

NBPS Technology Curriculum Philosophy

"The number one benefit of information technology is that it empowers people to do what they want to do. It lets people be creative. It lets people be productive. It lets people learn things they didn't think they could learn before, and so in a sense it is all about potential. "

Steve Ballmer, CEO of Microsoft Corporation

The rapid development of technology has been mind-boggling. Who would have thought fifty years ago that we would send letters in an instant or that grocery store checkout lanes would be manned with personnel operating a terminal that automatically restocks the store to replace everything that is sold? In the same light, a driver that delivers a package carries a wireless terminal that keeps the shipper and its customer aware of the location of every item sent and even produces a signature for view across continents instantly. Instant communication and the transfer of information have made the world a truly global community. Technology interfaces with all aspects of our lives and is correspondingly enhancing every element of the educational process.

Technology is a powerful tool to be used as an integral part of the curriculum. Students learn in many different modalities. The technology program in New Brunswick Schools appeals to the students of today who have been brought up in the age of instant messaging, online interactive gaming, individual game consoles and digital content downloading. Our goal is to improve student academic achievement through the use of technology. This is accomplished by encouraging effective integration of technology resources and systems with teacher training and curriculum development.

As technological advancement brings areas of the world ever closer, it is necessary to understand the pervasiveness of technology, not only in everyday life, but also in the global community. For students to relate to others in this complex system, they must possess a mastery of what technology is and how it is utilized in this interconnected world. As the founder of Ebay, Pierre Omidyar says, "We have technology, finally, that for the first time in human history allows people to really maintain rich connections with much larger numbers of people."

Bill Gates points out that, "Information technology and business are becoming inextricably interwoven. I don't think anybody can talk meaningfully about one without the talking about the other." Every facet of curriculum in New Brunswick Public School benefits and will further benefit interweaving with what technology has to offer. A student can learn almost anything with a few properly directed clicks on a screen. The future of their employment and quality of life is seamlessly interfaced with technological awareness and the development important computer skills. The core of the thrust of educational innovation in the New Brunswick Public Schools is infused with the tools of technology so that our students will have every opportunity to experience a better quality of life and employment.

Course Goals:

- **By the completion of Grade 4**, NBPS students will be familiar with a multitude of document creation programs, including word processing, multimedia, graphic organizers, reference programs, etc. The students will also have experience in proper and safe usage of the Internet as an educational tool. By this time, proper keyboarding techniques and proper file management are skills that have been introduced and reinforced within their curricula.

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- **By the completion of Grade 8**, NBPS students will have expanded upon their document creation skills to include more advanced word processing & multimedia presentations, spreadsheets, simple databases, and webpage creation. Within word processing programs, the students will create in depth research reports that utilize a more advanced form of page formatting, table creation, headers, footers, etc. By the end of eighth grade, the multimedia presentations that the students create will have a more distinctive & professional look.
- **By the completion of Grade 12**, NBPS students will have transformed their technological skills from an educational status, to that of higher education and the work force. *Business Class* documents will have been created in word processing and multimedia presentation programs. The students will have a real world experience and knowledge of spreadsheet and database programs. With the creation of a web-based portfolio, the students will have concrete evidence of their high school technological progress and advancement.

Course Description

- The students in Kindergarten through 4th Grade will acquire their technology skills in a multitude of fashions. All the skills will be taught within the various content area curricula in each grade level. The classroom teachers will be responsible for making sure each of the technology skills within a grade level is covered. Benchmark projects (*To Be Created*) will be completed at each grade level to ensure that all students have experience in all objectives, as well as provide technological consistency throughout the district. Technology skills and projects are to be created in: classroom computer centers, school computer labs, and on school laptop carts. A district wide technology assessment aligned with the NJCCCS for technology (8.1.4.A.1-9) will be completed by each 4th grade student and assessed using rubrics formulated by the district. (*To Be Created*).
- The students in fifth through eighth grades will also have technology infused into the various subject area curricula in each grade level. The classroom teachers will be responsible for making sure each of the technology skills within a grade level is covered. Benchmark projects (*To Be Created*) will be completed at each grade level to ensure that all students have experience in all objectives, as well as provide technological consistency throughout the district. Technology skills and projects are to be created in: classroom computer centers, school computer labs, and on school laptop carts. A district wide technology assessment aligned with the NJCCCS for technology (8.1.8.A.1-12) will be completed by each 8th grade student and assessed using rubrics formulated by the district. (*Social Studies-Stock Market Project*).
- At the high school level, technology will be infused into subject curricula as well as be taught in specified Business courses. Content area teachers will be responsible for making sure that each of the technology skills within a grade level is covered. Benchmark projects (*To Be Created*) will be completed at each grade level to ensure that all students have experience in all technology objectives. Technology skills and projects are to be completed utilizing: classroom computer centers, school computer labs, and on school laptop carts. As a 12th grade technology assessment, all 9th-12th grade

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students will be responsible for the creation and maintenance of web based portfolios containing select technology projects that show proficiency in each of the NJCCCS for technology (8.1.12.A.1-9).

New Jersey Core Curricular Content Standards – Technology

8.1 Technological Literacy

New Jersey Core Competency Standard 8.1 for Technology states that students will use applications and technology tools effectively to do research, improve learning and solve problems. In the classroom that translates into learning via a different modality using a hands on approach through technological means. Students will create publications, presentations and interactive portfolios using a variety of different software applications. In addition, students will be able to determine the most effective application for not only the task at hand but will learn how to utilize multiple applications simultaneously and in conjunction with one another. With an education rich in technological literacy, students will be able to solve problems and make decisions more efficiently and effectively. Through this use of these technologies, students will be provided with a solid foundation of technological skills that will be a tremendous asset for future educational endeavors or business career.