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A study deals with critical thinking based model for Invertebrate Zoology instruction conducted in Biology Education of Teachers Training College was aimed to improve critical thinking of the biology prospective teachers. This study employed research and development design. This study was intended to mainly provide the prospective teachers with: a developed model of critical thinking based instructional program, and its evaluation. The study resulted in a model of critical thinking-based instructional program used for teaching Invertebrate Zoology. The proposed model has its strength in improving students' both deductive and inductive thinking skills. In addition, this model is also effective to improve critical thinking in the teaching practice of certain subject covering structural morphology and anatomy. Yet, the developed model has its limitation in terms of enhancing/promoting students'/trainees' of making assumptions and arguments.

Key Words: instructional program of Invertebrate Zoology, critical thinking skill, model of teaching

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It has been widely accepted that environmental degradation is caused mainly by human anthropogenic activities. Indeed, injudicious exploitation towards natural resources has caused many negative externalities. Hence, cultural efforts are needed due to prevent further degree of degradation. According to the aforementioned goals, people behavior becomes a key factor of realizing sustainable environment. And this change of behavior can be achieved through education. As pertained to the importance of education in environmental conservation Toyota has contributed to this good programme through the programme called the *Toyota Eco-Youth (TEY)*. This green programme is performed towards students of SMA Negeri 1 Depok. A research about environmental awareness then is needed to assess student's motivation to participate in the *Toyota Eco Youth* programme. This research is considered as a quantitative research. Questionnaire was used to collect the data from all the respondents. Samples are taken randomly in a proportional manner. The collected data were descriptively analyzed by using descriptive statistic. The result of this research shows that student of SMA Negeri 1 Depok is highly motivated in performing environmentally friendly action. This condition is a good physiological capital to realize campaign to promote a good environmental attitude towards the youth.

Keywords : Environmental attitude, Student's motivation, Toyota Eco Youth

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Metacognition skill is regarded as higher order thinking. It is important to assure the success of achieving particular learning goal as it guarantees the improvement of student's ability of thinking towards particular given concept. Building metacognition skill has been commonly used in learning Genetics. One example of method within metacognition is Reading, Questioning and Answering (RQA) model. Theoretically, this model is able to facilitate student to improve his higher order thinking and therefore, metacognition skill in Genetics can be raised through this model.

Key Words: Metacognition skill, higher order thinking

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This research aims to raise student competence through the application of constructivism approach. A cooperative Problem Based Learning is used to achieve the aforesaid goal. This is a classroom action research that performed towards 48 university student at the fourth semester in Faculty of Teacher Training and Education. The dependent variable in this research was student's competence whereas the independent variable is the application of the aforementioned approach and model. By the application of Cooperative Problem Based Learning, the cognitive score has been raised and hence, its application towards is considered as effective.

Keywords: Cooperative Problem Based Learning, Learning achievement

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The aims of this study are to find out: (1) the effect of influence between Search Solve Created and Share learning model and the Problem Based Instruction to the achievement of biology, and (2) the influence between the high creativity students and the low creativity students to the achievement of biology. This research was conducted during May-June 2006, using experimental method by taking two groups randomly. The population of the research is all students in grade X in SMA Negeri 1 Karanganyar 2005/2006. The sample is six classes taken randomly by lottery, the control classes are X1, X4 dan X6, and the experimental classes are X2, X3 and X5. The technique of collection data is using test, documentation, questionnaire and observation. The data is analyzed using Anava technique. From the analysis it can be concluded that: (1) there was any influence Search Solve Created and Share learning model and the *Problem Based Instruction* learning model to the achievement of biology, (2) there was any influence between the high students' creativity and the low students' creativity to the achievement of biology.

Key Words: learning model *Search Solve Create and Share* and *Problem Based Instruction*, achievement of biology, students' creativity

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The purpose of this research is to know the level of human capital in Sub-Watershed Keduang related to conservation efforts in the watershed. Based on the questionnaires on human capital in the watershed Keduang, levels of achievement of particular capital at Keduang can be measured. The survey shows that 34.48% farmers of sub Watershed Keduang is considered as low educated. The level of human capital is 40.70 with a standard deviation of 6:51. If the total score of the ideal criteria is 55 the actual level of human capital is considered as moderate. Such degree of human capital is considered as sufficiently support efforts in watershed management at Keduang.

Key Words : Human capital, watershed conservation

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This research is aimed to reveal some misconception in genetic in some senior highschool handbook. Twelve biology books for highschool published during 2006-2010 have been reviewed. All those books show particular pattern of misconception that caused by misunderstanding about particular Mendelian approaches, inappropriate analogy and terminologies. Those misunderstanding lead to the misconception in the concept of chromose structure, protein syntheses, cell division, traits and mutation. Such misconceptions can be fix through the application of representative biomolecular approaches.

Key Words: Misconception in genetics.

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The research is aimed to know level of inquiry skill of elementary school teacher candidate as this type of skill is considered as appropriate for achieving science skill processes during teaching and learning processes in scientific knowledge. This research follows the qualitative paradigm. To achieve the research goal, the data was collected upon 30 teacher candidates by using tests, observation, questionnaires, and interview. The obtained data were descriptively analyzed. The result shows that inquiry skill level of elementary school teacher candidate is regarded as insufficient.









Key words: inquiry skill

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