accommodate this have been done over the years. It is clearly visible how it immediately impacts the overall work, as there is not a match between the educational philosophies. It does not allow the system shift and its creation of new educational fractals, the work is blocked, and the flow stopped. Even something that to a parent or child can seem like a small and insignificant adaptation to meet the immediate and perceived needs, while not being in alignment with the vision of Integral Education actually brings confusion, and even disharmony while meeting neither the goals of the old or the new systems of education, but simply keeping afloat. This is a much acknowledged reality, showing itself in the Auroville dilemma. Over the years, TLC has become less accommodating of things that are not a part of its foundational structures, during a period this firmer stand also reflected in fewer numbers of children, as fewer parents are ready for a full alternative to the security that the traditional system seems to offer.

This gives a better understanding of the first problem area of this research. Showing the need for more clarity around the pedagogical aims in Auroville schools, and the importance of understanding that by creating new fractals within the educational system through transformational educational leadership we are moving towards a transformative education which truly serves its purpose for the individual as well as for society. We gain clarity and are able to work away from comparison between schools, and when comparing, to be able to be clear on what is being compared, and why. Without radical value based action through educational leadership, truly new structures cannot be formed. Integral

Educational is dependent on the emergence of these structures, as they are what will contain and help the emergence new pedagogical practices. (Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017).

When learning is visible - assessment/recognition

The goal of Integral Education as a reflective education for socio-cultural transformation is that it neither can nor should be decided upon beforehand, as it is the individual's growing insights and consciousness that will show the way towards future developments (Ylimaki, Fetman, Matyjasik, Brunderman, Uljens, 2017). Through this study, it became clear that a definition is needed for what a reflective education for socio-cultural transformation has to embody, and how it can be visible and assessed, when it is not decided on beforehand. It is clear that it cannot be assessed against the criteria and with the methods of the traditional system with a social reproduction perspective (Neeltje, 2015). Without recognized ways to assess progress and learning within the Integral Education system, there is a feeling of unclarity and uncertainty for parents and children: if it is working, and how it is working towards their future role and placement in society.

Two research questions aimed at answering this:

- How can an education with the aim of individual development and growth be assessed?
- How can the pedagogical principles of an Integral Education be made visible to gain recognition?

The first of these questions, how an education of individual development and growth can be assessed, found its answers in previous research. A process of Integral Education cannot be looked at through curriculum, as this is a tool designed for the traditional reproductive perspective of education. Therefore it does not serve the means of assessing individual development growth. The reflective tools of *currere* can serve as a tool through which the child can reflect and document their journey of developing their personality and consciousness. It supports the individual in their reflection and learning manifestations, linking past experience and future aims, with their actions in the present.

As shared previously, at the start of the research, learning seemed intangible, and from this the name for this research study was derived. When analyzing the data through the different steps, very clear learning areas emerged, and learning could suddenly be seen everywhere. Yet it was clear that what one is looking at and assessing in an Integral Education is very different and needs to be defined. Throughout the results presentation, examples of how learning can be visible in different learning contexts were shared. This clearly concluded that learning is indeed very visible and tangible, if looked at with the right lens, which this research enabled.

The second question, how the pedagogical principles of an Integral Education are made visible to gain recognition, can only partly be answered through this research. Although it became clear that long lists of situations when learning is tangible – and can be "assessed" can be made, it would serve little purpose to do so, as it would not in a deeper sense address the questions of this research. For recognition common main areas would need to be defined through a deeper research in this, as this study only scraped at the surface, to bring light on it.

What was made visible through this research is a base for a deeper process, looking at defining guidelines for assessment through the three pedagogical principles, as well as development and growth through a free progress system. As an outcome of this, TLC intends to initiate a further research with interested parties for a more detailed exploration, to more clearly define "assessment" of Integral education that could apply for schools anywhere. This collaboration of interested schools working with Integral Education coming together to work for international recognition of Integral Education, would be a true example of transformational educational leadership in action, uniting and sharing

amongst those involved in applied research in this field. Such work would be of great support for more schools to take steps towards implementing Integral Education, adding to the shift towards a universal perspective of reflective education for socio-cultural transformation.

"For enduring results, the design and implementation of projects or ideas need to harness knowledge and skills and address the systems and cultural causes as well as root factors of the problem. The key is to source inner capacities and universal values for both design and implementation. This work is about BEING through action, embodying universal values for personal and planetary transformation – at home, in our workplace (here school) in society, and for the planet." (Sharma, 2017, p.97)

The aim would be to be able to give children/youth going through an Integral Education system, a recognition that truly defines the education that this represents, is purpose in Auroville and the world.

