

DEVELOPMENT OF MODEL LOCAL GENIUS IN KINESIOLOGY COURSES

Abstract

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This research aims to improve the quality of learning through development-oriented model of local genius on the subject kinesiology.

Development of models and tools based on Plomp development consisting of phases: an initial investigation, design, realization / construction, testing, evaluation, revision, and implementation. The data required are data on the validity of the model, a model of practicality, and effectiveness of the model validation were collected by using sheets, tests, interviews, questionnaires, and diaries. The data has been collected was analyzed descriptively and then compared with criteria of validity, practicality, and effectiveness of the model.

The results showed that: 1. Model development consists of 4 phases namely phases: 1) introduction, 2) use the concept of a motivator in cooperative groups, 3) evaluation (individual), and 4) award team. 2. Oriented learning model local genius who produced very effectively used to improve the quality of learning in subjects like kinesiology: student activities in following a very high learning, learning achievement of students classified in either category, and positive student responses to learning.

Key words: development, model, local genius

INTRODUCTION

Broadly speaking competence given in kinesiology course discusses the concepts and application of motion analysis of effective, efficient and safe in sport, which includes the careful selection of equipment and facilities, training (heating, stretching, exercise, and cooling), completeness protector, as well as early treatment efforts injury at the time of exercise. Kinesiology is the scientific study of human movement. Kinesiology comes from the Greek language (Greek) kinesi which means the movement / motion and logos meaning science. Thus kinesiology means the science of motion, but only limited to human movement (Imam Hidayat, 1999: 5). As the study of human body movement, kinesiology focuses on other sciences that relate to human movement among other elements of anatomy, physiology and mechanics that have to do with movement, especially bone, tissue, muscles, nervous system and skeletal system. Most of the lessons kinesiology based primarily on two areas of science that is the anatomy of skeletal muscle (musculoskeletal) and Biomechanics (Biomechanics), whereas the neuromuscular physiology (neuro-muscular) is a separate lesson.

Many efforts have been made in improving the quality of teaching faculty in kinesiology courses, namely by trying to implement innovative learning and trying to make a paradigm shift from the paradigm of learning that is teacher-oriented to student-oriented paradigm. However, the results obtained has not been as expected. This is caused by many things: effort teachers have not touched directly the lives of students and faculty often experience obstacles when trying to implement innovative learning so that the learning process tend to be procedural.

Van de Walle (1990) says "when the rules or procedures are either based on conceptual knowledge owned by it will be able to explain and make the learning process without actively involving students both physical and non physical. This affects the learning process makes students become passive in following the explanations of learning and less attention from teachers. In general, these effects arise because of learning undertaken by teachers not yet provide the opportunity for students to construct their own knowledge and learning do not take advantage of local knowledge / local genius.

Local genius is often conceived as a local policy (local wisdom), local knowledge (local knowledge) or local intelligence (local genius). local genius is the attitudes, views, and the ability of a community in managing the spiritual and his physical environment, which gives to the community's resilience and ability to grow in the area where the community is located. Utilization of a positive local genius in learning is one key factor in improving the quality of learning. It is said that positive local genius because no local genius that negatively affect a success including learning success.

Accordingly, Ardhana and Sudharta (1990) argued that culture is growing very strongly in the concept of "fate" in which this concept to the extreme to minimize effort, effort and human capabilities in the fight of his life, so as to realize the passive attitude and give up easily, a attitude that is not potential for life. Noting the above opinion, the concept of fate as far as possible attempt was made to not appear or develop in students self because it can reduce the motivation of achievement in college students.

The above shows how important attention to local genius in planning and implementing learning and so it is necessary to discuss and develop the local genius-oriented model in an effort to improve the quality of learning.

LITERATURE REVIEW

1. Learning Model

In the learning process known as some of the terms that have similar meanings, so that often people feel confused to tell the difference. These terms are: (1) learning approach, (2) learning strategies, (3) methods of learning, (4) learning techniques, (5) learning tactics, and (6) learning model. The following terms will be presented, with the hope of understanding about the use of the term. If between the approaches, strategies, methods, techniques and tactics even learning already strung into a unified whole is formed what is called a model of learning. Thus, the learning model is basically a form of learning which is reflected from the beginning to the end represented typically by a teacher. In other words, the learning model is a wrap or a frame from the application of an approach, methods and learning techniques (Akhmad Sudrajat, 2008).

