

METHODOLOGY AND PROMOTION OF GREEN BEHAVIOR AMONG STUDENTS IN MALAYSIA

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Abstract

The purpose of this paper is to dive into the thought process, motivations, promotional acts, and methodologies of imposing green behaviour among students in Malaysia. We will be reviewing articles related to both international and local practices, as well as understanding the factors, and key focus points on the current practices to promote green behaviour among students. For the international related articles, the paper will seek to understand the effectiveness of certain methods, and how different methodologies complements each other on creating a solid method on nurturing green behaviour. The local appendixes will showcase the factors influencing these methodology, and its reach amongst the Malaysian students.

Keywords: Global warming, climate change, environment education, promotion, green behaviour, audio & visual, go green , green campus, sustainability

INTRODUCTION

The burning of fossil fuels, such as coal and petroleum, is one of the major causes of global warming, and climate change, as it triggers the release of carbon dioxide carbon dioxide and other heat-trapping greenhouse gases into the atmosphere. The other major cause is the act of poorly regulated forest clearings, which is also caused by humans. Worldwide deforestation means that today we no longer have as many trees to absorb the extra carbon dioxide, and it stays in the atmosphere, trapping more heat. As mentioned by Marianne Lavelle

in her National Geography's article, "*Carbon is pouring into the atmosphere faster than at any time in the past 66 million years—since the dinosaurs went extinct—according to a new analysis of the geologic record.*" (Lavelle, 2016)

Initiatives to protect the environment, recycling resources, practices of forest conservation, preserving nature and other green natures have been implemented worldwide and across all levels of society. In order to enable them to take effect and to give such initiatives the best chance to succeed, everyone ranging from government leaders, to influential people such from film stars, parents, teachers, corporate leaders, workers, professionals and students, would need to do their part. Former US president Al Gore, author of the book *Earth in the Balance, An Inconvenient Truth, The Assault on Reason and Our Choice: A Plan to Solve the Climate Crisis*, took the lead when he founded a non-profit organization called The Climate Reality Project (formerly the Alliance for Climate Protection).

Their goal was to solve the climate crisis through grassroots leadership trainings, global media events, digital communications and issue campaigns. In short, the Climate Reality Project helps to bring millions of people together to demand leaders to give attention and place a healthy attempt at solving the climate crisis. The effects of global warming drew the attention of Hollywood star Leonardo DiCaprio, who took the opportunity to discuss climate change when he won his first Oscar for Best Actor at the 88th annual Academy Awards in February 2016. He mentioned that 'The Revenant' was a movie that depicted a man's relationship with the natural world.

Upon that note, he affirmed the crowd with the fact that 2015 was recorded to be the hottest year in history of human kind. Due to this, the movie's shooting location had to be moved to the southern tip of the earth, in order to find the right amount of snow. He urged the viewers that it is an urgent threat and we would need to work collectively in order to survive as a species. (Dicarpio, 2016).

Besides the initiatives taken by known respective leaders, the promotion of green behaviour to students in schools, colleges, universities and other institutions of learning, should be encouraged. Many schools and universities across the world have adopted programmes to promote green behaviour. This includes the University of Copenhagen, which launched Green Campus in 2008 to put a greener and more sustainable university on its agenda. The Environmental Protection of Department (EPD) of Hong Kong celebrated its 25th anniversary in 2011 with a series of public activities to highlight its work and mission. The Hong Kong Green School Award encourages schools to develop and implement an environmental management plan.

In Malaysia, Yayasan Hijau Malaysia is in collaboration with the Ministry of Education (MOE), Tenaga Nasional Berhad (TNB), Sustainable Energy Development Authority (SEDA), Jabatan Kerja Raya (JKR) and supported by Ministry of Energy, Green Technology and Water (KeTTHA). Through these collaboration, they have launched the Green School Campaign. In Malaysia, there has been numerous initiatives to promote green behaviour among students in primary and secondary schools.

