



PASSPORT TO AFRICA AND ASIA: A MULTIMODAL TEXTS IN AFRO-ASIAN LITERATURE

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ABSTRACT

This study was conducted to determine the effectiveness of Passport to Africa and Asia: A Multimodal Texts in Afro-Asian Literature, as instructional material in Literature 8 on the academic performance of select grade 8 students of Pedro Guevara Memorial National High School, School Year 2019-2020. The researcher developed instructional material which validated by five (5) Master Teachers before its evaluation. Seventy-five (75) English Teachers in Cluster 3, Division of Laguna evaluated the material in terms of its characteristics which includes, design, usability, suitability and consistency and its components in terms of objective, content, development and evaluation. Based on the findings of the evaluation, the material is found effective and is extremely acceptable. During the administration of the instructional material, two groups were used, the control group and the experimental group. Both groups consist of forty (40) learners. The sample was purposely chosen by the researcher for her convenience. A quasi-experimental control design was used in this study to determine the effectiveness of a multimodal texts in Afro-Asian Literature for grade 8 in the teaching and learning process. The researcher made use of arithmetic mean and standard deviation to determine the level of acceptability of the developed instructional material. It is also used to identify the level of performance of grade 8 learners through pretest and posttest and to determine the significant difference between the pretests and posttests of the two groups, the T-Test was utilized. The objectives of each lesson presented in the developed instructional material were congruent with its learning competency and content. The utilization of the multimodal texts contributes to an effective learning outcome. The provided tasks in the evaluation or application part were differentiated and based on the multiple intelligence theory and integrated in ICT. It satisfied the needs and interests of learners and improved their talents and skills. The pretest of the control group and experimental group had shown that both had the same knowledge prior to the utilization of the material was found statistically not significant. The academic performance of the control group based on the findings in posttest showed a satisfactory improvement even if not utilizing the multimodal texts, on the other hand the result of the posttest of experimental group which utilized the instructional material was found to be very acceptable which was statistically interpreted as significant. The multimodal text was effective because it helped the learners relate themselves and gave opportunities to improve their talents, skills, and aptitude, with the aid of individual practical exercises which were meant to improve one's skills at his/her pace.

1 INTRODUCTION

Education empowers people and strengthens nations. Thus, the Department of Education (DepEd), when it pushed for the adoption of the K to 12 program set goals to improve academic competencies and labor opportunities for the Filipino graduates. (Mateo, 2015), However, problems arise during the run through of the said curriculum. These include congested curricula, low budget allocation for new learner's material, inadequate and unavailability of instructional material, globally changing world, poor study habit, and diverse learning styles and intelligence of learners. (Cocal & Marcellano, 2017). Lack of learners' interest due to globalization and millennial stage is very evident, consequently, there is an inadequate actualization of educational goals.

Moreover, teaching and learning process is not as effective as Department of Education foresee it, when the

educational system adopts the K to 12 program due to diverse teaching processes delivered to learners without considering multiple intelligence of learners. Hence, educators find ways to improve quality education to meet the high demands of the future, to prepare learners in their life and work.

As a 21st century English teacher is a challenging task due to enormous problem on varied learning styles of young learners. They tend to feel reading literature as something tedious and worthless. Reading is not fun at all, it is a burden for them.

According to Tuzel (2013), in this century, literacy skills should be advanced and sense should be derived from texts, thus it is the foundations of literacy assertions should be humans and materials: within the scope of the 21st century concept of literacy, written words, oral communication, and visuals cannot



stand out from each other in communication; rather, it is important to make people literate in multimodal text structures in which all three elements are used together. (Wolfe & Flewitt, 2010).

Literature teachers conceptualize and innovate means to make the teaching and learning process be evidently effective. Teachers make use of differentiated teaching techniques and strategies that suit the learners' needs, interest and learning styles.

