An Evaluation of Art and Design in Primary Education in Zambia

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***Abstract*: This article is anchored on a study that evaluated the management of Art and Design in selected schools in Chongwe and Rufunsa districts of Zambia. The overarching goal of the study was to establish what else could be done for children to benefit fully from the subject as they play and make art. The theoretical framework was on the Social Development Theory of Learning, which was developed by Lev Vygotsky. The latter fundamentally proposed that social interaction profoundly influenced cognitive development of children. Based on this understanding, this study demonstrated that through play with art and design, children are likely to develop traits such as creativity, inventiveness, critical and analytical thinking. These traits could equip them for survival in their natural environments as well as instill values in them that would make them good members of their communities. To arrive at this conclusion, questionnaires were used to collect data, which was mainly qualitative. Consequently, thematic analysis was employed to interpret the findings.**

***Keywords*: Art, Design, Creativity, Inventiveness, Critical and Analytical Thinking**

I. INTRODUCTION

A child requires to be developed academically, mentally, morally, physically, psychologically, socially and even spiritually. When a child is born, the expectation by the parents and society is that the child will grow up and become a productive citizen or member of the community. A child is expected to grow up and fit into the community well. That is only possible, however, when a child is fully developed, academically, mentally, morally, physically, psychologically, socially and spiritually.

On these fronts, art enhances growth in all these facets of a child's life. As such, children need that chance to make art because when a child is left free, one of the first things that child is likely to do is to draw something anywhere. That child can draw on any available surface and also use any available material. That urge to make art in a child at that age should be checked, guided, molded, nurtured and in most cases it should be done with the help of teachers who are entrusted with the responsibility to lead children in learning.

However, while there has been so much art work dating as far back as the 14th Century in the Renaissance period in Europe [1], the teaching of art has not been continually improved, notwithstanding the constant change in literature and scientific ideas. Thus, this article evaluates the teaching of Art and Design in primary schools in order to ascertain the management of the subject, the teaching methods, the content and the teaching approaches that are effective for teaching growing children in Zambia. It is informed by the fundamental understanding that children need to have a secure future, and that exploring what must be done to give them what they need for their future survival and for their development has to factor in the teaching of Art and Design.

II. THEORETICAL CONTEXT FOR TEACHING ART AND DESIGN

One way to explore whether the effectiveness of Art and Design lessons offer any significant cognitive, psychomotor and affective development for primary schools children when they make art is to refer to theories surrounding this matter. To this effect, the theory that chiefly comes to the fore is the Social Development Theory of Learning that was developed by Lev Semyonovich Vygotsky (1896-1934). The latter proposed that social interaction profoundly influenced cognitive development. He called this as the 'Zone of Proximal Development' (hereinafter ZPD) [2]. The theory is concerned with children's interaction. In the case of Art and Design, play, observation and aesthetics form the backbone of children's interaction. Art and Design, a practical subject and a life skill, includes areas such as drawing, painting, batik, sculpture work. Besides, it is needed in the planning of structures including architectural work by using sketches writes Painting + Batik. [3]. In early childhood, Art and Design is essential for a child's physical, cognitive, psychomotor development, and child enjoys the subject as a pastime or play. Art and Design also serves as a therapy to a child's stressed mind.

The Social Development Theory of Learning is critical to this study because children's development is anchored on social interaction and play. Children do not act like adults who can spend time alone and may be doing very productive work. Children need social interaction with their friends for them to develop into adulthood. Evidence demonstrates that parents do improve their children's social growth by taking them to social places where they are encouraged to mingle with other children. According to McMillan, this element is encouraged in primary school, as it gives children 'playful learning' [4]. He further [5] observes that playful learning is achieved when there is social interaction between children. Children need to learn and to collaborate with others while they are young for them to face and overcome their future relational challenges.

Lowenfeld and Brittan [6] state that art is a skill in making or doing involving self-expression, aesthetics and visual

interpretation of environmental experiences. They also observe "More and more people are recognizing that the ability to learn differs from age to age and from individual to individual, and that this ability to learn involves not only intellectual capacity, but also social, emotional, perceptual, physical, and psychological factors. Altogether learning is very complex. Therefore, there may be no single best teaching method. Our tendency to develop the capacity to regurgitate bits of information may be putting undue emphasis on one factor in human development, that which is now measured by the intelligence tests. Intelligence as we now know it does not encompass the wide range of thinking abilities that are necessary to the survival of man- kind. The ability to question, to seek answers, to find form and order, to rethink and restructure and find new relationships, are qualities that are generally not taught; and in fact these seem to be frowned upon in our present educational system." Furthermore, Lowenfeld (1903 -1960) and Britain (1922-) found memorization and repeating information to have very little relationship to contributing to a well-adjusted member of society. Therefore, in order to achieve the Ministry of Education's stated objectives in Zambia, as seen in *The Curriculum Framework* [7] and *Educating Our Future*, [8] there is need to study and manage Art and Design education in the primary schools effectively and correctly.