This programme is carried out via talks, information sharing, activities, as well as raising the awareness of the public through video and songs to Malaysian students. The promotion of green behaviour to current generation students are through various of mediums. For example, the talks could be through the functions of Facebook Live, or YouTube Live Stream channel, instead of the conventional talks. This way, the way the information is shared, is faster as long as the content is deemed to have weight. It is important to consider how quickly information can be passed through for the current generation. This can be used to our advantage on raising awareness quicker, and much more effectively. Through these information, we can expect a change of behaviour given the time.

INTERNATIONAL PRACTICES ON METHODOLOGY AND PROMOTION OF GREEN BEHAVIOUR AMONG STUDENTS

This literature review will focus on how green behaviour among students have been effectively instilled in the youth of foreign countries, successfully, and follow by the actual case of the youth in Malaysia.

Several universities, including Harvard University and the University of British Columbia have launched initiatives to improve their sustainability in promoting green behaviour. However, the University of Copenhagen (UCPH) stands out in terms of its ability to achieve its goals. According to the news released on the University of Copenhagen, their ambitious effort to save energy at the university has paid off. They have been able to note both green results and large economic gains. Data has shown that UCPH were able to reduce their CO₂ emissions by 48% in ten years. To complement this, their energy consumption was noted to be reduced by 32%. (Copenhagen, 2016)

These actions have created a brand new market both of sellers, and buyers. People are now giving more attention on the resources they use and consume on daily basis. According to Rob Mittelman, the change of behaviour will have a say on dictating the market. We can see that most countries are slowly adapting to not use plastic bags, and imposing their population to even carry their own grocery bags. This trend will grow as it becomes a norm. (Mittelman, 2015)

In achieving this success, UCPH addressed four main environmental sustainability issues comprising the following, there have been valid questionings on what can be done with regards to global warming. Governments have created laws and regulations that improves our energy policy and regulating companies to adopt sustainable business practices. On a worldwide scale, the Kyoto Protocol, an international agreement linked to the United Nations Framework Convention on Climate Change, commits the developed countries to reduce emissions by setting internationally binding emission reduction targets. United Nations in this convention has recognized that developed countries are the major actors for the current high levels of GHG emissions in the atmosphere. This has been the compounded results of more than 150 years of industrial activity. The Kyoto Protocol acts to place a much heavier burden on developed nations within the idea of sharing these responsibilities together. (Kyoto Protocol: UNFCCC)

Global warming is still happening and the process has even accelerated. The Kyoto Protocol was adopted in Kyoto, Japan, on December 11, 1997, and entered into force on February 16, 2005. It has been more than ten (10) years since the protocol had been implemented. Clearly, the world has recognised the need to do more to promote green behaviour to address climate change and global warming. This literature review aims to understand how students in Malaysia are behaving amidst to all of these regulations being enforced, both locally and internationally.

CO2/Climate

UCPH gives high priority to its carbon footprint, and impact on the climate in its sustainability efforts. The university recognizes that it affects the climate directly through CO2 emissions from energy consumption, and they were able to identify that transportation and commuting to be the main focus area.

Energy

UCPH recognises that energy consumption affects the climate, and the bulk of the energy resources we currently use are finite. The consumption of energy for heating and operations at UCPH is given high priority based on this focus.

Materials and Resources

UCPH highlights that the consumption of raw materials and resources like copper, aluminium and phosphorus has significant environmental impact when they are extracted, manufactured, used and disposed of. Therefore, one of the crucial point is on resource management.

Pollution, Chemicals, and Undesirable Substances

This is arguably one of the major concerns for countries whom wishes to go green with their practices. The university takes into account that chemicals and problematic substances have form of negative impacts on the environment and people based on how they are produced, used and disposed of. There is a need for a guideline on the limitation of the direct use of chemicals, problematic substances found in construction, IT equipment and office equipment.

FACTORS INFLUENCING GREEN BEHAVIOUR

Inter Department Support

Stakeholders - If there are no backings from their departments, their efforts could spell disaster. Taking the example of UCPH, they work closely with its main stakeholders for this matter, which are the departments of the university. UCPH and their faculty managements, building organisation (Campus Service) team, operations organisation (Campus Services team, the faculty operations organisations), procurement organisation (procurement section, the faculty representatives),

University IT, UCPH and its faculties' staff and communication divisions (HR, Communications, the behavioural project group), occupational health and safety organisation besides Green Campus, work together in order to achieve their goal.

