

## **INTEGRATING VISUAL THINKING OF HEARING IMPAIRED STUDENTS IN INCLUSIVE CLASSROOM**

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### **Abstract**

Education in inclusive classes is a national alternative program in the context of fulfilling education rights based on a non-discriminatory spirit. However, in the implementation of education, there are problems that students with disabilities have in the difficulties of getting an inclusive school that meets their needs. Even schools that are considered inclusive can only fulfill 5% of the obligations required by the government for disabled students, without the provision of adequate facilities and infrastructure, and only students with disabilities who have moderate or mild disabilities can be educated in these inclusive schools. The method in this research uses qualitative research with basic research in the form of analyzing the principles in education, therefore this research is not directly useful in practice but takes time to see the results. This study also uses primary and secondary data sources, and data collection techniques by observation, in-depth interviews, documentation and research instruments. While the data analysis technique uses qualitative explorer, triangulation, and content analysis. The first finding of the research shows that *visual thinking* is a method that can facilitate hearing impaired students in learning Islamic education in full regular inclusive classes. This is evidenced from the academic achievement of hearing impaired students, including the ability to remember, the ability to think, the ability to find solutions, the ability to express opinions. The second finding shows that *integrating visual thinking method* that implements students' needs through the approach of *the collaboration visual thinking method* and *the visual thinking strategies approach*, as learning solutions that move students actively as subjects and objects of learning.

**Keywords:** *Integrating Visual Thinking*, hearing impaired students, Inclusive Education

### **A. INTRODUCTION**

Social interaction is the nature of the individual, as a communication process to establish relationships between individuals, individuals with groups and groups with groups.<sup>1</sup> One of the processes of communication in social interaction is through education. Especially in developing the full potential of one's humanity: the potential for individuality, sociality, morality and religiosity,<sup>2</sup> as the main mission of Muhammad's apostolate is to give mercy and goodness to all the *ummah* and the universe.<sup>3</sup>

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<sup>1</sup> Deddy Mulyana, *Ilmu Komunikasi: Suatu Pengantar*, (Bandung: Remaja Rosdakarya, 2005), p. 15.

<sup>2</sup> Peters, Susan.J, "Inclusive Education: An EFA Strategy for All Children", This article was accessed on October 1, 2019 from [www.worldbank.org](http://www.worldbank.org), 2003.

<sup>3</sup> Zamroni, *Pendidikan untuk Demokrasi: Tantangan Menuju Civil Society*, (Yogyakarta Bigraf, 2001), p. 24

According to Azra, one of Muhammad SAW's central missions is prophetic mission, which is to educate humans to change systematically, gradually and continuously, especially in the effort of humanist restoration of human morality towards the perfection of life.<sup>4</sup> So the education process does not take place in an empty and isolated space, but in the midst of the hustle and bustle of a rapidly changing society. This means, what happens in society sooner or later will significantly influence the education sector.

As explained by the Qur'an Surah al-Isra, verse 21, which implies the existence of individual differences among humans. Students are individuals who have different characteristics of physical, psychological, and intellectual readiness and abilities. Therefore, there must be a change of orientation from pedagogic in a narrow paradigm towards empowerment pedagogic,<sup>5</sup> where education is not just making students memorize, but more importantly makes students as humans, as the meaning of learning according to al-Ghazali as a process of humanizing humans.<sup>6</sup>

Philosophically, inclusion is implied in the Indonesian motto, "unity in diversity". This means that there is no dichotomy in the community, because disability is a natural thing that grows in the community.<sup>7</sup> In religion, inclusive education is in accordance with universal Islamic values in answering various differences in human life, namely equality (al-musawa / equality), justice (al 'adalah / justise), freedom (al-hurriyah / freedom). These values appreciate the role of the disabled in maintaining honor.

Juridically, the 1945 Constitution article 31 paragraph 1 and 2, Law no. 23 of 2002 concerning child protection, Law No. 20 of 2003 concerning the national education system which gives room for students with special needs to show their existence, namely in article 5 paragraph 1, that the same right to obtain quality education, whether those with physical, emotional, mental, intellectual or social disabilities.

Then Permendiknas (National Minister of Education Regulation) No. 22 of 2006 concerning content standards for primary and secondary education units. Government Regulation Number 17 of 2010 which explains that special education is carried out through special education units, general education units and department education units.<sup>8</sup> In fact in 1980 in Indonesia, the inclusion program was an integrated education continuation program, but it was underdeveloped. In 2004, Indonesia held a national convention with the Bandung declaration, namely "Indonesia towards inclusive education". In 2005, an international symposium at Bukit Tinggi for quality and decent inclusive education.<sup>9</sup>

Students with disabilities still experience various obstacles in inclusive schools, the first factor, the dedication and readiness of teachers, because most teachers do not yet understand the characteristics and learning styles of students with disabilities. The second factor is the curriculum and rules of the school as well as the culture of the environment

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<sup>4</sup> Azyumardi Azra, *Pendidikan Islam: Tradisi dan Modernisasi di Tengah Tantangan Milenium III* (Jakarta: Prenadamedia Group, 2014), p. 61-62

<sup>5</sup> Mohd Zailani, etc., "Direction of Moral Education Teacher to Enrich Character Education", *JIP-International Multidisciplinary Journal*, Vol. 3, No. 1, (2015), pp. 119-132

<sup>6</sup> Solichin, "Belajar dan Mengajar dalam Pemandangan Al Ghazali", *Jurnal Tadris*, Vol. 1 No. 1, (2006): pp. 139-153.

<sup>7</sup> Asrori, *Psikologi Pendidikan Pendekatan Multidisipliner* (Purwokerto: Pena Persada, 2020), p. 112

<sup>8</sup> Dedy Kustawan, *Analisis Hasil Belajar: Program Perbaikan dan Pengayaan Peserta Didik Berkebutuhan Khusus*, (Jakarta: Luxima, 2016), p. 8

<sup>9</sup> Kementerian Pendidikan Nasional, *Modul Pelatihan Inklusi*, (Jakarta: Kementerian Pendidikan Nasional, 2009), p. 10

where the application is less accommodative, for example communication interactions in learning.<sup>10</sup>

History has proven that some hearing impaired people are able to excel and prove their existence in society. Among them Helen Keller,<sup>11</sup> Thomas Alva Edison (US),<sup>12</sup> Beethoven,<sup>13</sup> Nashiru Abdulai.<sup>14</sup> There are also hearing impaired students who have proven their achievements in learning in Indonesia, including Hendry Restiya Susetya,<sup>15</sup> T. Mega Anggoyo,<sup>16</sup> Angkie Yudistia,<sup>17</sup> Dian Inggrawati Soebangil,<sup>18</sup> Rafi Abdurrahman Ridwan.<sup>19</sup> However, the issue of hearing impairment is broken with irrational assumptions on physical conditions. So that their space is narrow, difficult recognition, difficulties in employment opportunities and community acceptance, including proving that their achievements are genuine, not plagiarism and should be respected.<sup>20</sup>

There are two things that become obstacles for students with disabilities: first, the readiness and dedication of teachers to understand the learning models of students with disabilities. Second, the application of curriculum, school rules and environmental culture is less accommodative, so that hearing impaired students do not actively communicate.<sup>21</sup> For this reason, students need to prepare themselves in the learning process. Students' learning readiness is related to three elements of the basic education process including input, process and output, for example students already know or read the subject matter first. The educational process that is accompanied by readiness for learning will facilitate students to respond positively and support the achievement of educational outputs and

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<sup>10</sup> Irwanto et al., Analisis situasi penyandang disabilitas di Indonesia, (Jakarta, UI, 2010), [http://www.Ilo.Org/wcmssp5/Groups/Public/---Asia/---Ro-Bangkok/---Ilo-Jakarta/Documents/Publication/Wcms\\_160340.Pdf](http://www.Ilo.Org/wcmssp5/Groups/Public/---Asia/---Ro-Bangkok/---Ilo-Jakarta/Documents/Publication/Wcms_160340.Pdf) accessed December 1, 2019.

<sup>11</sup> American female researcher, political activist, lecturer. He is visually impaired and the first hearing impaired to get a degree in art. (Veronika yasinta, "Biografi Tokoh Dunia: Helen Keller, Tunarungu Pendobrak Keterbatasan", accessed on 7 February 2019 from <https://internasional.kompas.com/read/2018/10/03/17521121/biografi-tokoh-dunia-helen-keller-tunarungu-pendobrak-keterbatasan?page=all>).

<sup>12</sup> He was deaf since he was a teenager. Inventor of electric lights, fix the telegraph system, find a gramophone, a song turning tool.

