Technology
Speaking in code
CEOs see the benefits of learning programming languages

As the co-founder of Byte Dept., a New York City–based Web development firm launched in 2009, Phillip Reyland would have appeared to be every bit the typical Web-savvy tech entrepreneur. What he lacked, however, were coding skills. At Byte Dept., he handles sales, billing, project management, and client relations, while the company's in-house and freelance programmers take care of the technology side of the business. "I told them, 'You code; I'll do everything else,'" says Reyland.

That arrangement worked just fine during Byte Dept.'s early days, when the firm specialized in building simple WordPress sites and interactive banner ads. But as the company branched out into more sophisticated Web and mobile applications, Reyland's technical team started running into delays. It was difficult, with a very limited knowledge of Web development and programming, for Reyland to understand the cause of those delays. It was then that he realized he needed to learn to code.

More entrepreneurs are following suit. A recent proliferation of online courses and night and weekend classes from start-ups such as Codecademy, Code School, Girl Develop It, and Treehouse has made learning how to program accessible even to time-strapped CEOs. For many CEO students like Reyland, the goal is not to make programming their full-time job. Some want to converse more intelligently with developers; some want to make smarter decisions when hiring tech talent; and others just want to be able to update their company's website or fix a simple bug without bothering their engineers.

Codecademy, Code School, and Treehouse offer bite-size, self-paced online lessons on a range of technologies. Codecademy, which has attracted more than a million users since last August, is free. The other schools charge by the month or the course.

For Reyland, the trouble at Byte Dept. began when communication gaps between the designers and developers meant project designs were being approved that couldn't be programmed. His role was to act as an intermediary between the two groups, but he was floundering—he all but needed a translator to have a basic conversation. "A lot gets lost when you don't control any code," he says.

So Reyland set out to learn Ruby, a programming language Byte Dept. uses to make nearly all its Web apps. In February, he signed up for a two-hour introduction to Ruby on Rails, a class organized by Skillshare, a New York City–based start-up that connects students looking to learn a new skill to experts in a variety of fields. He liked the initial class so much that in April he enrolled in an $850, five-week Ruby on Rails developer course. The class met for two hours on Monday nights and four hours on Sunday afternoons.

"The classes were a little more difficult than I thought they would be," says Reyland. "It feels like when I started learning to speak German—all these foreign things flying around. But the most difficult part is finding the time to sit down and learn it. There's nothing that the average person

couldn't grasp; it's finding the two to three hours to go over the material that's hard."

With his new comprehension of Ruby, Reyland is now able to outline each step of the development process to clients and flag potential problems. He can also gauge his programmers' progress by looking directly at their files. "It's about being a better ambassador between my team and our clients," says Reyland.

Given the many code schools out there, finding the one that suits your learning style can be a challenge. When Tom Hughes joined Wi-Fi-sharing start-up KeyWifi as co-founder in 2011, he was a self-described "product guy." In January, however, he started Codecademy's weekly online JavaScript lessons to better collaborate with the contractors in India who were building his start-up's website. He says Codecademy's tutorials were a great introduction, but the online lessons were "too easy for a busy, midcareer person to put aside." In February, seeking in-person instruction, he enrolled in a Web development class at General Assembly, a New York City event space for entrepreneurs.

After studying HTML, CSS, and JavaScript two nights a week for 10 weeks, Hughes was able to grasp basic website structure and the value of time-saving design tools like Bootstrap.

That knowledge enabled him to specify and even tweak KeyWifi's site design. "When our contractors talked about 'front-end framework,' I had no idea what they meant," says Hughes. "Four weeks later, I was learning it, and the light shone." —*Elizabeth Woyke*

Which Code School Is Right for You?

CODECADEMY
PRICE: *Free*
Offers online, self-paced lessons in JavaScript, HTML, and CSS and is adding lessons in Python and Ruby. Participants in Codecademy's Code Year initiative (*codeyear.com*) get lessons via e-mail every Monday throughout 2012. Codecademy also hosts meetup groups for students.

CODE SCHOOL
PRICE: *$25 a month*
Code School's lessons, like Codecademy's, are online and interactive, with users coding directly in their browsers. Unlike Codecademy, Code School gears its classes toward professional developers. The focus is on cutting-edge Web technologies such as HTML5, CSS3, and Ruby.

TREEHOUSE
PRICE: *$25 a month for basic membership; $49 a month for gold membership, which includes access to more instructional videos*
Treehouse divides its online lessons into broad subjects (such as Web design and mobile app development) rather than specific programming languages. Students take quizzes and earn virtual badges as rewards. The online library contains more than 700 training videos.

GIRL DEVELOP IT
PRICE: *$80 for four classes on a particular topic (HTML and CSS, JavaScript and jQuery, PHP and MySQL, Android and Java, etc.)*
Founded by two women, and the only one of these schools whose classes are taught in person rather than online, Girl Develop It mostly attracts female students but also welcomes men. Classes are held regularly in Austin; Columbus, Ohio; New York City; and Philadelphia, as well as Ottawa and Sydney.