

The ones that use film teaching cognition of environmental topic of the high pupil of primary school of grade and attitude to influence are studied

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Abstract: With rapid change of science and technology, human life has brought a lot of progress and convenience. This progress has already brought serious and negative influence for our living environment. Because the mankind excessively utilizes science and technology in the environment, it derives a lot of environmental problems out. In addition, people have different faith and values so that it is unable to make the common understanding to its solution. Therefore, this research is to utilize film teaching cognition of environmental topic to attract people to pay attention about our living environment. The environmental topic of this research refers to relevant global warm topics.

Keywords: - Green topic, film teaching, environmental topic, melting globally and warmly

1 Teaching of environmental topic

Taking the environmental problems of all parts as the core, teaching activity leads students to analyse in depth and think. We call that the teaching of environmental topic.

1.1 Goal of teaching of topic

adapt the educational course development goal of environment, propose four educational objective levels, include basic level, topic awareness level, investigation, assessment level and citizen's responsibility level. It being with environment educational course ecology foundation, concept awareness, problem study and assess and environmental action 4 of skill of development goal, contrast and contrast it like form one:

Form one Goal of teaching of topic

Classification	Teaching goal stratum of the environmental topic	Educational course development goal stratum of the environment
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	Level		
1	A basic level offers learners to know and investigate the knowledge of the environment, includes the topic and is correlated with	Disciplines basic and studying when content.	Ecology foundation
2	Two topic awareness levels increase learner's cognition of concept of topic, included at the same time	Solve it via investigating, assess, personal decision, citizen take action and solve	Demand for the environmental topic.

3	Investigate the level	Offer the topic of investigating to learners with assessing the scheme of substituting in order to solve the forming of necessary knowledge and skill of these topics, he included some course letting students participate in the topic and investigate at the same time, collect, understand and annotate and communicate after including the materials.	The problem is studied and commented Estimate
4	Citizen's responsibility Take the post as the level	It lead learner develop and use it learn for responsible decision with adopting to action in order to lasting topics environmental.	Environment al action skill

1.2 Environmental topic teaching way

1.2.1. Teaching way of scholars such as Hungerford, etc.

have proposed a set of systematic study ways, Include six mould groups[3]:

- a. Solve the environmental problem: Students explore the impact on environmental topic of faith and values, analyze, summarize the meaning of the environmental topic.
- b. Plan to carry on the environmental topic investigation: Students distinguish the environmental topic, write and study the problem, study how to collect second hand materials and assessment, compare the source of the materials.

- c. The investigation of the environmental topic: How students study to collect the materials by way of investigation, questionnaire, etc..
- d. Annotate the materials: How students study to understand the materials, concluding and inference in the topic investigation, take shape and propose.
- e. Carry on the investigation actually: Students choose to investigate a topic by oneself.
- f. Environmental action tactics: Students study the main method that the citizen takes action, analyze the action efficiency, assessment action decision of individual and group and develop the settlement topic tactics.

1.2.2. Teaching way of Stapp

propose a set of teaching ways which solves the problem, include the following step five[1]:

- a. Assert the question, establish the question.
- b. Collect, sort out and analyze the materials.
- c. Produce, commenting amount and choosing to substitute the scheme.
- d. Develop, commenting amount and carrying out the action plan.
- e. Action result and the whole course of the commenting amount.

1.2.3. The teaching ways of Johnson, etc.

propose structural dispute teaching way, the step explains as follows[2]:

- a. Teacher and student choose an important citizen's topic.
- b. Teacher divide into groups students, a group plans to agree the view, a group prepare the opposing view.
- c. The teacher offers a bibliography to students, in order to help students to organize one's own view.
- d. Students read relevant materials and plan to have view of convincingness.
- e. The students agreeing put forward the view.
- f. Opposing students put forward the view.
- g. Agree to exchange positions with opposing students.
- h. Repeat step 5, 6.
- i. Group members abandon the position, try to reach common understanding, students can also propose the third kind of view at this moment.
- j. The group publishes the common understanding that the group reaches to the whole class.

