

Adding the “ABC” to the “STEM”.

The value of arts, business and communication to the science, technology, engineering and mathematics program

In the past weeks, students between the ages of fifteen and eighteen sat for their high school examinations. For many of them, it was a choice between Sijil Peperiksaan Malaysia (SPM) or International General Certificate of Secondary Education (IGCSE). They would then proceed towards completing their higher education. As teenagers, it can be quite difficult for students to decide on their careers. STEM (Science, Technology, Engineering and Mathematics) fields are popular in Asia. Many parents encourage their children to pursue these areas because they think that it provides job security. Education is viewed as an investment and the return of which is a high-paying job that will afford them a comfortable life. There is indeed a high demand for graduates in the STEM fields. We cannot deny the impact of STEM graduates in the marketplace. They ensure that the emergence of enterprise, innovation and progress which lead to new products, new technology, safety and stability in various industrial sectors, etc.

Being an educator, I usually tell my student that coming to university is not just about acquiring knowledge from a specific field of study. It is time to learn different kinds of knowledge and skills. For example, study skills, time management skills, working in groups, thinking critically, etc. One area that equips students with these skills is what I would call ABC. I want to suggest that there are major benefits to students taking ABC subjects.

The letter “A” represents Arts. I certainly believe that there should be more emphasis on the Arts. Arts subjects include the humanities



What's
next after
secondary
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and social sciences. For example, the study of theatre forces students to think outside the box. This can be done by watching performances and doing role-play. Theatre also helps students to express themselves their thoughts and ideas in very tangible ways. Philosophy is another challenging subject. It allows students to discuss big ideas from different perspectives. It teaches students how to construct strong arguments based on logical reasoning. The study of world religions, for example, enables students to understand how religions have developed, and how they influence society. What is particularly important is that this subject provides students with an understanding of the role of religion in times of war and peace. Therefore, subjects in the “A” category ask and answer many questions which are deemed important in the world today.

The letter “B” represents business. Business is not only about running a business, but it is also about learning about management and handling finances. Other skills that business studies teach include management, financial management, business information systems and accounting. These are also beneficial to STEM professionals. Even if STEM professionals are not interested in running their own business, these management skills are helpful for them. For STEM professionals to progress in their jobs, they will need to manage not only other STEM professionals but also the team’s finances, morale, performance, and so on. This is where accounting, finance management and business communication skills will help STEM professionals move forward in their career. “B” letter courses may be the answer to a more technology-driven business for our nation.

The letter “C” represents Communication. Communication is an essential part of our daily lives. The news that we hear on the radio, watch on television or read in the newspaper or online; the conversations that we have with our colleagues, friends and families; the presentations that we need to make to our colleagues, business partners, stakeholders; and the development of relationships in many settings require competent communication skills. Communication is about presenting the idea in such a way that the other party can understand. Many leaders in the STEM sectors have told me that communication skills are crucial in STEM graduates. Courses in the “C” area can provide the answer to better business presentations, clearer and more empathetic communication skills.

I would highly recommend students who are interested in Science, Technology, Engineering or Mathematics to consider taking a few subjects in the “Arts, Business, and Communications”. The American Degree Transfer Program provides students with the opportunity to include the ABCs in the STEM fields through the subjects grouped under the general education category. For students who are undecided of the field of study, they may explore the different fields before deciding on their major. Students who have completed two years of the American Degree Transfer Program may transfer locally or to the United States for the completion of their degree.

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