<sup>13</sup> Getting deaf as an adult, the classical music harmony of Ludwig van Beethoven, composer who created Fur Elise. Most of the legendary songs were created after he was deaf.

<sup>14</sup> One Muslim American figure, a deaf person who campaigns for prayer, listens to sermons and reads the Qur'an. He founded Muslim Deaf Global (GDM) in 2005 to fulfill the rights and needs of deaf Muslims around the world. California, Virginia, Minnesota, Minois, Texas, Canada, Ghana have evolved. Then at the Deaf International Conference in November 2013, the 376-page "Islamic Sign Language Dictionary" was created. (KisahIslami.com 10 August 2014).

<sup>15</sup> He is a deaf student winning 1st National Exam in Public Schools. (SMK Pangudi Luhur Muntilan –Magelang). News 30 Mei 2012.

<sup>16</sup> She is the champion of design and various technological competitions (SLB Kemala Bhayangkara 2 gresik), Jawa pos, 11 April 2017.

<sup>17</sup> Author of the book "A Deaf Woman Who Breaks the Line, founded this able enterprise (2011) as Chief Executive Officer (CEO), a company engaged in the social sector (Publishing, education and communication).

<sup>18</sup> As a miss deaf word 2011 and miss deaf Europe 2011 in Prague (the 2<sup>nd</sup> Runner up)

<sup>19</sup> As a designer whose dress designs were worn specifically at the finalists of America's Next Top Model in Bali. (14 years).

<sup>20</sup> Rahmah, "Mad'u: Disabilitas Dalam Islam", *Jurnal Ilmu Dakwah Alhadharah*, Vol. 15, No. 30, 2016, pp. 53-61.

<sup>21</sup> Irwanto, *Analisis Situasi Penyandang Disabilitas di Indonesia: Sebuah Desk-Review*, (Jakarta: Pusat Kajian Disabilitas, 2010). Also see [https://www.Ilo.Org/wcmssp5/Groups/Public/---Asia/---Ro-Bangkok/---Ilo-Jakarta/Documents/Publication/Wcms\\_160340.Pdf](https://www.Ilo.Org/wcmssp5/Groups/Public/---Asia/---Ro-Bangkok/---Ilo-Jakarta/Documents/Publication/Wcms_160340.Pdf)

objectives. According to Agoes Soejanto, students' readiness is very important to achieve success in learning activities.<sup>22</sup>

## B. RESEARCH METHOD

The method in this research uses qualitative research with basic research in the form of analyzing the principles in education, therefore this research is not directly useful in practice but takes time to see the results. This study also uses primary and secondary data sources, and data collection techniques by observation, in-depth interviews, documentation and research instruments. While the data analysis technique uses qualitative explorer, triangulation, and content analysis.

Researcher conducted in-depth observations and interviews at SMAN 54 Jakarta for 2 years, with 3 stages of research. The first stage: the researcher observed the school's floor plan of SMAN 54, where SMAN 54 consisted of three floors. The first floor, the mosque, the ceremony / sports field, the principal's office, the students' department room, the administration room, the curriculum department room, the public relations department representative, the representative of the Sar-Pres field. While on the second floor: the teacher and student consultation room and classrooms. And the third floor consists of classrooms. The second stage, the researchers observed students at SMAN 54 Jakarta through the process of attending Islamic education learning in class XI, every Monday and Thursday. The observation began by seeking out the views of the community at SMAN 54 Jakarta, July 2017-April 2018. Then observing the school environment and learning process starting from April 28, 2018 until July 21, 2019. And in the third stage, researchers conducted a literature review and observation. The researcher collected data by conducting interviews with the parties involved in this research and in inclusive classes with a population.

## C. RESEARCH RESULTS AND DISCUSSION

Learning methods are knowledge of ways of learning. As a central point that must be achieved in activities between the teacher and students to achieve learning objectives, through the formulation of specific instructional goals each time a class meeting.<sup>23</sup> The essence of teaching and learning is essentially a communication process.<sup>24</sup> The communication process can be said to be successful if the teacher's message about X is well received by students according to X not Y or Z.<sup>25</sup>

Rusuli argues that orientation to matter is preferred over method.<sup>26</sup> This view is also expressed by Salisu regarding material as the most important object in learning.<sup>27</sup> Meanwhile, according to Ritu, that students need material in the form of *lifeskill* learning,<sup>28</sup> in order to be able to develop their creativity,<sup>29</sup> the various learning methods

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<sup>22</sup> Agoes Soejanto, *Bimbingan Kearsah Belajar yang Sukses*, (Jakarta: Rineka Cipta, 1991).

<sup>23</sup> Samiudin, "Peran Metode untuk Mencapai Tujuan Pembelajaran", *Jurnal Studi Islam*, Vol. 11, No. 2, 2016, pp. 114-131.

<sup>24</sup> Maimunah, "Metode Penggunaan Media Pembelajaran", *Jurnal Al Afkar*, Vol. V, No. 1, 2016, pp. 2-24.

<sup>25</sup> Herka Maya Jatmika, "Pemanfaatan Media Visual dalam Menunjang Pembelajaran Pendidikan Jasmani di Sekolah Dasar", *Jurnal Jasmani Indonesia*, Vol. 3, No. 1, 2015, pp. 89-99.

<sup>26</sup> Izzatur Rusuli, "Refleksi Teori Belajar Behavioristik dalam Perspektif Islam", *Jurnal Pencerahan*, Vol. 8, No.1, 2014, pp. 38-54.

<sup>27</sup> Salisu Shehu, "To Ward an Islamic Perspective of Development Psychology", *The American Journal of Islamic Sosial Science*, Vol. 15, No. 4, 2013, pp. 27-49.

<sup>28</sup> Ritu Rani, Anjar Singh, "Life Skills Education in Tertiary Institutions-Need of the Hour", *Zenith International Journal of Multidisciplinary Research*, Vol. 5, No. 2, 2015, pp. 68-73.

are inseparable from the learning facilities owned by humans visually, audio, and kinetic. According to Acep, that humans first learn through hearing.<sup>30</sup> Where sound waves through the ear send these impulses into the brain.<sup>31</sup>

On the contrary, according to Sri Nurbayani, that human learning begins with seeing, because a visual stimulus can awaken the power of thought and enthusiasm for activities. The practice of seeing experience becomes a means of acquiring visual perception.<sup>32</sup> Different according to Kathryr Moore, that the visual concept is a construction of pragmatic analysis. From this perspective, there is a difference between primitive sensory thinking and conceptual thinking, meaning a dichotomy between theory and practice. Therefore, it is necessary to reassess the relationship that is assumed to exist between the five senses and intelligence.<sup>33</sup>

Then the focus of this research is on hearing impaired students. The term hearing impaired student is students who have special needs or children with disabilities (different abilities). Children with special needs in Indonesia have received educational services, such as:<sup>34</sup> 1). Children with impairments, visual impairments, especially blind children, cannot use their sense of sight to participate in all learning activities and daily life;<sup>35</sup> 2). Children with hearing and speech impairments (hearing impaired speech);<sup>36</sup> 3). Children with developmental abilities (mental retardation);<sup>37</sup> 4). Children with physical or motor (physical impairment) disabilities;<sup>38</sup> 5). Children with maladjustment behavior problems (unsociable / *tunalaras*);<sup>39</sup> 6). Children with autism problems (autism children);<sup>40</sup> 7).

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<sup>29</sup> Cam Caldwell, Do X.Truong, Pham T.Link, Anh Tuan, “*Strategic Human Resource Management as Ethical Stewardship*”, *Journal of Business of Business Ethics*, Vol. 98, No. 1, 2011, pp. 171-182.

<sup>30</sup> Acep Hermawan, *Metodologi Pembelajaran Bahasa Arab*, (Bandung: PT. Remaja Rosdakarya, 2011), pp. 130-131.

<sup>31</sup> Iskandar Wassid, Dadang Sunendar, *Strategi Pembelajaran Bahasa*, (Bandung: PT. Remaja Rosdakarya, 2008), p. 227.

<sup>32</sup> Sri Nurbayani, “Menumbuhkan Kreatifitas Anak Tunarungu dalam Pengembangan Diri Seni Tari di SDN 2 Padang”, *Jurnal Sendratasik*, Vol. 6, No. 1, 2017, pp. 18-27.

<sup>33</sup> Kathryr Moore, “Visual Thinking: Hidden Truth or Hidden Agenda?”, *Journal of Visual Art Practise*, Vol. 4, No. 1, 2014, pp. 177-195.