Contributions this study made in regards to its intensions

This study has contributed to more clarity, and visibility in context of Auroville education. Auroville is a very unique place, defined in its charter (see Annex 2), "Auroville will be the place of an unending education, of constant progress ... Taking advantage of all discoveries from without and from within, Auroville will boldly spring towards future realizations" (Auroville charter). Each individual joining Auroville has chosen to dedicate themselves to leading their own learning experience and growth in this direction, being a part of an individual and collective experiment of transformation of consciousness. Based on the fractal theory of Monica Sharma (2017), every aspect of work in Auroville needs to represent the characteristics of the whole, consciously in a full spectrum way, manifesting its charter. Each fractal, however small, adds to the larger fractal. The schools in Auroville have an important role in this work. The universal perspective and its educational values that need to be much more present in all our work in schools, especially through transformative educational leadership. This study has supported TLC to restructure its work, rooting the day to day work with the children more deeply in the values of social transformation. Each aspect of work in TLC, concerning adults or children, pedagogical projects or functioning, are all fractals of TLC and need to hold the same core values.

From this research it can seem that there is a need for a body working actively to support the deepening of Integral Education in Auroville, that can hold clearly that its intention is different to the aims of the traditional reproductive system of education. Such a body could help hold the challenges collectively and supportingly, together building more knowledge and understanding to also make parents more comfortable making this choice for their children. It could also, together with interested Integral Education schools outside Auroville, define pointers of "assessment" of Integral Education, looking at how to work towards recognition/accreditation, as this is still a clear need for our present, and coming generations.

Gaps that remain for future research

During the process of this research, several areas emerged that need to be researched further.

The third pedagogical principle – from the near to the far

From the children reflections in TLC, it emerged strongly that most of the described individual learning situations were related to collective and collaborative learning. There was a clear gap and lack of deeper understanding of this principle when looking for previous research on the topic. It should have included research on collaborative learning. This was a very interesting outcome, which TLC aims

to facilitate better for the children in the future. This is an interesting research topic to explore further the deeper meaning of the third pedagogical principle - Working from the near to the far, from that which is to that which shall be (Aurobindo, 1972).

Faculties of consciousness

Research on how to work with the planes of the being. Although this research study has looked at the foundations for what could be the universal cornerstones of how to recognize an Integral Education school, the expressions of an Integral Education school will vary as there are so many existing practices around the world that offer inspiration and country, school, facilitator and child will create different opportunities relating to their context, culture environment and needs. When looking at development of faculties of consciousness, this can be done through so many ways. During the coming year TLC is taking up a research study about development of faculties of consciousness through the work of children and adults in TLC.

Recognition/assessment

As mentioned previously, collective research done between schools working with Integral Education in an effort to work toward defining guidelines and recognition.

Psychic education

To be able to more deeply work with psychic education requires adults who are in contact with this aspect in themselves. How to work with one's own journey as a facilitator in parallel to the work with the children.

Learning from the research process

This study, from a transformational leadership perspective, aimed to, by deepening the understanding of Integral Education, have a clearer visibility of its purpose/action, implementation and way of assessment. This research has had an impacting role on the educational leadership in TLC this past year, and has been supporting an overall progress, individual as well as collective. This research emerged from a wish to learn, deepen and grow as facilitators. Looking back on the journey, it can be seen that, as participant observers in this research - facilitators have been working along the lines of the three pedagogical principles. Especially the second and third pedagogical principles have emerged with clarity. When the research began, little was known of where to go except to start from the existing everyday learning situations. Through questioning and checking along the way, with a research perspective on the ongoing work the research process evolved fast and was flexible and adaptive to needs as they arose. We see this as a strong indication that TLC is on a naturally progressive learning curve. Looking back it is visible that throughout the research, the adults followed the same process without it having been spelled out.

The C in TLC stands for community to show that collective efforts to grow, learn and care produces a field of energy with infinitely more possibilities than that which can be generated by single individuals. The people involved in the research group acknowledge with gratitude this collective emergence which transcended the individual scope, however brilliant one may be. It gave agreement on the need for collective transformational leadership in holding the vision and aims of TLC. It became an example of inter-independent learning, because of the systems put in place for the research, the ongoing reflections on the children's process was directed back through the work of the facilitators during the year, and could be watched and adjustments made as the results emerged. Some of the tools put in place for the research, like the Friday reflection interviews with children, and the monthly facilitator reflections, will continue to be a part of TLC's practices to develop self-knowledge and understanding of collective processes also in the future.

