

# **Enhancing the Teaching of Lawyering Skills and Perspectives Through Virtual World Engagement**

**ANDREA M. SEIELSTAD**

7 U. MASS. L. REV. 40

## **ABSTRACT**

Educators from around the globe are rapidly utilizing and transforming virtual worlds, such as Second Life, with innovative teaching strategies. Mediation and dispute resolution, and associated communication and problem-solving skills, are particularly well suited for developing in virtual worlds, as are other lawyering skills such as, interviewing, counseling, and trial advocacy. The opportunities for students and faculty to engage in cross-cultural exchange and networking are another selling feature of virtual world engagement. Virtual worlds offer particular promise for those seeking innovative and cost-effective ways to integrate more professional training and skills development into the law school curriculum. Moreover, as more and more people enter virtual worlds and other forms of online social engagement, there is increasing need to offer innovative online opportunities for student learning. This article uses a project on teaching dispute resolution skills to law students conducted in the virtual world, Second Life, to show the advantages of utilizing a virtual world as a medium within the law school curriculum.

## **AUTHOR**

Professor of Law, University of Dayton School of Law.

CONTENTS

**I. INTRODUCTION..... 44**

**II. VIRTUAL WORLDS AND REAL LIFE EDUCATION ..... 48**

**A. Second Life and Other Emerging Virtual World Platforms 48**

**B. Real Life Education in Virtual Worlds ..... 55**

**C. Online Dispute Resolution..... 57**

**D. Virtual Forums for Solving Real-World Legal and Social Problems ..... 61**

**III. DEVELOPMENT OF VIRTUAL MEDIATION CLINIC ..... 63**

**A. Entering the Frontier..... 63**

**B. Exploration and Cultural Adaption ..... 66**

**C. Course Design and Planning..... 68**

**D. Teaching Demonstrations..... 70**

**IV. EVALUATING VIRTUAL WORLDS AS PLATFORMS FOR LAW TEACHING..... 73**

**A. Assessment of Teaching Demonstration ..... 73**

**B. Challenges ..... 75**

        1. Adaptive Investment ..... 75

        2. Financial Costs and Risk..... 76

        3. Legitimacy, Security and Liability Concerns ..... 80

*a. Perceptions of Legitimacy & Concerns for Student Safety and Wellbeing ..... 80*

*b. Control Over Privacy and Security..... 82*

        4. Privacy and Personal Data Collection..... 83

        5. Potential for Interference in Classroom Exercises..... 85

        6. Reflections on Risks and Opportunities to Mitigate ..... 86

**C. Opportunities..... 88**

        1. Representation and Interaction via Avatar..... 88

        2. Immersive, Collaborative Learning Environments ..... 92

        3. Multiple Modes of Interactive Communication..... 94

        4. Nonverbal Communication ..... 96

        5. Proxemics—Creating, Modifying, and Utilizing Space ..... 98

        6. Collaboration and Networking..... 99

        7. Cross-Cultural and Comparative Competency ..... 100

8. Intellectual Engagement and Curiosity .....	102
9. Enhancing the Teaching of Lawyering Skills .....	102
10. Provoking Reflection on Contemporary Legal Issues .....	104
<b>V. CONCLUSION.....</b>	<b>106</b>



## I. INTRODUCTION

Virtual worlds have emerged in recent years as innovative frontiers in which to teach and learn about law and other matters of contemporary relevance. They allow students and faculty from all over the world and different disciplines to interact and learn while sitting within the confines of their homes or classrooms. They are imaginative, dynamic, provocative, multicultural environments that can be explored, manipulated, reacted to, and developed in ways limited only by the creativity of those who participate, a few basic community standards, and evolving technical constraints. They facilitate collaboration, unbounded by conventional social constructs like geography, discipline, status and personal age and demographic characteristics. People who enter them are free to construct identities of their choice. They may create and tell their own narratives, join and form communities, and create culture and history. Inhabitants are measured only by what they do in the virtual world and by the nature and quality of their interactions with others, or they are free to explore, play, or invent on their own.

Law has a whole new meaning in virtual words. It exists as social order created by the expectations and interactions of residents and limited only by a few community standards and terms of service imposed by the developers and owners of the platform.<sup>1</sup> When disputes arise between inhabitants—over intellectual property protection and infringement, financial investment, the provision of technical expertise and virtual world scripting and building expertise, virtual “real” property and leaseholds—they implicate interesting and complex problems, challenging traditional notions of jurisdiction, choice of law, identification of parties, and dispute resolution. A number of courts, their judges and clerks, have been forced to address the contours of virtual world realities in civil litigation,<sup>2</sup> and law

---

<sup>1</sup> See discussion *infra* Parts III.C-D.

<sup>2</sup> By virtue of the possibility for people from around the world to interact and transact business anonymously in virtual spaces, unconnected to geographical locale, the legal issues that emerge are complex, often presenting cases of first impression for the courts to resolve. Issues have ranged from intellectual property and contract law, to first amendment and domestic relations matters. For a brief overview of some of the legal issues arising out of virtual worlds, see Sean F. Kane & Benjamin T. Duranske, *Virtual Worlds, Real-world Issues*, 1 LANDSLIDE 9 (Sept./Oct. 2008); see also BENJAMIN T. DURANSKE, *VIRTUAL LAW: NAVIGATING THE LEGAL LANDSCAPE OF VIRTUAL WORLDS* (2008). In one interesting case, the legality of digital

enforcement agencies may use them for counter-intelligence and investigative purposes while monitoring them for potential terrorist or otherwise illegal activity.<sup>3</sup> As places that foster innovation and creativity by allowing participants to retain the intellectual property rights to their own creations while prohibiting infringement on others' rights, they present significant opportunities and challenges in the area of intellectual property recognition and protection, enforcement, and dispute resolution.<sup>4</sup>

Exposure to virtual worlds stands therefore to critically benefit law students and legal practitioners across a broad spectrum of legal interest. In addition to preparing students to effectively approach complex real life legal problems involving online interactions between persons and entities interacting from points around the globe, work in virtual worlds may have tremendous educational benefit as well. With proper investigation and application, the teaching of substantive and clinical or skills courses may be enhanced through virtual world exploration and engagement.

