UNIVERSITI TEKNOLOGI MARA

THE DEVELOPMENT OF HADHARI ENVIRONMENTAL ATTITUDE TEST INSTRUMENT FOR MALAYSIAN UNIVERSITY STUDENTS

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Thesis submitted in fulfillment of the requirements for the degree of Doctor of Philosophy

Faculty of Education

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AUTHOR’S DECLARATION

I declare that work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any other degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

Environmental crisis and ecological problems produced a global call to involve all residents of the Earth. Global warming, climate change, rise of sea level, glacier decrease, food crisis, health hazards, deforestation and others are among the problems, affected by human attitude. For that, environmental attitude development becomes more serious as UNESCO declared that 2005-2014 as ‘the decade of education for sustainable development’. Environmental attitude is best measured with affective outcomes; factual knowledge and behavior intention component to meet behavioral component. There is lack of study about the affective impacts of the environmental-related courses especially using a comprehensive instrument of environmental attitude. The objective of this research is to develop a valid and reliable Hadhari Environmental Attitude Test (HEAT) to assess the student’s environmental attitude after attending the environmental ethics course. Initial study has been done to support the development of the instrument, validated by the experts in education and environmental studies. HEAT comprises of 60 items on environmental attitude within ten dimensions, with reference to Quranic and prophetic values and in parallel with global and local’s concern. It is well tested and validated, with high reliability (r=0.94) using Rasch® measurement model. The test is also validated with Cronbach Alpha value of α=082. This research is also to identify the environmental profile among Malaysian students, who completed the environmental ethics course at the tertiary level. Forty three (43) students of environmental ethics course at university level, which is equivalent to 1537 data sets, are identified and the test session is administered, before and after a semester. There is nearly no correlation between student’s environmental knowledge and attitude (r=0.157), after the course as the result shows the mean before the course is 0.03
logi s and -0.02
logi s after the course; a difference of -0.01
logi s with low correlation value (p<0.01, r=0.427). However, the result shows a clear difference of student’s performance using this alternative assessment for affective effects, with comparison to the conventional method which is merely on cognitive effects. The research found 23.3% students have excellent grade, 72.1% students have good grade and 4.6% students fail in their examination. However, HEAT found that no student has excellent grade (committed pro-environmental), 55.5% of them have good grade (not committed pro-environmental) and 44.2% of them attained below passing grade (not pro-environmental). In conclusion, this research leads to few recommendations of paradigm shift in designing contents, learning outcomes and assessment method to achieve the objective of affective education for holistic education and sustainable development.
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Allah has created us the best ummah of the world, as mentioned in the Holy Quran. A part of the attributes of human being is the appointment as caliph or steward of the Earth. This stewardship and caliphacy is closely related to the obligation of amanah towards Earth and environment. Man without amanah is not considered as a believer, as mentioned by the Prophet SAW. This is the root inspirational motivation for me to study the environmental education, especially to ensure the success of future leaders who bear the amanah to God to sustain, conserve and wisely utilize all resources of the Earth, which includes all entities of the environment.

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Mohd Nor Mamat
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