

THE DEVELOPMENT ON INDICATORS FOR MONTESSORI MANAGEMENT PROGRAM IN THAI SCHOOLS*



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ABSTRACT

Recalibration to apply the Montessori Method across the hundreds of new Montessori classroom flourishing in Thailand needs its own development of essential performance indicators. The hypothesis examined through the Association Montessori International Assessment Criteria's on prepared adults, prepared learning environment, curriculum and leadership. The results validate the significant contribution of all factors. The prepared learning environment is the most crucial area with strongest agree on environment is aesthetic, well maintained, ordered and provides enticement to activities. The findings are evidence of the value on Montessori management program. The further research can be applied to different area such as private schools only or schools in neighboring country of the ASEAN region.

KEYWORDS : Indicators/ Montessori Program

INTRODUCTION

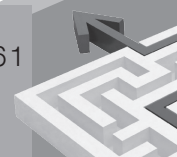
The Development of Indicators for Montessori Management in Thai Schools. There is no better time than now to address the future. What future do we want for our children? What future do we want to see for Thailand? In 2018, it is time to address our outdated old factory model education system aiming to The Development of Indicators

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for Montessori Management in Thai Schools. There is no better time than now to address the future. What future do we want for our children? What future do we want to see for Thailand? In 2018, it is time to address our outdated old factory model education system aiming to distribute a set curriculum. Children are disempowered and trained to reproduce knowledge, rather than empowered to be critical thinking and active citizens. At the forefront of alternative education models is the Montessori Method. Montessori turns the classroom around: the children learn at their own pace while teachers become facilitators to the child's own learning journey. Thoughtfully designed learning materials are displayed for children to guide themselves towards their own activities. Mixed aged classrooms encourage respectful and social cooperation of mentorship from older students helping younger students to finish their tasks together. Parents are just as much introduced to the Montessori philosophy to participate in the holistic nurturing of the child. Montessori facilitates a love for independent learning in hand with a nurturing community. A program on development of the potential of children to learn using a Montessori Approach had initiated a new interest in Montessori education in Thailand (Montessori Association of Thailand, 2013).

Montessori programs have shown in numerous studies positive influences in social and academic achievement (The office of Primary Education Service KhonKaen Area 3, 2009; Chisnall & Maher, 2007; Lillard & Else-Quest, 2006; Rathunde, 2005; Harris, 2004; Dohrmann, 2003, Vance, 2003; Reed, 2000). The great successes of applying the Montessori Method to classrooms are well tested and standardized across Western continents. Thailand needs its own development of essential performance indicators.

At present, Thailand is the only country in Southeast Asia that offers Association Montessori Internationale (AMI) teacher training and education with the support of the government to establish Montessori education in government schools. As an aviation hub of the Southeast Asian region and benefits from a highway network that connects 32 countries, Montessori International has entrusted Thailand to host the 29th International Montessori Congress in year 2021, this study will value add to studies in education management area.

Method

Participants

Participants consisted of teachers, administrators and parents from 36 education/child development organizations, located in North, South, Central, North – East and West of Thailand. The sample size was 340 stratified random selected congruent with 22 observed variables from Government Schools under the Office of Basic Education Commission, Children Homes (orphanages) under the Department of Children and Youth, Private Schools under the Office of Private Education Commission. These schools/child development organizations implement Montessori primary only or both primary and elementary programs.

Instrument

The instrument was designed from related concepts, theories and recommendation from experts. The research tool was a questionnaire consisted of two parts. It had covered all the factors recommended by Association Montessori Internationale Assessment Criteria's which were personnel, learning environment, curriculum, commitment and child advocacy. A panel of five experts was asked to evaluate the validity of questionnaire by utilizing the research's Index of Item-Objective Congruence (IOC). And a pilot test was conducted and applied the Cronbach Alpha Coefficient to measure the reliability of the questionnaire.

