

# [Oppenheimer, technological innovation has always been aimed](https://assignbuster.com/oppenheimer-technological-innovation-has-always-been-aimed/)

Oppenheimer, the father of the atomic bomb, faced the greatest downfall in the history. Hasty steps toward technological advancement cost him thousands of human lives and the world’s indignation and contempt. Nowadays, the story Oppenheimer’s feeble attempt to promote scientific and technological explorations makes discussion about information technology more complicated and challenging. In particular, are there chances that technological impact on education can bring similar destructive effect? Will it promote education at a more efficient level? The problem is that when studies about impact of technologies and the studies aimed at discussing the outcomes of drill-and-practice programs are combined, the conclusions may vary.

In particular, there are many types of educational plans and there are many technological introductions and, therefore, it is impossible to find a definite answer on the question: does technology positively influence an educational process? Despite this multidimensional retrospective, technological innovation has always been aimed at improving academic programs. Manifold effects of technological advances, hence, are inevitable, which can be explicitly illustrated in the chain of technological and scientific introductions of mankind to more vivid and effective methods for knowledge acquisition. History of humankind has always been marked by tireless attempts to cognize the unknown spots of science. Their desperate desire to learn the universal truth and to modernize all spheres of human activities has inevitably led them to new modes of knowledge acquisition. Frankel (1972) singles out three main principles on which human progress is based: criticism, history, and science. To elaborate on this issue, the first principle implies that people have always been captured by objects and phenomena that excite their imagination, delight, and interest.

Second aspect involves flashbacks to the past connected to the evocative activities that keep memories about those emotions. The final principle is more concerned with the activities aimed at explaining and organizing the events by means of generally accepted rules. All these principles are encircled into an endless whirlpool of knowledge and experience contributing to facilitation and promotion of new models of learning. This scheme is applicable to a science and technology sphere as well because it allows people to focus on the most salient inventions of human mind.

In addition to the principles, there are specific theories explaining human aspiration to constant improvement and progress. In particular, Sternberg (1982) states that “… the abstract idea of teaching adapted to intellectual difference among individual learners for the purpose of developing aptitude, directly or indirectly, has been carried along the whole stream of educational theory…” (p. 501). Consequently, technological development is the result of people’s desire to invent new modes of knowledge acquisition and intellectual growth. At the same time, technological advancement is closely interconnected with the introduction of automated techniques leads to the revolution of the modernity and modern society.

As it has been mentioned previously, the emergence of new mechanisms of acquiring knowledge has not only created new philosophic and scientific methods of learning, but has provided a turning point in developing specific techniques in technological spheres. The history shows that technological progress and modernity are closely interconnected, arranging a tandem for the development of more sophisticated techniques for the cognition of the surrounding world. Interestingly, modernity and technological advancement manage to cover mostly all terrains of human activities – from business and economics to an educational sphere. Indeed, technological and modernity trigger many rhetorical connections such as technology and sustainability, modernity and change, modernity and internet (Misa, Brey, and Feenberg, 2004, p. 367). Close attention should be paid to internet and computer technology which have appeared as a result of the modernization process being a distinctive feature of technological advances. Indeed, modernism can be considered the push for development of new culture and world organization closely connected with the World Wide Web.

Particularly, Misa, Brey and Feenberg (2004) put forward the idea that “…corporate adoption of the Internet and the advent of e-commerce…. were the decisive factors in turning the Web from a curiosity into a genuine global infrastructure” (p. 219). Indeed, virtual reality has created a solid foundation for further development of humankind and has introduced an alternative platform for advancing human achievements in many spheres, among which education is not of the last importance.

The popularity of virtual spaces has spread the necessity of computer modernization because it has become the main tool for operating in a Web space. Internet-Computer tandem has given rise to the appearance of computer-mediated communication, strengthening the impact of commuters on every day life of people. In particular, it has specifically influence on English language, as the emergence of new semantics, neologisms, and metaphors should not be ignored (Greiffenstrern, 2010, p. 14). The cooperation of computer and internet has been revealed through the development of APRANET that evolved in NSFBNET and then transferred to CSNET connecting universities in North America and EUnet uniting educational establishment in Europe (Greiffenstrern, 2010, p. 13). All these systems were gradually evolving into more sophisticated networks that significantly influenced social sphere of life with education being an integral component of it.