As a result, this reflected the choice of incorporating MI theory and multimodality in practices into education schemes as a brilliant and plausible action. It is fair and functional if an individual is assessed on its domain rather than be tested in General Intelligence. This would bring chances of every individual on its field of inclination, expertise and actual intelligence. Furthermore, the research was deeply founded on the glaring truth that many graduates were being under-

1.1 Objectives of the Study

The study determined the effectiveness of Passport to Africa and Asia: Multimodal Texts in Afro-Asian Literature on academic performance based on the statistical result of their pretest and posttest of select grade 8 students of Pedro Guevara Memorial National High School, District of Sta. Cruz, Division of Laguna, School Year 2019-2020. Specifically, it sought answers the following: Determine the level of acceptability of the teacher-made multiple intelligence based multimodal text based on its characteristics in terms of design, usability, suitability, and consistency. Assess the level of the acceptability of the developed multiple intelligence based multimodal text based on its components in terms of: objective, content, development, and evaluation. Identify the levels of academic achievement of control group and experimental group in terms of pretest and posttest. Compare if there is a significant difference between the pretest of control group and pretest of experimental group. Distinguish if there is a significant difference between the pretest and posttest of the control group. Evaluate if there is a significant difference between the pretest and the posttest of experimental group. Measure if there is a significant difference between the posttest of the control group and posttest of the experimental group.

2. LITERATURE REVIEW

In the 21st century young people live and learn in a technological world that is fast paced and in a constant state of change. As technology becomes more and more accessible outside of the classroom, educators are challenged to re-consider the literacy skills required to be successfully literate. Enacting literacy teaching and learning in and for the 21st century requires teachers to update their pedagogical knowledge, skills and contextual understanding of the world children live and learn in. Recent developments in the Philippines have prompted the Philippine government to push for a new basic education

employed, unhappy, inefficient and unproductive in their field for the social norms demands a certain skill notion that "everybody should have" and not what an individual has and yet to be discovered and not a globally competitive Filipino individual.

With the above discussion, the researcher was challenged to conduct a study on the effectiveness of a develop multiple intelligence based multimodal lessons in Afro- Asian Literature among grade eight students in Pedro Guevara Memorial National High School, District of Santa Cruz, Division of Laguna with great assurance that its findings will surely benefit DepEd officials, principals, teachers, students, and future researchers as solid ground for their resolute actions in the improvement of their respective concerns.

curriculum. Along with these changes is the adoption of the new English curriculum known as the Language Arts and Multi literacies Curriculum (LAMC). It examined the K-12 English Curriculum in the Philippines from a 21st century learning perspective.

The K to 12 curriculum focuses on the learner's acquisition of the 21st century skills (New Learning Goals). One of it is the learning and innovation skills. This includes adaptability, creativity, critical thinking curiosity, higher order thinking skills, managing complexity, problem solving, risk – taking, self-direction, and sound reasoning.

Multimodal literacy describes communication practices that use two or more modes of meaning. Multimodality has become a significant area of research given the broadened range of available designs and media forms in digitally networked and globalized textual ecologies. Language and literacy practices are inherently multimodal, because communication requires attending to diverse kinds of meanings, whether of spoken or written words, visual images, gestures, posture, movement, sound, or silence Yet, clearly, the affordances of people-driven digital media and textual production have given rise to an exponential increase in the circulation of multimodal texts in digitally mediated environments. (Mills, 2017)

Ashrafi (2013), asserted the fast growing availability and capability of emerging technologies have shaped enormous potential of designing developing and implementing pioneering pedagogy methods in learning environment. Applying interactive learning in current years has eccentric results on the student learning in their achievements, because the global technological scenario has covered the way to new pedagogies in teaching-learning process. On the other side methods by focusing on students and the ways of learning in them can illustrate logical ways of improving student achievement in English as foreign language.



A collateral write-up expounded by Kres (2016) focused on text and literacy in the broader sense. Text making or writing in a multimodal framework, and emphasized the importance of focusing on both the practice in which the text – making occurs and on the text design process which takes place through a range of media and modes.