With regard to the learning model, Bruce Joyce and Marsha Weil (Dedi Surasega Supriawan and A. Benjamin, 1990) explores four (4) group learning model, namely: (1) model of social interaction, (2) information processing model, (3) model a personal-humanistic, and (4) model of behavior modification. However, often use the term learning model is identified with the learning strategy. Beyond these terms, in the learning process is also known terms of instructional design. If the learning strategy is more related to general patterns and general procedures of learning activities, whereas design refers to learning more ways to plan a specific learning environment system after a particular set of learning strategies. If the analogy with the manufacture of home, the strategy talks about various possible types or kinds of houses that will be built (home joglo, gadang house, modern house, etc.), each impression and a message will display different and unique. While the design is the blueprint set (blue print) to be constructed along with the materials needed and step sequences of construction, and completion criteria, ranging from early stage until the final stage, after the specified type of houses to be built.

Based on the above description, that in order to carry out their duties in a professional, a teacher is required to understand and possess adequate skills in developing various models for effective learning, creative and fun, as implied in the Education Unit Level Curriculum. Observing the learning reform efforts that are being developed in Indonesia, teachers or prospective teachers now many choices offered by the learning model, which is sometimes for the sake of research (academic research and action research) is very difficult to find the sources of reference. However, if teachers (prospective teachers) have to understand basic concepts or theories of learning which refers to the process (along with concepts and theories) of learning as outlined above, it is basically a creative teacher can try out and develop their own unique learning model, in accordance with actual conditions in their respective workplaces, so that in turn will show the models of learning version of the teacher in question, which would enrich the treasures of the existing learning model (Akhmad Sudrajat, 2008).

2. Local Genius (Local Intelligence)

Learning-oriented model is the local genius that foster learning in students' achievement motivation. It could be argued that because the learning is done to arouse and develop self-motivation in students is reflected in the spirit of student learning. In addition, local genius oriented learning can enhance students' academic self-concept in the belief of students of academic ability. With high confidence of students on academic ability or have a high degree of assurance of success, then this may lead to hard efforts of students to achieve success and the end they were able to achieve the desired performance .

Local genius is a view of life and science and life strategies that intangible activities carried out by local students in answering a variety of problems in fulfilling their needs, local intelligence can essentially be viewed as the foundation for the formation of national identity nationally. Local intelligence to be a bridge that connects past and present, generations of ancestors and the present generation, in order to prepare future and future generations.

By always taking into account local intelligence through human necessarily education learners (pupils and students) are expected not trapped in a situation of

alienation. So the local content in education must always be interpreted in the context of liberation in order to better know ourselves and the environment. Digging and reinvest the local intelligence is inherently channeled through education can be said as a movement back to the base of their own areas of cultural value as part of efforts to build national identity, and as a filter in the selection of cultural influences. The values of the local intelligence is a strategic function for the formation of character and national identity. Education which put the matter to the local genius will lead to the emergence of an independent attitude, full of initiative, and creative.

The values of local genius can basically be viewed as the foundation for the formation of national identity nationally. local intelligence that makes a nation's culture has roots. Local ethnic culture often serves as a source or reference for the author-new authors, egg in language, art, good people, technology, and so on are shown in cross-cultural livelihood. Local genius interpreted as typical or traditional elements that are able to maintain the existence of any influence of external cultural elements and how we integrate these cultural elements in the development of attitudes and personality of the people who became a local advantage in the competitive globalized world.

Genius is a locally-based education model of education that has high relevance for the development of life skills (life skills), relying on the skills and potential for local empowerment in their respective regions. Learning materials should have meaning and relevance of their high level of empowerment in real life, based on the realities they face. The curriculum is the curriculum should be prepared in accordance with environmental conditions, interests, and the learners. One also must consider the sociological and constraints they face cultural (Ariska Prasetyanawati, 2010: 8-11).

Local genius based education is education that teaches students to always be attached to concrete situations that they face is to generate a high achievement motivation of students, resulting in more students will persist in the tasks or learning until they achieve success. Achievement motivation is maximized through the discovery and delivery of students who carried out the sentences suggestion, whether delivered orally by the teacher or in the form of text contained in the student worksheets and books.

