

INSTRUCTIONAL ORCHESTRA MEDIATED WITH MONTESSORY MEDIA FOR TEACHING ENGLISH VOCABULARY FOR KINDERGARTEN STUDENTS

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ABSTRACT

This article summarizes the design of instructional orchestra model based on Montessori media for English vocabulary acquisition for kindergarten students. It aims at fulfilling the need of instructional orchestra based on Montessori media which is designed using flexible model to stimulate creativity the motivation to learn for kindergarten, especially, meet the need of Griya Adinda Kindergarten students in learning English vocabulary. The instruction is developed by using 2 Dimensions of Degeng Instructional Orchestra. The products assessed by an instructional content expert, an instructional media expert, an instructional designer, kindergarten Headmaster, and a kindergarten teacher. Instruments used for data collecting were direct comment on the product script taken from instructional content expert and five-scale questionnaire taken from instructional media expert, instructional designer, kindergarten headmaster and kindergarten teacher. Products revision was done as the advises given by the experts, kindergarten headmaster and kindergarten teacher. Recommendations are given related to: product utility, product dissemination and further product development.

Keywords: instructional orchestra, Montessori media, English vocabulary acquisition, kindergarten

Introduction

Learning patterns in schools up to this point still stress on a uniformity that is both centralistic and monolithic (Degeng, 2005). A centralistic thinking pattern is a personal thinking pattern which centers on only one understanding. A monolithic thinking pattern, meanwhile, is a monotonous one. As a result, education which is supposed to teach how to appreciate diversity instead suppresses diversity. Every person is trained to have the same thinking pattern or points of view. There is rarely a chance to express different opinions or points of view regarding what is felt or thought during learning or the process of learning. Indeed, this is what starts the destruction of the creative thinking pattern that every learner should have. If the learning pattern that stresses a uniform thinking pattern is maintained, there will never be an opportunity for the development of creativity and initiative in learning.

In the context of kindergarten education, many examples were found of learning and teaching practices that hinder the creativity and initiative of children. Degeng (1998), in his professorate speech, reveals some salient examples that need to be reviewed in the effort to reform problem-solving in learning, such as not playing while learning. In reality, playing is identical with children and this occurs naturally. Griya Adinda Kindergarten is a private kindergarten in Malang which

was established in 1993. The kindergarten was established through an Indonesia-Korea cooperation under the supervision of the Indonesia-Korea Christian Foundation (Kristinakoe Foundation). Up until now, Griya Adinda Kindergarten is the only kindergarten in Malang which uses the Montessori media in learning. Even so, since it was purchased in 1992, the use of the Montessori media at Griya Adinda Kindergarten is still not maximized. This is because there is a lack of instruction manuals which are appropriate to the learning characteristics of Griya Adinda Kindergarten (which uses the Quantum learning design). The goal of the learning design of Griya Adinda Kindergarten is to stimulate creativity and initiative in learning of children, to develop leading individuals.

Based on the background of the problem which has been explained, the developer feels that it is necessary to develop a learning design model (orchestra of learning) using the Montessori media, which is designed with an approach or a design model which is flexible in nature to stimulate the creativity and initiative of children of kindergarten age. Next, the procedural steps of the orchestra of learning using the Montessori media are recorded in a teacher's manual which shows the operational steps.

Because of that, the goal of this development is to produce: 1) An Orchestra of Learning Model Using the Montessori Media for Children of Kindergarten Age; 2) A English Vocabulary Acquisition Orchestra of Learning Using the Montessori Media for Children of Kindergarten Age; 3) An Everyday Skills Orchestra of Learning Using the Montessori Media for Children of Kindergarten Age; and 4) An Example of an Orchestra of Learning Using the Montessori Media: English Vocabulary Acquisition and Everyday Skills (Walking).

