The Education Grid and Platform Ecosystem will “provide educators with a comprehensive end-to-end infrastructure for a new generation of virtual world learning environments.” The three platforms the ecosystem will focus on are part of the highly developed Second Life®, including the Teen Second Life Grid™, Sun Microsystems Laboratories® Project Wonderland™ (under development), and Active Worlds. These worlds are prominent in the education, business, and industry fields and have been useful for teaching and learning because they are interactive and engaging.

Investigating platforms is an important step in choosing a virtual world. Following is a short description of each of these well-defined platforms. After this chapter we will provide you with an in-depth guide to help you learn how to work with the Second Life virtual world.

Second Life

Access Second Life as shown in Figure 1.1 at http://secondlife.com/.

Second Life is a 3-D virtual world created by the residents who inhabit it. This platform was created by Philip Rosedale and the team at Linden Lab. According to statistics from December 1, 2008, there are currently close to 17 million avatars in Second Life, with a monthly count of 1,500,000+ and a daily count of 80,000+ “in world” at any given time. It is a unique place to discover educational opportunities, conferences, live music performances, games, interactive exhibits, and shopping experiences. At the time this book was written, Linden Lab was supporting an economy of $144 million a day in user transactions (Hale, 2009).
Examples of educational uses include the following:

- Classroom instruction
- Group interaction
- Office hours
- Role playing
- Peer review
- Collaboration
- Project development
- Faculty and administrative meetings
- Sharing videos and voice communication
- Text chat
- Interacting with the world
- Creating interactive objects
- Participating in communities, meetings, and conferences

Second Life enables you to create an avatar that can interact with individuals in order to learn and share. The world is your oyster, and there are endless opportunities to open your imagination and communicate with other residents in uniquely developed simulated areas.

Examples of SL users include East Carolina University, Princeton, North Carolina State University, the University of North Carolina at Chapel Hill, Harvard, Dell, IBM, Sun Microsystems, and the New Media Consortium.

**Teen Second Life™**

Access Teen Second Life as shown in Figure 1.2 at http://teen.secondlife.com/.

This is another grid developed by Linden Lab for anyone from the age of 13 to 17. Linden Lab would like to protect its younger residents, so this land is restricted to teens only. Adults can gain access purely for educational purposes.
after a background check and approval for entry into an island. Teens from all over the globe meet here.
Examples of uses include the following:

- High school-to-college programs
- High school courses
- Educational programs
- Teen interaction
- Shopping
- Introduction to virtual worlds
- College fairs
- Dancing clubs
- Craft fairs

Examples of users include Pitt County School Systems, East Carolina University (North Carolina), Global Kids, Eye4YouAlliance, Ohio University, Virtual World Campus, and the New Media Consortium.

**Project Wonderland**

Access Project Wonderland as shown in Figure 1.3 at https://lg3d-wonderland.dev.java.net/.

Sun Microsystems® Laboratories’ Project Wonderland™ is an immersive education virtual world built as a robust environment to provide scalability and security.
The Virtual Worlds Handbook

It is a free, open-source platform that runs on Java and has a large community of developers. Wonderland is currently under development and has new elements launching throughout 2009. The latest release provides additional functionality because Wonderland was designed to use the Education Grid and Ecosystem to develop a rich library of learning objects, digital media, learning games, and collaborative activities.

Examples of educational uses include the following:

- Writer's workshop
- Math help center
- Business applications
- Application sharing
- Software development
- Gaming
- Distributed collaboration
- Virtual theater
- Economics
- Share live applications
- Office documents

Examples of users include Essex University (UK), St. Paul College, the University of Oregon, the University of Zurich, the University of Missouri, the University of Rome, Sun Labs, and the New Media Consortium.

At this time, Project Wonderland is not as mature as SL and is not as widely used by educators. However, the open-source capability does make it a favorite of some educators because of the security of being able to run it on servers within the confines of their own environment.

**Active Worlds**

Access Active Worlds as shown in Figure 1.4 at http://www.activeworlds.com/.

Active Worlds, another free, open-source software platform, was developed to create collaborative multiuser online applications with a community of thousands of users. Active Worlds was specifically designed to enable the creation and low-cost deployment of large-scale metaverses that can be run within your own environment. It is an older platform and is used by educators worldwide.

![Figure 1.4 Active Worlds](active_worlds.png)
Educational institutions, teachers, students, and individual programs can use Active Worlds in a focused setting. Via this community, educators can explore new concepts, learning theories, creative curriculum design, and new paradigms in social learning. More than 80 educational worlds are available.

Examples of uses include the following:
- Collaboration
- Meetings
- Classroom instruction
- Medical community
- Programming
- Shopping
- Quest Atlantis
- Active World teen site

Examples of users include the University of California at Santa Cruz, Cornell University, the University of Cincinnati, the Art Center College of Design, the University of Toronto, the Oslo School of Architecture, University College London, the Haags Montessori Lyceum, the Charters School, Sacred Heart Middle School, the Boston Museum of Science, NASA Ames Research Laboratory, the Center for Advanced Learning Technologies, and the United Nations.

Other Virtual Worlds

If you would like to read about all the other virtual worlds, you can find a comprehensive list at this website: http://www.virtualworldsreview.com/info/categories.shtml.

Some are simple means of communicating over the Web, and others are multi-user virtual environments with a purpose directed toward education.
Keywords/Definitions:

**Active Worlds**—a 3-D virtual world created by Active Worlds, Inc.

**Ecosystem**—habitats where a population lives and functions together as a unit

**Linden Lab**—the company that created Second Life

**Main Grid**—the system that serves and caters to all adult users of the Second Life virtual world

**Project Wonderland**—a virtual environment created by Sun Microsystems Laboratories

**Second Life (SL)**—a 3-D virtual world created by Philip Rosedale of Linden Lab in June 2003

**Teen Grid**—a separate server of SL that houses regions specifically geared toward Second Life users between the ages of 13 and 17

**Virtual world (VW)**—a 3-D computer-based platform that allows users to interact with each other in real time

*Synonyms:* virtual environment (VE)

URLs to Helpful Information and Tutorials

- [http://secondlife.com](http://secondlife.com) (create an avatar here)
- [http://secondlifegrid.net/](http://secondlifegrid.net/)
- [http://www.activeworlds.com/edu/](http://www.activeworlds.com/edu/)
- Worlds Action Group—[http://members.tripod.com/~LadyJude/](http://members.tripod.com/~LadyJude/)
- RenderWare Modeler—[http://www.rwmodeler.com/](http://www.rwmodeler.com/)
- Accu Trans 3D—[http://www.micromouse.ca/](http://www.micromouse.ca/)
- Mauz’s HagViewer Tutorial—[http://mauz.info/hagviewer.html](http://mauz.info/hagviewer.html)
- Mauz’s RWXMod Tutorial—[http://mauz.info/rwxmod.html](http://mauz.info/rwxmod.html)