This article describes a project teaching dispute resolution skills to law students conducted in a virtual world called Second Life. Over the course of a summer and fall semester, I accepted an invitation from a colleague to become a resident of Second Life and explore the feasibility of using this virtual world as a platform for enhancing law teaching.<sup>5</sup> We combined our expertise in criminal and cyberspace law, civil dispute resolution, problem solving, and clinical legal education, immersing ourselves in the virtual world and canvassing the

---

sweatshops in which third-world laborers play online games around the clock generating wealth for the entrepreneurs that retain them, see *Hernandez v. Internet Gaming Entm't, Ltd. et al.*, No. 07-214-2-Civ-Cohn/Snow (S.D. Fla. Aug. 29, 2007).

<sup>3</sup> Congress even held hearings on terrorism and virtual worlds. For a discussion of the hearings and testimony, see Benjamin Duranske, *Congress Holds First Hearing on Virtual Worlds; Lab CEO Philip Rosedale Testifies*, VIRTUALLY BLIND BLOG (Apr. 1, 2008), <http://virtuallyblind.com/2008/04/01/congress-virtual-worlds/>. For a comprehensive discussion of the possible uses of virtual worlds for terrorism and counter-terrorism, see EDWARD M. ROCHE & AKIL AR-RAQIB, *VIRTUAL WORLDS REAL TERRORISM VIRTUAL* (First N. Am. Ed. 2009).

<sup>4</sup> Kane & Duranske, *supra* note 2.

<sup>5</sup> An expert in cybercrime and cyber conflict, Prof. Susan Brenner, NCR Distinguished Prof. of Law and Tech. at the Univ. of Dayton School of Law, parlayed this venture described in more detail in this article into virtual worlds into a one-credit course on the Law of Online Virtual Worlds and integrated it into her scholarship. See, e.g., Susan Brenner, *Fantasy Crime: The Role of Criminal Law in Virtual Worlds*, 11 VAND. J. ENT. & TECH. L. 1 (2008).

educational possibilities. After an initial exploratory period, we ascertained different ways of utilizing the virtual platform in law teaching. The possibilities ranged from theoretical studies of democracy and the rule of law to using the medium for practical professional skills training, or even clinical and experiential learning.

After evaluating the possibilities offered by virtual worlds in light of my own real-world teaching obligations and interests, I first tested the efficacy of the virtual world platform by using it for applied exercises in a unit on online mediation skills offered in a course on alternative dispute resolution. Thereafter, I developed a one-credit intensive virtual mediation clinic that made use of Second Life for class discussion and simulations. Students in both variations of the class developed and refined basic mediation skills and perspectives. They compared and contrasted their experiences with role-plays conducted face-to-face in first life class,<sup>6</sup> reflecting on important themes ranging from the importance of nonverbal communication in emotional expression to the suitability of the medium of Second Life for resolving different types of disputes. They engaged also in debate and critical reflection about theoretical concepts related to online dispute resolution and its role in virtual spaces and communities where the laws regulating conduct and interaction among members are ambiguous, at best, or often non-existent.

The results of these teaching demonstrations indicated that online virtual environments are unquestionably viable places in which to enhance the teaching of lawyering skills and perspectives. They have unique potential for augmenting distance learning initiatives or other forms of online law school or continuing legal education courses, particularly those requiring applied skills development and participant interaction. Virtual worlds also provide settings for novel and comparative consideration of issues presented in substantive courses in business and commercial law, intellectual property, property, torts, and criminal law.

Situated in cyberspace and providing places for residents to participate and engage anonymously in transactions with real-world economic and legal impact, they illuminate complex ethical and legal issues associated with multi-jurisdictional practice. They provide environments in which historical cases and other moments of legal

---

<sup>6</sup> See generally David W. Frazee, *Second Life is making its way into first life*, CTR. FOR PARENT/YOUTH UNDERSTANDING (2007), <http://www.cpyu.org/Page.aspx?id=315816> (noting that first life is a person's current, real life).

significance may be re-enacted and visually presented. They provide promising new arenas for the doing of social justice advocacy and problem solving of real-world problems. As places that generate disputes between people and commercial entities and have the potential to facilitate resolution of them, virtual worlds also are rich environments in which to study and situate training in online dispute resolution. There are a myriad of ways the law may come to life in virtual worlds, thereby enriching faculty professional development and student learning in the legal academy.

Part II sets the context, describing virtual worlds and opportunities for real life education. Part III describes the online mediation teaching experience in more detail, outlining features and strategies helpful in adapting to teaching lawyering skills in this kind of environment. Part IV analyzes and critiques the utility of teaching in virtual worlds.

This article is not a primer on how to establish a teaching presence in a virtual world. Rather, drawing from first-hand experience investigating and testing virtual worlds as places to conduct real law teaching, its purpose is to assist those who may be inclined to integrate virtual world experience into their teaching in evaluating whether and under what circumstances it may be beneficial to do so. Toward this end, it provides a first-person narrative describing and critiquing a concrete teaching experience and highlighting also a number of features that may be particularly significant in evaluating whether to integrate a virtual world experience into one's teaching. The narrative is provided as a means of illustrating a concrete way of utilizing virtual world experience to advance real law teaching and to demonstrate more particularly what is involved in doing so. While the article's primary purpose is to reflect on the suitability of virtual world platforms to law teaching in general, the article offers a number of insights of particular interest and applicability to the teaching of lawyering skills, particularly those related to alternative dispute resolution and problem solving. As such, it establishes a model for enhancing student engagement and learning of applied lawyering skills, beyond those traditionally employed in the classroom, and presents innovative new possibilities for the teaching of online dispute resolution skills and perspectives.