The same line of write-up has been expounded by Bezemer (2016) where in a design process of multimodal text, the students give profile to interest, purposes and intentions by using different media, tools and modes. The design of text is becoming a more complex, multimodal means of communication, representing a shift from a traditional way of using printed text to more multimodal use of texts. The use of digital tools may also challenge students' perception of texts and their idea and recognition of multimodal text productions.

The version of Banerjee (2013) offered the core area of online digital hardware and software influences to students' learning experiences be in theoretical knowledge, practical skills or proper disposition in lifting up the instructional level of the latest audiovisual program for effectiveness of the instructional service delivery with respect to performance-based in the execution of sure action by teachers during their deployment of innovative teaching opportunities to learners from different walks of life.

Ganapathy (2016) greatly considered the marvelous exposure of learners in various multimodal texts due to their active participation in social media and frequent usage of mobile devices on a daily basis. Such daily activities advocate the need for a transformation in the teaching and learning of ESL lessons in order to promote students' capabilities in making meaning of different literacy texts which students came across in their ESL learning activities.

Technologies being developed especially in the education system where multimedia learning packages are used should accommodate the needs of the learners by determining the learners and the methods that will improve the learning process. The developed multiple intelligence based multi-modal lessons by the researcher carried these principles in the selection and creation of the learning materials.

Andambi, and Kariuki, (2013) assert that learning resources for the SEE are relevant when they are arranged in agreement to the objectives geared towards molding desirable behavior of the learner. This implies that a teacher can achieve his/her objectives by careful choice and use of learning resources for teaching. Teachers have a right to select those resources such as media could go a long way to influence students' behavior in the classroom. Therefore, educational resources are obligatory components to any learning process.

The above bibliographic citations helped the present researcher since, multimodal text through ICT is adapted in schools in promoting and improving the methods of teaching and how extensive it is in students' learning process.

Mirzazadeh, (2012) states that the theory of multiple intelligences postulated by Howard Gardner (1983) is a model of intelligence that categorizes human's intelligences into specific modalities; the different intelligences are understood as personal gears and a person may be more talented in some intelligences than in others, it focuses in individual differences. As such, through the MI theory, Gardner (1983) posits that every individual errands varying levels of intelligence and thus has an exclusive, unique intellectual profile; his theory defines intelligence as "the capacity to solve problems or to fashion products that are valued in one or more cultural setting" (Gardner & Hatch, 1989). According to Yaumi, et al. (2018) multiple intelligence (MI) theory has concerned much attention in the field of education, although Howard Gardner as the inventor of this theory, does not intend to create it to apply learning and instruction. The theory was focused at the philosophy of developmental and cognitive psychology (Gardner, 2011) as a discipline he was interested in since the beginning of his career. Eventually, MI theory became popular in educational practice. The typical studies, which associate MI and education, are becoming multiple intelligences in school, multiple intelligences in the elementary school and multiple intelligences in the classroom. Later on, this study has evolved into a more specific discipline such as multiple intelligences and leadership, and the multiple intelligences in the reading and writing in the field of learning and instruction, MI theory has grown so popular, such as teaching and learning through multiple intelligences (Campbell, Campbell, & Dickinson, 1996) and multiple intelligences-based instructions (Yaumi, 2013). Here, multiple intelligences-based instructions are learner-centered learning approach, which focuses on identifying learners' distinct and innate intelligence, talent, and learning preferences and providing the best way for learning.

In the article entitled "Applying Multiple Intelligences in the classroom: A Fresh Look at Teaching Writing" by Fred C. Lunenburg & Melody R. Lunenburg, this article discusses the implication of multiple intelligences inside the classroom. Thus, with the manifestation of the new information of how educators teach and how learners learn, based on this study for the researcher will develop learning material which activities are aligned with the distinct intelligence of learner for every learner is unique. That will also enable the learners to apply their intelligences at the same time improve them. So that learning will be fun and easier for them.

