

Montessori against P21 Early Learning: A Quantitative Benchmarking Analysis

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ABSTRACT

This study was carried out to evaluate the extent to which the authentic Montessori Method (MM) for Early Childhood Education (ECE), as reflected by theory and practice, encompasses the contemporary 21st-century knowledge on early soft skills development. It involved a quantitative benchmarking analysis wherein it was weighed against the P21 Early Learning Framework (P21ELF) and its implementation guide (P21ELFIG) with the inputs of qualified Montessori ECE practitioners. A questionnaire using a 5-point Likert scale collected data from a sample of 100 practitioners reached through the Good Shepherd Maria Montessori Training Center, personal contacts, and snowballing. After filtering by extent of experience in Montessori ECE and knowledge on soft skills, 42 questionnaires were used for computing descriptive statistics and producing tabular and graphical representations. The findings revealed that the authentic MM for ECE is in remarkable sync with the P21ELFIG on concepts, strategies, optimal environment, and family involvement, while being moderate in encouraging and facilitating learning outcomes and encompassing the environmental requisites listed in P21ELF as related to individual skills. Meanwhile it was found to be greatly deviating from them on employing dramatic or role play as a pedagogical tool, use of duplicate materials, and teacher role.

Keywords: 21st Century Soft Skills, Early Childhood Education, Authentic Montessori Method, P21 Early Learning Framework

1.0 Introduction

In an era the global economy is in rapid transition to a knowledge based economy, routine jobs that largely called for knowledge, experience, technical skills, and basic cognition are by the day getting replaced by technology through automation. This leads to possession of certain skills of the ‘soft’ nature which enable working with the abstract, handling complex contextual information, and making ethical judgements which are essential for strategizing, creative decision making, and crisis management: tasks better performed by humans themselves than computers and artificial intelligence, becoming the key determinant of both entrepreneurial success as well as career success in all white, blue, and pink collar jobs in the 21st-century economy (Brown, Hesketh, & Williams, 2004; Autor, 2015; Holmberg-wright & Hribar, 2016; Luckin & Issroff, 2018).

In sight of their modern-day significance and their forecasted role in the unpredictable future, they have been brought under various 21st-century competency and skills frameworks: listings of which are considered as the most important to possess for ensuring all-around success in such a volatile era. Out of many such frameworks developed worldwide, the ‘21st Century Skills and Competences for New Millennium Learners’ (2005) introduced by the Organization for Economic Co-operation and Development (OECD), European Union Council and European Parliament approved European reference framework ‘Key Competences for Lifelong Learning’ (2006), and the ‘Partnership for 21st Century Learning (P21)’ (2007) are among the most adopted for educational reform. Whereas different competencies and skill sets are identified as important and listed under different frameworks, crucial soft skills such as Creativity, Critical thinking, Communication, Collaboration, Responsibility, Citizenship, Social skills, and Information literacy are commonly mentioned in the majority of key frameworks (Voogt and Roblin, 2012; Kereluik, Mishra, Fahnoe, & Terry, 2013; Salas Pilco, 2013; The Global Partnership for Education, 2020).

While the call for soft skills in the labor market has been thusly escalating, employers all over the world are complaining of the lack of soft skills which is increasingly evident in the new entrees to the job market (McLaughlin, 1995; Richens & McClain, 2000; Overtook, 2000; American Society for Training & Development, 2012; UNESCO, 2012; International Labor Organization, 2013; Seetha, 2014; Tulgan, 2015). The attempts of national education systems to remedy this situation through implementing 21st-century soft skills (21st CSS) development efforts are almost always focused on secondary and tertiary education, and therefore are greatly misplaced. While such efforts are backed by reason of immediate usability in job-related contexts, many facts cry out “too late!” and point at Early Childhood Education (ECE): the very first stage of formal education as the best time for such skills development initiatives.

This redirection of focus is mainly justified by that these skills are important not only for career success but also for success in all other life's domains: education, family, social, and citizenship, all which are adversely affected by their belated introduction in life. Given that the foundational human capabilities: emotional, social, regulatory, and moral on which subsequent development build, are mostly laid by the time a child is of five years old (The US National Research Council and Institute of Medicine, 2000, p 5), investments in ECE interventions with an extended target on non-cognitive skills development yield much higher economic returns than human development investments at any other stage in life. Provided that these skills *'form early in the life cycle and account for racial, ethnic, and family background gaps in schooling and other dimensions of socioeconomic success'*, Carneiro & Heckman (2003) strongly advocate shifting focus of 21st-century human capital development efforts to ECE.

It is also indisputable that the foundations of skills, especially those of such abstract quality are best laid at the earliest years of life when skills are actively acquired and frequently utilized (Guerra, Modecki, & Cunningham, 2014) and while the individuals are still malleable. Furthermore provided that learning soft skills is a life-long process, early introduction allows learners to put these skills to work in realizing their educational attainments while leaving adequate time for them to apply, practice, advance, and master them throughout later childhood and adolescence (The Southeast Michigan Council of Governments [SEMCOG], 2012), leading these learned skills to be transformed in to concrete habits, aptitudes, and character traits in adulthood.

Even though the importance of these skills and the need to develop them through early education may be well realized by all stakeholders of education, in-depth evidence-based knowledge on 'how' such skills in fact get implanted and developed in early learners, is however lacking. The only internationally recognized publication which provides guidance for ECE interventions focusing 21st-century skills (21st CS) development efforts to date is the P21 21st Century Skills Early Learning Framework together with its Implementation Guide (2017). While the learning outcomes listed under each skill therein will help recognize children's demonstrations of skills acquisitions, and the support guidelines given will help in setting out a general outline for a programme which would be of certain help in generating such student outcomes, it still has much room for improvement when it comes to giving a clear insight and sufficient guidance to individual skills development.

As an attempt to deepen the knowledge on specifics related to the development of individual 21st CSS in early learners, and in view that knowledge on such abstract phenomenon can only be generated through enduring research undertakings of the empirical nature, a strategic approach to accumulating such knowledge through an in-depth descriptive analysis of a timeless holistic method for ECE was decided to be adopted. With its reputation as a holistic method of ECE (Miller, 2011; Brunold-Conesa, 2010) developed and fine-tuned through half a century's worth of empirical research (Lillard, 2013) carried out by one of the most brilliant minds of the 20th century, and its continued world-wide popularity as an ECE system throughout over a century which has not yet diminished (Lillard, 2019; Association Montessori International [AMI], n.d.-b) under the new educational focus on 21st CSS, the Montessori Method (MM) for ECE answered to both the requisites, and was thus singled out for the study.

But before delving in to a much deeper study of the MM for ECE in search of further knowledge on specifics which are contributive to the development of individual soft skills, it was deemed necessary to first assess the extent to which it in turn encompasses 21st-century knowledge on early soft skills development. This paper brings out and discusses the results of a study carried out to meet this particular objective.