## II. VIRTUAL WORLDS AND REAL LIFE EDUCATION

### A. Second Life and Other Emerging Virtual World Platforms

A virtual world is a simulated environment that allows users to interact via an online platform or digital space. While there are many different variants, several characteristics are shared by all virtual worlds. Specifically, they involve some kind of two or three-dimensional graphical space that is shared by multiple users and permits them to participate at the same time, to socialize, and to interact with the platform by building, modifying, or otherwise submitting customized content.<sup>7</sup> Moreover, there is immediacy, in that the interaction takes place in real time, and the world exists and persists over time whether people are logged in or not. Long the imaginative subject of science fiction and movies,<sup>8</sup> prototypes of virtual worlds emerged as early as 1962 with the invention of virtual reality simulators.<sup>9</sup> With the advent of the internet, they evolved into social communities and chat rooms and three-dimensional multiplayer—or massively multiplayer (MMORPGs), as is the case with games

---

<sup>7</sup> For a fuller discussion of these shared features and as well as a review of different virtual worlds and their various uses, see Betsy Book, *What is a Virtual World?*, VIRTUAL WORLDS REV. (Jan. 10, 2012) <http://www.virtualworldsreview.com/info/whatis.shtml>.

<sup>8</sup> Virtual worlds have long have been a popular concept in contemporary cinema, finding recognition in the movies of *Neuromancer* (Cabana Boy Prods. 1984), *The Lawnmower Man* (New Line Cinema 1992), *Ghost in the Shell* (Palm Pictures 1995), *eXistenZ* (MiraMax 1999), and *The Matrix* (Warner Bros. Pic. 1999), among others. They have also been the construct of many works of fiction, most notably Neil Stephenson's *Snow Crash*, see NEAL STEPHENSON, *SNOW CRASH* (1992). For an interesting interdisciplinary survey of the evolution of the concept of virtual worlds in the cinema and written works of classical, cultural and religious studies, see Maria B. Bittarello, *Another Time, Another Space: Virtual Worlds, Myths and Imagination*, 1 J. OF VIRTUAL WORLDS RES. 1 (2008), available at <http://journals.tdl.org/jvwr/article/download/282/236>.

<sup>9</sup> The conceptual idea behind virtual worlds has earlier antecedents. Researcher Vannevar Bush is often credited with laying the theoretical foundation for the Internet and the connective environments it later established as early as 1945, in an article describing a device called “memex,” that would enhance the human memory and promote scientific advancements by storing information that could be accessed with “exceeding speed and flexibility.” See Vannevar Bush, *As We May Think*, ATLANTIC MONTHLY (July 1945), available at <http://www.theatlantic.com/doc/194507/bush>; see also Raph Koster, *Online World Timeline*, <http://www.raphkoster.com/gaming/mudtimeline.shtml> (last visited Jan. 10, 2012) (presenting timeline of significant events through 2002 for development of virtual worlds).

that have tens of thousands of players—online games where people move around and interact through avatars,<sup>10</sup> competing within a set of pre-programmed objectives and rewards created by the game designers.

Parallel to the gaming industry, another set of virtual platforms, otherwise referred to as “3D networked environments” or “3D immersive virtual environments” emerged, providing places for people to explore, participate in individual and group activities, create communities, make, sell, and trade items and services, and otherwise interact. While games may be invented and played in these worlds, they are not games in and of themselves; rather, they are vast digital places, online environments where people may explore/reside/interact, represented by self-designed avatars.<sup>11</sup>

In 1992, the concept of a Metaverse was first introduced by Neal Stephenson’s science fiction novel *Snow Crash*.<sup>12</sup> Stephenson’s Metaverse was “a real place to its users, one where they interacted using the real-world as a metaphor and socialized, conducted business, and were entertained.”<sup>13</sup> While early efforts to develop such a Metaverse were difficult, technological advances in three-dimensional graphics, network connectivity, and bandwidth have begun to realize this vision.<sup>14</sup> Several attributes are essential to the creation of such a “defensively real, online world,” namely, (1) users must be given the power to create the content within it, (2) users must be granted broad rights to what they create, and (3) those creations must be able to be converted into real-world capital and wealth.<sup>15</sup> The ability to collaborate and network is also central to the creation of such an online

---

<sup>10</sup> An avatar in this context is a graphical representation of a player or user of a virtual world. For a discussion of avatars, see *infra* note 99.

<sup>11</sup> For a more in depth account of virtual worlds, their history, and their contemporary and future significance, see F. Gregory Lastowka & Dan Hunter, *Virtual Worlds: A Primer*, in *THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS* 13 (Jack M. Balkin & Beth S. Noveck, eds. 2006); see also JESSICA MULLIGAN & BRIDGETTE PATROVSKY, *DEVELOPING ONLINE GAMES: AN INSIDER’S GUIDE* (2003) (describing the development of massively multiplayer online role-playing game (“MMORPG”)); see Koster, *supra* note 9.

<sup>12</sup> STEPHENSON, *supra* note 8.

<sup>13</sup> Cory Ondrejka, *Escaping the Guilded Cage: User-Created Content and Building the Metaverse*, in *THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS* 158 (Jack M. Balkin & Beth S. Noveck, eds. 2006).

<sup>14</sup> *Id.* at 159.

<sup>15</sup> *Id.*

environment, as is the ability to handle millions of simultaneous users.<sup>16</sup>

While limited modification and creativity by users is possible in some games and related applications,<sup>17</sup> few online environments yet have recognized the other attributes necessary to realize an online world akin to the Metaverse. Second Life, an internet-based platform launched in June 2003 by San Francisco-based Linden Research Inc., popularly referred to as Linden Lab, was the first online world to realize many of the essential features of the Metaverse.<sup>18</sup> Linden Lab

---

<sup>16</sup> *Id.* at 160.

