

Role of young engineers and successful examples education essay



INTRODUCTION

The term 'nation building' is usually used to refer to the constructive process of engaging all citizens in building social unity, economic prosperity and political stability in an inclusive and democratic way.

A nation is built out of the human intellect. This means that a nation cannot be built without the recognition and the collective efforts of all citizens, skilled and unskilled, young and old. Young people are a crucial segment of a nation's development. Their contributions, therefore, are highly needed. Young people are social actors of change; and as the saying goes, "The youth are not only the leaders of tomorrow, but also the partners of today." It is well known that the most vibrant section of every society is the youth. Therefore, the youth have the responsibility of being at the fore-front of any national exercise.

Youth is that period when a man is full of energy, ambitions and zest for life. The power possessed by youth is a recognised force today. The power or the energy can be used for both constructive and destructive purposes. Whenever there is unrest in a country, political forces use youth for their further selfish interests [1].

Youth Leadership skills are relevant to young people's personal development, as well as their role within a group. On a personal level, youth experiences gain insight into themselves. This helps them analyze their strengths and weaknesses and set personal and vocational goals. On a group level, youth develop the ability to work with others to create a shared vision and to draw on the talents, skills, and energy of others.

<https://assignbuster.com/role-of-young-engineers-and-successful-examples-education-essay/>

The task of nation building is very challenging and can be divided into phases. Everyone can contribute towards it according to his or her capabilities. The young people should be made to understand a specific project and its importance to the society. They should be given a suitable direction so that they can work hard for its fulfilment. This will make them satisfied by the realisation that they have been assigned roles in the nation building. They would be prepared to work sincerely for the welfare of the society and the country.

Every citizen, including the youths, should always have it at the back of their mind that nation building is a collective effort of all citizens in constructing a desired country. No contribution is too small or too big. It must also be noted that nation building starts from the community level up to the national level.

LEADERSHIPS IN NATION DEVELOPMENT FORWARDING TO “ 1 MALAYSIA” AND “ VISION 2020”

“ The young”, according to Pearl S. Buck (a Nobel Laureate in literature) “ do not know enough to be prudent, and therefore they attempt the impossible, and achieve it, generation after generation”. Youth is that clay which can be melded in either shape one wants. In our belief, this is the sole reason for both exploitation and utilization of youth in the destruction and construction of any nation respectively. It is a fact that, the nation’s building is highly dependent on youth. “ Youth is that spark which needs no ignition”. Youth is that powerful resource, which can either construct or destruct the whole nation. No doubts youth should step forward to take up on the responsibility in developing the nation. The country’s leadership should also embrace

youths, as well as youth organisations, as they are the leaders of the future and would contribute to the nation-building efforts [2].

Awareness among youth is to be raised about the development issues and their potential roles in the country. It is also important to involve young people in the consultative process of designing policies that affect youth. If young people are inexperienced at work, they will also be inexperienced about policies but there are some important lessons that we have learned. For example, youths in their upper teens and 20s have been consulted, if not in decision-making, at least in informing them about legislation that would affect their lives. As such, the government policies and constitutional provisions which safeguard the needy will continue to be implemented.

Prime Minister Datuk Seri Najib Tun Razak said that the 1Malaysia concept's ultimate objective is to achieve national unity among its people. He said " In other words, 1Malaysia is a concept to foster unity in Malaysians of all races based on several important values which should become the practice of every Malaysian [3]. Malaysia is a formula which serves as a prerequisite to ensure realisation of the country's aspiration to achieve developed nation status by 2020 if it is assimilated in the people and practised by society. If ' Bangsa Malaysia' (the Malaysian race) outlined in Vision 2020 is the ultimate objective of this journey, then 1Malaysia is the guide pointing the way towards that objective. As such, youth leadership is one of the very important elements to ensure that the concept would not deviate from what had been agreed to by our forefathers. In fact, 1Malaysia values and respects the ethnic identities of every community in Malaysia and regards them as assets to be proud of." Youth in order to make his/her country

<https://assignbuster.com/role-of-young-engineers-and-successful-examples-education-essay/>

developed, has to sacrifice not only their lives by protecting their country at the borders but also has to protect from internal threats, and make the society a healthy place to live. It is possible only, if the youth realize to stay healthy by sacrificing selfishness, laziness, evilness etc., and by thinking dedicatedly for the growth of nation.

