Numbers Don't Add Up for a TI Calculator

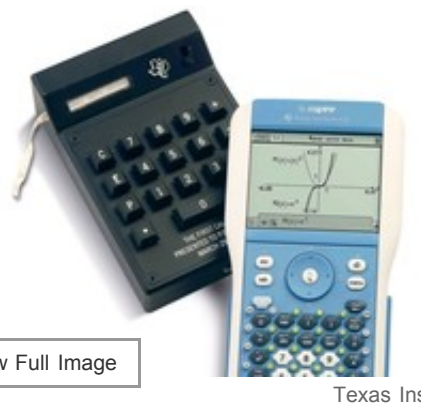
New Graphing Device Is More Than Some Students Need as Old Models Hold Their Own

By JERRY A. DICOLO

(See Corrections & Amplifications item below.)

Facing competition from iPhones and other devices that have caught on with the high school set, Texas Instruments Inc. is trying to inject some new life into its popular line of graphing calculators.

But its latest entry, the $135 TI-Nspire, has gotten off to a slow start since hitting stores last year. One of the company's biggest challenges: convincing users the revamped model is better than existing ones, which generally cost about $100.



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Texas Instruments

TI's first handheld electronic calculator from 1967 (left) and its latest model, the TI-Nspire, which has computer-like features.

Digits

Not All Is Gloom in Tech Hardware, Blade CEO Says

Some math teachers say the Nspire, which has more computer-like features, is unnecessarily complex. And calculator enthusiasts complain the new model limits what kind of tinkering they can do.

"TI-Nspire is a bit of a different model. It is taking us more time to have the market understand that," said Melendy Lovett, head of TI's education technology unit. The company's best-selling calculator remains the five-year-old TI-84 Plus, she added.

The Nspire is part of the Dallas-based company's strategy to defend its dominance in the sleepy but profitable calculator business as students head back to school. TI, whose scientists invented the portable calculator in 1967, accounts for about 80% of the U.S. market for graphing calculators in terms of units, according to research firm NPD Group.

Traditional graphing calculators, which are required for certain math classes and are used for college entrance exams, plot algebra and trigonometry on small screens and do a bit of programming. The Nspire has an operating system that makes the device run more like a PC, allowing students and teachers to run spreadsheets and take notes.

For some users the Nspire is too high-tech. "It sings, it dances, it does the dishes for you," said math tutor and retired teacher Lucinda MacKinnon, who owns an Nspire. "I can't imagine getting teachers to use that thing in the classroom. There is way too much going on."

Some calculator fans say they prefer the older models because the Nspire's operating system and other features limit users from creating the types of programs they have designed and shared in the past.

"In all the other calculators they have always encouraged programming," said Michael Vincent, a law student and calculator enthusiast who helps run the Web site ticalc.org. The site offers free downloadable programs and games students can put on their TI devices, a popular time-waster in high schools.

Mr. Vincent, who at one point owned 14 TI calculators, said the Nspire offers new interactive ways of solving math problems, but limits the computer languages that can be used to write programs.

Last year, 29-year-old programmer Gabor Nagy released a graphing calculator app for Apple Inc.'s iPhone and iPod touch. In the first five months, a free version was downloaded by 1.2 million users, he said, and a version that costs 99 cents has sold more than 45,000 copies.

TI rival Hewlett-Packard Co. has also released a similar iPhone app that costs around $30. H-P has a less than 5% stake in the graphing calculator market, according to NPD, and focused mostly on college and professional users.

"We've had a bit of a late start," in the high-school market, said Dirk Dykson, head of H-P's calculator division. But the company is renewing its focus on the much larger middle and high-school markets.

Casio Computer Co., which is a distant No. 2 to TI in calculators, said its lower-cost devices -- one graphing calculator retails for $50 -- are more appealing in the current economic environment. Greg Yurchuk, marketing director for Casio, said the company believes it is set to gain market share this year.

"It is a mature market, and we are feeling competitive pressure from alternatives," said TI's Ms. Lovett. But the company and analysts say the nature of the education segment gives TI an advantage. "Education is a market that doesn't change quickly," she added.

For one, standardized tests, including the SAT and ACT, prohibit test takers from using devices that have wireless connections such as iPhones.

Many supplements for high-level math classes direct students on how to solve problems using a TI device. That's helped TI maintain a steady stream of revenue from calculators for most of this decade.

TI's calculator business has generally accounted for about 5% of TI's annual revenue and profit. The unit had a profit of $208 million on revenue of $526 million in 2007 -- the last year in which the semiconductor giant broke out results for its education business. (Since 2008, the results have been folded into a larger segment.)

The Nspire also has its fans.

Andrew Munsell, 15, owns both a TI-84 and an Nspire, and likes the Nspire in part because of the added complexity. "The TI-Nspire that I have is not just a calculator any more -- it is a handheld computer," he said.

Mr. Munsell has also started up a Web site where other students can download simple games onto their TI devices, some that emulate popular titles like Tetris or Mario Bros.

At his school in Washington State, other kids took to their TI calculators once he provided a place where they could easily find games. "I was really the one that made the calculator cool. Almost," he said.

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Corrections & Amplifications:

The head of Hewlett-Packard Co.'s calculator business is Dirk Dykson. A previous version of this article misspelled his last name as Dickson.

Printed in The Wall Street Journal, page B6