<sup>17</sup> *See, e.g., id.* at 160-61 (arguing that *The Sims* was the first game to allow players to customize the virtual possessions they purchase for their homes as well as to allow users to create stories around screen shots that may be stored in albums posted and traded among players. While fantasy-themed MMORPG *Ultima Online* may combine in-world objects to create new images to decorate their in-world homes. Other forms of user-created content using tools independent from those available in the game may also be developed to utilize or enhance the game experience. *Mods* are independent modifications developed by users or developers that permit users to modify certain aspects of artwork or game-play when combined with the original game.). *Machinima*, or the creation of movies with synthetic realities, may be filmed in gaming environments. *See also* MATT KELLAND ET AL., MACHINIMA: MAKING ANIMATED MOVIES IN 3D VIRTUAL ENVIRONMENTS 10 (2005) (“Machinima is the art of making animate films within a real time virtual 3D environment. Or, to put it in simpler terms, machinima means making movies out of games. And, confusingly, the word is often also used to describe both the actual films made this way, either individually or collectively, and the process by which they were made.”).

<sup>18</sup> Ondrejka, *supra* note 13, at 162 (“Second Life, an online world built by its users . . . is taking the first steps on the path to the Metaverse.”); *see also* *What is Second Life*, SECONDLIFE, <http://secondlife.com/whatis/> (last visited Jan. 11, 2012) (“Second Life® is a 3-D virtual world entirely created by its Residents. Since opening to the public in 2003, it has grown explosively and today is inhabited by millions of Residents from around the globe.”). For more information about Second Life, *see* Stephen J. Davidson, *An Immersive Perspective on the Second Life Virtual World*, 947 PLI/Pat 673 (2008); Wayner J. Au, NEW WORLD NOTES BLOG (Sept. 2008), <http://nwn.blogs.com>; SECOND LIFE, <http://forums.secondlife.com/> (last visited Jan. 11, 2012)(you will need your login information). Competitors include Instant Messaging Virtual Universe (IMVU), There, Active Worlds, Kaneva, Onverse, Astra Grid, VirtualWorld.com, and 3Dchat.com.

OpenSimulator, an open source multi-platform 3D application server is emerging as a particularly effective place for virtual world developers to customize their worlds. As discussed more fully below, it is one way for educators to design their own spaces and exert greater control over the privacy and protection of their participants. *See also* Brian White, *A Bridge between Virtual Worlds*, MIT TECH. REV. (Aug. 11, 2008), [www.technologyreview.com/web/21203/page1/?a=f](http://www.technologyreview.com/web/21203/page1/?a=f) (“A

provides a digital continent with tools residents can use to create virtual objects and scripts. The tools also permit users to collaborate in the creation of entirely new virtual content in real-time and using built-in tools. “This allows users to create iteratively and interactively, while sharing the act of creation with other users ... encourag[ing] teams to work together on larger scale projects and creat[ing] the strong interpersonal bonds that are critical to online world success.”<sup>19</sup> The opportunities for collaboration support also a strong and diverse social network with users connected by group memberships and voice or text-based chatting and private instant messaging.

Through collaborative and individual initiatives, most of the content of Second Life has been user-created. Objects created within the virtual environment are bought and sold, and users may be consumers or creators, or both, thereby creating a market for each other. Unique creations are user-owned, and they may acquire their own intellectual property rights to objects, source code or scripts that activate objects, or names, personas and representations created in-world. There is a marketplace with an in-world unit of trade called Linden dollars, which supports millions of dollars of monthly transactions.<sup>20</sup> “[R]eal-world wealth can be generated in online spaces [like Second Life].”<sup>21</sup> It can be traded in-world for goods and services, or exchanged into real dollars for outside use. Some have noted the potential for virtual world commercial transactions to transform the marketplace in revolutionary new ways.<sup>22</sup>

---

Bridge between Virtual Worlds: Second Life’s new program links virtual environments.”).

<sup>19</sup> Ondrejka, *supra* note 13, at 162.

<sup>20</sup> *Id.* For Linden Lab’s current economic statistics, see Linden Lab, *The Second Life Economy in Q3 2011*, SECOND LIFE BLOG (Oct. 14, 2011, 2:38 PM), <http://community.secondlife.com/t5/Featured-News/The-Second-Life-Economy-in-Q3-2011/ba-p/1166705>. A variety of interpretations and analysis may also be found, some reflecting a Second Life recession at one point. *See, e.g.*, Pixeleen Mistral, *Second Life Economic Statistics Analyzed*, THE ALPHAVILLE HERALD (Apr. 26, 2007, 8:30 AM). *But see* Ian Lamont, *Second Life Profitable Despite Interface Woes*, PC WORLD (Jan. 30, 2009), [www.pcworld.com/article/158664/second\\_life\\_profitable\\_despite\\_interface\\_woes.html](http://www.pcworld.com/article/158664/second_life_profitable_despite_interface_woes.html); Financial News, *Second Life Profitable*, INTERNET, TECH. & TELECOMS BLOG (Apr. 30, 2008), <http://www.friend2financialnews.com/technology/second-life-profitable>.

<sup>21</sup> Ondrejka, *supra* note 13, at 175.