Ignorance, fear, prejudice and apathy, if left unchecked, are fertile ground for breeding hatred, extremism, fatalism and fanaticism, which are the root causes of the world's ills. So, youths of today play very significant role to demonstrate strong leadership potential, personal drive, and a passion and energy for making a difference in our community and country. No obstacle is too high, too deep or too wide for us to overcome if all of us especially the young generation who will be the leaders of tomorrow willing to join hands, think and act together as 1World. By quoting an old Malay proverb that " Together, people could conquer all peaks and traverse all valleys". One way to inculcate youth leadership, youth can participate in the youth leadership academy [4]. The Youth Leadership Academy is dedicated to nurture and to build capabilities of future young leaders. As a participant, we will have the opportunity to improve our leadership skills, and be inspired by Malaysia's most successful corporate leaders and young professionals. It is true that, youth is highly amendable, but one must show the guts to take up the challenge to guide the youth to a correct path.

The central purpose of advocating youth leadership is to support youth in taking the initiative to engage in civic and community activities in order to build on their strengths and self-esteem and to work together as a team in building leadership skills. Youth leadership groups are similar to other youth

<https://assignbuster.com/role-of-young-engineers-and-successful-examples-education-essay/>

development groups in that they are structured to offer youth educational, interesting material and resources that address current youth issues. Youth leadership groups are run by the youth themselves, but facilitated by a staff person in your program. Because the groups are self-directed by youth, the facilitator should serve as a support and guide for youth development.

The key for the 1Malaysia concept is to practise mutual respect and trust among the different races in Malaysia. However, mutual respect is not just tolerance [5]. That is just the bare minimum. Mutual respect means we have embraced unity in diversity. And secondly, we must trust one another. But trust is not something gained overnight. But if done consciously over time, it will eventually happen. Once trust is developed, Malaysia will be the sum total of all races. We will not be moving as separate communities but as one Malaysia and we will be stronger. It will be a new Malaysia because we'll change our mindset because we trust and respect each other. We hope all will join us to bring Malaysia to greater heights. That is why youth leadership programs come in handy whereby they enable the youths to learn from the best, and really develop themselves personally and professionally!

According to the National Centre on Secondary Education and Transition, youth leadership activities can help contributing to and being involved in promoting the well being of the community, developing and using a positive attitude within leadership activities, developing strong, trustworthy relationships with responsible adults and peers, interacting and collaborating with individuals from diverse cultural and ethnic backgrounds, participating in a wide array of career exploration activities, maintaining a commitment to

academic and lifelong learning, maintaining and demonstrating a healthy lifestyle.

In a nutshell, the core elements of unity are, firstly, the attitude of acceptance among the races and the people, secondly, principles of nationhood based on the Federal Constitution and the Rukun Negara (National Ideology), and, thirdly, social justice. As such, the government policies and constitutional provisions which safeguard the needy will continue to be implemented

Malaysia has come a long way since its independence. It has survived the Japanese occupation, followed by colonization by the British Empire. After years of power struggle and much bloodshed, Malaysia is now 52 years old and growing since it freed itself from the grip of foreign forces. However, independence was not the final objective of Malaysia. Inspired by the struggle of our forefathers, Malaysia craves for global recognition as a developed nation as well as a place on the world map. Who then is to lead Malaysia into achieving this particular dream? The answer is definitely not the current leaders as human is of finite life. It is worth mentioning a quote from our former premier, His Excellency YAB Tun Dato' Seri Dr Mahathir Mohamad during one of the recent Malaysian Business Council meetings. He (Dr. Mahathir) mentioned that most of the present council members will not be present on the morning of January 1, 2020; instead, the great bulk of work that must be carried out to ensure Malaysia as a fully developed nation will obviously have to be done by the present generation's youth. However, the current leaders should not neglect their role in guiding them (the youths) as well as lay the secure foundations that the youths will build upon [6].
<https://assignbuster.com/role-of-young-engineers-and-successful-examples-education-essay/>

The ultimate aim of Vision 2020 is to make Malaysia a fully developed country, hoping that Malaysians born today and in the years to come will be the last generation of citizens to live in a country that is called 'developing'. What then you might ask is a "fully developed country"? Just as Dr. Mahathir put it, a developed country should not only be developed in the economic sense but also be fully developed along with all other dimensions namely politics, social, spiritual, psychology and culture [7]. The aforementioned criteria carry a significant amount of truth in them. In terms of politics, if the ruling government is corrupted and insensitive towards the community he or she serves, the country will not be able to progress. An unstable political system often results in chaos as it results in public demonstrations whereby in some cases, violent clashes between citizens and the nation's defense body may occur. Violent situations like this creates an image of fear and insecurity and often these are the major factors that influences the decision of foreign investors on whether to invest, continue investing or to pull out. As mentioned earlier on, human life is finite, hence the current governing body will need replacement someday and this replacement will ultimately be succeeded by the current generation - the youths.