The Social Development Theory is useful in the teaching of Art and Design in Primary Education in Zambia as it advocates for play and social interaction. If meaningful development, especially in third world countries like Zambia, has to be achieved, the Social Development Theory of Learning is the way in which children should attain their education [9]. Children need to be convinced that they cannot achieve much for as long as they work as individuals, and that they need to work in groups, in teams and never try to stand alone if they have to secure meaningful learning and achievement in life.

However, learning by children should also be supplemented by an inclusion of other related theories to be fully relevant to particular contexts. Principally, these include Curriculum Theories and the Theory of Multiple Intelligences. Curriculum theories are needed in the management of Art and Design because they help to guide what must be presented and how work for the pupils should be managed. The Theory of Multiple Intelligences encompasses art. As such, this theory should be considered when children study Art and Design as the it deals with observation which is done on maps, drawings for paint work or done by architects which includes aesthetics is called visual spatial. Kurt [10] writes, as indicated in figure 1 by Gardner, that "Visually artistic people are known to demonstrate spatial intelligence. These abilities include manipulating images, graphic skills, and spatial reasoning – anything that would include more than two dimensions. They may be daydreamers or like to draw in their spare time, but also show an interest in puzzles or mazes. Careers directly linked to spatial intelligence include many artistic vocations, for example, painters, architects or sculptors, as well as careers that require the ability to visualize, such as pilots or sailors"

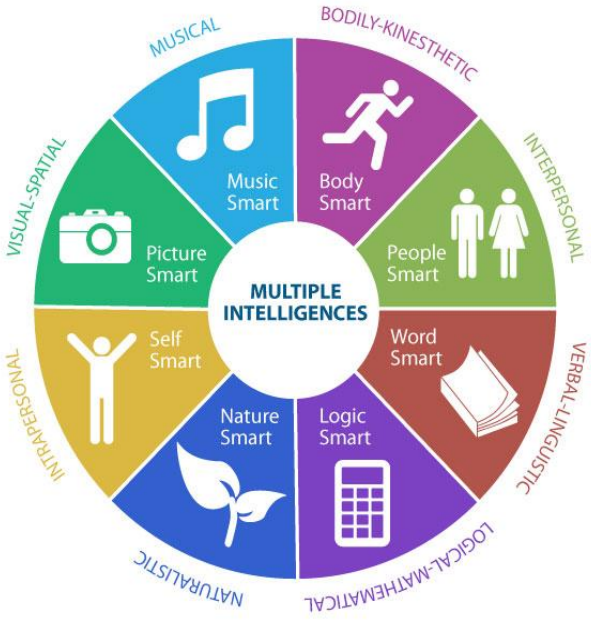

Figure 1 Howard Gardner's Theory of Multiple Intelligences

2.1 Curriculum Theories

A curriculum theory looks at the beliefs that surround what must be taught and why it must be taught. A curriculum theory is thus a term for how an educational institution decides what is worth learning and teaching, and how learning will be measured [11]. The Social Development Theory of Learning has been cited and found to be suitable as curriculum theory in the management of Art and Design as it promotes social interaction. John Dewey (1859-1952) also discussed learning through social interaction under the theory of Social Meliorism, Social Efficiency and Developmentalism. Kliebard [12] further explicated these aspects and called the theories as humanist social efficiency (or mental disciplinarians), developmentalist (or child study), and social meliorists *K12 Academics* [13]. These theories are complemented by what Vygotsky's (1896-1934) called the Social Development Theory of Learning. Malinao, Charlotte's [14] Social Meliorism, Social Efficiency and Developmentalism also show that these theories complement the Social Development Theory of Learning when it is applied in the management of Art and Design.