1.3 Teaching and the teaching of discipline centre of topic centre

Regard topic as the centre different from teaching view taking discipline as the centre, Similarities and differences of teaching of detailed comparative topic centre of seven respects and teaching of discipline centre such as theoretical foundation, teaching goal .

2 Global warm relevant research that melt

2.1 Global warm phenomenon of melting

The whole of earth temperature is that the changes in temperature appears alternatively. In the climate develop the past a million years, nearly go through several dozen ice ages, the changes in temperature one appears alternatively, the last glacier period nearly happened more than 18,000 years ago, climate of the earth was the interglacial stage at present[4]

According to history of the climate, although temperature is not the supreme temperature in history of the earth now. The earth temperature by 4,000 is higher than now about 6,000 years ago, but the pace that its temperature rises is quite surprising. Point out according to the third assessment report of IPCC: In the 20th century, 0.6 °C that the temperature of the earth's surface rose equally in the world, increasing the warm phenomenon among 1995-2000 years among them was more apparent.

2.2 Global warm influence that melts

At present because the global warm phenomenon of melting, has already caused many environment striking and changes, put it in order like form three.

Point out according to the third assessment report of IPCC: If does not take any to prevent from and make to the mankind and discharge the gas measure of the greenhouse, the global temperature of average ground will increase 1.4-5.8 °C compared with 1990 in 2100, And the sea level will rise by 9- 88 centimeters, area of global coastal low-lying, island,etc. will face the upward threat of sea water (IPCC 2001). And the greenhouse effects will affect the abnormal climate changes of the earth, already the foreseeable impact has emerged to the earth environment as follows[5].

a. Melt in the ice field of polar region, the sea level rises, relatively flood the coastal land of the

low-lying, assault the lowland country and most national coastal quintessence area.

b. The climate changes global, lead to the fact the abnormal torrential rain and phenomenon on land of the universe, bludgon water and soil resources environmental sanitation and mankind's life,etc. into.

c.The desertification phenomenon is expanded, the ecosystem changes, bludgon the farming, forestry, fishing and husbandary, society into passing the activity and global living environment etc..

Form three Warm impact that melts to the earth environment

Warm impact that melts to the earth environment	
Assault the project	Influence the aspect
Water resource	Water supplies the systematic change Change of water quality Increase of drought of the universe.
Agriculture	The crops output changes Increase the demand irrigated
Sea level and coastal area	The sea level rises Island of the low-lying and coastal cities are attacked by the flood The seabeach is attacked Influence fishery
Forest	Change the composition of the forest and position where one stays or lead to the fact some forest disappears Fire caused by drought of the universe Reduction of wild animals and
Bio-diversity	Extinction of the species of the animals and plants Reduction of the habitat Influence of the aquatic
Extreme weather	Lengthen heat wave and the universe drought Increase of the flood Enhancement of the hurricane, typhoon, tornado and storm wind
Health, disease	Increase because the death that heat and disease produce The supply of the food and water is influenced The spread of disease increases Disease breathed in increase Because the flood of the coastal area causes the pollution of the

Population	Death, increase migrating The refugee that produces because of the environmental problem increases
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Since the arrangement of materials, G. Environment science that Tyler Miller burns

2.3 Warm measure that melt that should be global

In the face of earth environmental problem that worsen day by day, environmental disaster the non- single country can solve alone already, must pass the international common cooperative tactics. United Nations Environment Programme (UNEP) in 1988, and World Meteorological Organization(WMO) establish together International Panel on Climate Change(IPCC). Because after Montreal Protocol on Substances that Depletethe Ozone Layer carries out, have really reduced the content of chlorine carbide of Fluorine in the atmosphere effectively. United Nations Conference of Environment and Development nearly held in Brazil in 1992 (UNCED) Commonly called as the United Nations Framework Convention on Climate Change that Earth Summit puts forward (UNFCCC), This convention is convention of mother of Kyoto Protocol.