This is then reflected in the news, whereby they claim that they are seeing the results thanks to the effort of many people. The acts that they mentioned in their article is rather enlightening. The actions of closing fume cupboard, ranges to the technicians and project managers who make sure that buildings are reassessed to be energy-efficient, clearly shows that even students would have an important role of making sure the campus is going green, effectively. (Copenhagen, 2016)

Respectively, other countries have follow suit on their pursuit of having being a green country. The Hong Kong Green School Award was an initiative which started in 2000. It was organised by the Environmental Campaign Committee, Environmental Protection Department (EPD) and Education Bureau of Hong Kong. The Hong Kong Institute of Education, Hong Kong Productivity Council, and Vocational Training Council are the co-organisers. The Hong Kong Green School Award is significant with the fact that it had managed to draw 228 pre-schools, primary schools and secondary schools to join the scheme by 2011-12. In Hong Kong, the government, via the EPD, plays a huge part in promoting green behaviour. Schools that meet a range of assessment criteria qualify as a "Hong Kong Green School".

Non-Government Organization

Non-Government Organization also plays a crucial role on influencing the methods which can be made available for the youth to adapt to green behaviour. As mentioned by the Environmental Protection Department, the objectives of the scheme are to encourage schools on regulating a school policy and environment planning to meet with their objectives of being a certified green school. Through this manner, there will be a need to enhance environmental awareness, develop an environmentally friendly attitude, and promote practices which focuses on the environment among school managers, teachers, the staffs, the students, as well as their parents. (Kam-sing, 2012)

Ambassador's Role

There are few major points which should be taken into consideration. Firstly, the Student Environment Protection Ambassador Scheme has been created to control and boost the students' environmental awareness through the mediums such as seminars, field trips, and workshops. It was noted that in 2011-2012, this scheme was able to few more than 15 300 students. Among the interesting programs was the Waste Separation and Recycling Scheme.

This scheme was practiced in school ever since the year 2000, and now has a collective effort from 1 048 schools participating. This is inclusive of both primary and secondary school. With every good action, comes a decent reward to complement it with. The ECC MTR Environmental Award for Schools 2011 was featured and became one of the standards. The theme behind the award was "Go Green on Waste Management." With this, a total of 40 primary schools and 35 secondary schools were involved.

Government's Support

Based on Kam-sing's foreword, the period between 2007-2008 to the 2012-2013 financial year, they were able to have doubled their annual funding allocation on environment related divestiture, from \$6.3 billion to \$13.9 billion. This investment has now shown its dividends on Hong Kong's environment. Through the measurement of their air quality, concentration of sulphur dioxide (SO_2), and respirable suspended particulates (RSP), all have shown improving figures. Air quality has risen as the SO_2 fell by 41%, and RSP fell by 11%, respectively between the period of 2006-2011. (Kam-sing, 2012)

While there have been acceptance and success drawn worldwide by programmes and initiatives such as those implemented by the University of Copenhagen (Green Campus), Environmental Campaign Committee, Environmental Protection Department (EPD) and Education Bureau Hong Kong (Green School Award), Yayasan Hijau Malaysia (Green School Campaign) and

Together Ecolife Education (Go Green in School), more efforts need to be done to promote green behaviour.

The Study of Green Behaviour with a Focus on Mexican Individuals was carried out in 2009. Analysis from the study showed that in spite of efforts done in environmental management in Mexico, one of the 12 environmentally mega diverse country of the world, there is a big gap between official programmes to protect environment and social participation. The summary of the deficits in environmental management in Mexico was negative. According to MagaliDelmas, a UCLA professor, motivation on purchasing things which evokes green living is due to our needs to get something more important out of it, such as health, higher quality items, functionality, and even status. Unless the population is aware of these upsides, there would be little or less motivation for them to pursue it. (Delmas, 2015)

There was an evaluation done by Eva Conraud-Kollner, and Luis Arturo Rivas-Tovar in 2009, whereby they found that certain bits of the population believe that it is the government's responsibility to take care of the environment. This is complemented with the idea that their ecological knowledge is poor as well. To note, during those years, there were no PhD programme focusing on environmental education and there were barely three master's programme related to this subject amongst 1 200 universities in Mexico. (Eva Conraud-Koellner, 2009).