<sup>34</sup> Yetti Yuniati, “Pengembangan Perangkat Lunak Pembelajaran Bahasa Isyarat Bagi Penderita Tunarungu Wicara”, *Jurnal Generic*, Vol. 6, No.1, 2011, pp. 29-32

<sup>35</sup> Generally learning activities are carried out by maximizing the sense of hearing and touch because the ability of the sense of touch is very prominent to replace the sense of sight. See: Dwi Putri Rahayu, “Konsep Pemahaman Mengenai Tunanetra”, accessed on July 26, 2019 from <https://www.kompasiana.com/dwiputrirahayu/5c58e014ab12ae1891159524/tunanetra?page=all>

<sup>36</sup> Because they have hearing impairment and difficulty communicating verbally with others. See: Oral Aural, “Kembangkan Keterampilan Berbahasa lisan Tunarungu”, accessed on July 26, 2019 from

<https://lifestyle.kompas.com/read/2009/05/25/20531876/Oral.Aural.Kembangkan.Keterampilan.Berbahasa.Lisan.Tunarungu>.

<sup>37</sup> Having learning problems caused by intellectual, mental, emotional, social and physical development obstacles. See: NanangRiyadi, “Tunagrahita”, accessed on July 26, 2019 from <https://www.kompasiana.com/nanangriyadi/5500c32fa33311981450ffa0/tunagrahita>.

<sup>38</sup> Medically stated that they experience abnormalities in the bones, joints, and nerves that move the muscles of their bodies, so that they are classified as children who need special services on the movement of their limbs. See: NN, “Pengertian dan Ciri-ciri Tuna daksa”, accessed on July 26, 2019 from <http://www.definisi menurutparaahli.com/pengertian-tunadaksa>.

<sup>39</sup> Prominent characteristics, among others, often cause excessive disturbance, and tend towards criminal behavior. See: Dosen Psikologi, “13 masalah Psikologi pada anak Tunalaras”, accessed on July 26, 2019 from <https://dosenpsikologi.com/masalah-psikologis-pada-anak-tunalaras>.

<sup>40</sup> In general, autistic children experience speech disorders besides experiencing intellectual abilities and nerve function disorders. Autistic child disorders include speech disorders,

Hyperactive children (attention deficit disorder with hyperactive);<sup>41</sup> 8) Children with learning disabilities (learning disability or specific learning disability). The specific term learning disability is aimed at students who have low achievement in certain academic fields, such as reading, writing, and mathematical abilities;<sup>42</sup> 9) Children with multiple handicapped developmental disorders and developmentally disabled children, with the term *tunaganda*.<sup>43</sup>

The term *tunarungu* (in *Bahasa* for hearing impairment) comes from the words "tuna" and "rungu". *Tuna* means less and *rungu* means hearing. Children with hearing impairment can be interpreted as a state of hearing loss that results in a person unable to capture stimuli through the sense of hearing.<sup>44</sup> There are two factors that lead to this, namely factors from within and from outside. As for factors from within a hearing impaired child including heredity, rubella from the mother's side, complications during pregnancy and birth. While external factors include a child having an infection at birth, inflammation of the lining of the brain, inflammation of the middle ear, illness or accident that results in damage to the middle and inner ear.<sup>45</sup>

Table 1  
**The Classification of Hearing Impairment dB (Decibel)**

No.	Sound	Indication
A	0 dB	Indicating optimal hearing
B	0-26 dB	Indicating still have normal hearing
C	27-40 dB	Indicating difficulty hearing distant sounds, requires strategic seating, requires speech therapy (mild hearing impairment).
D	41-55 dB	Indicating understanding of conversation language, unable to attend class discussions, requires hearing aids and speech therapy (mild hearing impairment).
E	56-76 dB	Indicating only being able to hear sounds from a close direction, still have the rest of hearing to learn with

neurological and intellectual dysfunction, and odd behavior. Autistic children have a strange social life and look like someone who is always sick, and does not like to get along, and is very isolated from their environment. (See: Kompas, "Lima Faktor Penyebab Autis", accessed on July 26, 2019 from <https://lifestyle.kompas.com/read/2011/01/11/09501535/Lima.Faktor.Penyebab.Autisme>).

<sup>41</sup> Hyperactivity is not a disease but a symptom. Symptoms are caused by several factors, namely brain damage (brain damage), emotional disorders (an emotional disturbance), lack of hearing (a hearing deficit), or mental retardation (mental retardation). (See: Kompas, "Beda Anak Hiperaktif dan Superaktif", accessed on July 26, 2019 from <https://edukasi.kompas.com/read/2009/07/16/12460644/beda.anak.hiperaktif.dan.superaktif>).

<sup>42</sup> In the cognitive field they are generally less able to adopt the information process that comes to them through vision, hearing, and body perception. (See: Adelia Ira Wanti, "Cara Mengatasi Kesulitan Belajar", accessed on July 26, 2019 from <https://www.kompasiana.com/adella24719/5be220d7677ffb1dc2785785/cara-mengatasi-kesulitan-belajar-menurut-bk>).

<sup>43</sup> Those who have developmental abnormalities include obstacles to neurological development. This is caused by one or two combinations of ability disorders in aspects of intelligence, movement, language, or personal relationships in the community. (See: M. Arista Akbar, "Gambaran Stres dan Strategi *Coping* pada Orang tua dengan Anak Tunaganda", accessed on July 26, 2019 from <https://docplayer.info/51012314-Gambaran-stres-dan-strategi-coping-pada-orang-tua-dengan-anak-tunaganda.html>).

<sup>44</sup> Ebid Lendra, "Persepsi Siswa Reguler Terhadap Sosialisasi Siswa Tunarungu", *E-Jupekhu, Jurnal Ilmiah Pendidikan Khusus*. Vol. 1 No. 3, 2012, pp. 1-20

<sup>45</sup> Jati Rinakri Atmaja, *Pendidikan Dan Bimbingan Anak Berkebutuhan Khusus*, (Bandung, Remaja Rosdakarya, Cet.1, 2018), pp. 70-71

		expressive or receptive language using hearing aids. (medium hearing impairment).
F	71-90 dB	Indicating only can hear sounds that are very close, sometimes considered deaf, requires extraordinarily intensive education, requires hearing aids and intensive speech training (severe hearing impairment.).
G	91 dB	Indicating the possibility of being aware of the sounds or sounds and vibrations, much more dependent on sight than on hearing for the process of receiving information (deaf).

Source: Jati Rinarki Atmaja, 2018

From the hearing impairment classification it can be seen that disability occurs, both in the pre-linguistic or post-linguistic period. Deafness is the hearing loss before speech and language skills develop. Whereas post lingual deafness is hearing loss after spontaneous speech and language development.<sup>46</sup>

As a result, children with disabilities experience obstacles in the process of development and growth, both from physical, mental, intellectual, social, emotional factors. Therefore the effectiveness of communication depends on the instruments used in helping to interact, including hearing impaired children.<sup>47</sup> According to Semiawan, that the potential is very high and the visual creative thinking of children with hearing impairment is high, but if the language skills are lacking, then cognitive development, academic achievement and social abilities will be affected.

On the age list and the introduction of language concepts, children learn language by connecting experiences and language symbols acquired through hearing. The process is the basis for the development of the inner language (inner language). Furthermore, children begin to understand the relationship of language symbols with objects or events so that they can form the child's receptive language. In other words, children already understand the language of their environment (auditory receptive language). That ability develops through hearing (auditory). After that the child enters school age, vision plays a role in language development through the ability to read (visual receptive language) and writing (visual expressive language).<sup>48</sup>

In addition to communication barriers, there is a process of acceptance experienced by children with hearing impairment. From aspects experienced by them, including self-understanding, the meaning of life, changing attitudes, self-engagement, directed activities, social support. While from the aspects traversed by children with hearing impairment, the process consists of shock, grief and depression, guilt, anger, shame, adaptation and reorganization, acceptance and adjustment. In the last two aspects, interaction between children and parents is needed well, namely in the pattern of upbringing in educating, guiding, disciplining, protecting according to community norms.<sup>49</sup>

Then we made observations at SMAN 54 Jakarta, which is one of the schools with an inclusive status and has become a reference school with national and international

<sup>46</sup> Tati Hernawati, "Pengembangan Kemampuan Berbahasa dan Berbicara Anak Tunarungu", *Jurnal Jassi\_Anakku*, Vol. 7 No. 1, 2007, pp. 101-110

<sup>47</sup> Fatma Laili Khoirun Nida, *Komunikasi bagi Anak Berkebutuhan Khusus*, Jurusan Dakwah dan Komunikasi STAIN Kudus, 2017.

