

Implementing of Kinematic Synergy Strategies to Develop basic Language Skills for A Sample of Special Needs Students

Dr. Ayman Ramadan Soliman Zhran, Dr. Turki Fahed Almasaeid
and Dr. Mostafa Mohamed Abo Elnour

Abstract--- Summary: *This study aims to develop the basic skills of the Arabic language (listening- speaking - reading - writing) by providing visual and motor synergy skills to a sample of students with educational concerns. The sample included (35) students of both males and females in the intermediate education stage who suffer from learning difficulties and excess Minor distraction, hearing and visual impairment. The study adopts the semi-experimental approach that depends on the same group and the application before and after the same group, and the researchers prepared a measure of the Arabic language skills that included the four basic skills and its validity and stability were verified, and the results of the study indicated a noticeable improvement in the four skills when comparing the averages of grades before and after, This indicated the effectiveness of visual and motor synergy strategies to develop basic Arabic language skills among students of interest.*

Keywords--- *Listening, Reading, Speaking and Writing.*

I. INTRODUCTION

Language is an essential component of human advancement, because of its intellectual, cultural and social functions, it is a necessary means of teaching, learning and expressing our potentials and ourselves, it is the most important means of communication and communication with others; learning it is necessary and vital for the human element.

The language consists of basic skills that cannot be completed without it, as language learning depends on learning and acquiring those skills; these skills are listening, reading, speaking and writing. (Musleh, 2019), and each of the language skills has characteristics and features that are specific to them, but these skills are integrated with each other, leading to the proper performance in language learning and practice, so the acquisition and development of these skills is essential in the language learning process, and strategies must be developed that Develop those skills.

Kinetic visual synergy is defined as controlling the muscles that allow the members of the body to carry out the task according to the way the eye sees it. Sight has a sense of penetration towards stimuli through which the child can acquire skills and learn to write and read, so the eye can see and translate the sighted images, drawings, sentences, phrases and forms. M. A Dziuk. et. Al. (2007)

Whereas, the motor-visual synergy strategies address the developmental disorders of the child, who suffers from

Dr. Ayman Ramadan Zahran, Assistant Professor, Ajman University (Collaborator). E-mail: a.zhran@ajman.ac.ae

Dr. Turkiy Fahad Al-Masaeed, Assistant Prof., Abu Dhabi School of Management. E-mail: t.almasaeid@adsm.ac.ae

Dr. Mostafa Mohamed Abo Elnour, Assistant Professor, Ajman University (Collaborator) E-mail: mostafaabonour54@gmail.com

a disability or immaturity in the organization of the movement, as well as problems related to the language, perception and thought of the child, as studies have agreed that children with special needs need to develop motor-sensitive synergy skills. Bodison. 2015.

II. STUDY PROBLEM

Many studies indicate in its results that there is a weakness in the level of students who are educated in some language skills, which led to a decrease in the performance and language use of a number of learners, especially if they have special needs. (Abdel-Hadi et al. 2003), where it was found that many of them have low reading comprehension, poor knowledge of vocabulary meanings, as well as expressing their opinion, and the need to strengthen reading, writing and listening skills through the application of strategies appropriate to the condition of the learner.

Categories of special needs have suffered from a lot of neglect and lack of benefit from applying modern learning strategies. Zahran and Dabour (2014), while developing developmental motor synergy skills is important and vital for children with special needs; many studies have confirmed that this group suffers from many problems and disturbances, and as a result they suffer from severe psychological problems that make their condition worse It makes it difficult for them to integrate into society and school. Bimbrahw& Jennifer (2012), and these groups also need to develop visual motor synergy skills represented in the difficulty of performing tasks that need synergy (harmony) between eye and hand. Al-Sartawi and Al-Smadi (2001).

Study Questions

Study questions can be identified in the main question, which is the effectiveness of "applying visual-visual synergy strategies to develop basic language skills among a sample of students with special needs?" Other questions arise from this question:

- Are there statistically significant differences between the mean scores of the pre and post applications for language skills testing after applying the visual kinetic synergy strategy with regard to reading skill?
- Are there statistically significant differences between the mean scores of the pre and post applications for language skills testing after applying the visual kinetic synergy strategy in relation to writing skill?
- Are there statistically significant differences between the mean scores of the pre and post applications for language skills testing after applying the visual kinetic synergy strategy in relation to speaking skill?
- Are there statistically significant differences between the mean scores of the pre- and post-application of language skills test after applying the visual kinetic synergy strategy in relation to listening skill?