Orchestra of Learning

Degeng (2006a) states the following: "Improving the quality of learning begins from the learning design. Learning design can be made as a starting point to improve the quality of learning. This means that the improvement of the quality of learning must begin from the improvement of the learning design." Referring to the preceding statement from Degeng, it can be said that to create quality learning, it also needs a quality learning design. Because of that, a learning design that hinders the creativity and initiative of children has to be changed into a learning design or an orchestra of learning that is able to develop and allows enough room for creativity and initiative in learning.

An Orchestra of Learning is learning which is conducted interactively and inspiratively, in a fun and challenging way, to motivate learners to actively participate as well as give enough room for initiative and creativity which are appropriate to the skills, interests, physical development, and the psychology of the learner (Degeng, 2007a). An orchestra of learning is a symphony. The learning and teaching process is characterized as a music show where each of its performers have high enthusiasm to do or find new things, all of which are done with joy.

Based on Government Regulation Number 19 of 2005, Article 19, paragraph 1 regarding the Standard Process, it is stated that "[t]he Learning Process on an education unit is to be executed in an interactive, inspirational, fun, and challenging way, to motivate learners to actively participate, and to give enough room for initiative and creativity, appropriate to skills, interests, physical development, and psychology of the learners." The learning process for any level of education certainly should be executed as such, and learning for children of kindergarten age, which is very much

identical with joy, is no exception. This is necessary to develop a love of learning in children so that learning is no longer regarded as something that is burdening.

There are five indicators of an orchestra of learning and teaching, among them: free, relaxed, amazing, delightful, and spirited (Degeng, 2007a). Learning will be able to proceed well if those five indicators are present. The main principle of an orchestra of learning: “Enter the world of your students! Bring the world of the students to our world and bring our world to theirs. The further you enter the world of the student, the more influence you can give to them.” By doing so, learning becomes a full-contact activity that involves all aspects of a learner's personality (thoughts, feelings, and body language) in addition to knowledge, attitude, and previous faith, as well as perception of the future (DePorter et al., 2000)

The Two-Dimensional Model of Degeng's Orchestra of Learning

The Two-Dimensional Model of Degeng's Orchestra of Learning is an orchestra of learning model adapted from the Quantum learning model. The dimensions of an orchestra of learning consist of two components: context and contents (Degeng, 2006b). The context is the grandeur of the orchestra room itself (the environment), the spirit of the conductor and musicians (the atmosphere), the harmony of instruments and musicians in cooperating (the base), and the interpretation of the maestro towards the sheet music (the plan). The contents, meanwhile, are the interactions that occur among the aspects of the context. Table 1 shows a representation of the two-dimensional orchestra of learning model.

Table 1 – The Model of the Two-Dimensional Orchestra of Learning

Context	Contents
<ul style="list-style-type: none"> • A Spirited Atmosphere Builds motivation, creates feelings of sympathy and understanding, increases merriment and amazement, encourages risk-taking, develops a sense of belonging, displays exemplarity • A Firm Base Establishment of shared goals, develops shared principles and values, builds confidence in one's abilities, creates shared agreement/policies/procedures/rules, builds learning partnership • A Fun Environment Learning media, classroom environment, desk arrangement, plant arrangement, pets, aroma, musical arrangement • Creates Dynamic Learning From children's world to our world, adjusting to children's learning characteristics, combining success/failure/risk, using metaphors/analogues/suggestions 	<ul style="list-style-type: none"> • Child-Teacher Interaction Becoming a Q-Teacher, adjusting to children's learning styles, harmonizing body language with verbal expressions • Child-Curriculum Interaction Ensuring success of children while learning, creating optimal learning conditions • Learning Skills for Learning Learning using children's learning styles, setting up best conditions for learning, setting up the organization and placement of information, Quantum <i>reader/learner</i>) • Learning Life Skills Living beyond responsibility, clarity of communication

The Montessori Media

The Montessori Media is divided into three functions: (1) the sensory function, (2) the language function (preparation for writing and arithmetic), and (3) the motor function. The main principle for training the motor function uses environmental management, while to train the sensory and language functions is accomplished by the use of didactic materials (self-teaching and self-correcting).

