



The Sinclair ZX-81 Personal Computer for Educational Purposes

In March of 1981, the British Sinclair company released the Sinclair ZX81 as the first personal computer available in kit form for less than \$100 (Obsolete Technology Website, 2013a). Assembled ZX81 machines were available for the slightly higher cost of \$149.95. Television sets (black and white only) were used as monitors for the basic ZX81 equipment. The release of inexpensive personal computing tools provided the foundation for widespread integration of technology with education and daily activities prevalent in the 21st century.

Earlier versions of personal microcomputers included the Altair 8800, Apple II, and IBM. The Altair 8800 kit was available in 1975 for less than \$400 and was considered the first mass-produced microcomputer (National Museum of American History, 2013). Demand for the Altair 8800 kit quickly backlogged to 4,000 orders within 3 months in spite of the equipment's limited features and difficult assembly process. The Apple II was released in 1977 and sold for approximately \$1,300 without a monitor (Computer History Museum, 2013) while a typical IBM personal computer that included a disk drive and display sold for approximately \$3,000 in 1981 (Obsolete Technology Website, 2013b). Due to the technical

requirements and relatively high cost, early versions of the personal computer were popular with computer enthusiasts rather than educators and mainstream society. When hobbyists entered the market the demand for low-cost personal computers increased greatly and opportunities for educational and personal uses increased (Lombardo, ND).

During the first 12 months after



the ZX81 was released on the market, 500,000 kits and machines were purchased (Obsolete Technology Website, 2013a). The ZX81 kit provided users the opportunity to learn electronic assembly and computer architecture as well as basic computer programming (Lombardo, ND). Numerous games and educational tools quickly became available for the ZX81 system to lay the foundation for increased uses of personal computers in education (ZX81Museum.Net, 2013). Competitors in the affordable

personal computer market quickly emerged with the release of the Commodore VIC-20, which included a color video, enhanced keyboard and increased power (Obsolete Technology Website, 2013c).

References

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