Low student success rates in introductory computer programming classes result in low student retention rates in computer science programs. For some sections of the course a traditional approach began using C# in the .Net development environment immediately. An experimental course redesign for one section was prepared that began with a study of HTML and JavaScript and focused on having students build web pages for several weeks; after that the experimental course used C# and the .Net development environment, covering all the material that was covered in the traditional sections. Students were more successful in the experimental section, with a higher percentage of the students passing the course and a higher percentage of the students continuing on to take at least one additional computer science course.