2.0 Literature Review

2.1. 21st-Century Soft Skills, Their Significance, and Scarcity

'Soft skills' are alternatively referred to by terms such as socio-emotional skills, non-cognitive skills, non-technical skills, core skills, life skills, generic skills, and pervasive skills, and are commonly included under certain umbrella terms such as key competencies, transferable skills, and 21st century skills. These skills generally refer to 'attitudes and behaviours displayed in interactions among individuals' (Muir, 2004, p 96), 'cluster of personality traits, social graces, and habits that characterize relationships' (The Education, Audiovisual, and Culture Executive Agency, 2015), 'strategies which facilitate success' (Gutman & Schoon, 2013), and 'goals, motivations, and preferences valued in different educational, occupational, and life contexts' (Heckman & Kauts, 2012), which enable 'doing the right thing at the right time, and doing it nicely' (Joubert, 2006).

While these skills are not 'newly-found' by any means, their significance has been greatly enhanced by the nature of work and life in the knowledge economy driven 21st century. They are found to be equally useful as hard skills for academic, career, and life success, and on top of it to be facilitative of hard and cognitive skills (Muller and Plug, 2006; Chuna & Heckman, 2007; Schuls, 2008; Brunello & Schlotter, 2011). Though soft skills play an equally important role in all aspects of life, either the benefits of having them or the consequences of lacking them are

mostly noted by an individual in his work life: both in securing a job and retaining it and in progressing along a chosen career path. Aiming for reduced staff turnover, increased productivity, and higher client/customer satisfaction (SEMCOG, 2012), 21st-century employers all around the world are increasingly reported as seeking soft-skills-rich employees for jobs from the top to bottom.

A World Bank Policy Research (Cunningham & Villaseñor, 2016) using a sample of 27 studies representing all regions of the world reveals that there is a greater demand by employers for higher-order cognitive skills and soft skills than all other types of skills, with a 'remarkable consistency across the world'. Meanwhile, enterprise surveys conducted in a mix of sectors across sub-Saharan Africa and South-East Asia found that the skills demanded by employers in developing countries are the same as those known to be demanded by employers in the developed countries: personal integrity, leadership, openness to learning, ability to effectively communicate, good work habits like punctuality and application, the capacity for teamwork, the capacity for analytical and critical thinking, and entrepreneurialism (Burnett & Jayaram, 2012).

Diverse professional fields call for soft skills such as those needed to handle humans in ICT project management (Lent & Pinkowska, 2012); soft skills necessary for both caring for patients and successful administration in Nursing (Maria & Rania, 2017); presentation, negotiation, teamwork, and leadership skills and emotional intelligence in Engineering (Shekhawat & Bakilapadavu, 2017); and interpersonal skills such as treating patients with respect, listening carefully, being easy to talk to, taking patients' concerns seriously, spending enough time with them, and really caring for the patients in Medicine (Taylor, 2004). The requisite of soft skills for front-line interactive service work was established by Nickson et al. (2012) through a survey carried out using 173 UK retailers. Emphasizing on the importance of soft skills for aesthetic labour, soft skills such as ability to work with others, ability to deal with customers, work ethic, dress sense and style, and voice and accent were identified therein as the deciding factors for employability for such front line service workers. Furthermore, the managerial skills of the 'soft' quality such as the ability to recruit the right people, create and maintain a work environment facilitative of keeping the team focused, and constantly communicating with the employees have been found to be the driving factors in creating wealth and success in an organization (Holmberg-wright & Hribar, 2016).

Yet a survey carried out by the McKinsey Center for the American Government (2012) across nine countries: Brazil, Germany, India, Mexico, Morocco, Saudi Arabia, Turkey, the United Kingdom and the United States revealed that not even 50% of employers find the skills they need in their workers: learning-to-learn, communication, teamwork, and problem solving, while the managers and entrepreneurs themselves are in need of acquiring soft skills which help develop innovative and flexible workplaces that meet the times. Meanwhile based on his decades worth of research on the job market, Bruce Tulgan (2015) claims that the widening generation gap is what causes the 'old-fashioned basics' such as professionalism, critical thinking, and followership to be increasingly missing in the new entries to the job market, and points out that they must now be explicitly taught to 'today's new talent'.

2.2. *The P21 Early Learning Framework and Guide*

Developed by the Partnership for 21st Century Learning (P21) as an extension of the P21 Framework (2016), the 21st Century Skills Early Learning Framework (P21ELF) and its implementation guide (P21ELFIG) published under the respective titles of '21st Century Skills Early Learning Framework' (2017) and 21st Century Learning for Early Childhood Guide (2017) aim to encourage and support 21st CS integration in early learning experiences, and is the only standard framework and guide focusing on ECE reform so far. It follows the same structure as the P21 Framework with its three skills categories: Learning and Innovation Skills (The 4cs) – Creativity and innovation, Critical thinking and problem solving, Communication, and Collaboration; Life and Career Skills – Flexibility and adaptability, Initiative and self-direction, Social and cross-cultural skills, Productivity and accountability, and Leadership and responsibility; and Information, media, and technology skills.

In the P21ELF there are 4 sections to each of the 21st CS areas: a detailed definition of the skill as it relates to early learning development; 21st-century learning outcomes for K-12 including the exact expected outcomes for 21st CS for each section as a reference with the three areas of 'Information, media, and technology skills' combined to be more developmentally appropriate for young learners; how to create an optimal learning environment for skill development in each of the learning areas with emphasis on exploration, discovery, play, creativity, experimentation and joy; and the early learning skills and outcomes charts showing the adaptations for early learning for ages from 1.5-6 years. Meanwhile the P21ELFIG covers four key areas which support the integration of 21st-century learning within early childhood experiences: how children learn 21st CS, strategies to help children build 21st CS, creating the optimal 21st-century learning environment, and the importance of family engagement in supporting such skills learning.

2.3. The Authentic Montessori Method for Early Childhood Education

Based on the revolutionary notion ‘the most important period of life is not the age of university studies but the period from birth to age six’ (Montessori, 1949), the Montessori philosophy and subsequent method of education introduced in 1907 by Italy's first female physician Dr. Maria Montessori is one of the most prominent in the area of ECE. Her system of education is validated by her expertise in all key areas related to early childhood development and education, which she acquired through an untiring search for knowledge throughout her early career and then tested and applied in the development of her own educational philosophy and method: her mathematical and scientific knowledgebase widened through the persuasion of degrees in both Engineering and Natural Sciences; her specialized knowledge in pediatrics and psychiatry gained in the study of Medicine; and her wide knowledge on the science of humans gained through her extensive studies on all the major works of the preceding two centuries on Anthropology, Educational Theory, and approaches to Special Education (AMI, n.d.-a).

