

## **Embracing the Internet of Things for Language Education: Are We There Yet?**



*Hafizoah Kassim,  
Asiah Kassim*

### **Introduction**

The fourth industrial revolution (4IR) has just begun, and already its impact on every part of our lives is massive. The fundamental change of this revolution is clearly defined by the burgeoning transformation of the so-called ‘technology’ and all things related including the humankind (Schwab, 2016). The term is coined by Klaus Schwab, the Founder and Executive Chairman of the World Economic Forum (WEF) in 2017, proclaiming that it is building on the third industrial revolution. Historically, this impactful revolution, from its first stage in the late 1800s, is founded on technology. This transformation begun when people realized what technology is capable of, and ultimately in order to mass produce systematically and efficiently to fulfill the needs of the ever increasing human population (Effoduh, 2016; Penphrase, 2018).

The 4IR is characterized by the convergence effects of exponential technologies, which are assimilated, again to fulfill the changing needs of the humankind, and are able to go beyond the simple mass production of the current industries (Penphrase, 2018). The mobile technology for example, will look to integrate modern, tiny, slick, and light design, numerous smart applications, high speed Internet connection, synchronous audiovisual connection, and smart links to homes, offices, devices, and appliances of the user. For such integrated technology to be possible, i.e., for such a small mobile device to be able to connect billions of people and numerous things for an unprecedented function, digital technology, the Internet of Things, nanotechnology, and artificial intelligence, to name a few, need to be converged. This technological convergence although currently imperfect, has occurred, and will define the needs and wants of man. This is the present future, designed and developed to solve future problems, but which has already making significant impacts and continue to make expanding profound influences on the society, industry, economy, environment and education (Penphrase, 2018; Schwab, 2016).