

Student Survey Questions 13 & 14

Q13: “What grade were you when you first wrote a computer program?”

Q14: “If you find computer programming interesting, what first sparked your interest and about how old were you at the time?”

- **Chart: CS Students – Motivation Categories - First Program in Grades K-12**
 - Data for this chart are from the worksheet “k12&college-comments.” Comments are from CS majors answering question 13 “What grade did you first program a computer?” Student comments are summarized into motivation categories. This chart includes only students who started programming in K-12, not in college.
 - Student comments are summarized into categories and counted. The top four categories are: **Discovery, Games, Project, and Web Design.**
 - **Discovery** includes comments where the student likes problem solving and software development.
 - **Project** includes comments that are more task and project driven. The reader is encouraged to read all comments and develop her/his own summary.
- **Chart: CS Students – Top 4 Motivation Categories – First Program Grade First Program**
 - Data for this chart are from the worksheet “k12&college-comments.” This chart shows motivation category by grade first program. For example, there were four students whose first programs were games in the seventh grade.
- **Comment Examples:**
 - **Discovery**
 - “The idea of being able to create something original”
 - “The problem solving aspect of it (programming), I like debugging”
 - “Being able to write my own software sounded like a lot of fun to me; at about 14 or 15 years old”
 - “I was about 12 years old. I found that programming computers was a way to focus my creativity and get a result”
 - **Project**
 - “Was interested in how I could avoid repetitive tasks that were boring by writing a program to do it for me--for which the process was neither repetitive or boring”
 - “I was 10; the idea of a logical system that could grant or deny access to something based on knowledge (password)”
 - “Was 14, wanted a program to keep track of my basketball stats”