2.2 Theory of Multiple Intelligences

Gardner (1943 -), a Harvard university psychologist [15], proposes that a human mind has eight (8) abilities as follows: Musical–rhythmic, Visual spatial, Verbal linguistic, Logical mathematics, Bodily kinesthetic, Interpersonal, Intrapersonal and Naturalistic writes Gardner. Focusing on one of these aspects, the visual spatial intelligence, Gardner indicates that people who are good in visual spatial do well at maps and direction videos and pictures [16]. Though his ideas have been

faced with various criticisms, it still has been noted that people are talented differently. While each person has at least a part in what others will have as talent like in musical–rhythmic, visual spatial, verbal linguistic, logical mathematics, bodily kinesthetic, interpersonal, intrapersonal and naturalistic, when it comes to children's growth, a child needs to experience total growth. Hence, visual spatial may not be completely overlooked because it is responsible for the source of growth for various aspects such as artists, engineers and architects in adulthood as observed by Gardner.

III. TEACHING OF ART AND DESIGN IN ZAMBIA'S PRIMARY SCHOOLS

To adequately discuss the situation in Zambia, with regard to the teaching of art and design, it is important that we highlight the methodology which we used in gathering data before presenting these findings.

3.1 Methodological Approach

There are obviously myriads of primary schools that have been established, and are operating across Zambia. To understand how Art and Design is being taught in these schools, the study that has informed this article focused on six schools in Chongwe and Rufunsa Districts. Being a case study, it mainly took a descriptive approach. The study rigorously investigated into how the teachers teach the subject, how they manage their classes and the reactions that school children present to them. Additionally, the study understood the pupils' views on how they see Art and Design taught and also how they wanted the subject to be taught to them. Furthermore, the study established the children's interest in what they perceived as what should be taught for their day today living.

The study population included the District Education Board Secretaries (DEBS), District Standard Officers (DESO), lecturers, head teachers, deputy head teachers, senior teachers, class teachers and pupils from the two (2) districts. As for the specific sample size, it consisted of two hundred (200) participants who were drawn from both districts. Their categories were as follows: Two (2) District Education Board Secretaries (DEBS); two (2) District Education Standards Officers (DESO); four (4) lecturers from Chalimbana University (CHAU) and Chongwe College of Education (CCE); six (6) school head teachers; six (6) deputy head teachers; six (6) senior teachers; eighteen (18) class teachers from six schools (Education providers,18 males and 26 females); and one hundred and fifty six (156) pupils from six (6) purposely chosen schools that were in Chongwe and Rufunsa districts which comprised of (76) boys and (80) girls in the primary schools with an age group between 12 and 18 years old.

In segmenting the sources of data, purposive sampling method was employed to come up with study sample by selecting both the districts and participants. Cohen *et al* [17] assert that "in many cases purposive sampling is used in order to access 'knowledgeable people', i.e. those who have in-depth knowledge about particular issues, maybe by virtue of their professional role, power, access to networks, expertise or experience." On the basis of this understanding, purposive sampling was used to select the classes that made the study sample since the number of the pupils in primary schools, from grade 1 to grade 7, was big,. Furthermore, the highest qualification of the educational providers was a master of education degree, while the lowest was a primary school teachers' certificate.

Granted that this study was a descriptive survey, questionnaires were used in order to gather data from the respondents. On this front, most of the data was qualitative and was analyzed thematically. This approach of analysis was necessary in order to establish narratives. The analysis, however, also included tables and charts in the representations of quantitative data.

3.2 Findings of the Study and Discussion of Key Lessons

The educational providers provided comments on Art and Design teaching in the primary schools on the appreciation of environmental nature as well as analytical and critical thinking. All the 44 respondents that were from all the categories indicated that Art and Design enhanced children's appreciation of nature and that the subject also enhanced analytical thinking in children. Additionally, the educational providers went further by stating that Art and Design enhanced the pupil's critical thinking since the subject offered them chance to examine what they created as they played and made art. Among the 44 respondents, thirty eight (38) respondents still indicated and emphasized that Art and Design enhanced analytical and critical thinking as well as the appreciation of nature. They further added that the subject should be supported in schools for children's good growth. There was also a mention that the use of the local environment enriches the pupils' appreciation of their area where they are expected to live even in their adulthood.