Analyzing the Data

The data were analysed by descriptive statistics; frequency, percent, mean, percentage, standard deviation, skewness, kurtosis and coefficient of variance. The hypothesis models were tested by using structural equation modelling. The analyses were conducted by Linear Structural Relationship Model (LISREL) program.

Results

Respondents

Majority of respondents were female 257 (75.59%). They were internal stakeholders: teachers 132 (38.82 %), administrators 81 (23.82%), and parents 80 (23.53%). The biggest group had 2 years Montessori experiences with child age kindergarten 117 (34.41%). The respondents who had Montessori qualifications were AMI trained teachers



86 (64.18%). The results confirmed that the sample group whom directly produced and consumed the education product had knowledge and first handed experiences which was an essential contribution to the study.

Variables

The four areas of variable were: 1) Montessori prepared adults; 2) Montessori prepared learning environment; 3) Montessori curriculum planning, implementation, and assessment and 4) Commitment to improvement, leadership vision and child advocacy, All 22 main and 87 sub indicators were significantly affected for the development of Indicators for Montessori management programs in Thai schools (Mean = 4.75 - 4.17, SD = 0.45 - 0.92, Sk = - 1.73 to 0.54 and Ku = - 1.02 to 3.10.).

Outstanding Variables

By mean of judging, the highest main indicators from each area were: 1) Environment is aesthetic, well maintained, ordered and provides enticement to activity (Mean = 4.74 SD= 0.41), 2) Adults serve as role models (Mean = 4.71 SD = 0.43), 3) All aspects guided by Montessori principles (Mean = 4.62, SD = 0.43) and School provides Montessori parent education programs that promote understanding of the Montessori curriculum and education as an aid to life (4.61, SD= 0.47).

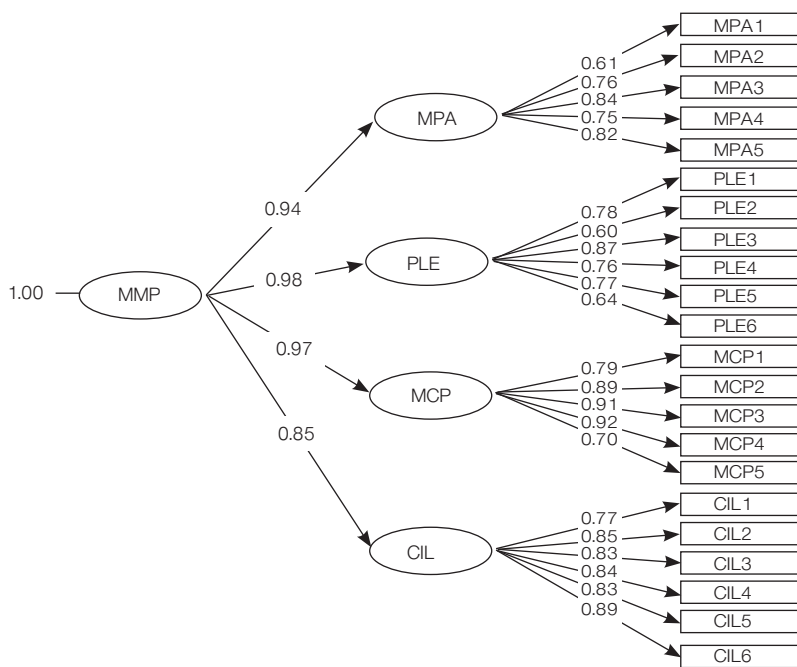
Correlation of Variables

Correlation matrix a total of 256 pairs of 22 observed variables were statistically positive significant at 0.01 level. (R=0.346 to 0.841, Bartlett's test of sphericity Approx. Chi-square = 6436.265, df = 231, sig = .000, KMO = .964).