<sup>48</sup> Tati Hernawati, "Pengembangan Kemampuan Berbahasa dan Berbicara Anak Tunarungu", *Jurnal JASSI\_Anakku*, Vol. 7, No. 1, 2007, pp. 101-110

<sup>49</sup> Fariat Nurhayati, Ningning Sri Ningsih, "Pola Asuh Orang Tua terhadap Sosioemosional Anak Tunarungu Usia Sekolah", *Jurnal Kesehatan*, Vol. VIII, No. 1, 2017, pp. 13-17.

achievements, including the acceptance and development of students with special needs. SMAN 54 is one of 17 inclusion schools among 590 schools in Jakarta.

The history of the inclusive school at SMAN 54 began in 1979, beginning with the presence of students from Budi Utomo High School in central Jakarta, having its address at Cipinang Muara, located at SMA 53 Jakarta, with a distant class system. Until 1981 under the leadership of Drs Yunan Abdullah, SMAN 54 Jakarta was moved to a new location that was specifically designated for SMAN 54 Jakarta. In 1981 these students were recognized as the first batch of SMAN 54 Jakarta.

SMAN 54 has a vision of excellence in achievement, having a global outlook, based on faith, piety, science and technology. As the vision of national education is the realization of the education system as a strong and authoritative social institution, to empower citizens to become qualified human beings so that they can respond to the changing times.

The mission of SMAN 54 also refers to the mission of national education, which is to optimize the implementation of the learning process, guidance and life skills, improve the competence of complete and competitive learning outcomes, apply faith, piety and noble morals comprehensively and develop global learning. It refers to the national education mission, which is to make efforts to expand and equalize the opportunity to get quality education, besides helping and facilitating it. The next mission is to help and facilitate children's potential, improve the quality of moral personality formation, improve the professionalism and accountability of educational institutions and empower community participation.

SMAN 54 also embodies the creation of social interaction between school residents with a variety of characteristics and the creation of social sensitivity. In Jalaludin Rumi's terms, teaching is the heart and social area.<sup>50</sup> Therefore SMAN 54 applies a vision and mission based on four pillars of development: heart (ethics), thought (literacy), taste (aesthetics), and sports (kinesthetic), which are manifestations of the noble values of the Pancasila. In line with Muhammad Rusdy's opinion, character education requires four pillars of education.<sup>51</sup> Thus becoming a conscious and planned effort to realize the atmosphere and the learning process, it is expected that students actively develop their potential.<sup>52</sup>

SMAN 54 students get attention from school policy which is student oriented. In the sense that students are not objects but learning subjects. This means that they are not measured by the extent to which students master the material, but the extent to which students emancipate in the learning process. Therefore, positive and negative trends in the achievements of Islamic education, can be seen from how a person behaves, as stated by Anita Taylor, "*all you think and feel about you, the entire complex of beliefs and attitudes you hold about yourself*".<sup>53</sup>

In line with Galloway, that the learning process has equal rights (emancipation) between students and teachers.<sup>54</sup> As according to Ambarin, all can not be separated from the learning objectives in school so that students can actualize themselves optimally in

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<sup>50</sup> Nevzat Tarhan, *Terapi Masnawi*, (Turki, Qof Media Kreatif, 2015), p. 80.

<sup>51</sup> Muhammad Rusydi, "Pendidikan Karakter pada Psikolinguistik Bahasa Arab", *Jurnal Al-Ulum*, Vol. 13 No 1, 2013, pp. 73-86.

<sup>52</sup> Law of the Republic of Indonesia Number 20 of 2003.

<sup>53</sup> Dina Khairani, "Analisis Konsep Diri Siswi-Siswi Penyandang Tunarungu dan Tunawicara SLB Negeri Cicendo Bandung", *E-Proceeding Of Management* Vol.3, No.2 2016, pp. 26-35

<sup>54</sup> Sarah Galloway, "Reconsidering Emancipatory Education Staging a Conversation Between Paulo Freire and Jacques Rancere", *Educational Theory*, Vol. 62, No. 2, 2012, p. 163.

social life.<sup>55</sup> However, the frequency of creativity and learning for now is still lacking, because the learning system feels top-down.<sup>56</sup> SMAN 54 also faces this. Where the scientific approach is applied, has not been maximally realized.

Furthermore, in the implementation of visual thinking in learning Islamic education for hearing impaired students. In the methods of learning in inclusive classrooms, it is expected that an understanding of strategies can facilitate the application of the method. So that the learning process is fun, not rigid and boring.<sup>57</sup> The strategy must be in accordance with the concepts and objectives of Islamic religious education learning in particular and educational goals in general. We also have to understand that the current generation is generation Y, which is very related to technology, where the development of technology is very fast over time.

One means of forming personality in students is learning from Islamic education.<sup>58</sup> Therefore, how can Islamic education learning be accepted by generation Y. According to Rijki Ramdani, the use of technology is very important for the learning of Islamic education,<sup>59</sup> including the use of appropriate methods. According to Iis, the accuracy of the method becomes the dominant factor that determines the success rate of a transformation of science, the process of technology utilization and the internalization of ethical and moral processes.<sup>60</sup>

Visual thinking implementation answers the communication process whereby the teacher's message about X is well received by students according to X not Y or Z,<sup>61</sup> both in normal students and hearing impaired students. Although according to de Vicentis, both have very different learning strategies.<sup>62</sup> In addition, Visual thinking is more applicable to supporting a scientific approach according to the 2013 curriculum that is applied to national education including SMAN 54 Jakarta.

Theoretically, Islamic education has a systematic link between educational outputs and educational output.<sup>63</sup> The actualization of Islamic education output is reflected in the form of religious observance behavior of students, as a product of religious education. This is a function of Islamic education. To produce an output or outcome of good Islamic education, it requires learning readiness. This is inseparable from the nature of students as humans, with the term spirituality suggesting the

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<sup>55</sup> Ambarin Mooznah Auleear Owodally, "Multilingual Language and Literacy Practices and Social Identities In Sunni Madrassahs In Mauritius: a Case Study", *Reading Research Quarterly*, Vol. 46, No. 2, 2011, pp. 134-155.

<sup>56</sup> Mawardi Ahmad, Syahraini Tambak, Ramlan Nasution, "Hubungan Potensi Akal dengan Kreativitas Belajar Siswa Bidang Studi Pendidikan Agama Islam di SMK Kanada Sakura Indonesia (KANSAL) Pekanbaru", *Jurnal Al Thariqah*, Vol. 2 No. 1 (2017):pp. 51-72.

<sup>57</sup> Intan Triana Chintiyatmi, Nurlela, Mahfud, "Pengaruh Penerapan Scientific terhadap Hasil Belajar pada Mata Pelajaran Pendidikan Agama Islam Siswa Kelas VIII SMPN 7 Kota Cirebon", *Jurnal Al Tarbawi Al-Haditsah*, Vol. 1, No. 1, 2017, pp. 1-18.

<sup>58</sup> Nur Ainiyah, "Pembentukan Karakter Melalui Pendidikan Agama Islam", *Jurnal Al-Ulum*, Vol. 13, No. 1, 2013, pp. 25-38.

<sup>59</sup> Rijki Ramdani, Munawar Rahmat, Agus Fakhruddin, "Media Pembelajaran E-Learning dalam Pembelajaran PAI di SMA Laboratorium Percontohan UPI Bandung", *TARBAWY, Indonesian Journal Of Islamic Education*, Vol. 5 No. 1, 2018, pp. 46-59.

<sup>60</sup> Sumarsih, Implementasi Teori Pembelajaran Konstruktivistik dalam Pembelajaran Mata Kuliah Dasar-dasar Bisnis, *Jurnal Pendidikan Akuntansi Indonesia* Vol. VIII. No. 1, 2009, pp. 54 – 62.

<sup>61</sup> Herka Maya Jatmika, "Pemanfaatan Media Visual dalam Menunjang Pembelajaran Pendidikan Jasmani di Sekolah Dasar, *Jurnal Jasmani Indonesia*, Vol. 3, No. 1, 2015, pp. 89-99.

<sup>62</sup> Ni Ketut Sri Eka Utari, "Peningkatan Pemahaman Siswa Tunarungu Menggunakan Model Pembelajaran Langsung Bermedia Gambar", *Journal Inclusive 77 Inclusive: Journal Of Special Education*, Vol 2, No. 2, 2016, pp. 77-87.