Didactic material to train the sensory function is composed of a series of objects which are grouped together, which have physical forms and qualities which are related to training the English Vocabulary Acquisition, among others by size, shape, sound, and color. All types of these sensory materials are specially designed to train all of the English Vocabulary Acquisition.

Materials for training language are divided into three aspects: speaking skills, writing skills, and reading skills. Montessori grouped the materials to train the motor function with training to perform everyday tasks (practical life). All forms of practical life training forms the Montessori philosophical base for further academic learning because the exercises provided can help a child to develop concentration and independence.

Method

The model used in this development was Degeng's Two-Dimensional Orchestra of Learning. The procedure to develop the orchestra of learning covered three stages which were flexible in practice: 1) Defining Stage – In this stage, the developer performed the following activities: focusing and identifying problem-solving progressively, and developing phronesis and contextual understanding. 2) Design and Development Stage – This stage was done integratively in one inseparable unit. Among

others, the developer performed these activities: selection of the development environment, which is the orchestra of learning model product using Montessori media which will be used at the Griya Adinda Kindergarten of Malang, and selection of format and media.

The developmental products consisted of: a) An Orchestra of Learning Model Using the Montessori Media for Children of Kindergarten Age, b) A English Vocabulary Acquisition Orchestra of Learning Using the Montessori Media for Children of Kindergarten Age, c) An Everyday Skills Orchestra of Learning Using the Montessori Media for Children of Kindergarten Age, d) An Example of an Orchestra of Learning Using the Montessori Media: and d) An Example of an Orchestra of Learning Using the Montessori Media.

Evaluation

The development results were evaluated by a content expert, a media expert, a learning design expert, the kindergarten principal, and a teacher in the kindergarten. The data collection instrument took the form of direct responses on the script and a questionnaire. After evaluation from the three experts and two teachers, the developer made revisions according to the suggestions from the experts and teachers. This could have been done several times as needed until the experts approved the development.

Product testing was done with the goal of obtaining data which can be used as a base for revisions so that the product itself achieved a level of effectiveness and interest. The developmental product testing was focused on the design process and is not preceded by individual testing. This was because the results of the development are only meant for teachers. The data collection instrument was in the form of direct responses on the developmental product script and a questionnaire. The direct

responses on the developmental product script were used to collect review data from the content expert. The questionnaire was used to collect data from the media expert, the design expert, the principal, and the teacher.

The data analysis technique used to process data collected from the reviews of the experts, the principal, and the teacher was qualitative descriptive analysis. This analysis technique examines the review data obtained from the experts, the principal, and the teacher. The data analysis technique was performed by grouping the information from the qualitative data consisting of input, feedback, criticism, and comments for revisions, which were found in the direct responses on the developmental product script and questionnaire. The data analysis was then used as a base for revising the product. To conceptualize and decide the quality of the product, achievement levels were converted to a scale of five.

Results

This orchestra of learning product was evaluated by a content expert, a media expert, a design expert, the kindergarten principal, and a kindergarten teacher. Content Expert

The learning content expert stated the following regarding the contents of the products:

Orchestra of Learning Model: very good; Orchestra of Learning, English Vocabulary Acquisition and Everyday Life: very good; and Examples of Orchestra of Learning for English Vocabulary Acquisition and Everyday Life (Walking): very good.

Media Expert

The learning media expert stated that the product media of the Orchestra of Learning, English Vocabulary Acquisition and Everyday Life were very good.

Design Expert

The learning design expert stated the following regarding the design of the products:

Orchestra of Learning Model: good; Orchestra of Learning, English Vocabulary Acquisition: good; Orchestra of Learning, Everyday Life: very good; and Examples of Orchestra of Learning for English Vocabulary Acquisition and Everyday Life (Walking): very good.