From the above paragraphs, it is noted of the significant role the youths of today will have to bear in the future. What about the current youths? How are they contributing towards the nation's growth? Youth bodies or communities such as B. R. A. T. S., Rakan Muda, YouthSays, and the like are led by youths and for youths. Its activities comprise of culture, social, sports, and etcetera. So how is it this a contributing factor towards the country's development? Recalling what Dr. Mahathir mentioned earlier on, the

development of the country should be developed along with other dimensions such as, social, spiritual, psychology and culture. Youth bodies such as the aforementioned promotes social bonding activities via forums, sports, support groups, and so forth. Furthermore, Malaysian culture can be promoted too via its cultural activities in the form of dance, drama, music, and so on. As mentioned earlier on, these bodies are led by youths for youths and it is only through successful leadership that will permit all these activities to be executed successfully. In other words, the present youths too contribute towards the developing of our nation.

To sum it all, youths whether it is present or future play a major role in contributing towards the success of Vision 2020 furthermore the development of the country. Let it be present or future, it is the youths that will eventually succeed their predecessors moreover lead the country towards its goals and vision. The capability of youths is powerful as displayed in their current activities and they are inevitably going to be the nation's upcoming successful leaders. This is why youths are the key in succeeding the country's Vision 2020.

EFFORT TO INCULCATE YOUTH LEADERSHIPS IN MALAYSIA YOUNG ENGINEERS AND PARTIES INVOLVED

Empowering youths towards leaderships enables all of us to get involved in nation building besides promoting national unity and social integration as well as becoming the role models in the society. Efforts has been undertaken to equip youths with the necessary skills and qualities to ensure them of a

better future and to meet the accelerated pace of economic development and the changes in the environment.

The strategic thrusts for the development of youths will be as follows [8]:

Empowering youths for the future through improved access to education and training;

Increasing participation of youths in youth organizations;

Inculcating the spirit of competitiveness among youths;

Strengthening the legal framework of youth development programs;

Promoting national unity and social integration.

To encourage youths to participate actively in nation-building, their accessibility to education and training will be further enhanced while leadership and skills training, entrepreneurial development and healthy lifestyles program can be carried out more extensively. In addition, self-confidence and discipline are positive elements which should be incorporated in the character building program. Measures shall be undertaken to increase the accessibility of the youths into life-long learning program through distance education and non-formal education as an effort to ensure balanced development. With the healthy mental and physical attributes, excellence results in nation growth could be achieved.

According to the Ninth Malaysian Plan, National Youth Research Institute will be established to undertake research in six areas, namely socialization of

youths, culture and religion, youth potentials and integrity, youth organizations, leadership and volunteerism, education as well as political awareness. Besides, national youth act – Youth Societies and Youth Development 2007 has been introduced to ensure the youth programs are implemented in an integrated, coordinated and synergistic manner.

In the aspect of leadership training, effort has been put to build a new breed of young leaders as prime movers of development. In this regard, the curriculum of leadership training program could be strengthened to make it more proactive and relevant to future needs. It is estimated that about 100,000 youths, including NGO leaders, will be trained under this program [8].

The government will continue to develop and instil leadership qualities among youths by conducting courses and training on good values and positive attitudes. Special courses on values will also be conducted to mould youths as responsible citizens and role models in society. Greater awareness on the important role of youths in forging and promoting unity towards building a united Malaysian nation has been given priority in the leadership training programs

A quality youth leader should equip themselves with soft skills in order to outperform as a nation builder. As Malaysia is a multi racial country, interaction and communication among each other should be further enhanced in order to bring our nation to leap on a larger step of improvement with all of us working together on it. Hence, to check racial polarization among youths, more multi racial youth organizations could be established to allow for greater interaction among them. In addition, good

moral values such as understanding, harmony, respect for the culture and tradition of other races, goodwill and trust will also be inculcated among the youths to enhance nation building efforts. The private sector will also be encouraged to contribute to youth training as part of their social responsibility. More active participation of youths at the international level could be promoted through intergovernmental and non-governmental institutions.

In effort of nation building involving wide range of people, the implementation of Rakan Muda Programs has been strengthened to focus on specific target groups, particularly youths who are out of the education system and the unemployed youths as they are more vulnerable and easily influenced to be involved in negative and unhealthy activities. In this regard, Rakan Muda Program will focus on efforts to create role models among youths who are caring, skilled and dynamic. In addition, these programs will also focus on enhancing cooperation amongst agencies involved in the social agenda [8].