To avoid excessive optimism in the students, the use of the phrase suggestions need to be tailored to the circumstances of students. In addition, the atmosphere of learning is directed so that the fun / convenient for students. Leisure can happen because: 1) a situation of mutual respect for differing opinions without having to sharpen the differences that exist and are not quick to blame the opinion of friends, 2) the learning situation that positive interdependence, meaning that every member of the study group have the same responsibility for achievement of individual and performance groups in the hope that each member of the group have an adequate understanding of the material being studied; 3) receive diversity capabilities of other students so as to maximize the humble nature of the self-student (I Made Ardana, 2008). Thus the learning-oriented local genius to avoid the emergence of the concept of fate among the students that can hinder learning and this learning ultimately can lead students to achieve an optimal learning achievement.

3. Course Characteristics kinesiology

Kinesiology is the scientific study of human movement. Kinesiology comes from the Greek language (Greek) which means kinesis motion / motion and logos meaning science. Thus kinesiology means the science of motion, but only limited to human movement (Imam Hidayat, 1999: 5). Motion is an activity or process of changing place or position viewed from a certain viewpoint. Human movement is assisted by the completeness of its equipment but all man-made mechanical devices however sophisticated, will experience wear and tear during use. Unlike the case with the human body, although there is a worn but there are recovery and cell networks grow and become better functionally.

Human movements can be observed due to the change in position of the body or limbs in space and time. All forms of movement, occurred because it is influenced by a number of styles. The style here is none other than muscle contraction. The movement occurs because of three elements, namely: 1) Bone as a means of driving, 2) muscle as a source of activator and 3) the joints that allow movement.

Benefits of sports students studying kinesiology is to improve the movement into a higher stage by analyzing the motion, to see the beauty, the uniqueness of human movement, and can apply the principle of movement in sports. Luttgens and Wells

(1982: 11). has three main reasons to study kinesiology, namely: (1) safety (safe), in order to avoid injury during physical activity, (2) skills (effective), so that something will rise and brilliant movement, and (3) adequacy (efficient), so that movements are made to reach a higher stage.

Kinesiology is the science that is important for the preparation of physical education teachers and experts in the field of professional sports. Movements of the muscle-skeletal system, which is the center of attention of the profession in the sports field produced by the contraction of muscles and is influenced by surrounding factors such as gravity and friction. These movements produced depends on two factors, namely factors that influence muscle contraction and the factors surrounding circumstances. Factors affecting muscle contraction mencakup properties, structure and function of muscle and nervous system that stimulates and controls the movement. The study of such properties are in the field of anatomy. Factors surrounding circumstances include gravity, friction, liquid resistance, and the normal reaction force arising because of a hit with other objects such as land, air, opponents played, and so forth. The study of these factors was in the branch of physics known as mechanics. In terms of the relationship between human movement sciences of anatomy and mechanics, physical education teachers and experts in the field of sports will have many benefits.

Teachers are experts in physical education and sport must have knowledge of the science of motion if it should present an effective program for the participant students. Teaching basic movements, movement skills, as well as improvements to the knowledge of motion is highly dependent kinetics. By understanding the basics of movement, physical education teachers to improve the movement which basically requires practice so that these movements become more high-quality trained and can provide greater results than before trained.

According Soedarminto (1992) through motion analysis kinesiology efficient, effective and safe related to analysis of bones and joints (anatomy), neuromuscular system (physiology) of human movement, and the legal principles associated with mechanics of human movement (mechanics) will be created properly. Human movement is efficient, effective and safe is a good motion (good technique). Because

each movement pattern using the energy (power), efficient in achieving the intended results or objectives (effectiveness) and to avoid injury in the motion (safe).

Movement in an efficient manner, with the efficient running, running, throwing, jumping, and all sports activities with efficient, too. If the motion is efficient, then we can control and master the attitudes, both at rest / rest and in motion. If the motion is efficient, it can be assumed that the technique is correct, because the technique is correct, because the technique is the ability to utilize the principle or theory in improving skills in an efficient manner. We recommend that if the technique is correct, it is certain that it is efficient motion. Efficiency is also closely related to the perfection of motion and beauty of motion. So efficiency, motion technique, and beauty of movement has a reciprocal relationship.