Study Objectives

The main objective of the study is to verify the effectiveness of some of the visual-motor synergy strategies among a sample of people with special needs in developing the basic language skills of the language, and there are other goals, including:

1. Understanding and overcoming the problems of children with special needs.

2. Applying educational best practices with children with special needs.
3. Take advantage of applying modern strategies in learning to learn the language.

Importance of the Study

The importance of the current study stems from the employment of visual and synergy strategies as one of the modern educational strategies that are concerned with people with special needs in an attempt to develop basic language skills for them. The importance of the study comes due to the lack of studies in the Arab environment - within the limits of researchers' knowledge - interested in applying that strategy with People with special needs.

Definitions

The current study included several terms, the most important of which are:

- A. A: Language skills: are the basic skills for language communication, and include four skills: listening, speaking, reading and writing, and between these skills are mutual relations. Taima (2006)
- B. B- Kinetic Visual Synergy: Strategies that regulate movement, which leads to treatment of problems related to language, perception, and thought that affect focus, memory, and reading. Ashour et al (2016).

Dr.. People with special needs: Federal Law No. (29) of 2006 defined those with special needs as every person who suffers from a permanent or temporary total or partial deficiency or imbalance in his physical, sensory, mental, communicative, educational or psychological ability to the extent that limits The ability to meet his regular requirements as his counterparts without special needs. The official portal of the United Arab Emirates government. (2017).

III. THEORETICAL FRAMEWORK

The Theoretical Framework can be Divided into Two Axes

First: Language Skills

Language skills (listening, speaking, reading and writing) are the basis for teaching and learning in the various stages, through which the learner provides knowledge and acquires the skills necessary for his life, so many studies aimed at developing these skills because they represent the basic building block for education and behavior in various areas of life; where Modern education emphasizes the need to take care of empowering learners with the language skills that help them to use the Arabic language, and it is only through their ability to have the appropriate language skills to learn; the results of some studies indicated that the individual learns by speaking / speaking Ratio (23%) and by listening (25%), and by reading by (35%), and by writing (17%), each with its skill specified in the students' learning and access them to the required level of purposeful learning. Shehata (2004).

And the development of language skills leads to the development of cognitive and mental capabilities, emotional trends and psychological and motor skills, which requires diversification of learning experiences at the cognitive and emotional level, to achieve the integration of the growth of aspects of the learner's personality according to the level of his cognitive, psychological and motor developmental stage.

Reading can be considered the highest skill that the human being distinguishes from other creatures, as it is a natural development of the existence of thinking, which is the function of the human brain, and it is sufficient for her to honor it in the first verse of the Noble Qur'an as the Islamic religion senses learning to read, a skill that comes as the first basic skills of language .

Reading and writing skills are also one of the most important basic skills that help the learner in its early stages. Reading difficulties lead to failure to learn in other subjects. Success in any academic subject requires the learner's ability to read, then write, and thus the matter usually needs to strengthen the skills. Linguistic necessary for learning. Shehata (2004).

And the skill of writing is one of the higher skills, as it is one of the most important language skills because of the big facts that it has great significance for the progress of science; it is one of the higher skills that exceed the use of certain strategies for memorization and repetition to the skill of thinking and the use of sound methodology; it is a human skill that translates what is inside the human ideas And abstract feelings to a written speech as it is a tool for expressing what goes on with reason and soul, and takes symbols that we call letters that differ from one group to another or from one nation to another nation, and without writing, man would not have been able to write down his thoughts and record his accomplishments. Taima (2006).

As for the skill of listening, it is the process of receiving a set of phoneme symbols that the individual guarantees in meaningful words, and then links them to his previous experiences on the subject of the hadith, and then lends him other meanings in excess of what he received. Al-Amiri (2019).

The skill of speaking or speaking also occupies a special place in language skills in terms of the temporal lead compared to other skills, language is basically words, and man has known speech long before writing or reading, and this skill requires the learner to be able to use the sounds of the language correctly, This is done at the hearing stage. Al-Amiri (2019).

Second: Visual and Motor Coordination with Special Needs

The term people with special needs came to express those with special needs, as people with special needs in the United Arab Emirates received care and support to activate their role and integrate them into society and to help them overcome the obstacles facing them, as government and private rehabilitation and care centers provide many services, programs and initiatives for the advancement Educational, social, psychological and physical aspects of them. Abu Dhabi Digital Government. (2017).