A collateral study was launched by Chang (2015) on social media and its impact on high school juniors' knowledge formation, skills and disposition in selected secondary schools in New Jersey. Among others, his findings revealed the significant impact of juniors' exposure to social media wherein enrichment of the hardware and software systems had been installed in the correct knowledge formation vital for applying their skills in technology and livelihood programs as basis for correct



disposition in their daily walks of life in the school and in their respective communities where they belonged.

The findings of Christensen (2013) sounded supportive to the foregoing studies upon spearheading a study on digital social media, the case of seventh graders in selected elementary schools in Kentucky. He utilized the descriptive method of research in gathering and treating the data by means of systematic sampling technique as basis for issuance and retrieval of quality tested questionnaire of five-scale checklist inquiries.

Falk-Ross (2014) suggested that students reading difficulties will be motivated to read with the use of multimodal texts as they are more easily comprehended with the aid of other supporting modes such as visuals and sounds. Multimodal texts enrich students' learning experiences and provide them a wider grasp of knowledge and skills.

Kotzer and Elran, (2012) in their study suggested that the computer is a substantial part of the learners' daily lives. It is by now, inevitable that methods of teaching and learning should include E-learning components that are based on the computer environment and include proper practice for the 21st century which requires a "new pedagogy". This new pedagogy, in the case of Math and Science teaching and learning, employs: (1) High-order thinking and learning skills, (2) A constructivist approach to science teaching and learning, (3) information, communication, and scientific literacy skills using digital and advances technologies.

Tüzel (2013) conducted a quantitative study on the opinions of 61 prospective teachers and concluded that prospective teachers have a low awareness level of 56 Berker Bulut, Hacer Ulu & Adnan Kan multimodal text structures and multimodal literacy education. In the study, "Multimodal Literacy Scale: A Study of Validity and Reliability", of Bulut et.al. (2015) a scale designed to measure the multimodal literacy skills of future teacher was developed. In this way, teacher can identify the multimodal literacy skills during their undergraduate education, whereby educators can identify the prospective teachers without such skills and they can be trained in this respect.

According to Abella (2013), selection or creation of instructional materials must highly center on the consideration of students especially for the fact that student's generation changes from time to time. Instructional materials are the hearts of the classroom setting. Most teachers maintain control over the instructional material by the pronouncement about what is to be taught, what material and methods to be used and how much students will be allowed to interact and does it suit to the learning styles of the learners.

One study reiterated that teachers may adopt new innovations, techniques, strategies and other teaching approaches that aligned to the learners' multiple intelligence to use in their class in order to improve the ability and understanding of context (Tibay, 2014)

It recognizes the fact that teaching using Multimodal texts promotes students' engagement in learning by enhancing their meaning-making abilities with the supplement of ICT as a tool. It affirms that students' perception of Multimodal Texts lessons are described as highly engaging, self-directed, and learner-centered and promotes meaning-making with minimal guidance from the teachers.

Ibragimova (2011) carried out his study about "Multiple Intelligences Theory in Action in EFL Classes: A Case Study. The results of his study may have some practical and theoretical implications. First of all, it may

help language teachers in designing or adapting materials in terms of Multiple Intelligences Theory to better cater for the students" Multiple Intelligences and, as a whole, improve learning and teaching process.

Moreover, the framework can be used in various educational and cultural contexts to analyze textbooks of different levels. Finally, the findings of this study may contribute to the related literature regarding of the application of Multiple Intelligences in language classes.

