This study was conducted to assess the computer and Internet usage as supplementary educational material to enhance quality education; help improve educational management and planning; how students use the computers and internet to facilitate their learning; how teachers in the Tema Senior High Schools use the computers and Internet to teach and guide students. Stratified sampling method was used to select students and teachers. The results showed that a significantly high percentage of respondent teachers (92%) were computer literate and 78% of respondent students also had basic knowledge in computer. However, less than 15% of these teachers used the internet as an innovative way of improving teaching and learning. Over 30% of the teachers used the computer mainly for research work. Less than 40% of student respondents used the computer and the Internet facility for entertainment, whereas less than 25% used it for research and learning. Less than 40% of respondent students used the Internet for e-mail and browsing. It was revealed that Internet and computers have helped students to achieve new things such as finishing assignments, solving problems, learning history of other countries, improving typing skills, and chatting with friends. There is no clear interaction between teachers and students through the use of Internet facilities. The Internet was not used for guidance. Despite the limited use of computers by teachers in their teaching, many agree that the computer has changed the way students learn. One fourth of teachers have received some form of training in the use of computers, with quite minimal training in the pedagogical integration of ICT. It appears that integration of ICT in Ghanaian school systems is a major step in promoting innovation. Keywords: Computer; Internet; Teaching; Learning; Guidance