Though Kyoto Protocol comes into force, the question with implicit back and possible risk are worth thinking deeply about

a) The mankind may face the extensive climate to change in the next century, the industry certainly will put into coming more because in conformity with the impact brought toward humanity and ecology of the natural disaster.

b) Even there are a lot of uncertain factors, the mankind may still need to sacrifice the development in economy of a certain degree, in order to stabilize the gas thickness of the greenhouse in the atmosphere.

2.4 Always the discussion of the topic with melting of course globally and warmly in nine years

Course outline stipulate always nine year, to use for how about via school education does it brief on, arrange the appropriate teaching situation and teaching material, carry on the effective teaching activity, Promote students to study, in order to promote knowledge and cultivate the ability to solve the problem. So, have something to do with and melt globally and warmly and

strengthen the impact on the earth with the greenhouse effects, have already become one of the educational subjects now, and incorporate it in three respects of environmental cognition, environmental ethics values and environmental action skill:

a. Environmental cognition: Teach students how to understand the ecological basic conception of the earth, the greenhouse effects, to the influence that the earth bring.

b. Environmental ethics values: Train student's environmental protection attitude with positive front, the importance that the phenomenon worsen that realize and prevent and cure the air pollution and halt melting warmly.

c. Environmental action skill: Lead students to show loving care for the earth, collect relevant materials, discuss and propose the possible solution, reach and manage continuously forever.

2.5 Research discussion of the relevant concepts that global and warm to melt

The teacher is a very important knowledge disseminator, shoulder community responsibility. So teacher be which have correct in itself concept, could correct cognition, student of professor. Hope to probe into the literature to understand the grade teacher is to the global warm possible myth concept that melts, by regarding as and designing the reference of the concept questionnaire tool, help the researcher to design setting out and have research tools of degree of letter result.

In addition, Summers, In the interview grade teacher[7], The result of study also points out the teachers realize the global warm fact that melt, understand too the global warm reason to melt is uncertain.

b. Cause the warm melting and reason of climate changes

Found the wondrous myth concept by the result of study[4] [5] [6] [7], to the research which grade teacher, duty former teacher and freshman do, get a lot of experimenter with global to take, linked to, form fan thought law together while being warm ozone layer all.

c. How to slow down to melt in the pace and climate changes warmly

Synthesize the literature discussion of the above, though marriage partner and research approach investigated in every research are not the same, but we can find to the concept with a lot of myth is to exist in the cognitive structure of the research object deep-rootedly. Results that the concept will be investigated done, put it in order

like form ten, the reference in order to be designed as the questionnaire.

Form ten The analysis of the result of study is put in order

Project	Main investigation result	Research and analyse
Melt warmly and the climate change Move	1. Temperature rises 2. Change disappear four seasons, leave two seasons of winter of summer only 3. The weather changes suddenly	Most experimenters all admit that warm the phenomenon of melting is produced and the climate is in changes.
Cause and melt warmly with the reason of climate changes	1. Ozone layer hole 2. Greenhouse effects 3. Environmental pollution	The main reason for climate changes that regarded as the ozone layer hole, is a very serious myth concept.
Slow down and melt in the pace and climate changes warmly	1. Stipulate the standard 2. Behavior with friendly environment (Use environmentally safe products, plant the trees, ride few motorcycles 3. Promote people's environmental protection knowledge and sense of responsibility	The answer of experimenter's very general proposition environmental protection, and a lot do not really reduce and get a breathing space the effective method to wait changes

Global warming Have already caused ecological deterioration of the environment of the climatic anomaly of the earth, nature,etc. to strike greatly. So, prevent and inhibit the global warm phenomenon of melting from already becoming the very urgent subject. Violate natural mistake in order to improve this, can slow down the tempo of the phenomenon of melting warmly, Except that set about improving from tactics such as politics, economy,etc., it is important that educate a ring.

3 Relevant theories of teaching of film

3.1 Theoretical foundation of teaching of film

The teaching of film is a link among

media's teaching, The theory principle based on according to media's teaching, the teaching of film can find some principles followed in these theories too.