<sup>63</sup> Fatah Syukur, "Reorientasi Manajemen Pembelajaran PAI dan Deradikalisasi Agama", *Jurnal Walisongo*, Vol. 23, No. 1, 2015, pp. 113-130.

expression of a sense of belonging to God and the term religiosity suggesting one's religious expression.<sup>64</sup>

The role of Visual Thinking in the delivery of visual information is usually considered as a form of communication that is not in oral form. There are five visual categories in the field of education, namely semiotics and film / video conventions, symbols and icons, images and illustrations, multi-images, graphic representation. Learning using visual literacy can be done in several ways:

- 1) Activity exploring visual text in context.
- 2) Teaching code and text structure to support students learning in composing their own texts.
- 3) Using a series of strategies to read visual text and continue with writing / drawing activities about the understanding gained.
- 4) Integrating visual and verbal texts.
- 5) Rewriting; that is, reading information in one particular form and summarizing it in another form (such as diagrams or tables).

Based on the above activities, the visual categories used by students in learning Islamic education with visual thinking methods must be able to provide verbal understanding in accordance with the visual message delivered. Thus visual thinking that will be applied to religious education materials must be preceded by an understanding of several things:

- 1) Conformity between visual form categories (videos, symbols, images, multi-images, graphics) with Islamic educational material that will be delivered to achieve learning objectives.
- 2) Understanding the characteristics and learning styles of students in the inclusive class.
- 3) Conformity with environmental conditions, facilities and time to facilitate teachers and students to carry out teaching and learning.

Then the teacher must choose a visual representation of the text or object that becomes the material. Appropriate visual choices, will facilitate students in the process of thinking, for example in identifying something that is known and unknown.

Next, pay attention to students in learning Islamic education, how the visual process is able to stimulate the thought process further. Thus visuals can help stimulate metacognitive processes such as regulating how to observe, see, pay attention, imagine, estimate or judge.

Furthermore, memories are stored in three storage systems, namely 1). sensory memory, short term memory, long term memory; 2). Motor sensory, for example vision (visual motor sensory); 3). Hearing sensor (audio motor sensory) and so on.<sup>65</sup>

In order to be effective, visuals should be placed in the context of students interacting with visuals (images) to ensure the occurrence of information.<sup>66</sup> Therefore

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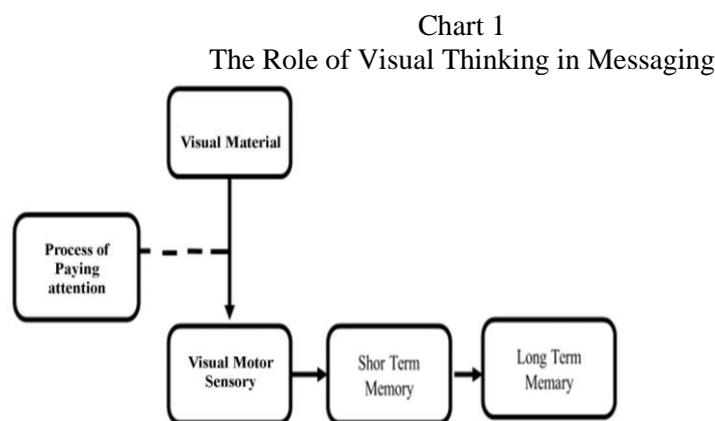
<sup>64</sup> According to Zohar, spirituality is an innate internal ability of the brain and the human soul. As according to Ahmad Syuedy, spirituality is the impetus for all human actions, the impetus for responses to the problems of contemporary society. (See: Achmad Sauq, *Meraih Kedamaian Hidup Kisah Spiritualitas Orang Modern*, (Yogyakarta: Sukses Offsat, 2010), p. 6.

<sup>65</sup> Magda Bhinnety, "Struktur dan Proses Memori", Buletin Psikolog, Fakultas Psikologi Universitas Gadjah Mada, Vol. 16, No. 2, 2008, pp. 74 – 88. See also Suparmi, "Studi Meta Analisa: Strategi *Rehearsal* dan Memori Jangka Pendek" *Jurnal Psikologi*, Vol. 5 No. 2, 2010, pp. 289 – 310, See also Raymond, Rahmat Suhatman dan Meilany Dewi, "Pembangunan *Game Memory Training* terhadap Peningkatan *Short Term Memory* (STM) pada Anak SMP Menggunakan *Speech Recognition* (Studi Kasus: SMP Dharma Loka Pekanbaru) ", *Jurnal Nasional Teknologi dan Sistem Informasi*, Vol. 04 No. 02, 2018, pp. 061-072.

according to Fajar, to facilitate understanding and strengthen memory through visual media<sup>67</sup> as long-term information, because in learning Islamic education is a concept of religious life.

In visual thinking, teachers must be able to process the class by asking critical questions, where they can generate interest, assess student preparation, diagnose various strengths and academic needs of students and encourage critical thinking skills. Thus it can be integrated social skills and academic achievement.<sup>68</sup> As according to Surya, the creation of maximum thinking as a foundation in accordance with the interests and talents of students.<sup>69</sup>

Literacy in visual thinking will produce students who have creative souls, critical thinking, communication and collaboration.<sup>70</sup> Visual thinking becomes a form of literacy culture that integrates through teaching strategies and methods, classroom management and evaluation activities.<sup>71</sup> The visual role in delivering messages can be seen in the chart below:



Source: Fajar Kawuryan, 2012

After understanding visualization of vision optimization as the main mean of hearing impaired students in learning, the researcher analyzed the steps of visual thinking methods in learning in inclusive classes. This is to facilitate hearing impaired students in learning Islamic education. The steps are as follows: 1). The use of language that is concise and clear, and 2). The use of images, graphics and total communication.

<sup>66</sup> Erni R. Manara, A. Halimah, “Pengaruh Tata Ruang Kelas dan Media Visual terhadap Minat Belajar Fisika Peserta Didik Kelas VIII MTs Madani Alauddin Paopao”, *Jurnal Pendidikan Fisika* Vol. 3 No. 2, 2015.

<sup>67</sup> Fajar Kawuryan Trubus Raharjo, “Pengaruh Stimulasi Visual Untuk Meningkatkan Kemampuan Membaca Pada Anak Disleksia”, *Jurnal Psikologi Pitutur* Vol. 1 No.1, 2012, pp. 9-20.

<sup>68</sup> Williams, Evelyn. *Mengajar dengan Empati*. (Bandung: Nuansa. 2005), p.18.

<sup>69</sup> Edy Surya, “*Visual Thinking* dalam Memaksimalkan Pembelajaran Matematika Siswa dapat Membangun Karakter Bangsa”, accessed on 18 October 2018 from [http://JournalUpi.Edu/File/Edi\\_SPdf](http://JournalUpi.Edu/File/Edi_SPdf), p. 1-7.

<sup>70</sup> Ika Fadilah Ratna Sari, “Konsep Dasar Gerakan Literasi Sekolah pada Permendikbud Nomor 23 Tahun 2015 tentang Penumbuhan Budi Pekerti”, *Al-Bidayah: Jurnal Pendidikan Dasar Islam*, Vol. 10, No. 01, 2018, pp. 94-95, see also Hamid Muhammad, *Desain Induk Gerakan Literasi Sekolah*, (Jakarta: Direktorat Jenderal Pendidikan Dasar dan Menengah Kementerian Pendidikan dan Kebudayaan, 2016), pp. 8–10.

<sup>71</sup> The School Literacy Movement can be divided into 1). Basic Literacy, 2). Library Literacy, 3). Media Literacy, 4). Technology Literacy, 5). Visual Literacy.

Furthermore, the teacher's interaction with students, students and students must use the principle of directed face, directed sound and demonstration, this must also be a concern in making visualizations. At SMAN 54, hearing impaired students already have vocabulary skills in good verbal language, where the visual thinking power will greatly facilitate the understanding of hearing impaired students. The use of hearing aids also helps a little in sound sensitivity, so they have a balance of expressive and receptive language skills.

Visual thinking routines affect today's class culture. When a teacher makes use of a routine of visual thinking, students' way of thinking becomes visible. They deliberately realize their own thoughts, and the teacher maps their progress by remembering evidence of their thoughts. Therefore, visual thinking is highly valued in the classroom. Students are well equipped through sufficient opportunities to express, explain, expand, and challenge their own ideas.<sup>72</sup>

In return, students become active, curious, engaged, enthusiastic, and responsible learners. When students are actively involved in the learning process, students become involved meaningfully and are highly motivated in achieving lasting understanding that can be transferred through real life situations. With a visual thinking routine, a teacher will receive a minimal response: "I can't do it".<sup>73</sup>

Considering the importance of making students' thinking visible through the routine use of visual thinking, teachers, administrators and parents must ensure a rich and unique learning environment to produce the best things for each student. How to bring learning to a new level, and direct all students to lifelong learning that is full of exploration, investigation, and questions.<sup>74</sup>

Basically the teaching methods conducted by religious education teachers have used the stages of the method in visual thinking, only still focusing on the lecture method. The stages of the discussion did not get enough composition time.