According to Rosenberg (2004), the growth of computers in classrooms rose from about 10 % to 95 % within a 1981 – 1995 period. From 1994 to 2000, not only number of computer class increased, but the actual among of classrooms has been sharply increased as well (Rosenberg, 2004, p. 215). With regard to this, it is purposeful to explore the extent of effectiveness as well as contributions of computer technology to an education process revealed through simplification and automation of all learning models.

In general, the popularity of online communication has created unlimited possibilities for improving and extending education and the next step to transmitting students to the information rich society. The rapid development of Internet technology and computerized techniques has created new models of knowledge acquisition and information search. In particular, the creation of specific processes and algorithms and the introduction of search engines have considerably simplified all the processes of information exploring in all spheres of human activities. More and more areas are being captured by a virtual space, from online shopping to the introduction of social networks. All these significant shifts have influenced the methods for knowledge representation and semantic changes on the Web (Mika, 2007 p. 64). Mika (2007) has provided his research findings revealing “ a number of logic-based knowledge representation languages for describing both the domain knowledge and task knowledge of such systems” (p. 64).

The multifold influence on information gathering has given rise to the emergence of new academic disciplines, such as e-social science and computer science being included into curriculum as a significant course to learn. In this regard, social networks undertake the role of semantic infrastructures, the sources where new terms and meanings are created. All these terms should be conceived and explained in order to obtain an access to a new dimension of information processing.

The introduction of new software aimed at improving learning modes and schemes is the final accord in structuring a new informative space for educators. Online technologies and social networks have become the bases of specific online courses providing students with a possibility to be engaged in learning irrespective of their location and additional occupations. Computerized techniques and online programs have considerably changed the landscape of educational system together with other human activities (Misa, 2004, p. 15). Technological innovations have opened new paths for educational development, specifically for the invention of new methodologies aimed at improving and fostering an academic process. What is more, technical knowledge and advances have created the need for the modernization process and fundamental changes in the sphere of education. According to Kiesler (1997), access to endless flows of information provides a great number of benefits for students and empowers them with new useful skills for acquiring knowledge.

Therefore, all effects of technology integration to human activities positively contribute to educational spheres. It does not only introduces new scientific disciplines to explore, but also provides new schemes and training programs for more effective promotion of an academic program. Hence, the analysis of history of human development and progress has disclosed people’s tireless aspiration to continuous growth and improvement.

As a result, the introduction of technological advances has brought the modernization process nearer and serves as a solid foundation for creating a new space for communication and knowledge exchange. In response, the advent of the World Wide Web can be considered as brain child of the modernization era, as something inevitable that should have happened. This new period of information technology has introduced significant shifts in educational cultures because much techniques and devices has been borrowed for enhancing and improving learning models and theoretical approaches. With regard to analysis of theoretical frameworks and empirical observations, it can be stated that due to the manifold effects of technological innovations, education has undergone significant and positive changes connected with the simplification and automation of sophisticated processes, introduction of audio-visual media, and the advent of the Word Wide Web, one of the powerful instruments for acquiring knowledge.

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### Discussion Board

Although education has assimilated to technological devices and online techniques, online education, or distant learning, is still a new word in higher learning.

Nowadays, there are many educational establishments offering online programs and courses for students who do not have a possibility to study on a full-time basis. However, not all training programs introduced online can be helpful for students, and their effectiveness depends on specific factors, such as students’ aptitude for independent learning, the origin of programs, and teachers’ experience in online communication (Bates, 2005, p. 16). Therefore, technological impact on distant learning creates much more challenges both for students and teachers in terms of comprehending the material.

## Reference List

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### Reply to Driver’s Post

Driver’s arguments supporting penmanship are quite effective.

The student manages to successfully render the major concepts in favor of considering penmanship as a significant tool for children’s development. Though Drives provides a number of arguments, not all of them are properly supported by evidence and personal analysis. Besides, the reply is improperly cited due to the presence of first name and absence of page numbers.

### Reply to Corson’s Post

The arguments presented by the students are clear and logical, but they are poorly backed up by evidence and sources. Specifically, there is no evidence asserting the statement about problems with obesity and its connection to eating habits. The in-text citations and reference page is also formatted in a wrong way. In particular, in-text citations should coincide with the author of the sources, but not the title of the work.