<sup>22</sup> *See, e.g.*, GEORGE B. DELTA & JEFFREY H. MATSUURA, *LAW OF THE INTERNET* §14.06, at 14.70 (3d ed. 2001) (“For example, systems permitting ‘micropayments,’ electronic payments of small amounts of money, can transform the marketplace. Prototypes of micropayment systems are being developed for sale of products

These unique features have galvanized the development of a wide variety of creative innovations and serious real-world activity. While gaming and entertainment industries have flourished, so too have resident-created museums, scientific laboratories, art exhibits, musical performances, research and development applications,<sup>23</sup> and interactive exhibits and experiments. In some instances, users have imported for exhibition in virtual worlds, talent produced offline or in other online media, and in others they have made innovations with media available exclusively in virtual worlds. Ballets have been choreographed, machinima<sup>24</sup> and theater directed. Some well-established real-world businesses have set up shop in Second Life,

---

including software, music videos, and games. Dramatic advances in the development of virtual worlds, such as ‘Second Life,’ have created a whole new category of money and payment transactions. Virtual cash is used extensively in those entirely digital communities. Yet, that virtual cash has developed commercial value in the physical economy as well. Consumers are increasingly willing to pay real cash in exchange for virtual cash that they can spend and invest in the virtual worlds, including Second Life. This ability to bridge real and virtual worlds makes Second Life and other virtual communities popular venues for commercial companies to refine existing products and to experiment with new ones.”); *see also* Eve Tahmincioglu, *Business and Startups in Second Life*, BUSINESSWEEK (Aug. 22, 2008),

[www.businessweek.com/magazine/content/08\\_68/s0808041522849\\_page\\_2.htm](http://www.businessweek.com/magazine/content/08_68/s0808041522849_page_2.htm).

<sup>23</sup> The scientific community has made particularly effective use of virtual worlds, like Second Life. Alan Boyle, *Science Thrives in Virtual Worlds* (Mar. 25, 2011), [http://cosmiclog.msnbc.msn.com/\\_news/2011/03/25/6344843-science-thrives-in-virtual-worlds?gt1=43001](http://cosmiclog.msnbc.msn.com/_news/2011/03/25/6344843-science-thrives-in-virtual-worlds?gt1=43001). Nat’l Aeronautics & Space Admin. (NASA), Nat’l Oceanic & Atmospheric Admin. (NOAA), NASA Jet Propulsion Lab (NASA JPL) and a number of other research institutions and universities have developed interactive projects and simulations for educational and research purposes in a diverse array of applications in science and technology. *See Science & Technology, SECOND LIFE*, <http://secondlife.com/destinations/science> (last visited Jan. 11, 2012). For a list of science-related projects in Second Life, see <https://spreadsheets.google.com/a/udayton.edu/pub?key=0AkP1COanpEMQdG1MOHFavmVpbINIT3lvXzFOc3k2WIE> (last visited January 11, 2012). A searchable database of publications on virtual world science, problem-solving and other real-world applications may be found at <http://www.shendusou.com> (last visited Jan. 11, 2012).

<sup>24</sup> Machinima is film-making within a real-time, 3-D virtual world. “[I]t is the convergence of filmmaking, animation and game development. Machinima is real-world filmmaking techniques applied within an interactive virtual space where characters and events can be either controlled by humans, scripts or artificial intelligence.” THE MACHINIMA FAQ, <http://www.machinima.org/machinima-faq.html> (last visited Jan. 11, 2012).

while others have made small fortunes on purely virtual businesses.<sup>25</sup> There are international communities and cultural centers created by and for people from certain cultural and linguistic backgrounds. Some countries have opened diplomatic embassies in Second Life.<sup>26</sup> Political

---

<sup>25</sup> Virtual worlds have been used as a place to conduct marketing or outreach for real life businesses as well as a platform for conducting recruiting, demonstrations and prototype testing, online meetings and events between employees and business partners located in diverse geographical locales. For a list of examples of real-world business applications in Second Life, see Cynthia M. Wetzler, *Exploring the Vast Business Potential of the Metaverse*, N.Y. TIMES (Sept. 16, 2007), [http://www.nytimes.com/2007/09/16/nyregion/nyregionspecial2/16peoplewe.html?\\_r=1](http://www.nytimes.com/2007/09/16/nyregion/nyregionspecial2/16peoplewe.html?_r=1); Rita King, *From the Fire Pit to the Forbidden City: An Outsider's Inside Look at the Evolution of IBM's Virtual Universe Community*, DANCING INK PRODS. (Mar. 31, 2008), [http://dancinginkproductions.com/uploads/pdfs/Firepit\\_to\\_Forbidden\\_City\\_Final.pdf](http://dancinginkproductions.com/uploads/pdfs/Firepit_to_Forbidden_City_Final.pdf).

<sup>26</sup> The Maldives was the first embassy to open in Second Life. See selected press clippings on Maldives virtual embassy, *Tiny Island Nation Opens The First Real Embassy In Virtual World*, THE TIMES (UK) (May 24, 2007), [http://maldivesmission.ch/fileadmin/template/Pdf/Second\\_life/Global\\_press\\_coverage.pdf](http://maldivesmission.ch/fileadmin/template/Pdf/Second_life/Global_press_coverage.pdf). It was followed by the embassies of Sweden and Estonia. *E.g.*, *Sweden Opens Virtual Embassy in Second Life*, SPIEGEL ONLINE INT'L (Jan. 30, 2007), <http://www.spiegel.de/international/0,1518,463073,00.html>; *see also It Is Open!*, ESTONIAN SL EMBASSY NEWS BLOG (Dec. 4, 2007), <http://saatkond.typepad.com/news/2007/12/it-is-open.html> (announcement of Estonia). The U.S. Dep't of State and Univ. S. Cal. Ctr. on Pub. Diplomacy sponsored an event in Second Life regarding the use of virtual worlds in promoting public diplomacy as well as an ongoing project on virtual world diplomacy. *See, e.g.*, *Univ. of S. Cal., U.S. Dep't of State and U.S.C. Ctr. of Pub. Diplomacy Second Life Event* (Jun. 12, 2007), [http://uscpublicdiplomacy.com/index.php/events/events\\_detail/2345/](http://uscpublicdiplomacy.com/index.php/events/events_detail/2345/). The Carnegie Council of Ethics in International Affairs sponsored a very interesting project on using virtual worlds to understand Islam using Second Life because of its highly international community, with more than 70% of the residents being from outside of the U.S., and the opportunity for immersive interaction between members of this community. Rita J. King & Joshua S. Fouts, *Digital Diplomacy: Understanding Islam through Virtual Worlds*, CARNEGIE COUNCIL (Jan. 29, 2009), [http://www.dancinginkproductions.com/uploads/pdfs/ui/DIP\\_understandingislam\\_policyrec\\_2009.pdf](http://www.dancinginkproductions.com/uploads/pdfs/ui/DIP_understandingislam_policyrec_2009.pdf). For a comprehensive discussion of the role of virtual worlds in diplomacy, see Joshua Fouts, *Social Media, Virtual Worlds and Public Diplomacy*, WORLD POL. REV. (Oct. 13, 2009), <http://www.worldpoliticsreview.com/articles/4440/social-media-virtual-worlds-and-public-diplomacy>.