The visualization used in visual thinking still tends to display text. From PowerPoint, hearing impaired students are assisted in learning Islamic educational materials. However, they feel they have not yet achieved the expected learning outcomes, because in the process of explaining using the lecture method, the style of the teachers who like to walk back and forth in giving explanations makes it difficult for them to be observed in their spoken language. However, the problem was answered with the help of the live transcribe application to translate the teachers' information.<sup>75</sup>

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<sup>72</sup> Education in learning today is centralized in integrating Strengthening Character Education (Penguatan Pendidikan Karakter / PPK) in learning. There are 5 strengthened characters, namely: religious, nationalist, independent, mutual cooperation, and integrity. The movement needs to integrate, deepen, expand, and simultaneously harmonize various character education programs and activities that have been carried out until now. In addition, there is now a School Literacy Movement which is the ability to access, understand, and use something intelligently through various activities including reading, seeing, listening, writing and / or speaking.

<sup>73</sup> Tishman, S., & Palmer, P., *Visible thinking*. Leadership Compass, Vol. 2, No.4, 2005, pp. 1-3. See also Alain Gholam, "Visual Thinking Routines: A Mixed Methods Approach Applied to Student Teachers at the American University in Dubai", *Journal of Inquiry & Action in Education*, Vol. 9 No. 1, 2017, p. 25

<sup>74</sup> Salmon, A. K., "Thinking Routines. *Teaching Young Children*, Vol. 5, No.1, 2011, pp. 18-22, see also Alain Gholam, "Visual Thinking Routines: A Mixed Methods Approach Applied to Student Teachers at the American University in Dubai",... p. 26.

<sup>75</sup> Edwin, Y. *Dua Aplikasi Android Bantu Penderita Gangguan Pendengaran*. Retrieved from Beritagar:<https://beritagar.id/artikel/sainstekno/dua-aplikasi-android-bantupenderita-gangguan-pendengaran>, p. 7. See also A. Setiawan, G.X. Naphan, K. Dynata, J.E. Friry, H.L.H.S. Warnars, "Aplikasi *Deaf Helper* untuk Interaksi Komunitas Penderita Gangguan Pendengaran", *Jurnal Sistem Informasi, Teknologi Informatika dan Komputer*, Fakultas Teknik Universitas Muhammadiyah Jakarta, Vol. 10, No. 1, p. 19

The accompanying teacher facilities for special needs students at SMA 54 in the inclusive class are also not available, there is only a teacher who handle students with special needs, which is administrative / counseling, so that the teacher does not help in the learning process that is not yet understood by students. Therefore, hearing impaired students tend to supplement their needs by learning independently.

Interaction of hearing impaired students can run well, only it is created only for certain students, so that the active socialization of their communication becomes less than optimal. Besides that, they do passive communication. Therefore, they argue that changes in classroom layout are needed, namely changes in seating, which were originally lined up with elongated seats, can be changed in a half circle so that students can see each other and read the words of their lips.

According to hearing impaired students, religious education learning, although the term visual thinking has not yet been introduced to students, but in the stages of the process is very helpful in their learning process, for example by using powerpoint or visualization, explaining with lectures then conducting discussions to practice conclusions. Although according to them, the method of visual thinking is only conducted on certain meeting materials. Because learning Islamic education is more in terms of memorization and practice.

In the 2013 curriculum, students are required to be active, with an emphasis on discussion methods, according to student guardians, with longer school hours, students complain about assignments because teachers are required to make it.<sup>76</sup> However, it has not been supported by students' learning behavior patterns, where their fighting abilities are still low.<sup>77</sup> According to the student guardians, students often complain that they do not understand the lesson because the teacher's explanation is not adequate. Teachers are not curriculum servants, which are limited by that, but how to build understanding for students from the curriculum as a great guide, not on the pursuit of material, and make students able to do the test. If students are unable, the teacher only instructs to memorize the lesson.<sup>78</sup>

One of the stages of subject matter is to build a method of thinking that is undergoing a thought process where students are trained to think. Because the subject matter is not just the content of the theory but how the theory is built. If the thought process is trained, then the process will become an inherent pattern at any time.<sup>79</sup> In a method that is applied, of course the question is how the results of student assessment of the learning methods carried out by the teacher. Although learning is essentially a process, not an outcome. Because assessment is not only limited to values (numbers), but achievements in self-development.<sup>80</sup>

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<sup>76</sup> The 2013 curriculum also requires learning materials to be metacognitive which require students to be able to predict and design. In line with that the realm of HOTS is analysis which is the ability to think in specifying aspects / elements of a particular context; evaluation is the ability to think in making decisions based on facts / information; and creating is the ability to think in developing ideas.

<sup>77</sup> Robertus, Ini yang dihadapi murid dengan kurikulum 2013, <https://edukasi.kompas.com/read/2014/12/10/13381611/Ini.yang.Dihadapi.Murid.dengan.Kurikulum.2013>, accessed on July 26, 2019).

<sup>78</sup> Adiva's parents interview in class when they take their daughter's report cards on June 15, 2019.

<sup>79</sup> Kompas, Pendidikan, membangun metode berpikir, accessed on July 26, 2019 from <https://edukasi.kompas.com/read/2017/09/14/09481451/pendidikan-membangun-metode-berpikir>,

<sup>80</sup> Arifin, Zainal. *Evaluasi Pembelajaran. Prinsip, Teknik, Prosedur*. (Bandung: Remaja Rosdakarya, 2013), p. 4. This is in line with the explanation from prof. Husni Rahim in his presentation in the education management class on 28 December 2017 that the results of education were from a change in students. From not knowing to knowing, from being undisciplined to being disciplined, and so on. In the pedagogy seminar at Pamulang University also explained by Prof.

Visual thinking socialization can be informed by showing the benefits of its use in learning. It supports the vision of the pillars of education in the form of developing learning to know, learning to do, learning to be a person, learning to live a life together.<sup>81</sup>

From the stage of visual thinking, both looking, seeing, imagining, showing and telling can build the ability to think, creative, egalitarian, democratic characters so that they can become human agency or personal creativia.<sup>82</sup> Visual thinking becomes a method that creates social interaction. Because in visual thinking, there is an interaction between students created in cooperation, namely in the discussion stage. As according to Setiawati and Suparno, learning to express opinions, resolving differences of opinion within groups is part of developing students' potential.<sup>83</sup>

The advantages of visual thinking that researchers observe in learning include:

**1. Visual Thinking helps students to classify their thoughts**

In visual thinking, the concept of material is easy to understand when it is associated with prior knowledge. Students more easily understand connected ideas and realize how information can be grouped and organized.

**2. Visual Thinking Helps students to organize and analyze information.**

Students can easily understand information and also understand the relationship of patterns through diagrams, charts or tables

**3. Visual Thinking helps students to integrate new knowledge**

Students easily remember information when studied visually and verbally, especially if through video.

**4. Visual Thinking helps students to think critically**

Connected verbal and visual information helps learners make connections, understand relationships and recall related details.

Visual thinking has been done at SMAN 54, where students are invited to think scientifically on the material being discussed and open material communication and active interaction. In line with Ariawan, that students who learn by using visual thinking further improve their communication significantly.<sup>84</sup>

In the material communication and active interaction of hearing impaired students there are factors that influence the process of acceptance experienced by them, both from self-understanding, meaning of life, changing attitudes, self-engagement, directed activities and social support, which come from families, schools and communities. And there are other factors that influence it, which come from the students themselves, for example the process of shock, grief and depression, guilt, anger, shame and embarrassment, adaptation and reorganization, acceptance and adjustment. These factors are influenced by parenting as a form of interaction of children with parents,

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Dr. H. Atwi Suparman, MSc on January 20, 2018 that educational outcomes are a process in itself which gradually develops better than students.

<sup>81</sup> Eko Triyanto, Sri Anitah, Nunuk Suryani, "Peran Kepemimpinan Kepala Sekolah Dalam Pemanfaatan Media Pembelajaran Sebagai Upaya Peningkatan Kualitas Proses", *Jurnal Teknologi Pendidikan*, Vol. I, No. 2, 2013, pp. 226-238

<sup>82</sup> Sarwenda, "Pembelajaran Kritis di Pesantren; Studi Kasus di Pesantren Darul Fallah Bogor", *Tarbiya*, Vol. 1, No. 2, 2014, p. 151.

