



Detail: I was charged with creating an interactive game, based on the successful direct marketing VHS 'Road Construction Ahead' for children ages 4-7, for Simon & Schuster. They had two requirements: it must be entertaining with underlying educational concepts, and it must contain as much high quality, digital video as possible. For this case study, I will concentrate on my solution to the first requirement; the digital video solution is addressed in a separate study.

The demographic of children, ages 4-7 presented an immediate challenge due to the broad developmental range found within that group. Working with an educational consultant, I spent the first several weeks fully exploring the demographic; how they learn, what they are capable of doing, what challenges and frustrates them, and how long I could expect their attention to last. By the end of the session, we had divided the demographic into three developmental levels, each with defined motor skills, cognitive abilities and attention spans.

I based the navigation on a simple hub and spoke system that flattens the architecture making areas easily accessible and allowing the navigational elements to remain consistent throughout the experience. Each area has its own activities and educational concepts, with several recurring themes and activities that link the experience together. I designed the experience through the eyes of a child, beginning with the familiar scene of a sandbox loaded with toys. From there, the user is taken into the real world of road construction, the cartoon like sandbox is replaced with a lush, illustrated environment, populated with realistic, 3D animated trucks and machines. The child is not alone in the real world, friends have come along for the ride, though unseen except for their arms, they hold out tools for the child to grab and use on the trucks and machines. I designed the environment in layers, with the cartoon like elements always on the top layer, following the child throughout the experience, providing the navigation, and interactive tools for each scene.

I reinforced the functionality both visually and aurally in a consistent manner. Information is conveyed in three ways: visually as text, visually as animation, and aurally as spoken words or sound effects. While the repetition was tedious for the adults creating and reviewing the program, repetition of visual and aural cues is a cornerstone of early development. The visual and aural feedback also serves as clues that unlock the hidden aspects of each area. Developed around a core set of functionality, layers of complexity were added to areas, addressing the different stages of development within the three sub-groups of our target demographic. The child can discover new aspects of each area as they grow without having to jump to the higher level; the game grows with the child.

Though one of my first projects, 'Road Construction Ahead' is still my favorite. I can attribute this to many factors, it may have been the project team, my level of involvement and creative input, or maybe just because it was so much fun. Perhaps also, because the target of children ages 4-7 remains the most unique, challenging and rewarding user group that I have had to design for to-date.