Editorial

The expectations of STEAM Education

STEM education is apparently a system of education expected to generate innovation skills through integration and possibly facilitate the development of Artificial Intelligence. Many Western countries are known to use STEAM education, although apparently Finland seems to have the best adoption, which begins in primary education.

No one knows the type of education that prevailed in ancient Sri Lanka, although it is clear that a system of knowledge transfer may have existed in ancient Sri Lanka, where it is amply seen in the spectacular technological marvels of the ancient hydraulic civilization.

Henry Parker (1909), the British engineer in colonial Ceylon, who investigated most of Sri Lanka's ancient hydraulic contraption, of all, the *Bisokotuwa* was considered a unique water-tight device to control the flow of water from the massive reservoirs to the low-lying paddy fields. Incidentally in the middle of the Nineteenth century, similar opens wells called value pits had been built in numerous reservoirs in Europe. These were also meant to regulate the flow of water for reservoirs. Parker (1909), concludes in this context that also was the function of the *bisokotuwa* of the ancient Sri Lankan engineer, they were in fact the inventors of the value pits more than 2100 years ago.

Yet another engineering marvel was the ecosystem based trans basin 50-mile-long *Jaya Ganga* in the *Kala Oya* Basin taking water to Anuradhapura to replenish water in the City reservoirs. R. L. Brohier commenting on the magnificent engineering marvel of the latter, state that it verily baffles understanding how a canal of such magnitude could have been planned and executed over a difficult terrain nearly 1500 years ago which meanders over the first 17 miles at an unbelievable gradient of no more than 6 inches per mile.

Nevertheless, it is necessary to await the successful implementation and outcome of the STEM or STEAM education system which will undoubtedly turn tide in transforming the technological and economic development in Sri Lanka.

M. Asoka T. De Silva