RESEARCH METHODOLOGY

The design of this study is the type of research and development-oriented research on the product. The main procedures in research and development consists of five steps, namely: (1) preliminary studies, (2) develop a model, (3) test model, (4) validation of model products (5) to socialize and dissemination. The design of the development's first phase aims to formulate a model of learning kinesiology through local genius. Product to be developed include: preparation of syllabus, lesson plans, and handbooks on the subject teaching team kinesiology Department of Health Education and Recreation FIK UNY. The detailed procedure kinesiology learning development through a local model and the genius to follow the model based on the development Plomp (1999) which consists of 5 phases which: 1) initial investigation, 2) design / drafting; 3) realization / construction; 4) tests, evaluation and revision, and 5) implementation. Instruments in this research is a sheet that is the subject of evaluation of expert opinions professor of physical education and kinesiology courses. The instrument was conducted in order to obtain feedback and improvement of the model to be developed. The evaluation covers aspects of form / content of the learning model, general comments and suggestions, and conclusions. Evaluation range from "very good" up to "very poor" by giving a "√" in the fields. Data obtained through the evaluation sheets from the expert and professor of kinesiology courses were analyzed using qualitative descriptive statistics.

RESULTS AND DISCUSSION

Research Results

Based on the results of field observation, it was found that learning-oriented kinesiology still learning outcomes. The learning process is still ongoing in a conventional lecture. This means that learning patterns are still centered on the lecturer (teacher oriented) with the delivery of basic techniques in analyzing several sports. The following are the characteristics of the learning model kinesiology courses and local genius model:

The characteristics of Learning Model kinesiology course with Model local genius

The characteristics	Course Learning Model Kinesiology	Model local genius
Learning Methods	<i>teacher oriented</i>	<i>Student oriented</i>
Implementation of Learning	Teaches how to analyze the motion of a good (efficient, effective and safe)	Direct practice independently and in groups by analyzing the movement of sports
Participation Requirements	Same role for all students	1. In accordance with the development of student 2. A more diverse role 3. Full participation of students
Learning Objectives	Delivering basic theories	developing a reliable nature of sports analyzer with the theory and practice
Assessment	Authentic assessment	Using a checklist (checklist) skills to determine the accuracy of the student.
Syllabus and lesson plans	Basic learning model	Model <i>local genius</i>
The role of student	little	Many
Role of lecturer	Many	little
Learning time	Using a learning unit that is usually long	Using a more effective learning groups
Infrastructure Facilities	classroom space, power point, pictures and LCD	classroom, field, video and LCD
Results / Products / Learning	Papers	Video analysis

Discussion

Based on the steps of research and development to produce products that have been made, then the final product obtained in the form of models of local genius kinesiology courses on student FIK. The specification and product benefits of the research development includes four characteristics: 1) initial investigation, 2) design / drafting; 3) realization / construction; 4) testing, evaluation and revision, and 5) implementation.

Initial investigation carried out by providing an introduction and explanation in lectures before doing the analysis, by dividing the number of groups according to the beliefs students' academic ability. Design and Realization oriented learning by student (student oriented) that is a motivator in the premises utilizing the concept of cooperative groups. The evaluation was done by using a checklist (checklist) to determine the precision skills of individual students. Team Award is done by identifying some group / team of the best, done in various forms, ranging from the ability to ask, Traffic said, the number of students who are active in the discussions, the number of students in attendance, and quality of tasks, an award given to the delivery of medals for enhance the meaning of participation and the social aspects of experience do college students.

Based on those results above, it appears that the development and utilization of local genius in learning model affects students' academic self-concept increased the confidence of students on academic ability. Students who have faith in good academic ability resulted in increasing their success rate and able to develop the achievement motivation in students so as to bring a positive impact on student learning achievement.

Establishment of basic kinesiology courses learning through local genius model is expected to give a clear picture of the context of conventional learning / procedural, with emphasis on mastering the techniques of sports analysis and believes Traffic academic-oriented students towards cooperative learning in groups that educate students to become analyzer , the ability of cooperation, and to distinguish the motion of right and wrong and can fix the wrong move to be good, which includes efficient, effective and safe.

CONCLUSION AND RECOMMENDATIONS

Conclusion

Based on research results and discussion above, it can be concluded that the local genius-oriented learning model consists of 4 phases, namely: 1). Introduction, 2) Utilization of the concept of motivation in cooperative groups; 3) Evaluation (individual), and 4) Award team. In addition, highly effective learning model is used to improve the quality of learning that is student activities in following a very high learning, learning achievement of students classified in either category, and positive student responses to learning.

The final product model kinesiology local genius on the subject as a whole can be tested to obtain maximum results. The model can bridge the local genius of students and lecturers in the learning-oriented view on the involvement of students into analysis of sports movements with the right techniques.

Recommendations

Need to be testing the first phase of research to achieve maximum results and dissemination of research should be conducted to prove the effectiveness of the model that has made local genius.

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