Furthermore, Chauhan (2009:4) conducted his research about "Effectiveness of Multiple Intelligences Based Teaching in Teaching English for Primary School Students". He concluded that Multiple Intelligences Based Teaching is an effective method in teaching and learning English among primary school students. The collected data were subjected to the following statistical analysis to arrive the meaningful conclusion. It is inferred that in the control group, 20% students have low level, 70% of them have moderate level and 10% of them have high level of gain scores. In the experimental group, 10% of students have low level, 63.33% of them have moderate level and 26.67 % of them have high level of gain scores. Results showed that the students in the experimental group receiving MI-based instruction performed better than those in the control group. It proved that the research was successful to use effectiveness of Multiple Intelligences Based Teaching in Teaching English for Primary School Students.

Yalmanci and Gozum (2013) explored the effects of MI teaching approach on students' degree of accomplishment and their knowledge retention. For this study, two groups of science students were formed as the experimental and control groups, and MI-instruction was executed for the experimental group. Although no noteworthy difference was found between the two groups in the pretest results, regarding their information level about the subject under investigation, after the experiment, there was a significant difference between the groups in favor of the students who received MI-inspired instruction. Thus, the researchers concluded that the MI theory is effective in learning. Furthermore, a retention test was administered after three weeks from the research date and it was found that students from the experimental group could remember the information significantly better than those from the control group, and this



led to the conclusion that MI-inspired instruction also has positive effects on the retention of information.

Kok (2013) in a study on the correlation between learners' Listening comprehension performance and their Multiple Intelligence groups found no statistically significant difference between the experimental and control group students with regard to their multiple intelligence groups. Moreover, the results on the above mentioned area are rather inconsistent.

As an example, Adrian and Shagabutdinova (2012) proclaimed that logical, verbal, and spatial intelligences were the dominant predictors of multiple intelligences among 230 Russian college students; few studies have exclusively focused on exploring the impact of different intelligence abilities on the performance of private institute EFL learners. Accordingly, it seems that there is still a need to conduct more studies in the above mentioned area to get more consistent and conclusive results. The aforementioned result of the studies on multiple intelligence or MI based learning thrust the researcher to pursue the current study on multiple intelligence based multi modal lessons to support the theories and to determine the effectiveness of multiple intelligence based instructions. Furthermore, the studies mentioned above is connected to the present study for they provide pedestals on its content.

3. METHODOLOGY

Eighty Grade 8 students under the K to 12, Regular BEC curriculum were chosen as sample among the population of Pedro Guevara Memorial National High School. The respondents of the study were the students under the supervision of the researcher. These classes were assigned as Multiple Intelligence Based Learning (Experimental Group) with 40 students and another 40 students as Non-Multiple Intelligence Based Learning (Control Group). In addition, Seventy-five (75) English teachers from secondary public school in Santa Cruz, Pila, and Pagsanjan were purposively chosen as the respondents of the study and they were the ones evaluated the instructional material developed by the researcher. To determine the number of evaluator, Slovin's Formula was used by the researcher.

4. RESULTS AND DISCUSSIONS

The output of this study was the utilization of a developed multimodal texts in Afro-Asian Literature. Its efficacy was evaluated by means of pretests and posttests results of the control group and experimental group. The developed material was evaluated and validated by English teachers.

Table 1. Level of Academic Achievement of the Control Group and Experimental Group in Literature in terms of pretest and posttest scores.

Group	Pretest			Posttest		
	Mean	SD	VI	Mean	SD	VI
Control	20.68	8.398	S	33.53	7.535	VS
Experimental	20.03	9.225	S	39.1	6.254	VS

Legend:

Scale

40-49.99
30-39.99
20-29.99
10-19.99
0-9.99

Verbal Interpretation

Outstanding
Very Satisfactory
Satisfactory
Fairly Satisfactory
Did not meet expectation

Table 1 shows the respondent's in Literature in terms of pretest and posttest. The table also presents the academic achievement of the control group and the experimental group in terms of pretest and posttest.