candidates and movements organize, fundraise, and educate.<sup>27</sup> A variety of publications broadcast news about events in Second Life.<sup>28</sup>

Members of the legal profession have made limited but innovative use of the virtual features of Second Life. The International Justice Center established a presence, commemorating and supporting the work of the International Criminal Court.<sup>29</sup> Law librarians and lawyers, mediators and arbitrators also have opened practices in Second Life, attempting to navigate the complex jurisdictional landscape presented by virtual worlds.<sup>30</sup> There are also bar associations and professional organizations.<sup>31</sup> Private practitioners of intellectual property and commercial law, among other specialties, have established a virtual presence and responded to legal issues that have arisen over creation and protection of objects, scripts, and names developed in-world. The Portuguese Ministry of Justice once collaborated with a law school in Portugal in developing an e-justice center, aimed at providing mediation and arbitration services for commercial disputes.<sup>32</sup>

---

<sup>27</sup> The presidential campaigns of Barack Obama, Hillary Clinton, and John Edwards set up campaign headquarters in Second Life, and there are a variety of political parties and movements with presence in Second Life from different places around the world (personal observation, fall 2008).

<sup>28</sup> See, e.g., THE ALPHAVILLE HERALD, <http://alphavilleherald.com/> (last visited Jan. 14, 2012); NEW WORLD NOTES, <http://nwn.blogs.com/> (last visited Jan. 14, 2012). For a list of radio, television, and podcasts broadcasting in Second Life, see RADIO & TV, [http://wiki.secondlife.com/wiki/Radio\\_%26\\_TV](http://wiki.secondlife.com/wiki/Radio_%26_TV) (last visited Jan. 14, 2012).

<sup>29</sup> Shava Nerad, *SL News: Opening of International Justice Commons Capped by an Address by Kofi Annan*, SLENTRY.COM (Mar. 26, 2008), <http://www.slentre.com/sl-news-opening-of-international-justice-commons-sim-capped-by-an-address-by-kofi-annan/>.

<sup>30</sup> See Martha Neil, *Law Firm Plans Real-Life Practice at Virtual 'Second Life' Office*, A.B.A. J. (Nov. 6, 2007), available at [http://www.abajournal.com/news/article/law\\_firm\\_plans\\_real\\_life\\_practice\\_at\\_virtual\\_second\\_life\\_office/](http://www.abajournal.com/news/article/law_firm_plans_real_life_practice_at_virtual_second_life_office/). For an overview of some of the legal issues arising in virtual worlds; GREG LASTOWKA, VIRTUAL JUSTICE: THE NEW LAWS OF ONLINE WORLDS (2010).

<sup>31</sup> Richard Acello, *As Worlds Collide*, 94 A.B.A. J. 64 (2008); Steven T. Taylor, *Riding the Net's Second Wave: How Lawyers and Their Firms Are Applying Web Tools in Game Changing Ways*, LAW PRACTICE (Jan. 1, 2009), at 40.

<sup>32</sup> The project was in collaboration with the Dep't of Comm'n and Art of the Univ. of Aveiro and the Faculty of Law of the Lisbon New Univ., *e-Justice Centre, ODR in Second Life*, E-ARBITRATION-T PROJECT- DISPUTE RESOLUTION (Feb. 28, 2008, 3:46 PM), <http://www.e-arbitration-t.com/2008/02/28/e-justice-centre-odr-in-second-life/>.

## B. Real Life Education in Virtual Worlds

Universities and educators from across the world have ventured into virtual worlds, conducting research, offering virtual admissions tours and information, entrance exam preparation courses, lectures, discussions, simulations, review sessions, and engaging students in creative design projects, fieldwork, and other kinds of observational and applied studies.<sup>33</sup> They are places that may be used to enhance distance learning or other kinds of academic classes. There are wikis, blogs, list serves, and a variety of programs, virtual space, groups, and opportunities within Second Life to connect with other educators, learn fundamental Second Life skills and cultural information, and develop educational opportunities.<sup>34</sup> A number of universities have purchased space and developed elaborate teaching and admissions marketing facilities.<sup>35</sup> Universities across the globe have integrated research and academic courses of study in subjects ranging from the arts,

---

<sup>33</sup> For examples and assessment of Second Life teaching demonstrations, see Denise Harrison, *Real Life Teaching in a Virtual World*, CAMPUS TECH. (Feb. 18, 2009), <http://campustechnology.com/articles/2009/02/18/real-life-teaching-in-a-virtual-world.aspx>; The SLENZ Project for the N.Z. Tertiary Educ. Comm'n, *Second Life Education in New Zealand: Evaluation Research Final Report* (2010), [http://slenz.files.wordpress.com/2010/03/slenz-final-report-\\_milestone-2\\_-\\_080310cca.pdf](http://slenz.files.wordpress.com/2010/03/slenz-final-report-_milestone-2_-_080310cca.pdf) (assessing benefits to teachers and students of learning in a virtual world, focusing on two pilot projects: one on midwifery in which Second Life was used to engage students in birthing simulations, and one in foundation studies in which students entered a skills master "hyperdome" where they could develop and hone their job search and application skills); GIOVANNI VINCENTI & JAMES BRAMAN, *TEACHING THROUGH MULTI-USER VIRTUAL ENVIRONMENTS: APPLYING DYNAMIC ELEMENTS TO THE MODERN CLASSROOM* (2010). For a comprehensive bibliography setting forth resources and publications on the impact of technology on law teaching, see Pearl Goldman, *Legal Education and Technology II: An Annotated Bibliography*, 100 LAW LIBR. J. 415 (2008).