Kindergarten Principal

The kindergarten principal stated the following regarding the products: Orchestra of Learning, English Vocabulary Acquisition: very good; Orchestra of Learning, Everyday Life: good; Example of Orchestra of Learning for English Vocabulary Acquisition good; and Example of Orchestra of Learning for Everyday Life (Walking): very good.

Kindergarten Teacher

The kindergarten teacher stated the following regarding the products: Orchestra of Learning, English Vocabulary Acquisition: good; Orchestra of Learning, Everyday Life: fair; and Examples of Orchestra of Learning for English Vocabulary Acquisition and Everyday Life (Walking): fair.

The developmental product of the Orchestra of Learning Model Using the Montessori Media for Learning the English Vocabulary Acquisition and Everyday Skills for Children of Kindergarten Age is divided into five parts: 1) An Orchestra of Learning Model Using the Montessori Media for Children of Kindergarten Age, 2) A English Vocabulary Acquisition Orchestra of Learning Using the Montessori Media for Children of Kindergarten Age, 3) An Everyday Skills Orchestra of Learning Using the Montessori Media for Children of

Kindergarten Age, 4) An Example of an Orchestra of Learning of English Vocabulary Acquisition Using the Montessori Media: and d) An Example of an Orchestra of Learning for Everyday Skills Using the Montessori Media: *Walking*. The revisions to the Orchestra of Learning Using the Montessori Media products have been done in accordance with the suggestions given by the experts, kindergarten principal, and kindergarten teacher.

There are a few advantages of the orchestra of learning, among others. The Orchestra of Learning Using the Montessori Media Product is a developmental learning design model which is flexible in nature and does not follow a strict and stiff order, to stimulate the creativity and initiative of children of kindergarten age, and was designed specially to fill learning in a kindergarten which uses the Montessori media as a learning media. It can increase growth in learning by giving a chance for each child to pick their own media which interests them. Also, children are driven to divergent, relational, and double-solving thinking through the various activities using the Montessori media which stimulates the learning creativity and initiative of children to nurture a leading individual. This developmental product can also grow the independence and learning passion of kindergarten age children by an organization of the learning environment which is appropriate to children's intellectual and emotional development. This was developed using Degeng's Two-Dimensional Orchestra of Learning model which is flexible in nature and appropriate to the learning design used at the Griya Adinda Kindergarten of Malang, which is the Quantum learning design.

This product has a few weaknesses, among others. The Orchestra of Learning developmental product, in particular the English Vocabulary Acquisition and

Everyday Skills teaching material books, can only be used in kindergartens where the Montessori media is used as a learning media. In addition, the development of the Orchestra of Learning Model is limited to the context or environmental organization of learning and not to the contents.

The Orchestra of Learning Using the Montessori Media Product Model can be used by any group in the field of children's education. Also, this product is also appropriate to be used for learning in kindergarten, especially for learning environment organization. The Orchestra of Learning product, specifically the Orchestra of Learning for English Vocabulary Acquisition and Everyday Life Using the Montessori Media, are very appropriate for use in kindergartens, especially those that use the Montessori media for learning.

Conclusion

The Orchestra of Learning Using the Montessori Media product can only be used in kindergartens that use the Montessori media for learning. Even so, the cover needs to be re-appropriated so that it can be used by a broader group of people and that it does not look like it was made only to fulfill thesis requirements. The Orchestra of Learning Using the Montessori Media Product Model can be used by any group that specializes in education for children of kindergarten age, and is not just limited to teachers.

The development of the orchestra of learning product model is still limited to the context or environmental organization of learning for kindergarten education needs, and only uses the Montessori media. Because of that, the following can be done to develop the product: a) expand the content of the orchestra of learning model; b) use other learning media to develop the orchestra of learning; and c) use the

orchestra of learning media in higher levels of education.

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