The students in the control group showed satisfactory in pretest (M = 20.63, SD = 8.398) and very satisfactory in the posttest (M = 33.53, SD = 7.535). On the other hand, the students in experimental group showed satisfactory in pretest (M = 20.03, SD = 9.225) and very satisfactory in posttest (M = 39.1, SD = 6.254).

Based on the data, it shows that there is no significant difference between the pre-test of control group and pre-test of experimental group at 0.05 level of significance. It shows that

the null hypothesis stating that "There is no significant difference between the pretest of control group and pretest of experimental group" is accepted. It also shows that there is a significant difference between the pretest of control group and posttest of control group at 0.05 level of significance. It shows that there is a significant difference between the pretest of experimental group and posttest of experimental group at 0.05 level of significance.

This implies that both groups have the same level of knowledge about the topics prior to the start of the experiment. This is required for the study to be valid. This also implies a very satisfactory improvement on the performance of learners when they used the multiple intelligence based multimodal texts.

**Table 2. Level of acceptability of Passport to Africa and Asia: A Multimodal Text in Afro-Asian Literature on its characteristics**

Indicators	Overall Mean	Overall SD	Verbal Interpretation
Design	4.79	0.389	EA
Usability	4.84	0.344	EA
Suitability	4.81	0.376	EA
Consistency	4.80	0.380	EA

Legend:

Range	Verbal Interpretation
4.20-5.00	Extremely Acceptable
3.40-4.19	Very Acceptable
2.60-3.39	Moderately Acceptable
1.80-2.59	Slightly Acceptable
1.00-1.79	Not Acceptable

Table 2 shows the level of acceptability of Passport to Africa and Asia: A Multimodal Texts in Afro-Asian Literature on its characteristics; with the results of design with overall mean of 4.79, and with overall standard deviation of 0.389 which is verbally interpreted as extremely acceptable; usability with overall mean of 4.84, and with overall standard deviation of

0.344 which is verbally interpreted as extremely acceptable; suitability with overall mean of 4.81, and with overall standard deviation of 0.376 which is verbally interpreted as extremely acceptable; consistency with overall mean of 4.80, and with overall standard deviation of 0.380 which is verbally interpreted as extremely acceptable,

Table 3. Level of acceptability of Passport to Africa and Asia: A Multimodal Text in Afro-Asian Literature on its components

Indicators	Overall Mean	Overall SD	Verbal Interpretation
Objectives	4.85	0.335	EA
Content	4.84	0.355	EA
Development	4.82	0.396	EA
Evaluation	4.80	0.406	EA

Legend:

Range	Verbal Interpretation
4.20-5.00	Extremely Acceptable
3.40-4.19	Very Acceptable
2.60-3.39	Moderately Acceptable
1.80-2.59	Slightly Acceptable
1.00-1.79	Not Acceptable

Table 3 shows the level of acceptability of Passport to Africa and Asia: A Multimodal Texts in Afro-Asian Literature on its components; with the results of objectives with overall mean of 4.85, and with overall standard deviation of 0.335 which is verbally interpreted as extremely acceptable; content with overall mean of 4.84, and with overall standard deviation of 0.355 which is verbally interpreted as extremely acceptable; development with overall mean of 4.82, and with overall standard deviation of 0.396 which is verbally interpreted as extremely acceptable; evaluation with overall mean of 4.80, and

with overall standard deviation of 0.406 which is verbally interpreted as extremely acceptable,

The result of the evaluation made by the English teachers is extremely acceptable supported the study adequacy of instructional materials used by the teachers in teaching Afro-Asian Literature of Bolante, (2018). According to him an excellent instructional material has a big impact on the students learning since students learn most by doing. Engaging in hands on differentiated activities that suit to learners' multiple intelligence and interests gives the learners idea on how this



experience can be applied in a real life and improve academic performance.