Regardless of having been found over a century ago, the MM for ECE which is deeply rooted in Dr. Montessori's pioneering research based discoveries of a child's mind and soul is a timeless success story on whole-child education. While contemporary terms such as ‘soft skills’, ‘non-cognitive skills’ or ‘socio-emotional skills’ may not to be found in the Montessori terminology, Dr. Montessori's idea of ‘educating for life’ (Montessori, 1912, 1949, 1966) seems to be well harmonized with the core concept behind the modern phenomenon of the 21st CSS development. An authentic Montessori ECE program which is generally called ‘Montessori Primary’ is characterized by its five curricular areas: Practical Life, Sensorial, Mathematics, Language, and Culture (AMI, n.d.-c) and certain unique elements brought to being by Dr. Montessori based on her principles of education and child development: children of ages 3-6 grouped together in the ‘Case dei Bambini’ - ‘the Children's Houses’, freedom of choice in activities in a prepared environment, control of error in learning material which induce auto-education, large blocks of time to create learning experiences, facilitative and exemplary role of teacher, and respect for the child through policies and actions (Lillard & McHugh, 2019a, 2019b). Ever since the passing of its creator in 1952, the responsibility of safeguarding the authenticity of the method lies with the organization Dr. Montessori in conjunction with her son, Mario founded for that purpose in 1929: The Association Montessori International (AMI, n.d.-d).

3.0 Methodology

3.1. Research Design

A quantitative benchmarking analysis was carried out to weigh the authentic MM for ECE against the P21ELF and the P21ELFIG with the intent of determining the extent to which it encompasses 21st-century knowledge on early soft skills development.

3.2. Population and Sampling

In the absence of definitive documentation on the authentic MM for ECE carrying information on the key areas covered in the P21ELF and P21ELFIG, the benchmarking of MM against P21 was resorted to be done with the inputs of AMI qualified Montessori ECE practitioners in Sri Lanka. The sample for data collection comprised of 100 qualified ECE teachers and ECE center administrators reached through the contacts provided by the Good Shepard Maria Montessori Training Center: the only AMI Training Center in the country, as well as through personal contacts and snowballing.

3.3. Data Collection Tool

A survey questionnaire comprising 13 sub sections was developed as the data collection instrument for the study. Each sub section encompassed Likert scales with their items adopted from the P21ELF and the P21ELFIG. The first 9 sections comprised of 2 separate Likert scales for ‘EL Outcomes’ and ‘EL Environmental Features’ for each of the 9 skills under 2 of the 3 skills categories of the P21ELF: ‘Learning and Innovation Skills’ and ‘Life and Career Skills’. The third skills category, ‘Information Literacy’ which corresponded with ‘Information, Media, and Technology Skills’ under the P21 Framework was left out on the grounds of irrelevance in the olden times the MM was developed. The 4 sections which followed encompassed Likert scales for the 4 general support areas for skills development discussed under the P21ELFIG: ‘Concepts on How Children Learn’, ‘Strategies Employed’, ‘Optimal Learning Environmental Features’, and ‘Opportunities for Family Engagement’.

In the process of adopting Likert items for ‘EL Outcomes’ from the lists under each skill of the P21ELF, where necessary the statements were combined with those for K-12 as well as specific outcomes for sub age groups for early years and substitute wording were used to amplify the clarity of their meaning. Strict caution was exercised in this process to make sure that the original idea of the outcome statements was intact. The items for ‘EL

Environmental Features’ for each skill had to be pulled out and appropriately structured from the text under the headings in the P21ELF. Similarly, items were directly adopted for ‘General Support Areas’ from the P21ELFIG for the 3 Likert scales ‘Concepts on How Children Learn’, ‘Strategies Employed’, and ‘Optimal Learning Environmental Features’. The descriptive text for each of these items were appropriately shortened with substitute wording where necessary, which was once again done with utmost care to preserve their original meaning. The items for ‘Opportunities for Family Engagement’ also had to be pulled out and appropriately structured from the text in the P21ELFIG under the heading ‘Importance of Family Engagement’. One item each under 3 of the 4 General Support Areas of the P21ELFIG were left out from getting adopted on base of irrelevance: respectively under ‘Strategies Employed’ and ‘Optimal Learning Environmental Features’, ‘Blended approach - Connecting online play with hands-on play’ and ‘Integrates technology’ were not adopted on base of irrelevance in the time the MM was developed, while under ‘Opportunities for Family Engagement’, ‘Being combined within comprehensive services such as health and wellness, mental health, nutrition, and access to other social services focused on needs of the family’ was not adopted on base of irrelevance for the MM as a method of education.

The same text under ‘EL Environment’ for ‘Initiative and Self-direction’ in the P21ELF: ‘Offer learning experiences to help children develop the 4Cs – critical thinking, creativity, collaboration, and communication – while developing content knowledge. This intentional approach can be done while reading a story and discussing the characters or during a science experiment through the problem solving experience.’ is repeated in the section ‘Ten Strategies to Help Children Learn 21st Century Skills’ under ‘Combine Learning Domains’ in the P21ELFIG. Therefore, the content of the text was dissected as appropriate and was used as the two items. Furthermore, two additional items were developed from the definition of ‘Initiative and Self-direction’ and added under EL Environmental Features which made up the three items in the survey instrument.

As what the respondents were required to grade for each item under the 22 Likert scales of the survey questionnaire was the extent to which the MM fell in line with that item, all Likert scales were assigned with the same set of options: ‘To a Full Extent’, ‘To a Large Extent’, ‘To a Moderate Extent’, ‘To a Small Extent’ and ‘Not at All’ (Brown, 2010). ‘Undecided’ was provided as an additional option aimed at elevating the reliability of the data collected, through giving the respondents a chance to avoid having to rate items when faced with ambiguity, uncertainty, or lack of knowledge. Instructions were given for respondents to provide a brief clarification on the reason for selecting that option in common spaces allocated for comments following each sub section. Despite general negativity on the use of undecided as an option in survey scales, this was deemed necessary here on the grounds that all the Likert items throughout the questionnaire were adopted rather than developed following a standard criterion for forming survey questions, and therefore its use was helpful to receive some contextual indicators in order to better interpret the results (Commonwealth Higher Education Management Service, 1998). Given that all Likert items for the survey instrument were directly adopted from a standard international framework, tests for neither internal consistency reliability nor construct validity was deemed necessary.

3.4. Process of Data Collection

Before the actual data collection, a pilot study was done using 5 prospective participants selected based on convenience. The questionnaire was further refined on their feedback and was translated to Sinhala, the official language of the country based on their recommendations. ‘Google Translate’ was used for the basic translation and the outcome was corrected using a Sinhala Unicode font converter. The translated content was then checked for adverse inconsistencies with the Montessori terminology and was further refined with the support of 2 experienced AMI qualified ECE practitioners who agreed to assist.