"...the realities that can serve as a corner-stone for a new organization of mankind are twofold: the new unity of mankind and the new child.... A single nation and a better human being: these are the two great realities. The new human being must show us how to make all mankind aware of its unity. The human beings who must bring about this new world are different from us. Such a world is perhaps already developing without our being aware of it. We can see the obvious portents of such a world more or less on every hand. Amid the shadows of doubt and fear that hang heavily over the human race, we can now catch a glimpse of the light that will dissipate them, because a new society is already coming into being. A new humanity for a new world is already being born!" (Montessori, 2007, p.64-65)

References

A Dream. https://www.auroville.org/contents/197)

Action Plan of the APEC Education Strategy (2017). Vietnam: Asia-Pacific Economic Cooperation.

Adams, Anna (2006). Education: from conception to graduation - a systemic, integral approach. California Institute of Integral Studies. http://www.wisdompage.com/AnneAdamsDissertation.pdf

Al-Khamisy, Danuta (2015). Inclusive education as a complex process and challenge for school system. *Practice and Theory in Systems of Education*, 3(10), p265-268.

Alvesson, Mats & Sköldberg, Kay (2015). Tolkning och reflektion- vetenskapsfilosofi och kvalitativ metod. Lund: Studentlitteratur.

Ananiadou, Katerina, Claro, Magdalean, (2009). 21st Century skills and competencies for a new millennium learners in OECD countries. *EDU working paper*, no.41. OECD.

Art Studio 12 Qualities. http://12qualities.com/projects/integral-paradigm-of-knowledge/

Aurobindo, Sri (1972). The hour of god and other writings. Pondicherry: Sri Aurobindo Ashram

Aurobindo, Sri & Mother, The (1995). *A divine life manifesto- an integral education for a divine life*. Pondicherry, Sri Aurobindo Ashram Press.

Auroville charter. https://www.auroville.org/contents/1

Auroville website. https://www.auroville.org

Axner, Jürgen & Grinnell, Chali (2017). *Evaluating and documenting the implementation of Integral Education in Auroville*. Interim Report.

Banerjee, Debashri (n.d.). *The theory of education in the light of Aurobindo and Tagore*. Bankura: Burdwan University.

Banerjee, Debashri (2014). Individual Self: As envisioned by Sri Aurobindo. *International Journal of Research in Humanities and Social Studies*, (6)1, 1-8.

Bankura, Banerjee, Debashri (2016). *National education theory of Sri Aurobindo. International Journal of Research in Humanities and Social Studies*, 1(3), 34-40.

Barket, Ann-Terese (2012). Integral Education for the Integral Child: A Qualitative Study of One Contemporary Experiment in Integral Elementary Education. ProQuest Dissertations & Theses Global.

Bryman, Alan (2008). Samhällsvetenskapliga metoder. Malmö: Liber.

CCE (Council for Creative Education), Finland. https://www.ccefinland.org/finland-education-model-c1vvm

Delores, Jacques (1996). Learning: the treasure within. Report to UNESCO of the international commission on education for the twenty-first century, UNESCO.

Egidius, Henry (2003). Pedagoqik för 2000-talet. Stockholm: Bokförlaget Natur och Kultur.

Fejes, Andreas & Thornberg, Robert (2015). Handbok i kvalitativ analys. Stockholm: Liber.

Finnish National Agency for Education (https://www.oph.fi/sites/default/files/documents/new-national-core-curriculum-for-basic-education.pdf)

Fohlin, Niclas, Moerkerken, Anneke, Westman, Lisa & Wilson, Jennie (2018). *Grundbok i kooperativt lärande*. Lund: Studentlitteratur.

Gonzales, Robert (2015). *Reflections on compassionate living – awakening our passion and living in compassion*. Utah: Publisher's Place.

Grey, Peter & Feldman, Jay (2004). Playing in the zone of proximal development: qualities of self-directed age mixing between adolescents and young children at a democratic school. *American Journal of Education*, 110.

Grazzini, Camillo (1994). The four planes of development. *AMI international study conference "The Child, the Family, the Future"*, July 19-24. Washington DC.

Gustavsson, Bernt (2003). Bildning och demokrati – att förmedla det partikulära och det universella. Utbildning & Demokrati, 1(12), 39-58.