5. CONCLUSIONS AND RECOMMENDATIONS

After gathering the findings, it was found out that the developed multiple intelligence based multimodal texts was evaluated extremely acceptable by secondary English teachers in terms of its characteristic and components had a positive effect on the students' learning performance on Afro – Asian Literature. It provides differentiated activities that suit to the diverse students' needs and interests and able to think learners critically. It is resulted a greater depth of understanding among learners by presenting multiple input of modalities and increasing motivation among learners. Therefore, the Department of Education may provide trainings for teachers on how to develop supplementary instructional materials like multiple intelligence based multimodal texts which are usable and suitable to the academic level of learners, consistent in content and design can fascinate the interest of learners. Teachers may develop multimodal texts anchored to grade 8 Competencies. The contents and objectives must be aligned with the content standard and learning competencies of the curriculum provided by the Department of Education. The development and assessment must be jived with the performance standard of the curriculum.

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REFERENCES

1. Armstrong, T. (2009). *Multiple Intelligences in the classroom*. Alexandria, Virginia USA: ASCD
2. Abella, I. (2013). *Educational Practices that Benefit Pacific Learners in Tertiary Education*. Ako Aotearoa, National Centre for Tertiary Teaching Excellence
3. Andambi; R. & Kariuki, B. (2013) *Criteria for Seleyong Relevant Learning Resources by Teachers of Social Education and Ethics in Burgonia District, Kenya Journal of Emerging Trends in Educational Research and Policy Guidelines*.
4. Banerjee, A. (2013) *Remedying Education: Evidence from Two Randomized Experiments in India*, NBER Working Paper No. 11904 Issued in December 2005
5. Bezemer, J. & Kress G. (2016) *Multimodality, Learning and Communication: A social Semiotic Frame*. Retrieved from <https://www.researchgate.net/publication/307940615>
6. Campbell, L., Campbell, B. & Dickinson, D. (1996). *Teaching and Learning through Multiple Intelligences*. Massachusetts: Allyn and Bacon
7. Cocal J. & Marcello G., (2017) *Challenges of the K+12 Program Implementation in the Public Elementary Schools of Pangasinan, Philippines*
8. Christensen, C. (2013). *Innovation Imperative: Change Everything*

<https://www.nytimes.com/2013/11/03/education/edlife/online-education-as-an-agent-of-transformation.html>

9. Ganapathy, M. (2016) *Advances in Language and Literary Studies; The Effects of Using Multimodal Approaches in Meaning-Making of 21st Century Literacy Texts Among ESL Students in a Private School in Malaysia*
10. Kotzer & Elran, (2012). *Learning and Teaching with Moodle-based E-learning Environments, Combining Learning Skills and Content in the Fields of Math and Science & Technology*. Davidson Institute of Science Education, Weizmann Institute of Science, Rehovot, Israel
11. Kress, G. (2013). *Multimodality: A social semiotic approach to contemporary communication*
12. Kok, Izzetin (2013). *A Study on the Relationship between Learners' Listening Comprehension Achievements and their Multiple Intelligence Groups, Procedia-Social and Behavioral Sciences*, 89, 182-186
13. Mills, K. (2017) *Teachers and Teaching Theory and Practice; Exploring the Meaning Potentials of Swedish Teacher Education*. Volume 24, 2017,
14. Mirzazadeh, M. (2012). *Impacts of Multiple Intelligence on Learning English in the ESL Classroom*. *American Journal of Scientific Research*.
15. Talib, A., & Bini-Kailani, I. (2014). *Problem based learning in cooperative situation (PBLCS) and its impact on development of personal intelligences*. *International Journal of Evaluation and /research in Education.*, 3 (4), 236-244. <https://doi.org/10.11591/ijere.v3i4.6969>
16. Tuzel., S. (2013). *An Investigation of Prospective Turkish Teachers' views regarding multimodal literacy*, *Journal* 9(2), 133-15
17. Wolfe, S. & Flewitt, R. (2010). *New Technologies, new multimodal literary practices and young children's metacognitive development*. *Cambridge Journal of Education*, 40 (4), 387-399