Outstanding Confirmatory Factor Analysis (CFA)

Second Order CFA (See Figure 1) lambda values revealed effective crucial component areas as follow: 1) Prepared Learning Environment (PLE), 2) Montessori Curriculum, Planning, Implementation & Assessment (MCP), 3) Montessori Prepared Adults (MPA) and 4) Commitment to Improvement, Leadership, and Vision & Child Advocacy (CIL).

The most effective crucial components of main indicators in each area revealed by power of lambda: 1) Environment is organized according to Montessori principles and offers multiple learning opportunities and indoor/outdoor (PLE3), 2) Teacher uses a process of reporting student progress that is compatible with Montessori principles (MCP4), 3) Teachers utilize observation as a key tool for reflection and program planning (MPA3) and 4) School supports the broader Montessori mission and undertakes continuous development (CIL6).



Chi - Square = 182.55, df = 159, P - value = 0.09727, RMSEA = 0.021

Figure 1 : The Second Order Confirmatory Factor Analysis

Discussion

Prepared Learning Environment

Humans have impacted the environment and have changed the world in unprecedented ways as we progress through the 21st century dependent on luxuries of living and technology. Montessori (1989) addressed that the adult worked to improve their environment while the child worked to improve themselves. Prepared learning environment was found to be the top crucial component effective contribution of indicators for Montessori management program in Thai schools. The result supports by the recent epigenetic research study which has established that DNA blueprints passed down through genes are not set in concrete at birth. Genes are not destiny. Environmental influences, including nutrition, stress, and emotions can modify those genes without changing their basic blueprint. Genes cannot pre-program a cell or organism's life because cell survival depends on the ability to dynamically adjust to an ever - changing environment. (Reik and Walter 2001; Surani 2001; Watters 2006; Cloud 2010). In addition to the organism, a child, a human being, the prepared environment must be rich in motives which lend interest to activity and invited the child to conduct their own experiences. The child could only develop fully by means of experience in their environment (Montessori 1989).

“To assist a child, adults must provide them with an environment which would enable them to develop freely”. (Montessori 1949) Montessori discovered that education was not something which the teacher did, but that it was a natural process which developed spontaneously in the human being. It was not acquired by listening to words, but in virtue of experiences in which the child acted on their environment. The child has a different relation to his environment from adults, the child absorbed it. The things they see are not just remembered; it forms part of their soul. The environment must be a living one, directed by a higher intelligence, arranged by an adult who is prepared for the child’s mission.

The Montessori environment in Thai classrooms grew from underdeveloped classrooms into well maintained classrooms with cleanliness and order, offering developmentally appropriate materials, resources, and activities. Therefore, the Environment is aesthetic, well maintained, ordered and provides enticement to activity and is organized according to Montessori principles and offers multiple learning opportunities and indoor/ outdoor. Montessori program in Thai schools became well accepted by the school community. Montessori’s idea of the prepared environment was that everything the child came in contact with would facilitate and maximize independent learning and exploration. This calm, well-ordered environment has a lot of movement and activity. Children have opportunity to choose and work on activities at their own pace, they experience a combination of freedom and self-discipline, as guided by the environment.

Curriculum, Planning, Implementation & Assessment

The Montessori approach is focused on the development of the independence and adaptability of the child. Therefore, Education is seen as an aid and preparation for life and experiences in the school are linked with the world outside. Learning occurs in a variety of ways and is suited to the child’s individual needs: learning is active and experimental, individually paced, self-correcting, independent, and unlimited in scope.

Montessori curriculum and activities are extensive and precise. They offer concepts which are underlined human development by scientific principles to the practice. The findings reflected that teachers need to use a process of reporting student progress compatible with Montessori principles, curriculum planning, implementation and assessment as keys element of quality management program in schools.