<sup>83</sup> Eka Setiawati and Suparno, "Interaksi Sosial dengan Teman Sebaya pada Anak Homeschooling dan Anak Sekolah Reguler (Study Deskriptif Komparatif)", *Indigenous, Jurnal Ilmiah Berkala Psikologi*, Vol. 12, No. 1, 2010, pp. 55-65.

<sup>84</sup> Ariawan, "Pengaruh Pendekatan Pembelajaran Visual Thinking disertai Aktivitas Quick On The Draw Terhadap Kemampuan Komunikasi Matematis", *Suska Journal Of Mathematics Education*, Vol 2, No. 1, 2016, pp. 20-30.

teachers or the environment in educating, guiding, disciplining and protecting children to understand norms.<sup>85</sup>

According to Ehiobuche, discussion as a form of learning and training of students with the help of the teacher as a facilitator on how to express emotions, reinforce values, ask questions, point of view of clarity and propose solutions to problems.<sup>86</sup>

Table 2  
**The Benefits of Visual Thinking for Educational Achievements**

<i>Visual thinking</i>	Educational pillar	2013 curriculum (scientific approach)	21st Century Challenge	Student achievements in education
<i>Looking</i>	<i>Learning to know</i>	Reading	<i>Critical thinking skill</i>	Literacy
<i>Seeing</i>	<i>Learning to do</i>	Questioning	<i>Creativity</i>	Autonomy
<i>Imagining</i>	<i>Learning to be</i>	Reasoning	<i>Communication</i>	Competency
<i>Showing and Telling</i>	<i>Learning to live together</i>	Communicating	<i>Collaboration</i>	Social inclusion

Source: Processed by researchers, 2019

From the two tables above, visual thinking has a positive impact both on aspects of student development and aspects of educational achievement. Because in this method it is not measured how far the students master the material, but how far the students are emancipating towards the learning process, not "student oriented" but "looking-glass self".<sup>87</sup> As according to Anita Taylor, "all you think and feel about you, the entire complex of beliefs and attitudes you hold about yourself".<sup>88</sup> Visual thinking provides answers to the growth of critical thinking power, displays creativity, trains expressing opinions, and teaches the ability to work together.

It can be said that the direct impact of visual thinking on students can be felt directly. As according to Hizbul Muflihini, the learning process must be more down to earth or humanistic, which emphasizes the fulfillment of students' of talents, interests and abilities.<sup>89</sup>

This research resulted in a new finding that is integrating visual thinking method is the development of visual thinking method after analyzing the application of visual thinking at SMAN 54 Jakarta.

Chart 2  
***Integrating Visual Thinking Method***

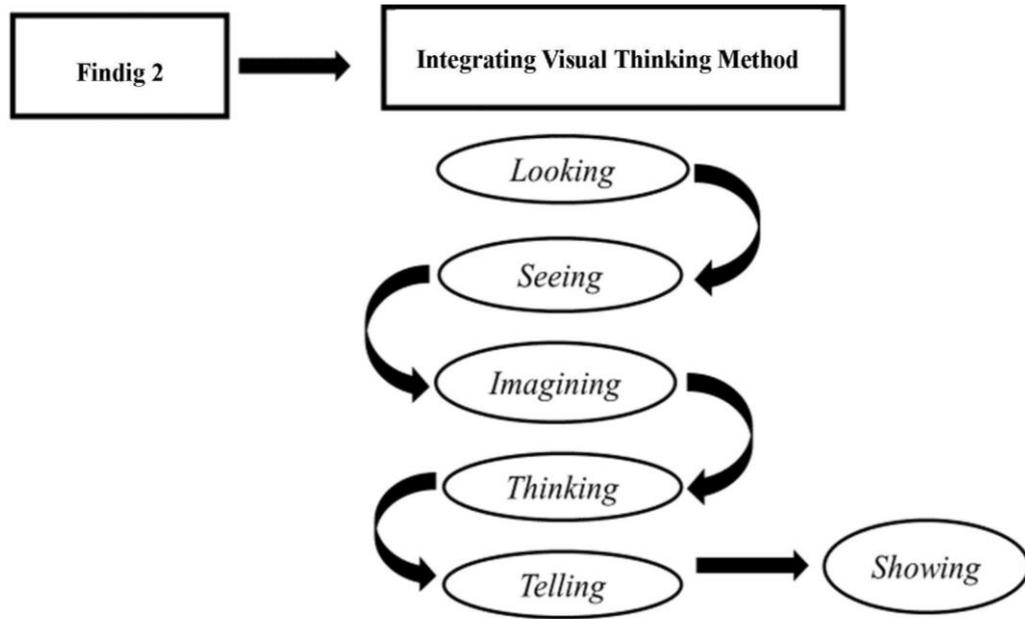
<sup>85</sup> Farial Nurhayati1, Ningning Sri Ningsih, "Pola Asuh Orang Tua Terhadap Sosioemosional Anak Tunarungu Usia Sekolah", *Jurnal Kesehatan*, Vol. 8, No. 1, 2017, pp. 13-17.

<sup>86</sup> Chris Ehiobuche, Hui-wen Tu and Bright Justus, "*Dalgue As A Tool for Teaching and Learning of Enterpreunership*", *Proceedings of ASBBS*, Vol. 19, No. 1, 2012, p. 306.

<sup>87</sup> Law of the Republic of Indonesia Number 20 of 2003 Yamin, Martinis, Ansari, & Bansu, *Taktik Mengembangkan Kemampuan Individual Siswa*. (Jakarta: Gaung Persada Press, 2018).

<sup>88</sup> Dina Khairani et al., "Analisis Konsep Diri Siswi-Siswi Penyandang Tunarungu Dan Tunawicara SLB Negeri Cicendo Bandung", *E-Proceeding of Management*, Vol.3, No.2, 2016, p. 2635.

<sup>89</sup> Muh. Hizbul muflihini, Aplikasi dan Implimentasi Teori Behaviorisme dalam Pembelajaran (Analisis Strategis Inovasi Pembelajaran), August 20, 2019.

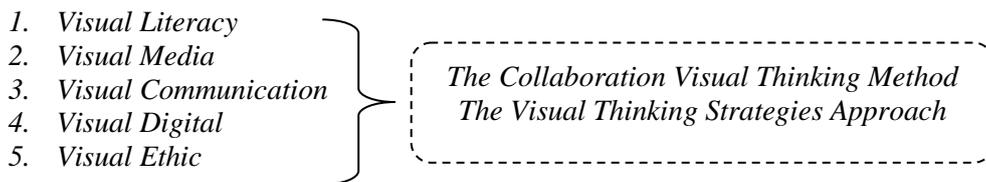


Data source: Processed by researchers, 2019

In the concept of learning methods, teachers must pay attention to various things that become problems in learning. How the method can be learned and facilitates the teacher in communicating about the material to be delivered. How do students get a complete picture of the material. And how teachers and students are able to feel comfortable in the teaching and learning process. Therefore, teachers must understand when determining learning methods. This means that teachers must master pedagogy. Pedagogy is the science and arts of teaching children.<sup>90</sup>

By referring to the study of visual literacy, visual media, visual communication, digital visuals, visual ethics. In addition, through the study of visual thinking and observation of this research, the researchers found Novelty: "The Integrating Visual Thinking Method".

Chart 3  
**The Data Source of Integrating Visual Thinking Method**



The researchers define the Integreting Visual Thinking method as the ability, process and result of creation, interpretation, use of images and diagrams in the mind, on paper or using technological tools, with the aim of describing and communicating information, ideas and developing previous ideas and improving understanding as a whole learning method collaboration. Integrating Visual Thinking method is formulated from collaborative learning methods and visual thinking approaches.

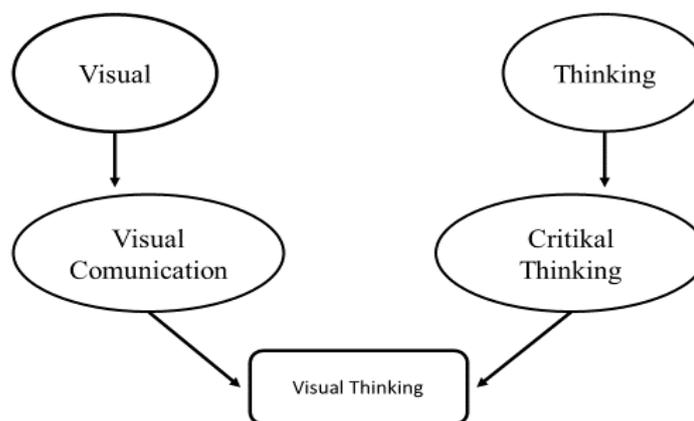
<sup>90</sup> Djudju Sudjana, *Ilmu Dan Aplikasi Pendidikan*, (Jakarta, Imperial Bhakti Utama, Handbook, Cet 12, 2007), p. 1.