People with special needs are part of society and the educational system. Modern strategies and technologies must be harnessed to raise, educate, and educate, and the use of different techniques and strategies and their use in teaching contributes to achieving inclusion and involving them in all activities inside and outside the school, as this group suffers from many problems Psychological, social and scholastic as a result of their apparent or hidden disabilities, whether physical or sensory. Zahran and Dabour (2014).

The United Arab Emirates guarantees people with special needs equality between them and their healthy counterparts in all legislations, economic and social development programs and policies, many ministries and

institutions have raced to provide services to this group to raise their suffering and alleviate them, so education in the school was obligated to take the lead too To this end, researchers were invited to do that study.

Kinetic visual skill is also a series of coordinated muscular movements that succeed in performing a certain task. The senses play their role in the process of learning motor skills, where the sensations are transmitted to the brain to transform into perception - organizing the information that is received from different senses and interpretation - and coordination between the muscles is Through the nervous system. .Tissot& Evans. (2003)

The exercises on visual motor synergy aim for children with special needs to help them to acquire skills that facilitate their learning process that leads them to an independent life according to what their abilities allow, and the motor visual synergy is very important for humans, and in different age stages in general, and in childhood stages Especially early, and its development - visual kinematic synergy - in this category happens to develop the efficiency of their capabilities and energies. Stewart h. Mostofsky. et.al; 2006

The Russians (2001) indicate that the manifestations of the development of motor visual synergy include the development of the child's ability to general motor synergy and general motor balance, and increase his ability to deal with the objects dynamically, and the training program for children with increased activity depends in particular on reducing the number of external stimuli they have, And provide an opportunity for them to direct this activity.

From here it becomes clear to us the importance of the activities and motor exercises (activities of movement, play and physical exercises) in working to take advantage of the extra movements by investing them in a movement activity that returns to the child's body benefit and gets rid of the random excessive activity, and the speed and frequency of movement and impulsivity, while improving the muscular capabilities that help a lot in Control body balance, develop walking and running movements, and develop impairments in visual and kinematic synergies.

In view of the need for people with special needs to take care and care of the language they have in order to integrate with their peers, the methods and strategies of education and training for them have varied, through which they can be trained and improve their abilities, and stability has been established in the current study on applying visual kinetic synergy strategies because of their effectiveness and impact on developing their skills Different linguistics (speaking - listening - reading - writing). Tomlinson, C. A. (2001).

Kinetic Visual Synergy Strategies

When applying visual-motor synergy strategies with children with special needs and those with special needs, the following should be considered, as Denning & Moody (2013) notes:

Employing the child's strong and favorite senses in the training process.

Linguistic growth is one of the foundations of kinetic synergy strategies

Encourage the child to participate in defining activities.

- Change the training method in case it fails to help the child acquire the required skill
- Provide the child with adequate opportunities to practice what he has learned and make sure to link what he has learned.

Visual movement synergy exercises for students with special needs

The researchers have developed strategies to develop visual motor synergy, and training procedures have been developed to suit the development of their language skills, Padmadewi&Artini explains. (2017):

Perform physical rhythmic exercises beneficial in the process of physical synergy using tactile, visual, auditory and written rhythms, which gives the child an understanding of the rhythm through the different parts and patterns of perception he has.

- Various team games for their activity and interaction among students.

Intelligence games, especially those requiring mental and written skills, by expressing their opinions by speaking and writing.

- Photo collection games and fill in the blanks to stimulate their mental abilities.
- Walking, running, jogging, movement and jumping games.
- Geometric figures games and expressing them either in writing or speaking
- Various games like you are my best friend
- Alphabet games and math numbers
- Maze and balance games, and games like the beep game and its reversal
- Games to imitate the sounds of animals and write their name
- Story games, analysis, writing a summary and the extent of their use

IV. LITERATURE REVIEWS

The Researchers Divided the Previous Studies into Two Axes, Each Axis is Dealt with Individually as Follows

First: Studies on the Development of Basic Language Skills for Learners

The study of Elijah 2011 aimed to study modern methods and methods that contribute to the development of Arabic language skills among learners speaking other than them, and the four skills were listening, speaking, reading and writing, and then the study dealt with modern methods of developing those skills and the Internet was a model of them, and the results have reached that Modern methods have been effective in developing the four language skills of non-native speakers.

The Shanti study, 2010, also focused on identifying the effect of using the representative activity to develop some listening skills among students in Gaza, using the experimental approach, and the results showed the effectiveness of the representative activity to develop listening skills for fourth-grade primary students.