Prepared Adults

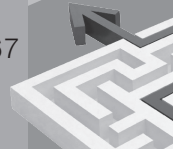
The indicator on teachers serving as a role model is essential issue in education for social change. A role model seen in the teacher to the children was very valuable,

and a role model was a person who could inspire and encourage us to strive for greatness. We learn through their commitment to excellence and through their ability to make us realize our own growth. Lunenberg, Korthagen, Swennen 2007; Griffin 1999; Russell 1999; Wood & Geddis 1999, suggested that when the teacher modelled certain behaviour, students not only saw, heard, and read about, but that they experienced it. As a way to change education, Stofflett and Stoddart (1994) stated that the introduction of new practices could help students to new ways of thinking. Through this, teachers would not only have a greater impact on the preparation of student, they could also play a leading role in the innovation of education itself. Russell (1999) emphasised that if genuine change was to occur in schools, the changes might have to occur first in the teacher herself and teachers' modelling as facilitator improved the learning of students (Korthagen, 2002; Loughran, 1996; Smith, 2001; Wideen et al., 1998), by helping them to expand their repertoire, to reflect on their own learning, and to rethink the connection between the action and the knowledge.

Observation is the cornerstone of the Montessori Method, enabling the teacher for the needs of the child. It is one of the most vital elements to the Montessori practice. When the adult feels herself, aflame with interest, seeing the spiritual phenomena of the child, and experiences a serene joy and irresistible eagerness in observing him, then she will know that she is initiated. Then she will begin to become a teacher (Montessori, 1965). The role of the teacher as the dynamic link between the children and the prepared environment requires the art of the observer. Adults gain true insight into the child achievement through observation, noticing child's preferences and interests, being aware of their abilities. Observation based on scientific studies of each child allows us to bring personalized education that is unique to each child, not of stereotypes or generalizations about children, not of theories that we come up with. Observation tools are record keeping, lesson planning, and photo journaling; these are teachers' tools to keep track of what the children are doing and how they are progressing. It assists teachers in lesson planning and continued communication with parents. The teachers utilize observation as a key tool for reflection and program planning and serve as role models demonstrated strong correlations indicators because what is the message that we are giving to children, we have to model to be able to observe results.

Commitment to Improvement, Leadership, and Vision & Child Advocacy

Schools operated in complex environments, teachers and school administrators must effectively complete their mission of educating students, and they must be able to manage more than just a classroom lesson. Broader mission and undertakes continuous



development are factors that can lead to program success and, frequently, only top management leaders have the authority to address these factors. Although budgets and schedules were issues that top the management leader could deal with, the expected benefits from the program quality was usually the most important outcome. Management commitment captured various ways such as engagement, involvement, oversight, influence, leadership, and support of senior management. Leadership commitment was important because top management controlled the resources within organizations; in times of budget overruns, scope changes, unexpected delays, and other such crises, their commitment would be necessary in obtaining much needed resources (Ifinedo & Nahar, 2006; Davenport, 1998). A school leader's commitment influences the roles of other stakeholders and program participants (Shaul & Tauber, 2013). School leaders needed to sell the rationale for the program with visible enthusiasm by championing the program's activities in order to enhance the quality of the program outcome (Boonstra, 2013).

Montessori approach is focused on the development of the independence and adaptability of the child. Therefore, Education is seen as an aid and preparation for life and experiences in the school are linked with the world outside. Learning occurs in a variety of ways and is suited to the child's individual needs: learning is active and experimental, individually paced, self-correcting, independent, and unlimited in scope. The finding yielded the strong indicator on school provides Montessori parent education programs that promote understanding of the Montessori curriculum and education as an aid to life as support, appreciation and hope for the future education.

Suggestion

This study has provided original insights reflected on the evidence in organizational development. Whereas this study investigated in detail the individual and collective sense-making key elements from Montessori managing experts and applied factors to the study, future research can further develop such insights and assess their transferability and relevance to other contexts. Because of this study's focus on criteria and standards, emphasis was given to practitioners rather than decision-making or practice adaptation and assimilation. Future research could investigate in more detail how school as the users implement and assimilate management guidelines into their established day-to-day routines, which are issues that have limited attention in current studies.

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