As according to Carpenter, to obtain optimal learning outcomes requires a combination of lecture methods with other active learning.<sup>91</sup> The development of the transition from traditional ways of learning to modern ways of learning is influenced by dynamic lifestyle.<sup>92</sup> Modern ways of learning have led to what is needed and what are the abilities and interests of students. In addition, they must pay attention to the learning situation and how effective the teaching method is.<sup>93</sup> In addition, this is adapted to Islamic education learning materials. According to Fatah Syukur, the position is not only on the content or material, but also the elements (input, process, output, outcome).<sup>94</sup>

Therefore, to maximize the elements of the process, researchers collaborate several concepts about visual thinking from the Barahal version (2008),<sup>95</sup> Bolton (2011),<sup>96</sup> Alain Gholam (2017),<sup>97</sup> visual thinking of Islamic perspectives, visual thinking Ramlah, including with a review of methods that support method for output, expected outcome.

In the visual thinking of the Barahal version found a learning concept by activating the use of visual communication and critical thinking, as in the following chart:

Chart 4  
**Visual Thinking Concept**



Data source : Processed by Researchers, 2019

Visual communication is a visual activity with concepts such as knowing and understanding the character of a letter / picture used (Legibility), the accuracy of the use of letters / images that are communicative (Readability), visual communication can be

<sup>91</sup> Jason M.Carpenter, "Effective Teaching Methods for Large Classes", *Journal of Family & Consumer Sciences Education*, Vol. 24, No. 2, 2006, p. 18.

<sup>92</sup> Ahmad Chorul Rofiq, "Moderasi Daulah Rustamiyyah Dalam Penyelesaian Konflik Politik", *Analisis*, Vol. 14, No. 1, 2014, p. 112.

<sup>93</sup> Miftaku Rohman, "Konsep Pendidikan Islam Menurut Ibnu Sina Dan Relevansinya Dengan Pendidikan Modern", *Epistemé*, Vol. 8, No. 2, 2013, pp. 279-300.

<sup>94</sup> Fatah Syukur, "Reorientasi Manajemen Pembelajaran PAI dan Deradikalisasi Agama", *Jurnal Walisongo*, Vol. 23, No. 1, 2015, pp. 113-130.

<sup>95</sup> Barahal, S.L., *Thinking About Thinking*, (Phi Delta Kappan, Vol. 90 No.4, 2008, pp. 298-302. See also Alain Gholam, "Visual Thinking Routines: A Mixed Methods Approach Applied to Student Teachers at the American University in Dubai", *Journal of Inquiry & Action in Education*, Vol. 9 No. 1, 2017, p. 12.

<sup>96</sup> Bolton, S , *Decoding Visual Thinking Never Workshop*, Visualising Creative Strategies, accessed on August 22, 2019 from <http://issuu.com/qpbr/docs/decodingvisualthinking>.

<sup>97</sup> Alain Gholam, "Visual Thinking Routines: A Mixed Methods Approach Applied to Student Teachers at the American University in Dubai", *Journal of Inquiry & Action in Education*, Vol. 9 No. 1, 2017, p. 15.

read within a certain distance (Visibility), the ability to read and understand the meaning of visualization (Clarity). Then the process of visual communication is associated with deep thinking power (critical thinking).<sup>98</sup>

Critical thinking begins during stimulation (literacy) by looking at the problem statement. This can be conducted by raising questions or identifying problems from data processing, which is to generalize steps to find solutions or patterns with collaboration and critical thinking in managing information.<sup>99</sup>

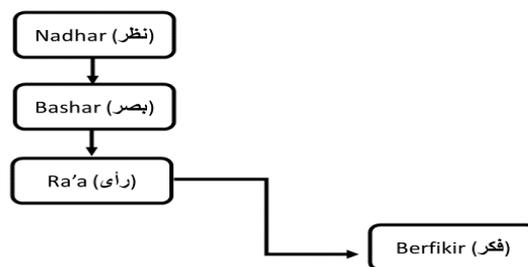
However, the visual thinking method can only be understood by normal students because the stages that must be undertaken are not clearly explained. Students are required to see from the visual material that is communicated and do critical thinking directly without going through the stages of the process.

Visual thinking in an Islamic perspective is a concept that is still individual rather than classical. The Qur'an explains the concept of thinking very specifically and with a very broad description, so that it can be used generally in any field of study, while the concept of thinking in Islam is, al-Tadhakkur, al-Tafakkur, al-Taddabur, and al- Ta'aqqul in which there are phases of thinking as expressed by psychology, but not explicitly, the concept of thinking in Islam strongly prioritizes clarity of heart and love of Allah SWT.

So it can be concluded that the combination of the Qur'an and the study of psychology is very useful for the development of science, although in fact psychology can be said to originate from the Qur'an. Ibn-Khaldun argues that al-Ulum al-Aqliyyah (rational / natural / thabi'i) is obtained by humans through the ability to think, these are the philosophical sciences which are beautiful places in human civilization.<sup>100</sup>

Chart 5

**The Concept of Visual Thinking in Islamic Perspective**



Data source: Processed by Researchers, 2019

<sup>98</sup> 21st Century skills or referred to as 4C (Communication, Collaboration, Critical Thinking and Problem Solving, and Creativity and Innovation). This is what we really want to achieve with K-13, not just material transfer, but the formation of 4C. Actually these words are familiar to us. On various occasions, we have often heard several experts explain the importance of mastering 4C as a means of achieving success, especially in the 21st Century, a century where the world is developing very quickly and dynamically. Mastery of 21st century skills is very important, 4C is a type of soft skill that in everyday implementation, is far more useful than just the handling of hardskill.

<sup>99</sup> The School Literacy Movement (Gerakan Literasi Sekolah / GLS) is a comprehensive effort to make schools a learning organization whose citizens are lifelong literates through public engagement. Literacy is more than just reading and writing, but includes thinking skills using knowledge sources in print, visual, digital and auditory forms. Literacy can be translated into 1). Basic Literacy, 2). Library Literacy, 3). Media Literacy, 4). Technology Literacy, 5). Visual Literacy.

<sup>100</sup> Abu Muhammad Iqbal, *Pemikiran Pendidikan Islam* (Yogyakarta: Pustaka Pelajar, 2015), p. 537.

Therefore, according to researchers that visual thinking can provide achievements in the development of hard skills and soft skills seen from the stages of the learning concept. Especially in the modern era, critical thinking skills are very important. Visual thinking can be an answer to increasing critical thinking. Although Abdul Syukur argues, learning in inclusive classes is still academic oriented, because it is not oriented towards intercultural competencies and soft skills in a balanced way to face global challenges.<sup>101</sup>

That is because the learning of Islamic education is different from other materials as according to Nasaruddin Umar. Ontology of Islamic scholarship, besides based on hushully, also based on hudlury (knowledge gained through the heart). Therefore, it is important to integrate hushully and hudlury. If these two things are applied properly and integratively, the future of Islamic education will become a center of excellence as well as the role model of education in the world.<sup>102</sup>

#### D. CONCLUSION

In the discussion of this research, several conclusions are found and can be our common contemplation and followed up in further research, as follows; In visual thinking it is not only the process of transfer of knowledge but it gives creativity and development of ways of thinking. With the concepts of looking, seeing, immagining, showing and telling that can develop learning processes more precisely on target and meet the characteristics needs of hearing impaired students. In the Visual thinking method that is in accordance with the provisions of the 2013 curriculum with a scientific approach, among others, from the concept of constructing, asking, concluding, evaluating. This research supports Edy Surya (2014) and Ramlah (2017) about learning visual thinking methods. That the implementation of visual thinking in the inclusive class of SMAN 54 on Islamic education facilitates the learning of Islamic education for hearing impaired students. Students do not have obstacles in receiving subject matter, either visually, lecturing, discussing or re-communicating the material. Although hearing impaired students cannot hear the teacher's conversation, it can be overcome by using the live transcribe application, even though it is limited in scope. The implementation of visual thinking produces several things, namely the academic achievement of hearing impaired students, the ability to remember, the ability to think, the ability to find solutions, and the ability to express opinions.

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<sup>101</sup> Abdul Syukur, *“Internasionalisasi Pendidikan di Indonesia”* (Thesis, UIN Syarif Hidayatullah Jakarta, 2010).

<sup>102</sup> Nasaruddin Umar, *“Pendidikan Karakter Berbasis Al-Qur’ân (The Quran-Based Character Education)”*, *Jurnal Bimas Islam*, Vol.6. No.I, 2013, pp. 194-209.

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