From the respondent's viewpoint, there was a confirmation that Art and Design enhances the appreciation of nature. Children that appreciate nature can also learn to nurture their environment, and this shows that teaching Art and Design can even help children to keep their environment clean. Concerning enhancing analytical thinking, the respondents showed that the subject of Art and Design is a catalyst for learners to think and to analyze what is before them. This element helps them to grow intellectually. On the aspect of critical thinking, the respondents showed that Art and Design enhances critical thinking in children as they make art. The indication was that learners are given chance to think and visualize something before drawing and putting their concepts on paper. Figure 2 below shows that Art and design enhances the appreciation of nature and critical thinking:

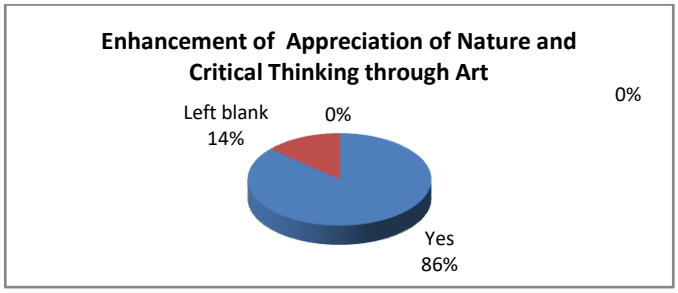

Figure 2

As for pupils' benefit from Art and Design lessons in the primary schools, respondents mentioned various issues. Notably, they indicated that pupils gained self-expression better than in any other subject and that they think intelligently because of Art and Design. Moreover, the research showed that children need to grow up with certain values and principles. Hence, there should be a way of channeling the pupils' energy as they grow up even in the communities. Such things like beauty, nature and the value of a clean environment and skills must be recognized to be as a result of art when practiced. Pupils also need to grow up with such things as Social Intelligence and Emotional Intelligence.

Social Intelligence is a concept that falls under Social Quotient (SQ). It denotes the ability of a person to tune into other people's emotions and read the subtle behavioural cues to choose the most effective response in a given situation[18]. The behavioural cues happen when children play and make art. There are several things that happen in the children's minds when they play and make art. They are able to create something, copy from others and even influence friends to change certain things in their works of art. Children need also to have emotional intelligence, which is a concept that falls under Emotional Quotient (EQ). Segal, Jeanne et al [19] define EQ as the ability to have key competencies that include self-awareness, self-regulation, self-motivation, self-social-awareness, good school performance and good social skills. Each of these virtues is needed in a child's life so that at adult stage they will be able to relate well with others and all the members of the community. In all these, play is the central theme in children's growth as illustrated in Figure 3 below:

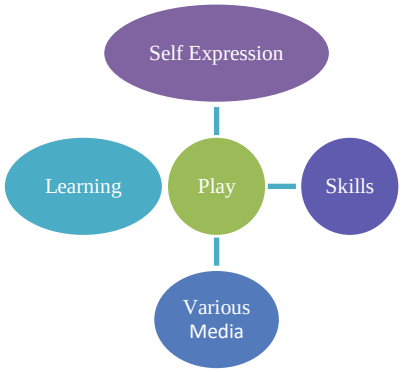

Figure 3 Play the central theme in children's learning

When children play and make art, the activities that may be observed fit in well and involve Benjamin Bloom's Theoretical Framework as shown in Table 1 below Armstrong [20].

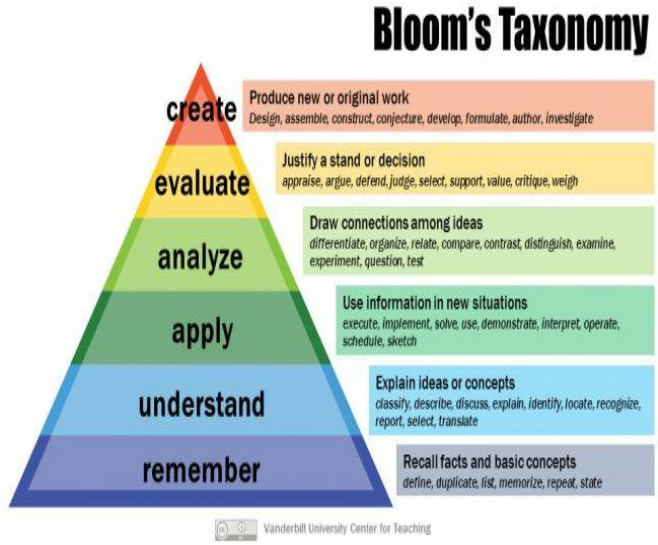

Table 1 Benjamin Bloom's Theoretical Framework

In the Benjamin Bloom's Theoretical Framework, one domain should support the other for emotional growth as children in primary schools do the following activities:

- Create – Produce new or original work by designing art works at their level
- Evaluate – Justify a stand or decision for the action taken
- Analyze – Draw connections among ideas when they organize or differentiate
- Apply – Use information in new situations
- Understand – Explain their ideas at the their level
- Remember – Recall facts and duplicate

The psychomotor growth in children takes place when a child puts a hand on something when playing. In the processes, there is an element of thinking for that activity to be accomplished. The more the child tries, the more the activity is perfected and eventually the work will be loved – emotional growth.