Hard copies of the questionnaire were then distributed among the sample of 100 participants. The contacts provided by the AMI Training Center were some of their affiliated ECE centers with equal representation of those attached to private missionary schools and privately run establishments. Following initial contact with the principles of the ECE centers, hard copies of the questionnaire were couriered to each destination. Copies of the questionnaire were also delivered by hand, couriered, or emailed to the participants reached through personal contacts and snowballing. The questionnaire itself carried the directions necessary for completing and additional clarifications were done through telephone conversations where necessary. On request, the Sinhala translation of the questionnaire was made available to those who needed some support in working with the terminology involved in the English language. Some of the questionnaires were returned after completion by the participants and the rest were arranged to be collected by courier and by hand.

Out of the 74 questionnaires which were received, 3 were excluded due to incompleteness. Based on the personal and general information provided by the respondents, 29 were excluded due to the respondents not having had at least three years of experience as an ECE practitioner at any stage of their life and/or due to the respondents’ insufficient awareness/knowledge of 21st-century soft skills. The bar for the minimum required sample size was set

as 30 assuming distribution normality following the Central Limit Theorem provided that the population size could not be determined (Ganti, 2019), and the remaining 42 questionnaires were used for analysis.

3.5. Data Analysis

The data were analyzed using SPSS version 12, and given the basic nature of the process, Microsoft Excel was used to produce the tabular and graphical representations required to better illuminate the findings. The mean values for each Likert scale was calculated as a composite of its individual Likert items (Boone & Boone, 2012, Norman, 2010, Rickards, Magee, & Artino, 2012) and their percentages were rounded up to the closest integer in producing the graphs. All mean, median (Jamieson, 2004), and mode were calculated and tabulated for each of the 113 items adopted for the survey instrument from the P21ELF and P21ELFIG so as to clearly understand the distributions of the responses for each of those items. They were then categorized and re-tabulated to produce summary statistics for the ease of interpretation. While recognizing that calculating mean values of discrete numbers which give the answers to the 100th or so decimal place may generally make no sense, they were nevertheless calculated and used for the reason that they are helpful in this case to get an idea of the distribution of responses for each item of interest while being harmless due to the nature of conclusions drawn (Sullivan & Artino, 2013), especially when in combination with the other statistics produced.

4.0 Findings

Under each of the 3 sections: Learning and Innovation Skills, Life and Career skills, and General Support Areas, the summary tables and charts present and illustrate the extent to which the MM for ECE falls in line with the P21ELF and the P21ELFIG. The tables under each section give the statistics for each sub-section under that particular section. The total number of items is given on one column with the number of items which were scored either of ‘To a Full Extent’ or ‘To a Large Extent’ by more than 80% of the sample given on the adjoining column under the heading ‘Number of Items with >80%’ for each such sub-section. The number of items out of that which were scored either of ‘To a Full Extent’ or ‘To a Large Extent’ by the whole sample of respondents is given within brackets on the same column under the heading ‘Number of Items with 100%’. Finally, the number of items which produced a mean score of 4.00 in addition to being scored either of ‘To a Full Extent’ or ‘To a Large Extent’ by the whole sample is marked with a * and placed within the same set of brackets. Meanwhile the bar charts under each section give the percentage averages of the numeric values of responses for each Likert scale under that particular section.

The 80% tab in both the summary tables and the bar charts has been used for no other reason but for the ease of comparison and interpretation. Also the term ‘the authentic MM for ECE’ has been shortened and hereafter referred to as ‘the MM’ till the end of the Discussion section.

4.1. Learning and Innovation Skills

Table 1: Summary Statistics – Learning and Innovation Skills

The Skill	EL Outcomes		Optimal EL Environmental Features	
	Number of Items with >80% (Number of Items with 100%, * - Number of Items with 100% as well as a mean score of 4.00)	Total Number of Items	Number of Items with >80% (Number of Items with 100%, * - Number of Items with 100% as well as a mean score of 4.00)	Total Number of Items
Creativity and Innovation	6 (2, *2)	8	6 (4, *4)	6
Critical Thinking and Problem Solving	8 (2, *1)	10	1 (0, *0)	2
Communication	4 (2, *0)	5	2 (1, *0)	3
Collaboration	2 (2, *0)	3	3 (2, *1)	4
Total	20 (8, *3)	26	12 (7, *5)	15

As shown in Table 1, more than 80% of the sample graded 20 out of the 26 EL Outcomes adopted from those under the 4 Learning and Innovation Skills of the P21ELF: 6 out of the 8 Outcomes for Creativity and Innovation, 8 out of the 10 for Critical Thinking and Problem Solving, 4 out of the 5 for Communication, and 2 out of the 3 for Collaboration as encouraged and facilitated through the MM to either a ‘Full Extent’ or a ‘Large Extent’. Meanwhile 8 out of those 20 Outcomes were graded either a ‘Full Extent’ or a ‘Large Extent’ by the whole sample of respondents. Yet only 3 Outcomes out of those 8: 2 for Creativity and Innovation and 1 for Critical Thinking and

Problem Solving produced a mean value of 4.00, indicating that the whole sample of respondents had graded those Outcomes as encouraged and facilitated through the MM to a ‘Full Extent’.

Similarly, more than 80% of the sample graded 12 out of the 15 Optimal EL Environmental Features adopted from those under the 4 Learning and Innovation Skills of the P21ELF: all 6 Features for Creativity and Innovation, 1 out of the 2 for Critical Thinking and Problem Solving, 2 out of the 3 for Communication, and 3 out of the 4 for Collaboration as encompassed in the MM to either a ‘Full Extent’ or a ‘Large Extent’, with 7 out of those 12 Features graded either a ‘Full Extent’ or a ‘Large Extent’ by the whole sample of respondents. Interestingly, 5 outcomes out of those 7: 4 for Creativity and Innovation and 1 for Collaboration produced a mean value of 4.00, indicating that the whole sample of respondents had graded those Features as being encompassed in the MM to a ‘Full Extent’.

Figure 1 below illustrates the extent to which the MM, as perceived by the respondents, is in line with the P21ELF when it comes to the development of Learning and Innovation Skills.