LOCAL PRACTICES ON METHODOLOGY AND PROMOTION OF GREEN BEHAVIOUR AMONG STUDENTS IN MALAYSIA

Under the Green School Campaign launched by YayasanHijau Malaysia, the Green Catalyst& Curriculum has a 48-month programme to integrate subjects on sustainability and green technology into the school's syllabus of 2,500 schools across Malaysia. YayasanHijau plans to work with institutions of higher learning, and both primary and secondary schools to intensify the awareness on green technology and its applications of green living. The Green School Campaign is also a maiden project by YayasanHijau Malaysia that aims to install 5kWp photovoltaic (PV) systems at 140 selected primary and secondary public schools across the nation. Looking at the international standards set, we can see that YayasanHijau Malaysia is not far off from emulating what was effective in the Copenhagen, and Hong Kong.

According to YayasanHijau Malaysia's website, parts of their objectives are inclusive of the intent to groom and educate youth to be the change agent in promoting and raising awareness both on sustainability and sustainable living within their communities. There will be integration of sustainability related subjects in all tier of education's syllabus. (Yayasan Hijau Malaysia, 2015).

YayasanHijau Malaysia has also introduced aCentre for Education, Training and Research in Renewable Energy and Energy Efficiency (CETREE) in collaboration with UniversitiSains Malaysia. The aim of CETREE is to increase the knowledge and awareness of the role of Renewable Energy (RE) and Energy Efficiency (EE) for professionals, schools, tertiary institutions, schools and also to the public in Malaysia. YayasanHijau Malaysia has listed its mission to implement and promote green practices within Malaysian society at the grassroots level to ensure environmental sustainability. It also plans to increase the level of awareness among the masses through education on the importance of effective green practices.

Comparing the practices between the three countries mentioned, we can see that Copenhagen, Hong Kong, and Malaysia has derived themselves to believe that grassroots education is crucial. Understanding that these issues and practices can be nurtured, but with time, and not forced onto. By having the younger generation to be more proactive on how they handle their resources in the future, green living will be a second nature to them rather than a forced obligation.

In Malaysia, Together Ecolife Education launched the Go Green in School programme to promote green behaviour among primary and secondary school students in Malaysia via the dissemination of information, through the medium of talks, activities, programmes, and the media. In 2015, the KesatuanKebangsaan Guru-Guru Besar Malaysia (KKGGB), known as the National Union of Heads of Schools, officially launched the Go Green in School Programme and introduced it to all Chinese primary schools throughout Malaysia. Two songs -- “Together” and “Love and Seed” were composed by the author and introduced to engage school students,

Statistics have shown that music can influence people. Listening to a particular song or hearing the beat, can change the way you see the world. The music reflects your mood and emotions. It can make people happy, sad, or angry, which may have a positive or negative impact on their lives. Music affects people because of the way it is processed in their brain. A new study by researcher Jacob Jolij and student MaaikeMeurs of the Psychology Department of the University of Groningen shows that music has an even more dramatic effect on perception; *“Even if there is nothing to see, people sometimes still see happy faces when they are listening to happy music and sad faces when they are listening to sad music.”* (Jacob Jolij, 2011)

Reason why music, videos, and other mediums are used is to ensure that the capacity of the student’s attention is not cluttered with information, but more of a subtle way on influencing them.(Johnson, 2013)In 2015, the GO Green in School programme was introduced to secondary schools starting with SMJK Yu Hua in Kajang, Selangor, SMK Bukit Indah Ampang, SMJK Yu Hua,Tsun Jin Independent Secondary School and SMJK TsungWah. By 2016, more than 200 primary schools and 70 secondary schools in Malaysia had joined the programme.

With these important factors complementing each other, the value itself contains a certain brand of morality which promotes green behaviour. It is important to balance the way of promoting green behaviour as going green could be seen as being mean. In the midst of promoting for green behaviour, it is just as important to understand the value of going green could mean a way of living which could be too costly for certain demographic. Not everyone would be willing to buy fresh milk, rather than processed milk, simply because of the price point factor (Judith de Groot, 2009). Therefore, it is crucial to balance the demand and supply slowly to suit the demographic, and not simply imposing it in a drastic manner, especially to Malaysian students.