Gutmann, Ann (2020). The dimensions of democratic participation. Princeton University Press.

Hjerm, Mikael, Lindgren, Simon & Nilsson, Marco (2014). *Introduction till samhällsvetenskaplig analys*. Malmö: Gleerups Utbildning.

Hopman, Stefan (2007) Restrained teaching: the common core of didaktik. *European Educational Research Journal*, 2(6).

Joshi, Kireet (2012). Philosophy of Indian pedagogy. Delhi: Popular Media.

Krishnamurti, Jiddu (2008). In the problem is the solution. Chennai: Sudarsan Graphics.

Marti , Aloka & Sala, Joan (2006). *Awareness through the body – a way to enhance concentration, relaxation and self-knowledge in children and adults*. Pondicherry: Sri Aurobindo Ashram Press.

Modak, Ketaki (2014). *Principles of integral education and its possible implementation in the existing educational system.* University grants commission. Department of Marathi. Pune.

Monod-Herzen, G. & Benezech J. (1972). The free progress experiment (Pondicherry-India). *International commission on the development of education*. Series C:Innovations. No. 17. UNESCO.

Montessori, Maria (2007). *Education and Peace*. The Netherlands: Montessori-Pierson Publishing Company.

Montessori, Maria (1989). To educate the human potential. Amsterdam: Clio Press.

Morin, Edgar (1999) Seven complex lessons in education for the future. *United Nations Educational, Scientific and Cultural Organization*, UNESCO.

Mother, The (2012). On education. Pondicherry: Sri Aurobindo Ashram Press.

Munoz Villanueva, Maria Laura (n.d.). *Overview of 21st century competencies and skills – policy analysis*. Peru: Ministry of Education.

Murchison, Julian M. (2010). *Ethnography essentials – designing, conducting, and presenting your research*. San Fransisco: Jossey-Bass Press.

Neeltje (2015). Psychic education - a workbook. New Delhi: Sri Aurobindo Society.

Pal, Tapas & Kaibarta, Mrityunjoy (2015). Vivekananda and Aurobindo's philosophy of education: a comparative study. *International journal of Innovative Knowledge Concepts*. 1(1).

Partho (2008) Integral education – a foundation for the future. Pondicherry: Sri Aurobindo Society.

Pinar, William Frederick (1975). *The method of currere. Annual Meeting of the American Research Association*. Washington, D. C.

Prakasam, Gnana (1966). What you should know about your child - based on lectures by Maria Montessori. Madras: Kalakshetra Publications.

Roa, Venkateswara, Peesapati (2019). Sri Aurobindo and the Mother on five aspects of integral education. *International Journal of Advanced Research, ideas and innovations in technology*. 1(5).

Rich, Matthew (2012). Educating towards an emerging future: an integral proposal. *To be young! Youth and Future.* Finland.

Sharma, Monica (2017). Radical transformational leadership. California: North Atlantic Books.

Silalahi, Rentauli Mariah (2019). Understanding Vygotsky's zone of proximal development for learning. *Polygot: Jurnal ilmiah*. 2(15), 169-186.

Stoll Lillard, Angeline (2007). *Montessori - the science behind the genius*. New York: Oxford University Press.

Sundberg, Daniel (2015). *Pedagogik som vetenskap*. Linnaeus University, Faculty of Social Sciences, Department of Education.

Tewari, Deepti & Clarence-Smith, Suryamayi (2016) Auroville education survey (1968-2013) Auroville.

The Learning Community. https://www.facebook.com/The-Learning-Community-288022377952675/

Uljens, Michael (2002). The idea of a universal theory of education - an impossible but necessary project? *Journal of Philosophy of Education*, 3(36).

Uljens, Michael (2016). Non-affirmative curriculum theory in a cosmopolitan era? Revista Tempos e Espaços em Educação, 18(9), 121-132.

Uljens Micheal & Ylimaki, Rose (2017). Implications and future directions for a new research agenda on non-affirmative education theory. *Leadership and policy in schools*. 2(16), 389-396.

Verdiani, Antonella (2011). Educare alla gioia. Studi Sulla Formazione/Open Journal of Education, 13(2), 109-122.

Vetenskaprådet (2002). Forskningsetiska principer – inom humanistisk och samhällsvetenskaplig forskning, Elanders Gotab.