The reformer study 2017 examined specific strategies for developing the four linguistic skills of the learner, and relied on the descriptive approach, and the study showed the results of some studies that confirmed the low level of students in the four language skills, and the results showed that there are different strategies and methods through which the four language skills can be developed as they have shown The results indicate that each skill has specific

strategies that can be developed through it.

The study of Muhammad 2010 aimed to prepare a training program based on some activities based on the theory of multiple intelligences that are appropriate for kindergarten children to develop some language skills (listening - speaking - writing), and the sample consisted of (38) children, and after applying the activities that were identified in the study showed Results: The marked improvement in the linguistic skills of the study sample (listening - speaking - writing).

Second: Studies Dealing with the Motor-Visual Synergy for People with Special Needs

Study Cacola. Et.al 2017 that study discussed the disorders associated with autism by reviewing the literature that dealt with the link between the two variables, and the study showed in its results autistic exposure to many of the developmental motor disorders and other disorders that need therapeutic, psychological and educational interventions, and the study indicated the need to develop diagnostic methods for autistic people To facilitate the detection of such disturbances.

- 2016 Bodison study that study discussed the difficulties of developmental motor synergy and its development for a sample of children with special needs, and the study indicated that children with special needs of disabled people constantly suffer from problems in the motor visual synergy, so the study applied strategies that relied on developing their visual motor synergy skills Also, the results indicated the effectiveness of the visual-motor synergy strategies for children with special needs.

- Discussed the study of Ablenda. Et. Al 2015 developmental motor kinetic disorders in autistic adults, the study showed that the autism spectrum often associated with the presence of developmental kinetic disorders, and the study indicated that until now the extent of the developmental kinetic disorder has not been determined among autistic people, and at the end of the study indicated that Adults with autism are more likely than others to develop developmental motor impairment, so strategies to strengthen their visual motor coordination must be implemented.

Comment on the Previous Studies

The researchers divided the previous studies that were presented to two axes dealing with the first axis: the studies that concerned with developing the linguistic skills of learners. The studies unanimously agreed on the need to apply strategies to develop the linguistic skills of learners in the Arab environment, given the need of teachers to develop those skills, especially students with special needs, and addressed The second axis: studies that dealt with the visual-visual synergy strategies for people with special needs, which indicated that these strategies contribute to modifying behavior and learning patterns among students with special needs, and that they develop skills Rkiya, visual, linguistic, physical and psychological.

Study Procedures

The procedures include the following:

- Study methodology: The current study relied in its methodology on the semi-experimental approach with one group and the application before and after for the same group, with the aim of checking the differences between the pre and post applications.

The study sample: The study sample consisted of students from Al-Rashid American School in Dubai, and the sample consisted of (35) male and female students, among the students who were classified as having special needs in the school, so that (22) students were male, and (15) female,

And the following table shows the distribution of the study sample according to disability as follows:

Table 1: Distribution of the Study Sample According to Special Needs

%	N	Handicapped
37.1	13	LD
34.3	12	ADHD
28.6	10	Other Handicapped

From the previous table, it is clear the distribution of the study sample between learning difficulties, hyperactivity, and other disabilities.

Study Tools

The current study relied on two main tools:

First: kinetic visual synergy strategies: The strategy was prepared in accordance with the principles and steps for kinetic visual synergy strategies, and this was clarified in the section on the theoretical framework, and then the validity and validity of the strategies were verified as follows:

- **Validity and Reliability of the Strategy:** The strategy was well prepared after the researchers reviewed a number of previous studies that dealt with differentiated education, so it was presented in its initial image to (10) specialists, experts and university professors to verify its sincerity and consistency, and after the amendments and directives given by the judges The researchers modified and stabilized the final shape of the strategies that were applied in the current study.

Second: Language Skills Test: The researchers prepared the test that included the four skills - speaking, listening, reading and writing - so each skill was measured separately.

The validity and reliability of the language skills test: This was done through two methods:

- **The arbitrators' sincerity:** the test was presented to a group of gentlemen of the arbitrators to verify its sincerity and suitability for application in the current study. Indeed, the arbitrators showed a high agreement of more than (90%) on the safety of the wording of the test phrases and their suitability for application in the current study.

Alpha Cronpagh: The reliability of the test was calculated by the Alpha Cronbach coefficient, and the coefficients were high for most of the test clauses and the deletion of weakly correlated phrases, Corrected Item-Total Correlation is less than (0,19), where the alpha Cronbach coefficient was relative to the test score (0,86).