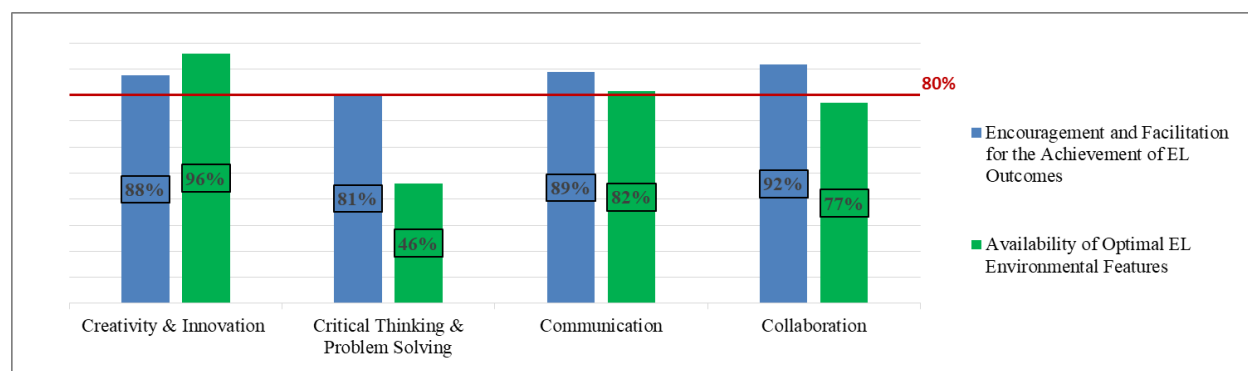


Figure 1: Percentage averages of the numeric values of responses corresponding to the Learning and Innovation Skills specified under the P21ELF and the P21ELFIG

The above percentage averages indicate that in the aspect of Encouraging and facilitating the achievement of EL Outcomes relevant to individual Learning and Innovation Skills, the MM is more than 80% in line with the P21ELF in all of the 4 skills: Creativity and Innovation, Critical Thinking and Problem Solving, Communication, and Collaboration. In comparison, the MM is more than 80% in line with the P21ELF in encompassing the Optimal EL Environmental Features only for 2 out of the 4 skills: Creativity and Innovation, and Communication, with substantial differences between the averages for each of the other 2 skills: Initiative and Self-Direction and Social and Cross-Cultural Skills.

4.2. Life and Career Skills

Table 2: Summary Statistics – Life and Career Skills

The Skill	EL Outcomes		Optimal EL Environmental Features	
	Number of Items with >80% (Number of Items with 100%, * - Number of Items with 100% as well as a mean score of 4.00)	Total Number of Items	Number of Items with >80% (Number of Items with 100%, * - Number of Items with 100% as well as a mean score of 4.00)	Total Number of Items
Flexibility and Adaptability	4 (2, *0)	5	4 (2, *1)	4
Initiative and Self-Direction	7 (5, *1)	8	2 (2, *2)	3
Social and Cross-Cultural Skills	4 (2, *0)	4	3 (3, *2)	5
Productivity and Accountability	2 (2, *2)	3	3 (2, *1)	4
Leadership and Responsibility	5 (4, *2)	5	3 (3, *2)	3
Total	22 (15, *5)	25	15 (12, *8)	19

More than 80% of the sample, as presented in Table 2, graded 22 out of the 25 EL Outcomes adopted from those under the 5 Life and Career Skills of the P21ELF: 4 out of the 5 Outcomes for Flexibility and Adaptability, 7 out of the 8 for Initiative and Self-Direction, 2 out of the 3 for Productivity and Accountability, as well as all 4 for

Social and Cross-Cultural Skills and all 5 for Leadership and Responsibility as encouraged and facilitated through the MM to either a ‘Full Extent’ or a ‘Large Extent’. Out of those 22, 15 Outcomes were graded either a ‘Full Extent’ or a ‘Large Extent’ by the whole sample of respondents. But it also shows that only 5 Outcomes out of those 15: 1 for Initiative and Self-Direction, and 2 each for Productivity and Accountability, and Leadership and Responsibility produced a mean value of 4.00, indicating that the whole sample of respondents had graded those Outcomes as encouraged and facilitated through the MM to a ‘Full Extent’.

All 100% of the sample graded 15 out of the 19 Optimal EL Environmental Features adopted from those under the 5 Life and Career Skills of the P21ELF: 2 out of the 3 for Initiative and Self-Direction, 3 out of the 5 for Social and Cross-Cultural Skills, 3 out of the 4 for Productivity and Accountability, as well as all 4 for Flexibility and Adaptability and all 3 for Leadership and Responsibility as encompassed in the MM to either a ‘Full Extent’ or a ‘Large Extent’, with 12 out of those 15 Features graded either a ‘Full Extent’ or a ‘Large Extent’ by the whole sample of respondents. Meanwhile 8 Features of those 15: 1 each for Flexibility and Adaptability, and Productivity and Accountability, as well as 2 each for Initiative and Self-Direction, Social and Cross-Cultural Skills, and Leadership and Responsibility produced a mean value of 4.00, indicating that the whole sample of respondents had graded those Features as encompassed in the MM to a ‘Full Extent’.

Figure 2 below illustrates the extent to which the MM, as perceived by the respondents, is in line with the P21ELF when it comes to the development of Life and Career Skills.

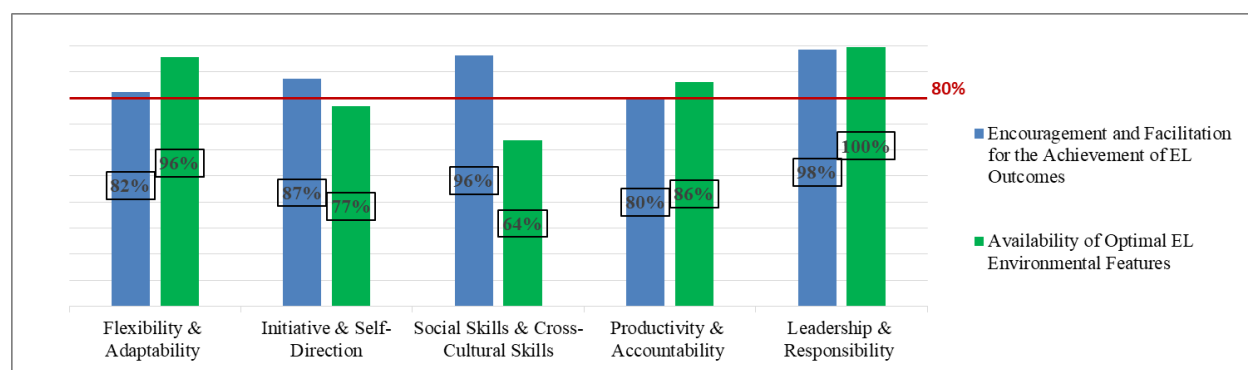


Figure 2: Percentage averages of the numeric values of responses corresponding to the Life and Career Skills specified under the P21ELF and the P21ELFIG

The above percentage averages indicate that in the aspect of encouraging and facilitating the achievement of EL Outcomes relevant to individual skills, the MM is more than (or at least) 80% in line with the P21ELF in all of the 5 skills: Flexibility and Adaptability, Initiative and Self-Direction, Social and Cross-Cultural Skills, Productivity and Accountability, and Leadership and Responsibility. But the MM is more than 80% in line with the P21ELF in encompassing the Optimal EL Environmental Features only for 3 out of the 5 skills: Flexibility and Adaptability, Productivity and Accountability, and Leadership and Responsibility. Meanwhile there is substantial differences between the averages for each of the other 2 skills: Initiative and Self-Direction and Social and Cross-Cultural Skills.