Bartley [21] suggests that all species are born with basic or primary emotions: fear, joy, anger, and surprise. Many of these emotions can be seen through their reflexes or the best form of communication, crying. However, these are just our basic responses; emotions eventually become more complex. As infants and toddlers, we look at our immediate models, our parents or caregivers including teachers to see how to react to various situations. In all the situations, play in children accompanied by art activities is the catalyst so much that Art and Design becomes a surfactant for each growth whether psychomotor, cognitive or affective growth as shown in Figure 4

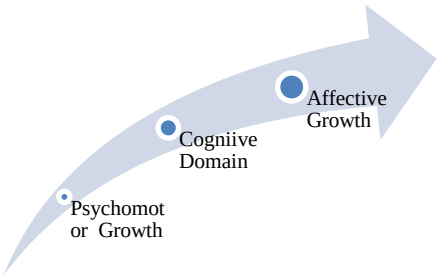

Figure 4 One Domain Supports the other for Growth

The research also targeted pupils in the primary schools, particularly the sixth grade learners who amounted to one hundred and fifty-six (156). The variables that controlled the choice of the class to be included in the research were the time when the class was free and present at the schools.

In order that Art and Design should support children in inventive, imaginative and creative drawing, schools may be involved as the educational providers responded when commenting on the matter. On this front, pupils were asked if they were told to draw something new, to write the name of anew thing that they could draw. The respondents indicated various things that each one of them could draw. Incidentally, indicating something new to be drawn is and was really what also presented one of the results for the objectives of the research. For one thing, the pupil's choices showed how wide the range is when pupils need to draw something. What pupils presented were really a wide range of things ranging from natural materials, science, fiction, agriculture, aquaculture, imagination, inventiveness, and creativity. Thus, when children began to draw, what they drew was something new which they had either not drawn before or that never existed. This tendency revealed that a child may urge the teacher to be allowed to draw what he or she wants.

The children that took part in the research presented a list that demonstrated that each pupil has expectations in terms of making art. Out of 156 pupils, 74 items were listed. This translated into a mean of 2.108, that is, about two pupils indicated a similar item. This also indicated that you may need to teach art to children based on all the issues surrounding humanity. In this way, what is drawn would tell a story about humanity in as much as it would express a theme or an event for the children and community. The pupils were further asked whether they wanted to draw whatever they wanted to draw or that the teacher should tell them what to draw in Art and Design lessons. Ninety one (58.33% of the respondents) indicated that they preferred to draw whatever they wanted to draw. The other pupils (65) representing 41.66% indicated that the teacher to tell them what to draw.

3.3 Lessons Drawn

Art and Design, a practical subject, offers chance for children in primary schools a hands-on activity, which enhances analytical and critical thinking when children play and make art. This was confirmed by 38 respondents (86.36% education providers) that were from all the categories indicated that Art and Design enhanced analytical and critical thinking and also the appreciation of nature. The subject also enables primary school children to appreciate nature and to creatively engage with their environment. Furthermore, when art is allowed to be practiced freely, children can domesticate the knowledge of their environment. This also has the potential to increase the population that cares for the environment.

Children have the need to grow up with certain values and principles in communities. The practice of art and design serves as a way of channeling their energy as they grow up in communities. Such things like beauty, nature and the value of a clean environment are some of the benefits that may accrue from the skill and practice of art. When children engage themselves in art and design as a subject of learning, it enhances self- expression and the subject is enjoyed by children as they play and make art. Since playing is central in the lives of children, art becomes a form of self-expression and a motivating way of teaching and learning for children. Education providers, therefore, should blend pupils' learning, thinking, feelings and practice with innovation, creativity, imagination and inventiveness.

Cooperation is a possible virtue among pupils through art, something that is needed in children when they are growing up so that they should support each other within schools and in communities. Their collaboration as they grow up also enhances their Social and Emotional intelligence, which is good for them to grow up as children that value the presence of the friends, others and their environment. In this way, Vygotsky's Social Development Theory of Learning pans out to be true particularly to the extent that it proposes that social interaction profoundly influences cognitive development in children.