Ylimaki, Rose, Fetman, Lisa, Matyjasik, Erin, Brunderman, Lynnette, Uljens, Michael (2017). Beyond Normativity in Sociocultural Reproduction and Sociocultural Transformation: Curriculum Work - Leadership Within an Evolving Context. *University Council for Educational Administration, Educational Administration Quarterly*, 1(53), 70-106.

Ylimaki, Rose & Uljens, Michael (2017). Theorizing Educational Leadership Studies, Curriculum, and Didaktik: Non Affirmative Education Theory in Bridging Disparate Fields. *Leadership and Policy in Schools*, 16(2), 175-227.

Annex 1 A Dream

A Dream

There should be somewhere on earth a place which no nation could claim as its own, where all human beings of goodwill who have a sincere aspiration could live freely as citizens of the world and obey one single authority, that of the supreme Truth; a place of peace, concord and harmony where all the fighting instincts of man would be used exclusively to conquer the causes of his sufferings and miseries, to surmount his weaknesses and ignorance, to triumph over his limitations and incapacities; a place where the needs of the spirit and the concern for progress would take precedence over the satisfaction of desires and passions, the search for pleasure and material enjoyment.

In this place, children would be able to grow and develop integrally without losing contact with their souls; education would be given not for passing examinations or obtaining certificates and posts but to enrich existing faculties and bring forth new ones. In this place, titles and positions would be replaced by opportunities to serve and organize; the bodily needs of each one would be equally provided for, and intellectual, moral and spiritual superiority would be expressed in the general organization not by an increase in the pleasures and powers of life but by increased duties and responsibilities.

Beauty in all its artistic forms, painting, sculpture, music, literature, would be equally accessible to all; the ability to share in the joy it brings would be limited only by the capacities of each one and not by social or financial position.

For in this ideal place money would no longer be the sovereign lord; individual worth would have a far greater importance than that of material wealth and social standing. There, work would not be a way to earn one's living but a way to express oneself and to develop one's capacities and possibilities while being of service to the community as a whole, which, for its own part, would provide for each individual's subsistence and sphere of action.

In short, it would be a place where human relationships, which are normally based almost exclusively on competition and strife, would be replaced by relationships of emulation in doing well, of collaboration and real brotherhood.

The earth is certainly not ready to realize such an ideal, for mankind does not yet possess the necessary knowledge to understand and accept it nor the indispensable conscious force to execute it. That is why I call it a dream. Yet, this dream is on the way of becoming a reality. That is exactly what we are doing on a small scale, in proportion to our modest means. The achievement is indeed far from being perfect, it is progressive; little by little we advance towards our goal, which, we hope, one day we shall be able to hold before the world as a practical and effective means of coming out of the present chaos in order to be born into a more true, more harmonious new life. (Auroville website)

Annex 2 The Auroville Charter

The Auroville Charter

Auroville belongs to nobody in particular. Auroville belongs to humanity as a whole. But, to live in Auroville, one must be a willing servitor of the Divine Consciousness.

Auroville will be the place of an unending education, of constant progress, and a youth that never ages.

Auroville wants to be the bridge between the past and the future. Taking advantage of all discoveries from without and from within, Auroville will boldly spring towards future realizations.

Auroville will be a site of material and spiritual researches for a living embodiment of an actual human unity. (Auroville charter)

Annex 3 Reflection questions

Interview Reflection questions (used for children and facilitators)

1.	How was your week	/month? Wh	at was good	/interesting	g/fun/bac	l/challengi	ng?

- 2. Was it better than last week/month? If so, what was? Did you do something to make it better? Did someone else do something to make it better for you?
- 3. Did you have any special moments of challenge/growth/learning?
 - a) In your social life? (What happened? How? Why? What? How?)
 - b) In your learning activities? (What happened? How? Why? What? How?)
- 4. How focused/engaged were you this week/month?
 - a) What helped you stay engaged?
 - b) What distracted you?
- 5. Which facilitators gave you something that felt good and helped you this week/month? What?
- 6. How was it at home this week? Describe.

Barometer questions answered weekly by children, parents and facilitators through Google forms to keep track of general well being.

1	1 How did you sleep this week?					
	1	2	3	4	5	
2. H	2. How was your appetite this week?					
	1	2	3	4	5	
3. Ho	3. How was your focus this week?					
	1	2	3	4	5	
4	4. How did you feel this week?					
a	a) With your friends?					
	1	2	3	4	5	
b	b) With your family?					
	1	2	3	4	5	
c) With your learning?						
	1	2	3	4	5	