This is a high coefficient that indicates the reliability of the test, and Table (2) indicates the alpha Kronbach coefficients for the four skills as follows:

Table 2: Alpha Coefficient for the Four Language Skills

Sig	Alpha	skill
0.05	0.81	Listening
0.05	0.76	Speaking
0.05	0.87	Reading
0.05	0.73	Writing

The results of the above table show an increase in the Alpha Kronbach transactions, which indicates the stability of the language skills test.

Study results: To answer the study questions, arithmetic averages, standard deviations and the value of (T) were calculated to show the differences between the pre and post applications and Table No. (3) illustrates this as follows:

Table 3: Differences between Pre and Post Application to Test Language Skills after Applying Visual Motor Synergy Strategies

T	Post test		Pre test		skill
	St.div	mean	St.div	mean	
*0.70	1.62	2.50	1.82	3.50	Listening
*0.74	1.87	4.20	1.91	4.50	Speaking
*5.24	0.61	2.83	0.51	1.46	Reading
*0.45	1.66	4.60	1.71	4.33	Writing

* Significant at the level of 0.05. Table (T) value at (0.05) = 1.83

It is clear from the previous table that the value of (T) is a function at the level of (0.05) where the calculated value of (T) is greater than the tabular value for the four skills (listening - speaking - reading - writing), which indicates the presence of statistically significant differences between the pre and post applications in favor of Post-implementation, in the four skills.

V. DISCUSSION

The results of the current study indicated that it is possible to develop different language skills for students with special needs, through the various visual-visual synergy strategies that were used in the current study, where it was found that there were statistically significant differences between the average degrees of pre and post application in favor of post-implementation, after applying strategies The visual kinetic synergy in the four language skills, and these results were consistent with what was indicated by the results of the studies of Muhammad 2010, Al-Shanti 2010, Elijah 2011 and Musleh 2017.

The results of the current study also showed that children with special needs suffer from many disorders that need to be intervened through innovative educational strategies such as visual and kinetic synergy strategies, which results in the development of the development of different skills they have, including the different language skills under study (listening - speaking - Read-write).

Thus, the results of the current study were in agreement with the results of the studies presented by the researchers, such as studies, and this is consistent with the studies of both Cacola. Et.al 2017, 2016 Bodison, 2015 Abelenda. et.al, and other studies that confirmed the effectiveness of visual-motor synergy strategies in improving the different skills of children with special needs, as these strategies helped them to autonomy rather than depend on

others, as well as developing their various skills such as motor skills, acquiring social skills, and adapting to disability Or their disorder.

From the above, it is clear that education and training for people with special needs can improve their various skills, especially language skills that will - certainly - contribute to the educational and social development of the child's level.

VI. RECOMMENDATIONS

The study recommends a number of recommendations, including:

Carrying out studies of modern strategies that contribute to developing language skills separately.

Holding training courses for people with special needs to overcome their problems, especially with regard to language, because it is the first means of understanding the world for a disabled child.

- Attention to the linguistic level of people with special needs and its impact on their academic progress.

Working to develop different skills for people with special needs, whether linguistic or otherwise.