As evident in this article, Art and Design cannot be managed like some other subjects such as Mathematics or History. Children have in mind what they see and can be drawn or done. As such, teachers need to accommodated children's' views in art. The answers are not rigid like 10 + 5 = 15. The teaching approaches should thus include such ways that can give pupils a leeway to include what they want to learn as seen in the curriculum paradigms. In the final analysis, this entails that Art and Design teaching approaches or methods should not be generalized like in other subjects. On this note, the Ministry of Education would do well to make Art and Design as a full standalone subject.

IV. CONCLUSION

As argued in this article, cognitive, psychomotor, affective and emotional growth of children effectively happens when these domains supports each other. The cognitive, psychomotor and affective aspects are supported, and it is seen that emotional growth is boosted. Emotional growth may be one of the virtues that are not easily promoted because it involves feelings. The cognitive and psychomotor growth may be easy to develop. However, the affective growth which touches on emotional development needs pupils' mutual

cooperation through play. To achieve normal balanced growth, teaching Art and Design a practical approach should be employed as opposed to simply being theoretical. Besides, when teaching this subject is casually done in class, the results can be phenomenal as it great potential to unleash imagination, creativity and inventiveness in children. Future studies could perhaps focus on understanding what propels children in their early stages to choose using particular colours.

REFERENCES

[1] *Encyclopaedia Britannica, Inc. (2021) Renaissance Art. Retrieved from https://www.britannica.com/art/Renaissance-art*.

[2] McLeod, S. A. (2018). *Questionnaire: definition, examples, design and types. Simply Psychology https://www.simplypsychology.org/questionnaires.htl.*

[3] *Painting + Batik (2020) Retrieved from https://www.com/search?q=painting+batik=sculpture*

[4] McMillan, D. (2017). *Playful Teaching and Learning. Retrieved from https://us.sagepubs.com/en-us/nam/author/dorothy-mcmillan*.

[5] McMillan, D. (2017). *Playful Teaching and Learning. Retrieved from https://us.sagepubs.com/en-us/nam/author/dorothy-mcmillan*.

[6] Lowenfeld,V. and W. L. Brittain (2011) *Digitized Creative Mental Growth*, New York: Macmillan Company.

[7] Government of the Republic of Zambia (2013) *Education Curriculum Framework* Lusaka: Ministry of Education.

[8] Government of the Republic of Zambia *Educating our Future* (2008) *Retrieved from https://www.moge.gov.zm* Ministry of Education.

[9] McLeod, S. A. (2019*). https://www.simplypsychology.org/Zone-of-Proximal-Development.html*.

[10] Kurt, S. (2020) *Theory of Multiple Intelligences – Gardner in Educational Technology, Retrieved from https://educationaltechnology.net/theory-of-multiple-intelligences-gardner/*

[11] Kliebard, H. (2013) *https://image.slidesharecdn.com/curriculumtheory.130725195704-phpapp0195/curriculum-theory-6-6-638.jp?cb=1374782276*.

[12] Kliebard, H. (2013) *Curriculum Theory Retrievedfromhttps:www.slideshare.net/charlottemalinao/curriculum -theory-24635017#related-tab-content.*

[13] K12Academics (2021) *Retrieved from https://www.k12academics.com/education-theory/curriculum-theory*.

[14] Malinao, Charlotte (2021*) Curriculum Theories Retrieved from (https://www.slideshare.net/charlottemalinao/curriculum-theory-24635017#related-tab-content*.

[15] Kurt, S. (2020) *Theory of Multiple Intelligences – Gardner in Educational Technology, Retrieved from https://educationaltechnology.net/theory-of-multiple-intelligences-gardner/*.

[16] Gardner, H. (2019) *Theory of Multiple Intelligences Retrieved fromhttp://www.verywellmind.com* .

[17] Cohen, L. et al (2007) *Research Methods in Education New* York: Routledge.

[18] *APA Dictionary of Psychology (2020) retrieved from https://dictioanry.apa.org>social-quotient.*

[19] Segal, J et al (2020) *Emotional Intelligence (EQ) Retrieved from https://www.helpguide.org/home-pages/emotional -intelligence.htm.*

[20] Armstrong, Patricia *(2001) Benjamin Bloom's Theoretical Framework Retrieved from https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/#2001*.

[21] Bartley, L (2017) *Emotional Growth: Definition & Overview. (2017, February 10). Retrieved from https://study.com/academy/lesson/emotional-growth-definition-lesson-quiz.html*.