Chapter 16
Emerging Role of Technology in Health Education for Youth

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ABSTRACT
The Information Technology (IT) produces significant impact on the emotional and social health of young people. It is obvious that IT is playing an increasingly important part in people’s lives. This chapter reviews the current state of youth health and the role of digital landscapes in health education of youth. The chapter also provides insight into how youth, particularly youth of color, use technology to learn, communicate, and discuss various health-related issues. Specific technology needs and usage patterns are identified and success of various initiatives of use of technology for health educations is assessed. Various implications and recommendations are provided for optimizing technology use in young people health education.

INTRODUCTION
As children enter into adolescence and youth, they face a new set of health challenges. These challenges are more linked to behavior and the unprotected environment around them. These challenges include injuries from accidents, tobacco and substance abuse, HIV/AIDS and other sexually transmitted infections, and mental health issues. Consequently, accidents and related injuries are the leading cause of death among 15 to 24 year olds (Baum, Singer, & Singer, 2013). Despite the magnitude of ill health and disability among the youth, most young people are not aware of the specific health issues that affect youth, and the risk factors associated with their health. This situation calls for intensified efforts to increase awareness about their health issues. Young people, especially in developing countries, encounter barriers in accessing health services (Gupta, Goel, Shah, & Misra, 2012). Many health facilities and communities do not have confidential and youth-friendly services where young people feel comfortable in seeking care, and those who seek care are often confronted with negative attitudes from healthcare providers. Additionally, many young people do not have the financial resources to enable them to seek care on their own, and restrictive laws and policies often require a parent or husband’s written permission to access services. Mental
health is increasingly gaining recognition as a major problem globally (Wilson, 2007). Recent reports from WHO indicate that mental disorders and psychosocial distress are affecting millions of children and adolescents in all parts of the world. Suicide and depression are alarmingly common among both rich and poor and in both urban and rural environments. New evidence shows that most mental health problems that continue through adulthood are manifest before the age of 14, suggesting that mental health assessment in childhood could provide early warning and early treatment, possibly diminishing the impact in later life. It is estimated that one in five adolescents will experience a mental health problem during their lifetime, and yet they are less likely than adults to recognize the symptoms of mental disorders or seek treatment (voiceofyouth.org, 2014).

Recent global investments in fiber and wireless infrastructure, and innovations in e-learning, electronic health (eHealth) and mobile health (mHealth) and in the social media, have become great tools for health education (Schweitzer & Synowiec, 2012). The International Telecommunication Union estimates that, in only four years (2007–2011), mobile broadband subscriptions in the developing world increased by more than tenfold: from 43 million to 458 million. Mobile devices and internet access are becoming increasingly preferred tools for accessing health information. New fiber and wireless infrastructure, as well as the rapid growth of computer processing power, provide an unprecedented opportunity to scale up the provision of, access to health information, and improve its quality (Bollinger et al., 2013).

Youth entering college today have always had access to email, the Web, cell phones, text messaging, and all other sorts of gadgets. To them, these are normal. In addition, it is normal for them to see technology constantly changing. Four-out-of-five teens now own a cell phone. Cell phones are the second leading item for a teen's social status and 42% of teens indicate they could text blind-folded. In a broader sense, the U.S. saw 14.3 billion searches (via Google and Yahoo) in April 2009 (National Sexual Violence Resource Center, 2011). It was estimated that in August 2008, over 210 billion emails were sent daily, and an estimated 2.3 trillion text messages will be sent in 2010 (Kittleson, 2009). The resulting stalemate has forced professionals to make decisions based on their own technology comfort level, capacity for using new technology, and organizational constraints. Such an approach is not driven by the value of their own knowledge and experience. As such, this approach fails largely to cater for the needs and actions of their audience.

According to Charlton et al. (2002), we have very little information about how new technologies affect the health of young people, especially their social and emotional health, and there is a distinct lack of attention towards monitoring ways in which new communications technologies impact upon young people. The field appears to be open now for much speculation. There is a wide range of positions that can be taken on this issue. There are the doom-mongers who believe all this technology is sending our children, and ultimately our society, to a disaster. In the early 1990s, some condemned all use of technology, especially computers, as means to generate chaos and confusion (Postman, 1992). Many believe that the media has blurred the boundaries between childhood and adulthood and exposed children to activities they are not ready for (Buckingham, 2000). It is said to induce aggressive behavior and destroy healthy social bonds, which may inhibit such behavior. There are concerns about addiction, e.g. to computer games, chat rooms, and texting on mobile phones.

Many are concerned about the growing social gap between those who can access the information required i.e. information rich and those who cannot i.e. information poor. According to Ling (2000), the ownership and use of Information Technology (IT) by the young people will shape their needs for friendship, emancipation, and status in the current technological environment.