<sup>34</sup> For information on teaching in Second Life, see *Best of Education in Second Life*, TULSA CMTY. COLLEGE (Oct. 26, 2011), <http://guides.lrc.tulsacc.edu/content.php?pid=134114&sid=1404674>; SECOND LIFE, EDUC. AND NON-PROFITS, <http://secondlife.com/destinations/learning> (last visited Jan. 15, 2012); *Second Life Education Wiki*, SIMTEACH, [http://www.simteach.com/wiki/index.php?title=Second\\_Life\\_Education\\_Wiki](http://www.simteach.com/wiki/index.php?title=Second_Life_Education_Wiki) (last visited Jan. 15, 2012).

<sup>35</sup> For a partial list of universities, colleges, and schools in Second Life, see SECOND LIFE EDUC. DIRECTORY, [http://wiki.secondlife.com/wiki/Second\\_Life\\_Education\\_Directory](http://wiki.secondlife.com/wiki/Second_Life_Education_Directory) (last visited Jan. 15, 2012). For examples of admission and marketing uses of Second Life, see for example, Debra C. Weiss, *Law School Recruits Students Through Second Life*, A.B.A. J. (Jan. 21, 2009), available at [http://www.abajournal.com/news/article/law\\_school\\_recruits\\_students\\_through\\_second\\_life/](http://www.abajournal.com/news/article/law_school_recruits_students_through_second_life/).

architecture, and sciences, to business, cross-cultural studies, and the anthropological and social sciences.<sup>36</sup> Professional schools, such as schools of medicine, have developed applications to assist with the training of future professionals.<sup>37</sup> At least one university has developed a degree program offered entirely through Second Life.<sup>38</sup> While a few law schools have ventured into Second Life, the movement to virtual teaching in the law academy has not yet been rapid.<sup>39</sup> However, virtual worlds are emerging as fertile grounds for scholarly reflections.<sup>40</sup>

---

<sup>36</sup> For general discussion in the media of the actual and potential educational uses of Second Life, see Colleen O'Hara, *Virtual Learning Gets Second Wind from Second Life*, FED. COMPUTER WEEK (Apr. 30, 2009) (describing training initiatives in military bases and reserves, as well as research and development opportunities); Grace Wong, *Educators Explore 'Second Life' Online*, CNN (Nov. 14, 2006), [http://articles.cnn.com/2006-11-13/tech/second.life.university\\_1\\_second-life-educators-virtual-world?\\_s=PM:TECH](http://articles.cnn.com/2006-11-13/tech/second.life.university_1_second-life-educators-virtual-world?_s=PM:TECH); Christine Lagorio, *The Ultimate Distance Learning*, N.Y. TIMES (Jan. 7, 2007), [www.nytimes.com/2007/01/07/education/edlife/07innovation.html](http://www.nytimes.com/2007/01/07/education/edlife/07innovation.html); Justin Appel, *Second Life' Develops Education Following*, ESCHOOL NEWS (Nov. 10, 2006), <http://www.eschoolnews.com/2006/11/10/second-life-develops-education-following/>. For specific teaching applications, see Christopher Kieran, *Second Life and Google Earth are Transforming the Idea of Architectural Collaboration*, MCGRAW HILL CONSTR. (Jan. 2007), <http://archrecord.construction.com/features/digital/archives/0701dignews-2.asp>. See also, MaryAnnCLT, *Education Uses of Second Life*, YOUTUBE (Aug. 10, 2007), <http://www.youtube.com/watch?v=qOFU9oUF2HA;xxArete2xx>; *Education in Second Life: Explore the Possibilities*, YOUTUBE (May 29, 2007), <http://www.youtube.com/watch?gl=AU&hl=en-GB&v=TMGR9q43dag>; eXtension Initiative, *Cooperative Extension Education In the Virtual World Second Life*, YOUTUBE (Sept. 29, 2011), <http://www.youtube.com/watch?v=SsVDbw5dt9I>.

<sup>37</sup> See, e.g., Jeremy Bradley, *Can Second Life Help Teach Doctors to Treat Patients*, CNN.COM (Mar. 30, 2009), <http://www.cnn.com/2009/TECH/03/30/doctors.second.life/> (describing virtual hospital training program implemented at Imperial College London). Greg Welch et al., *3D Medical Collaboration Technology to Enhance Emergency Health Care*, 4 J. OF BIOMED. DISCOV. AND COLLAB. 4 (2009), [http://www.cs.unc.edu/~andrei/pubs/2009\\_JBDC\\_3DMC.pdf](http://www.cs.unc.edu/~andrei/pubs/2009_JBDC_3DMC.pdf).

<sup>38</sup> *MMU to Develop Film and Media Degree through Second Life*, HOW-DO (Mar. 24, 2009), <http://www.how-do.co.uk/north-west-media-news/north-west-digital-media/mmu-to-deliver-film-and-media-degree-through-second-life-200903244983/> (describing film and at Manchester Metropolitan University).