In this current day and age, it is important to select the right ambassador who can carry the right message, and portray the right brand that you wish to impose. Chai Zi, an Astro and television host, singer and artist, became its green ambassador. The main factor on why Chai Zi is selected is due to the familiarity of Chai Zi among the students. On top of that, Chai Zi is well aware on how the education system works. That is the familiar ground which could help the students to seek for their idols to see what they are doing. Nowadays, social media pages of idols are powerful, and able to reflect these sort of messages at a high frequency based on their social media postings.

On top of that, school headmasters and teachers were recruited to help promote the programme to students. Five main themes - *Hello Uncle Tree*, *Oh No! Mr Rubbish*, *Say No to Plastic*, *We appreciate It!* and *Together we live* - were created with simple messages that primary school students especially could relate. The idea was to encourage students to adopt a holistic approach towards preserving the environment by reducing waste, energy consumption and carbon emissions and generally practising green behaviour. To gauge the effectiveness of this programme, several participants were selected for evaluation.

It is well documented that powerful visuals, tied with emotions can cause a deeper engagement in sense of future behaviours. (Curve, by Getty Images, 2016) One song that has been described as indisputably the most popular green-themed tune, is 'The Earth Song' by Michael Jackson. It remains to Jackson's best-selling song in the United Kingdom (bigger than "Thriller" or "Billie Jean"), and beating out the Beatles' first single in 25 years for the top spot on the British charts. As mentioned by Rosemary M., the influence that music has been to influences behaviors of the listeners to react a certain way, may it be joyful, teaching remorse, as well as taking responsibility and motivating the listeners to uphold a certain cause. (Wixom, 2016)

The essence of the song revolves around the factors of drought, over-fishing, deforestation, pollution, and the effects of war. The song vividly speaks loudly today as it would ever will be ever since 1996, according to Alex Pasternack. (Pasternack, 2009). I do believe that

mediums as such is a crucial entity to be used for the benefit of us imposing green behaviour among the younger generations. We have seen how a catchy song catches on to be the trending topic on the internet. At times, all it takes is one viral video with the song as the background to have a colossal effect on the public's awareness. Content related marketing is king, in the digital age.

As mentioned by Getty Images, content marketing is about storytelling, and composing a connection between the message and the consumer, through powerful visuals and sounds in order to leave a lasting impression. (Curve, by Getty Images, 2016)

CONCLUSION

There has been a sense of urgency not just in Malaysia, but worldwide with regards on implementing drastic effort to address the effects of global warming. It is proven that this is done through the promotion of green behaviour amongst governments, industries, and society of all tier may it be internationally, or locally. The range of targets are inclusive of students, and the rate of acceptance has even achieved breakthrough in many areas and places. However, it has not reached the level whereby universal acceptance exists. Certain countries are yet to impose measures of combating global warming, by practicing green behaviours.

We can derive that Malaysian students are slowly grasping the methodology imposed by the non-government organizations, as well as government related effort in order to instil green behaviour within them. Looking at the rooms for improvements, there are gaps whereby within the country's population, industries, businesses, are yet to be regulated upon green behaviours. This gap is crucial for the students of Malaysia to follow through their practices, carrying forward what they have learnt from their education, to their workplace.

Ongoing efforts by both the public and private sector are still required; which means that the new generations must take this heavy responsibility to push through the not just at university level, but at international level through the universal acceptance of practising green behaviour.

Initiatives carried out by any individual, body, organisation or Government have to be realistic, inspiring, empowering, creative and self-sustaining at the same time if they are to draw any acceptance, recognition or success in the long term and on a scale that can achieve a significant breakthrough in the promotion of green behaviour to society in general and to students in particular. The promotion of green behaviour to students is therefore important, and can be confirmed that it can be done in numerous ways, each effective on their own merits. This would indicate that everyone has a role on educating each other, by creating a green behaviour ecosystem.

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