A program named, Program Memperkasakan Tenaga Muda, will be implemented specially for youths who are not selected for PLKN. Activities and modules under the PLKN will be carried out to ensure those who are not selected for the PLKN training to be exposed to similar program which helps a lot in character building towards quality leaderships. To better prepare students for the PLKN, the Government will incorporate this program into the co-curricular and curriculum in secondary schools. The participants of the PLKN will be encouraged to join Rakan Muda Program to continuously nurture the spirit of volunteerism and solidarity amongst them [8].

<https://assignbuster.com/role-of-young-engineers-and-successful-examples-education-essay/>

The various skills and leadership training program aimed at empowering youths has been undertaken by the Ministry of Youth and Sports, Ministry of Entrepreneur and Cooperative Development and Ministry of Human Resources.

Nevertheless, combating social problems among youths could help in nation building. The measures should be taken to avoid the youth from influences by negative and unhealthy activities, but on the other hand improving self inner qualities in order to contribute to the country as well as leading the nation towards progressive development. During the Ninth Malaysian Plan period, the Government has continued to give emphasis on preventive and rehabilitative program to combat social problems among youths. Closer cooperation between the local communities and government agencies in stemming crimes among youths will be established. In addition, training program for youths in the high-risk crime group will be carried out to nurture them to become responsible citizens.

Apart from producing a productive and disciplined young generation, youth development program should continue to focus on skills training and entrepreneurial development to encourage self-employment among youths. They will be trained to be resilient and to withstand challenges in a competitive environment through on-the-job training and exposure to real work situations. This is to prepare ourselves towards real time challenge as we ultimately will come to work environment and contributes in different aspect or in different fields. Youth leadership program had given emphasis on the role of youths in society and fostering national unity with a sense of common and shared destiny.

<https://assignbuster.com/role-of-young-engineers-and-successful-examples-education-essay/>

ROLE OF YOUNG ENGINEERS AND SUCCESSFUL EXAMPLES

One may see an engineer as a person with a university education in engineering who may take an idea and turn it into a useful thing for other people to use. An engineer may make a better mouse trap, or tell people how best to build a bridge or a skyscraper. Whatever things to they wish to do, an engineer is to make sure people are safe and the next is to improve life. They can become very good engineers who can handle tools and machineries. Die-hards and loyal engineers to these perceptions have been losing out in terms of managerial positions, wealth and leadership to those who are enterprising and see business as well as quality management as prime factors to improve life, build better bridges and skyscrapers.

In this fast changing world, the expectations towards engineers have changed. Engineers have to leave their cocoon if they wish to be better engineers of today and see the reality of life which is getting more sophisticated and complex. They need skills to manage people, technology, money, physical facilities, time, money and other resources. In addition, they also need to communicate effectively with society and other non-engineering people from various professions. Prestigious universities in the USA have been pushing for changes in their engineering programs. One might wonder why and what's behind the sudden push by universities to produce ' people-smart engineers'?

Successful engineers must learn to be a leader not mere follower neither only as a faithful employees in an organization. These skills and knowledge shall be acquired from the humanities and social sciences disciplines. An <https://assignbuster.com/role-of-young-engineers-and-successful-examples-education-essay/>

engineer must no longer a person who is shy away from things and challenges to be confronted as they can be better engineers, scientists and wealthy entrepreneur with their equipped technical and interpersonal skills as well as passion in solving problems for improvements.

Engineering is a profession that covers a wide variety of disciplines. The tasks and studies of the various fields of engineering are vastly different, though each requires problem solving through the use of mathematical and scientific principles. Such fields include civil, electrical, aerospace, computer, chemical, environmental and mechanical engineering. No matter what will be the speciality, it requires a time-consuming, intense course of study and efforts beginning as far back as high school in order to become a well equipped engineer.

Throughout the years, our government has increases its access to education and training especially on engineering field. We generate young professionals to enhance income generation capabilities, as well as life quality improvement of Malaysians. Nevertheless, the education and training system on engineering field has yet to be restructured, especially with greater private sector involvement in order to cater for the demand and needs of our local industries in their specified fields.

Aspiring engineers should focus on developing different types of skills such as detail oriented, keen analytical skill, good communicator, able to work on a team, able to build and improve the way things work, or creative thinker. It is not easy to become a successful engineer in this world without any long

journey of hard work. In Malaysia, there are a lot of successful engineer born in this country.

Associate Professor Dr. Law Chung Lim is a lecture from The University of Nottingham. Associate Professor Dr. Law Chung Lim of the School of Chemical and Environmental Engineering at the Malaysia Campus was conferred the Young Engineer Award by the Institution of Engineers Malaysia (IEM). This award comes in recognition of Chung Lim's involvement in various academic and research undertakings, as well as his societal and voluntary commitments and contributions [9].

