Bjarne Stroustroup: Three Key Lessons

YS: What are the three key lessons you would like to share with programmers in their early twenties who are just starting up?

**Bjarne:** Why three? Well, OK:

Learn several programming language well.

Learn to communicate well, verbally and in writing.

Develop and maintain interests outside software development. Programming is a way of expressing idea, but unless you have an understanding of an application area you won't have the insights to make contributions to any application area.

In addition to your computer science basics (such as machine architecture, data structures, and algorithms), you should spend significant time on some non-computer topic (mathematics, physics, biology, history, architecture or literature), and learn to speak and write effectively.