4.3. General Support Areas

Table 3: Summary Statistics – General Support Areas

The Support Area	Number of Items with >80% (Number of Items with 100%, * - Number of Items with 100% as well as a mean score of 4.00)	Total Number of Items (Number of Items in the P21ELFIG)
Concepts on How Children Learn	4 (4, *4)	4 (4)
Strategies Employed	8 (8, *8)	9 (10)
Availability of Optimal Learning Environmental Features	7 (7, *7)	7 (8)
Opportunities for Family Engagement	8 (6, *4)	8 (9)
Total	27 (25, *23)	28 (31)

The whole sample of respondents, as presented in Table 3, graded 8 out of the 9 Strategies adopted for the survey as employed in the MM to either a ‘Full Extent’ or a ‘Large Extent’. Then again, all 8 of those Strategies produced a mean value of 4.00, which means that the whole sample of respondents had in fact graded them all as employed in the MM to a ‘Full Extent’. Meanwhile, 80% of the sample graded all 8 Opportunities for Family Engagement adopted for the survey as seized in the MM to a either a ‘Full Extent’ or a ‘Large Extent’, with 6 out of those 8 Opportunities graded a ‘Full Extent’ by the whole sample of respondents. All 4 Concepts on How Children Learn adopted from the P21ELFIG were graded as shared and all of the 7 Optimal Learning Environmental Features adopted for the survey were graded as available in the MM to a ‘Full Extent’ by the whole sample of respondents.

Figure 3 below illustrates the extent to which the MM as perceived by the respondents, is in line with the P21ELF when it comes to the 4 General Support Areas discussed under the P21ELFIG.



Figure 3: Percentage averages of the numeric values of responses corresponding to the key General Support Areas specified under the P21ELFIG

According to the above percentage averages, the MM is more than 80% in line with the P21ELF in all of the 4 General Support Areas discussed under the P21ELFIG: Concepts on How Children Learn, Strategies Employed, Optimal Learning Environmental Features, and Opportunities for Family Engagement, with it being 100% in line with the P21ELF in 2 out of the 4 Areas: Optimal Learning Environmental Features, and Concepts on How Children Learn.

5.0 Discussion

While the results section has been sub divided following the same order in which the survey instrument was developed and the data were collected: based on the 2 segments ‘Learning and Innovation Skills’ and ‘Career and Life Skills’ adopted from the P21ELF, and the segment ‘General Support Areas’ adopted from the P21ELFIG, this section has been reorganized to better present the results. Also in the process of interpreting and arriving at conclusions, those instances where the items of the questionnaire were scored either of ‘to a Large Extent’ or ‘to a Full Extent’ by the full sample of respondents have been referred to by the term ‘greatly’ whereas those instances where they were scored ‘to a Full Extent’ by the full sample of respondents have been referred to by the term ‘fully’.

5.1. Early Learning Outcomes

As illuminated by the results, while the majority of the EL Outcomes adopted for the survey from the P21ELF are greatly encouraged and facilitated through the MM, 8 among those are fully encouraged and facilitated. Accordingly, the children’s daily activities at the Montessori Children’s Houses revolve around exploring and learning from both their specially prepared indoors environment as well as the easily accessible natural outdoors environment, with ample guidance from their broad curriculum for making connections of how things work together. They have the freedom and time to choose one from a set of activities, stick to it, and continue till they have fully exhausted it before moving on to select another. They are encouraged to try out new experiences and seek out increasingly difficult tasks and stay on them till completion. As they progress with the especial manipulative material, they naturally learn to try again with improved or different approaches when actions don’t achieve desired results, and develop a tendency to independently review work and make improvements and adjustment with minimum teacher interventions. They are constantly supported to understand goals through the presentation of materials, and are given freedom to follow through, acknowledge achievement and draw satisfaction through

independent goal attainment, which in turn motivates them for continued self-learning. In the miniature society within the walls of the Children's Houses, children mostly work with others in pairs or groups with a single set of the special Montessori resources being available to them, learning therein to take turns and wait for own turn as means of sharing. Under the lessons of Grace and Courtesy in the Montessori primary curriculum they are explicitly taught to be polite and kind in interactions with both adults and peers, and following their exemplary teacher and elder peers they learn to live together in harmony, naturally mending broken relationships and building companionships for those in need.

Meanwhile as indicated by the study results, certain EL Outcomes adopted from under the P21ELF are possibly poorly facilitated in the MM due to the principles on which Dr. Montessori has built her method and certain unique elements which characterize the method which follow. Montessori children are not at all required or encouraged by the teachers to check approval after each step of a process before moving to the next, but are left free to make mistakes and learn from them so as to make each learning their very own discovery. When faced with new challenges, the children tend to take them head on and strive to succeed on their own opposed to asking for help. Also while creating new game rules may not always be possible with the majority of Montessori material which must be handled in specific ways for them to be of maximum use for a child's development, in which case they are limited to following the relevant pre-set rules, there are other opportunities such as with word games and free gymnastics where they get ample opportunities to bend, break, and create game rules.

Further on while not unable to distinguish between easier and harder tasks under general settings, when working with the special Montessori material, the children may not be able to perceive the increasing difficulty in those materials. This is due to the fact that through the use of the Montessori materials which are arranged in the order of their difficulty, the children themselves are progressing and approaching the next challenge armed with their immediate prior learning. Also, though it is possible that once concentrated on the work at hand the children may not be aware of time and how long it takes to do something due to their lengthy uninterrupted work cycles, they are by no means devoid of a sense of time as they specifically learn of time under their curriculum and get a good hand of it through their various Practical Life activities.

5.2. Optimal Early Learning Environment

Specific to Individual Skills Development

The results reveal that the MM fully encompasses 13 EL Environmental Features adopted from under the P21ELF as specific to individual skills development. In Montessori Houses of Children, the children are provided with an abundance of opportunities for different types of creative experiences ranging from colouring and drawing; to pottery and building; to music and movement; to gardening, cooking, and serving; to carefully studying the nature at its work, all which they can select from based on their interests. They can easily access and handle the materials all which are child-sized and placed on low shelves, able to freely move among spaces as necessary to go on with their chosen work, and have ample time to complete and perfect their work given their 3 hour work cycles. The view that children are more likely to self-direct, focus, demonstrate persistence, and complete a task when their activities are aligned with their natural curiosity and desire to better understand the world around them is shared in Montessori and is reflected by the basic way of Montessori: to leave the child free in an environment prepared to meet his general developmental needs and then follow his 'spontaneous manifestations' so as to better cater his unique developmental needs. In their daily work children collaboratively engage in a variety of activities mostly in pairs and small groups, following a broad range of topics and exploring each other's interests. They also work in large groups, especially in the outdoors and as required by the activities.