3.1.1 Study the theory

a. The concrete form seeks the theory
 Sheffield, F. N. Concrete form last theory, regards action of the film media as study by movement the ways of the skills effectively, Broadcast the course through type Fan of media, can form the learner's effective memory blueprint. Accept the starting point that information is study through the sense organ. Bruner proposes in Toward a Theory of Instruction too: The course of teaching should be based on direct experience, via the picture type, substitute experience (Such as the picture, film).

b. Mediate the theory in cognition
 Cognition mediate theory offer one appropriate type Fan mainly, join observer to detail validity and movement relevant information of exactness that movement carry out. The course of human behavior can be divided into: Consciousness, memory, attitude, taking action. Consciousness: I.e. since the sense organ is entered in the signal, the cognition of person received, interpreting as the meaningful message. Memory course: Message / attitude dealt with to receive keep consciousness, need, search the materials of the storehouse from memory sometimes. Reaction process: Further assess or reflect consciously, form the attitude toward a piece of things, idea. Behavioral course: The recipient receives the behavioral development course after the message.

c. Information processing theory
 Information processing it is for theory not to care about, mankind to daily life a large amount of information is how to go to the consciousness, organization and memory. The previous question of this theory, regard our brain as a information processing organ that extremely mix. The following question is, how the mankind chooses on earth, the code and storage information. Three all right respects are probed into:

- a The multiple sense organ is studied
- b Short-term memory and memory for a long time
- c The arousing of attention

Media's teaching theory

Media's teaching purpose is being used and making the function of media up, makes its full play in studying the situation. It not merely hopes to bring learner's attention, especially is unable to

fully explain complicated information to characters. Utilize the characteristic of media at the same time, overcome the restriction on time, space and number of people of teaching [7]. Dale and Bruner puts forward the following important argument when the media of studying uses the relation with teaching [7]□

- a. Study acquisition in experience from continuous to a abstract one
- b. Teaching is designed and used with the media

3.2 Communication theory

The cognitive form of Bruner seeks the experience Pyramid where the theory is according with Dale □ Such as Fig. 1 □. Dale developed experience Pyramid in 1946. In Pyramid □ the learner begins from the participant of true experience, it is the observer of the true incident to move to the learner up, It is the observer of the indirect incident to and then move to the learner, and reach learners finally, those of observing describe symbol happening in incident. Advocate saying: If the learner can use more abstract teaching activities effectively, they must set up the stock with a lot of concrete experience first, In this way they could for the meaning in the reality described of the abstract symbol from tower of Dale's experience[7].

Generally speaking, among experience Pyramid, to shift down whom concrete media spend when study time large, move abstract media upwards, can thick to contract, appear within shorter time more information. So teachers must make choosing and decision between concrete study experience and limited time two constantly. Combine the authenticity and abstract content with the hypermedia now, not only can make learners have true and concrete study experience that can also shorten and study necessary time effectively at the same time[7]□

3.4 Use the advantage of teaching of film

The most apparent function of the film can offer the scene discussed and communicated for every kind of theme that is full of imagining. Because the film video-tape presents the sense of hearing and visual stimulus for the theme, even the capability-limited students of Chinese, so long as they use a way among them, can understand the thing happening in the film.

The contribution to put forward the film and incorporate teaching is as follows,

- a. Offer a true life passage: Because the film is that sound and picture appears at the same time, and make the use of the language truer, easier to understand.
- b. Can enable students to open one's mouth and say: The film can present personages and the scene really out, and pass the role playing of this scene, to express one's own opinion.
- c. Can offer the visual result: The dynamic picture of the film, this kind of visual effect makes the scholar more attentive.
- d. Can give consideration to and study and amuse: We have a lot of software that melt teaching variably, cause the learner's interest and motive.

The teacher should follow these advantages and offer the valuable film, let students study in the classroom. Will use the film to study oneself after students study interest of gains, not only the film can give play to its efficiency, students can pay attention to and care about our environmental problem to the environmental topic even more also.

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