REFERENCES

Arabic References

- [1] The official portal of the United Arab Emirates government. (2017). People with special needs: those with disabilities beforehand. Available at the following link: <https://www.government.ae/ar-AE/information-and-services/social-affairs/special-needs>
- [2] Elijah, Dawood Abdel-Qader. Developing Arabic language skills and contemporary strategies for non-native speakers. 2011, Second Arabic Language Conference, International University, Malaysia.
- [3] Abu Dhabi Digital Government. (2017). Support for people with special needs. Available at the following link: <https://www.abudhabi.ae/portal/public/ar/homepage/family/getting-support-people-of-determination;jsessionid=WPNjgml0sLxXmbzZ6JeJLDirjWI99rmxhy5Hr0hj02ETeDT9QkRu!-1523497919>
- [4] Al Russians, Farouk. The psychology of unusual children. (2001) Dar Al-Fikr Printing and Publishing, Amman, Jordan.
- [5] Abdul Hadi, Nabil and Bindi, Khaled, Abu Hashish, Abdulaziz. Language and thinking skills. 2003, 1st floor, Al Masirah House, Amman, Jordan.
- [6] Zahran, Ayman Ramadan Soliman, and the Horner, Ahmed Mohamed. (2014): Challenges of implementing e-learning for people with special needs from the viewpoint of a sample of workers in the field. The thirty-eighth issue, first part, pp. Pp .: 957-997, Journal of the Faculty of Education, Ain Shams University.
- [7] Al-Sartawi, Abdul Aziz; Al-Smadi, Jamil and Al-Qaryouti, Yousef. (2001). Introduction to Special Education, Dar Al-Qalam for Publishing and Distribution. Dubai.
- [8] Al-Shanti, Princess Abdul Rahman. The effect of using representative activity to develop some listening skills in the Arabic language for fourth-grade primary school students in Gaza. 2010, Master Thesis, Al-Azhar University, Palestine.
- [9] Shehata, Hassan. Teaching Arabic between theory and practice. 2004, 3rd floor, Egyptian Lebanese House.
- [10] Taima, Rushdie. Language skills: their levels, teaching, and difficulties. 2006, Dar Al-Fikr Al-Arabi, Cairo.
- [11] Tuaima, Rushdi Ahmed. Teaching Arabic to non-native speakers. Available at the following link:
- [12] <https://www.voiceofarabic.net/ar/articles/2009>
- [13] Al-Amiri, Abdel-Moneim. Strategies used to develop listening and speaking skills. Available at the following link:
- [14] http://www.edutrapedia.illaf.net/arabic/show_article.html?id=839&print=true
- [15] Ashour, Rajaa Abdel Samad, Hassan, Hamza and Obaid, confident. 2016. Design and codification of dyspraxia test using computer simulation. Available at: <http://un.uobasrah.edu.iq/papers/3725.pdf>

- [16] Muhammad, Heba Ali Farhat. The effect of using multiple intelligence strategies on developing some language skills among preschool children. 2010, Journal of the Faculty of Education, Suez Canal University, second issue, July.
- [17] Musleh, Imran Ahmed. The four linguistic skills development strategies of the learner: a descriptive study. Available at the following link:
- [18] file:C:/Users/Dr.%20Aymn.%20Zhran/Downloads/StrategiesofImprovingLanguageSkillsfortheLearneraDescriptiveStudy.pdf

English References

- [1] Abelenda, Judith. et.al. 2015. Dyspraxia in Autism Spectrum Disorders: Evidence and Implications. *The American Occupational Therapy Association, Inc.* Volume 38, Number 3.
- [2] Bodison. Stefanie C. 2015. Developmental Dyspraxia and the Play Skills of Children With Autism. *The American Journal of Occupational Therapy.* September / October, Volume 69, Number 5
- [3] Bimbrahw, B. □ Jennifer, B. Alex, M. (2012). Investigating the Efficacy of a Computerized Prompting Device to Assist Children with Autism Spectrum Disorder with Activities of Daily Living. *Assistive Technology*, 24, 286-298.
- [4] Bodison. Stefanie C. 2015. Developmental Dyspraxia and the Play Skills of Children With Autism. *The American Journal of Occupational Therapy.* September / October, Volume 69, Number 5
- [5] Cacola, Priscila ;, Haylie L. Millerb, Peace Ossom Williamson. 2017. Behavioral comparisons in Autism Spectrum Disorder and Developmental Coordination Disorder: *A systematic literature review. Research in Autism Spectrum Disorders* 38. 6--18.
- [6] Denning, Christopher B. & Moody, Amelia K. 2013. Supporting Students with Autism Spectrum Disorders in Inclusive Settings: Rethinking Instruction and Design. *Electronic Journal for Inclusive Education.* No1, Vol. 3, No. 1 (Fall / Winter).
- [7] M. A Dziuk. et. Al. 2007. Dyspraxia in autism: association with motor, social, and communicative deficits. *Developmental Medicine & Child Neurology* 2007, 49: 734-739.
- [8] Padmadewi, Ni Nyoman&Artini, LuhPutui. 2017. Teaching English to a Student with Autism Spectrum Disorder in Regular Classroom in Indonesia. *International Journal of Instruction* 10 (3): 159-176.
- [9] Stewart h. Mostofsky. et.al; 2006. Developmental dyspraxia is not limited to imitation in children with autism spectrum disorders. *Journal of the International Neuropsychological Society*, 12, 314--326.
- [10] Tissot, Catherine; Evans, Roy. 2003. Visual Teaching Strategies for Children. *Early Child Development and Care Journal* · August.
- [11] Tomlinson, C. A. (2001). How to Differentiate Instruction in Mixed Ability Classrooms (2nd ed.). Alexandria: *Association for Supervision and Curriculum Development.*