In the Montessori system of education, maximum effort is taken to recognize children's natural abilities and individual strengths, and in all their differences every child is equally valued. In an environment where there are routines, predictability, and simple rules, and a culture where the children are naturally inclined to help each other and take responsibility for their environment, they are provided with abundant inspiration to play, explore, generate ideas, innovate, and create. In such environments as at the Montessori Houses of Children, the children naturally develop abilities to think critically, be creative, work collaboratively, and communicate effectively and appropriately, closely followed by the ability to take initiative and suitably self-direct their learning efforts.

While thus meeting up with the P21ELF, the MM rather resorts to alternative means from employing dramatic and role play as teaching methods for the means of developing social sense and social problem solving of their children and for training them how to take different perspectives and become accustomed to different points of view. Further on, Montessori teachers purposefully refrain themselves from intervening through either questions or discussions to help their children reflect on how they did things unless they are certain of the absolute necessity to do so. Also while involvement of children in planning and organizing activities is not always possible in the MM given that it is the teachers' job to prepare the environment as appropriate for the lessons she intends to give during a

certain period and also the pre-set nature of the Montessori material, the children are instead given the responsibility of caring for the material and keeping their environment in order to give them a sense of belonging and accomplishment. While children are well encouraged to work together, duplicate materials are not seen in Montessori Houses of Children given that Dr. Montessori has strictly advocated the restriction of her educational material to just one copy for a Children's House (Lillard & McHugh, 2019b).

With the exception of 'Integrates technology' which was not adopted for the survey due to its irrelevance in the olden times the MM was developed, the MM fully encompasses all the Features which make up the Optimal Learning Environment for the development of P21 21st CSS. In the Montessori Houses of children, children are always nurtured through a welcoming environment in which they are always encouraged to further themselves, and responded to by the teacher and therefore their peers with utmost respect and attention. The environment carefully prepared by the teacher to cater all the children's age-specific development needs and sensitivities offers them with a variety of self-corrective materials which have been developed by Dr. Montessori and her collaborators specifically for the purpose of inducing independent learning. In addition the Montessori environment abundantly offers varying types of activities targeting all physical, intellectual, sensorial, socio-cultural, mathematical, and linguistic development, which children can select from based on their interests and engage in independently, in pairs, or in small groups as they choose and in large groups as the activity calls. The interconnected arrangement of all indoor and outdoor spaces of the Houses of Children and the teacher who sets the children free to explore and learn provides them the freedom to move throughout the spaces as their work requires. The daily work transitions in Montessori Children's Houses are smooth, easy, and stress-free because the work cycles are consistent and the resulting predictability helps the children to feel safe and get adapted to them in no time. The Montessori teachers who are especially trained to 'follow the child', always focus on each learner and support them to stay in focus and build on what they learn as they investigate and self-learn from their environment. Children learn of cultural diversity through materials and activities which come under their Culture curriculum and of social diversity mainly through their own experience of being part of a miniature replica of the larger society, wherein if not otherwise so, diversity is in the least supplied by the certain mix of peers of 3-6 years who learn at a House of Children at any given time.

5.3. Other General Areas of Support

Concepts on How Children Learn the Skills

Dr. Montessori's concepts on how children as young as 3 – 6 years learn fully coincide with those adopted from the P21ELFIG. Whether she believed that 'playful learning' is how children learn is a somewhat gray area: while she refers to children's activity as 'work' rather than play, Montessori 'work' shares many elements of playful learning such as freedom of choice in selection, induction of fun, absence of extrinsic rewards, and the opportunity to involve others (Lillard, 2013), and she quite often refers to her educational activities as 'games' and to engaging in them as 'playing' (Montessori, 1966). Further on Dr. Montessori had allocated time for such 'Guided play' in the daily schedules for the Houses of Children (Montessori, 1912). In either case, Montessori children do spend all their time in the Houses of Children playfully learning through testing their abilities based on prior experiences and then practicing them till they are perfected.

The MM agrees perfectly with the two concepts that children learn through adult interactions and through peer interactions. The Montessori curriculum is prepared to cover all areas of development: physical, cognitive, social and emotional, language and literacy, as well as numeracy and basic life skills through its five key curricular areas: practical life (Caring for the Self, Caring for the Environment, Grace & Courtesy, food, and Movement of Objects), sensorial (for developing an ability to discriminate between the variations of size, form, and color, as well as tactile, gustatory, olfactory, and auditory stimuli), culture, language, and mathematics (Montessori, 1912, 1966) and is assisted therein by specific Montessori elements such as the prepared environment, special didactic material, unique teacher role, large classes, and multi-age grouping. The Montessori teachers arrange, or in the Montessori terminology, 'prepare' the learning environment by suitably adding and removing learning materials according to the standard Montessori primary curriculum and arranging them attractively and orderly so as to motivate and support the children's learning. They arrange the didactic materials in their proper order to help children identify associations current learning has with their prior learning so they can further build on them. They observe children in their activity and as necessary guide them to build on their interests, skill levels, and abilities through preparing and make special presentations to extend and direct their current learning to achieve additional learning goals.

Meanwhile, Montessori children are stress free as they have older peers who very well know their teacher expectations who they can follow. Meanwhile Montessori children who have same-age as well as both younger and older children to associate with and who get to play the roles of the younger, intermediate, and elder peers to others during the successive years of their 3 years at the Houses of Children, therein have extended opportunities to observe and imitate others and build on the same as well as to teach and be a role model to others. For the same reason they get a wide range of social experiences through making efforts to play games and coordinate activities with each other.

Dr. Montessori yet again held the same views as the P21ELFIG on the children's ability to draw learning through all around them wherever they may be. She claimed that children educate themselves through their experiences and pointed out that through absorbing form their surrounding is how children, especially those from birth to age 6 spontaneously learn their mother tongue at such a tender age and how they may learn many languages simultaneously making no confusions if they are exposed to them all at once, the phenomenon she calls 'the absorbent mind' (Montessori, 1949). She shares the concept that children learn through making connections to the larger world and are inspired to learn thus informally because of their own desire to know how to do something or how to engage with others, in which case the reward of successful learning is more enjoyable to them since it is based on their real-time experiences. This concept is in fact what she refers to as 'spontaneous activity in education' and which led her to extensively 'prepare' the environment in which children learn in order to ensure a comprehensive education through inducing spontaneous learning in them (Montessori, 1917).