Chung Lim has served the Institution of Engineers (IEM) since Jan 2004 and is actively involved in its activities. He has organised technical talks and technical visits for the Chemical Engineering Technical Division and has reported six events in the bulletin Jurutera over the years. Further to this, Chung Lim was a member in the sub-committee of Career and Guidance of Admission & Practical Training Committee and IEM Computer Lab Project Committee in 2005. In addition, he served the 1st and 2nd Malaysian ChemECar Competition organising committee as a secretary, MC cum judge in 2004 and 2005. Besides, he also served as secretary cum treasurer and chemical risk and health assessor for the regional ChemECar competition which was held in KL in conjunction with the Asia Pacific Confederation on Chemical Engineering Conference, APPChE. Chung Lim also contributes to the reviewing of manuscripts submitted to the Jurnal IEM [9].

Over the years, Chung Lim has worked extensively on various research areas which has give a lot of important outcome in many aspects, ranging from

research publication, equipment design, product development and many other researches. He innovatively modified a conventional fluidized bed dryer and proposed two modified fluidised bed dryers, viz. baffled fluidised bed dryer and two-stage cross flow fluidised bed dryer. The inventions won him a bronze and a gold medal in 2003 and 2005 respectively. Chung Lim obtained two e-Science research grants from the Ministry of Science, Technology and Innovation (MOSTI) and involved in three MOSTI grants which amount to over RM1. 25 million. He has published more than seventy five papers including journal articles, handbook chapters, book chapters and review articles and conference papers. He has produced five equipment designs, fabricated and commissioned three prototypes of unit operation, conducting three product development projects, supervising seven postgraduates, received two award of excellence from the institution, and two awards of best paper [9].

As a researcher who is actively involved in drying and dehydration, Chung Lim receives requests to review manuscripts submitted to various journals, namely Drying technology, Canadian Journal of Chemical Engineering, Chemical Engineering Science, Jurnal of IEM, Pertanika and Jurnal Teknologi. Over the years, he has reviewed more than fifty five manuscripts and technical papers. Chung Lim received a certificate, medal and a prize award of RM500. 00. Speaking after receiving the award, Chung Lim said, “ I shall continue to strive hard to remain worthy of this award. I shall uphold professionalism, make more contribution to promote engineering as a profession and conduct more impactful researches to the enrichment of knowledge” [9].

CONCLUSION

Nation building is a collective effort of all citizens. As an old saying goes: “the youth are not only the leaders of tomorrow but also the partners of today”. The Youth, as the energetic ambitious and highly capable people, have the responsibility, passion and power of being at the fore-front in developing the nation in a democratic and constructive way.

Undoubtedly, Youth leadership is a significant element to ensure the concept of One Malaysia would not deviate from what had been agreed to by our forefathers. Also, Youth play a very important role to demonstrate their potential, motivation and passions of making a difference in our community. The young generation, as tomorrow’s leaders; have to think together as one. The opportunity of improving our leadership skills is being given to us by taking part in civic and community activities. Youth leadership programmes will give emphasis on the role of youths in society and fostering national unity with a sense of common and shared destiny to develop the mutual trust and respect among different races in Malaysia at the young age and promote the well-being of the country. Moreover, Youth organisations are important and contribute to Malaysian nation-building and development because youth organisations have served as a training ground for many national leaders in Malaysian history. As empowerment emphasizes development of collective rather than individual goals, it will henceforth lead to capacity building and setting the agenda for changes for Malaysia.

In an effort to attain developed nation status by the year 2020, the Malaysian government has made strategic thrusts for the development of youths by improving the access to education and training, inculcating the <https://assignbuster.com/role-of-young-engineers-and-successful-examples-education-essay/>

spirit of competitiveness among youths, strengthening the legal framework of youth development programs; increasing participation of youths in youth organizations, and promoting national unity and social integration.

Most importantly, the essay would not bring any benefits if we did not know the roles of young engineers in building this nation. With the profession of many disciplines, engineers should not only develop their personal technical skill but also be creative thinker, good communicator and think positively to distribute to group success.

In fact, youth leaders, as the powerful pressure groups and guardians of transparency, will enable themselves to query government policies and performance for corrective action to be taken for the development of a Malaysian Malaysia. According to Abdul Rahman Embong, Malaysians (especially with the emergence of a middle class) would like to have greater democracy and a stronger civil society. This is essential for youth organisations and their leaders to champion these new challenges - to check and balance in all major issues, government policies and implementation, because youth comprises a significant proportion of the Malaysian population.