In this chapter we meet young people who are engaged in learning that is connected to their interests. Their interests also coincide with membership in particular communities. First we meet Jessie who uses the Internet as a stage for her performance as a singer/guitarist. Then we meet Rubiks cube solving middle school students and uncover the secret of their success. Finally, we will meet Alex an expert at sports talk and a resource for his family and community. What these young people have in common is that they have deliberately made use of the Internet to acquire knowledge that was of interest to them. Access to technology rich environments that happen to incorporate some basic learning principles in their design provided different levels of membership in communities that would not have been otherwise possible for these young people.

Performing: Playing the Guitar

Jessie is fourteen years old and she is sitting in front of a digital video camera strumming her steel stringed acoustic guitar as she sings along with the popular song that is playing on the speakers of her iPod. Her bedroom is decorated with posters of young actors promoting their latest popular movies for teenaged girls. There are piles of clothes, dirty and clean, strewn around the room. Her bed is unmade, and a wireless phone handset, several stuffed dolls and some notebooks can be seen on top. She is looking into the mirror as she sings along to the song. On the desk next to the mirror is another pile of books, a hair curling iron and a hair straightening iron. This evening her shoulder length brown hair is straight with bangs across the front. She is sitting in front of a tall dresser and on the top, arranged neatly in two rows, is a collection of sunglasses next to a vase of artificial carnations, and two hairbrushes.

She has not kept track of how much time she has been practicing but for a period of about 6 months, she’s been watching YouTube videos on the computer in the kitchen and on her iPod, of young people and original artists playing the songs that she is interested in. She has been able to download the lyrics and the tabs (chord notations) for the songs from the Internet and uses a guitar music reference book to get the chord fingering right. She has regularly stayed up late at night past bedtime quietly strumming and singing until she was happy with her musical performance. She also practiced rearranging her hair and clothing and adjusting the lighting in the room to prepare for recording her performance. She regularly borrows her father’s digital video camera and asks not to be interrupted while she records.
After some trial and error she gets recordings that she likes. She uploads her recordings to her MySpace page and reports days later that she has hundreds of page views and many positive comments from friends about her videos. We know with certainty that she did not learn to use the technology in school and that she has no formal musical training on the guitar. Jessie’s parents are enthusiastic about her interest in playing an instrument and offer to pay for lessons. She refused the offer and stated that she preferred to keep learning on her own. Jessie resists playing for her parents or friends. Her parents puzzle over that while they look at the video she produced for everyone on the Internet to watch.

Teaching Yourself and Learning on My Own

Is there really such a thing as “teaching yourself?” That’s the question that I asked myself after several days of thinking and talking to others about Jessie’s performance. Where was the more experienced peer or adult that was relating to the guitar player as “a head taller” than her actual level of development? What was the social context for the performance that she was engaged in? How was it possible for her to know and do more than when she had started if she was really just “teaching herself?” Why will she play for an Internet audience and not her parents? Can you actually be a performer if you are just pretending in front of your bedroom mirror?

ZPDs are created in a complex social environment and social environments can include people who are not in the room. A book, a bit of streaming video, a computer, an iPod, guitars, are all cultural artifacts that were made (produced, manufactured, created) by people not in the room. These cultural artifacts or tools were necessary for Jessie’s guitar playing ZPD to be possible. The room itself, in the house, warmed by oil, paid for by the labor of adults and the complex social arrangements that make such things possible were all part of the creation of the guitar playing ZPD. Jessie is drawing on a rich socio-cultural history when she learning by herself.

Prior to her learning activity she had no repertoire of songs, or chords, she was limited to holding and strumming an open stringed guitar. Her interactions with Internet artists included being able to watch different artists engage in playing a song on the guitar or explaining some techniques. She also interacted with family members who could play the guitar by asking questions and watching them play. As she “taught herself” she produced a “creative imitation” (Vygotsky, 1978; Holzman, 2009) or pretended to be able to play and compared her performance to the performances she had seen and made decisions (conscious and unconscious) based on those comparisons. The various media sources, textual artifacts (lyrics, chord references), audio recordings, and video recordings provided the information that she needed to produce a performance of a particular song.

In order to retrieve and make sense of the resources that she is using on the Internet Jessie has to make use of search engines and must have a fair idea about the