Strategies Employed for the Skills Development

With the exception of 'Blended approach - Connecting online play with hands-on play which was not adopted for the survey on base of irrelevance in the time the MM was developed, the MM fully coincide with all Strategies adopted from the P21ELFIG. The MM is entirely Child-centered with the children let free to pursue their interests and self-learn through specially designed hands-on learning material, while the teacher stays back to observe and intervenes only to keep the child focused in his work and to assist further his learning. It's focus extends well beyond subject matter and subject specific skills and rests on the whole-child development or 'teaching for life' as Dr. Montessori calls it, where it strives to ensure all physical, intellectual, creative, social, emotional, moral, and spiritual well-being of the 'future man', who according to Dr. Montessori is the produce of the present child (Montessori, 1948). For that purpose many other strategies are adopted in the MM such as basing children's learning on a wide variety of educational games and learning activities, but with the exception of dramatic play which she has rejected as a sound pedagogical tool: letting children learn by interacting with each other through cooperative learning; using observation to study the learners and develop further activities and adjust the environment to advance their learning; using differentiated instruction when necessary both in form of multiple methods for a single teaching point as well as different method for different learners based on their learning styles; and combining of learning domains such as in developing communication through one of teaching basic literacy, word games, or practical life lessons. Such strategies are further made fruitful through the consistency in Montessori daily routines and teacher expectations of student behavior, but then with a flexible attitude of teacher towards the daily work schedule in her pursuit of the child which would lead to putting the child before any routine.

Engaging Families in Skills Development

With the exception of 'Being combined within comprehensive services such as health and wellness, mental health, nutrition, and access to other social services focused on needs of the family', which was not adopted on base of irrelevance for the MM as a method of education, the MM is fully in line with almost all of the Opportunities for Family Engagement discussed under the P21 ELFIG. The Montessori system of education has a respect for the diversity within any community and has a place for any child no matter how different he may be perceived from others in any possible aspect. In the Montessori Houses of children, the teachers frequently collaborate with children's families to help the children take their learning home with them and make them a part of their life. While refraining from assigning specific homework to children in view that such assignments would violate their 'free choice of activity', this is achieved through educating the families on the child's interests and providing suggestions for suitable at-home activities which the families can adopt to reinforce their learning which originated at the Children's Houses. They show parents the child's work and seek their inputs, and in return encourage families to communicate their expectations of the children and inquire about their children's learning. Free tips, ideas, and a wealth of resources on how to extend their child's experiences are commonly made accessible to parents around the world through a series of AMI websites on top of education on the MM provided through periodic seminars conducted at each House of Children for their children's parents. The parents are constantly empowered and encouraged to support opportunities for children's learning as they arise in the everyday routines of family and social life.

6.0 Conclusions and Recommendations

The study results conclude that the authentic MM for ECE is significantly in line with the P21ELF and the P21ELFIG with the exception of a handful of facets some of which are irrelevant for comparison and others on which it stands in contradiction to them. The majority of these contradictions can also be attributed to the unique way of Montessori and its characteristic elements. Approximately just half each of the EL Outcomes and EL Environmental Features specific to individual skills which were adopted for the survey from the P21ELF are greatly encouraged and facilitated through the authentic MM for ECE. Yet when it comes to the opportunities to support 21st CSS in early learners, the authentic MM for ECE is remarkably in agreement with the P21ELFIG. The concepts on how children learn skills are fully shared in the Montessori philosophy while the environment which is optimal for such skills learning is well set in Montessori Houses of Children. The strategies employable to support these skills are fully resonated in the authentic MM for ECE and opportunities which are discussed in the P21ELFIG are also greatly made available to Montessori parents and families to involve them in supporting such skills development in their children.

While thus prominently overlapping with the P21ELF and the P21ELFIG, the authentic MM for ECE deviates significantly from the P21ELF in few certain aspects. For one, it stays in opposition with the P21ELF when it comes to providing the children with opportunities to learn through dramatic play. While Dr. Montessori has referred to the activities at the Children's Houses as 'work' and elsewhere as 'games' and allocated time for 'free play' and 'guided play' in her time schedules, the authentic MM for ECE does not employ 'dramatic play' or 'role play' as a teaching method. Instead for the means of developing their social sense, perspective-taking ability, and social problem solving, Dr. Montessori has awarded her children with their own miniature society in which they learn not through acting out events they see in their daily lives but rather through the experiences gained by themselves through being part of a society of their own.

Also in their unique role that of a facilitator and guide of self-education rather than a teacher in the conventional sense who would in turn focus on disseminating knowledge, the Montessori teachers strictly refrain from interrupting children who are engrossed in their work in any manner except to redirect a child who has deviated from his work. While they are not denied of help if directly asked for, the children are not encouraged to look for help whenever faced with challenges and difficulty, and are left alone to reflect by themselves on their work without any uncalled-for adult interventions. Therefore, in the Montessori culture they learn to apply themselves to meet challenges and overcome difficulties on their own. Amply facilitated by both the teacher who appropriately presents them with the materials and makes tailor-made introductions to initiate further learning, and the self-corrective nature of the materials and the order of difficulty in which they are made available, they work independently, make mistakes, make improvements, and eventually perfect and solidify their learning. Furthermore, duplicate material are not found in Montessori Houses of Children as Dr. Montessori has advised against having more than one set of materials available to the children. As a result, Montessori children learn to share and work together, to be patient and wait until the material they want is available to them, and also to sacrifice, negotiate, and compromise as necessary to work out a fair solution as means of avoiding conflicts.

In summary, it can be concluded that allowed an insignificant number of exceptions the majority of which can be attributed to the unique way of the authentic MM for ECE, it is in remarkable harmony with all the General Support Areas for skills development specified under the P21ELFIG. In regard of the specific skills development, the relevant descriptive statistics: the percentages and mean values in combination with the median and moral values, point out that majority of the learning outcomes listed in the P21ELF are greatly encouraged and facilitated and optimal environmental features contributive to such skills development listed therein are greatly encompassed in the authentic MM for ECE.

Though this quantitative benchmarking study was able to reveal the general extent to which the authentic MM for ECE generally overlaps with the P21ELF and the P21ELFIG, the specific ways in which the learning outcomes are brought about and the forms in which the required environmental features are existent in the authentic MM for ECE are not illuminated by the results of this study due to the specific objective and the consequential nature of the data collected at this phase. But based on its results which reveal the great extent to which the authentic MM for ECE, despite of being a century-old method still in its authentic form, is in line with a contemporary skills development framework such as the P21ELF, it can be speculated that a descriptive analysis of the same focused on finding specific factors which contribute to soft skills development in early learners would give a better insight into the means of developing such skills in them.

Not stopping at the MM, this search can be further extended to other classic approaches to ECE such as Kindergarten, Waldorf, and Reggio Emilia, and to more modern approaches such as High/Scope, Te Whāriki, and Experiential Education. Knowledge drawn from an assortment of such proven approaches to ECE on specifics related to individual soft skills development in early learners would exist in a variety of forms such as underlying

theories/concepts, principles/policies, curricular elements, program traits, environmental features, teaching methods/techniques/strategies, and specific practices, as well as interrelations and interdependencies between individual soft skills, and will be practically useful to those who make attempts to develop 21st CSS in early learners both at the policy level as well as the implementation level.

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