<sup>39</sup> In the fall of 2006, Charles Nesson of The Berkman Center for Internet and Society at Harvard Law School utilized Second Life in offering an interactive course in Law in the Court of Public Opinion, a course in “persuasive, empathic argument in the Internet space” that permitted participation by enrolled Harvard Law Students and Extension Students as well as “at large” Internet users. *Virtual Reality*, CYBERONE: HARV. BLOG (Sept. 26 2006, 11:40 PM), <http://blogs.law.harvard.edu/cyberone/>. They offered in Second Life also a short course in trial advocacy in the fall 2007, utilizing a case filed against Linden Lab by a resident of Second Life to

### C. Online Dispute Resolution

Virtual worlds are particularly well suited to explore delivery of services and the teaching of skills and perspectives involved in Online Dispute Resolution (ODR).<sup>41</sup> ODR is any method by which parties attempt to resolve disputes online.<sup>42</sup> The field includes online methods aimed at resolving disputes arising in e-commerce or other related

---

explore the complex legal issues surrounding what substantive law will govern in the event of a dispute. See generally Charles R. Nesson, *Trials in Second Life: Seminar–Fall 2007*, HARV. UNIV. BERKMAN CTR. FOR INTERNET & SOC’Y (2007), <http://cyber.law.harvard.edu/teaching/courses/2007/fall/trials>. For a discussion of the trial advocacy course, see Steven J. Horowitz, *Bragg v. Linden’s Second Life: A Primer in Virtual World Justice*, 34 OHIO N.U. L. REV. 223 (2008). Seton Hall has offered a joint law school and business seminar to explore the creation of Second Life businesses and attendant legal issues. *SLurl: Location-Based Linking in Second Life*, <http://slurl.com/secondlife/Democracy%20Island/122/128/27> (Second Life location). Nova Southeastern University Law School has created in Second Life, a virtual library of state, federal, and Fla. resources, *id.*; <http://slurl.com/secondlife/Cybrary%20City%20II/60/44/22> (Second Life location). New York University has created a Democracy Island for exploration of civil uses of virtual space and set up a peer to patent exhibit in collaboration with the USPTO. *Id.*; Joshua Fairfield, *Anti-Social Contracts in Virtual Worlds*, WASH. & LEE UNIV. LAW SCHOOL (Sept. 19, 2007), <http://law.wlu.edu/news/storydetail.asp?id=300>.

<sup>40</sup> See, e.g., *Symp. Issue: Virtual Worlds*, 118 YALE L. J. 648 (2009), <http://yalelawjournal.org/the-yale-law-journal-pocket-part/intellectual-property/symposium-issue:-virtual-worlds/> (the Yale Law Journal is presenting the second symposium issue of the academic year to examine the legal issues surrounding the growing presence and influence of virtual worlds). For a bibliography of legal scholarship on virtual worlds, see also Greg Lastowka, *Virtual Law Bibliography*, TERRA NOVA BLOG (Mar. 17, 2008), [http://terranova.blogs.com/terra\\_nova/2008/03/virtual-law-b-1.html](http://terranova.blogs.com/terra_nova/2008/03/virtual-law-b-1.html) (demonstrating a growing trend in publications in law journals).

<sup>41</sup> Although ODR has emerged as the most common name, other names have been utilized to describe this emerging field, including Internet Dispute Resolution (IDR), Electronic Dispute Resolution (eDR), Electronic ADR (eADR), Online ADR (oADR), and Technology-Mediated Dispute Resolution (TMDR). For a general overview of ODR and its variants, see David A. Larson, *Technology Mediated Dispute Resolution (TMDR): Opportunities and Dangers*, 38 U. TOL. L. REV. 213 (2006).

<sup>42</sup> See A.B.A. Task Force on Elec. Commerce & Alt. Dispute Res., *Addressing Disputes in Electronic Commerce: Final Recommendations and Report*, 58 BUS. LAW. 415, 434 (2002) [hereinafter A.B.A. Task Force] (defining ODR as “includ[ing] the use of the Internet and other Web and computer-based technologies for facilitating ADR”).

disputes generated through internet transactions.<sup>43</sup> It may also encompass traditional “off-line” disputes and may enhance traditional dispute resolution methods in innovative ways that integrate technology. Generally, ODR involves the application of traditional mediation and other dispute resolution techniques in an online environment, and may be conducted using facilitative, evaluative, or transformative techniques.<sup>44</sup> A distinguishing characteristic of ODR is that the technology used to conduct dispute resolution may have a significant impact on the success of resolving the dispute and hence, may act as a kind of “fourth party.”<sup>45</sup>

ODR has been widely acknowledged as essential in resolving disputes arising out of online transactions, particularly business transactions between people and entities from distant geographical

---

<sup>43</sup> Sarah R. Cole & Kristen M. Blankley, *Online Mediation: Where We Have Been, Where We Are Now, and Where We Should Be*, 38 U. TOL. L. REV. 193, 197 (2006). For other discussion of the online versus off-line uses of online mediation, see Arno R. Lodder & John Zeleznikow, *Developing an Online Dispute Resolution Environment: Dialogue Tools and Negotiation Support Systems in a Three-Step Model*, 10 HARV. NEGOT. L. REV. 287, 300 (2005) (“There is no reason why offline disputes could not be resolved online.”); A.B.A. Task Force, *supra* note 42, at 434; Aashit Shah, *Using ADR to Resolve Online Disputes*, 10 RICH. J.L. & TECH. 25, 32-33 (2004) (arguing that online mediation is best suited for basic contract disputes, e-commerce disputes, domain name disputes, and intellectual property disputes); Joseph W. Goodman, *The Pros and Cons of Online Dispute Resolution: An Assessment of Cyber-Mediation Websites*, 2 DUKE L. & TECH. REV. 1, 1 (2003), <http://www.law.duke.edu/journals/dltr/articles/pdf/2003DLTR0004.pdf> (“Online dispute resolution (“ODR”) can take place either entirely or partly online and concerns two types of disputes: those that arise in cyberspace and those that arise offline.”). *But see* Mary S. Martin, *Note, Keep It Online: The Hague Convention and the Need for Online Alternative Dispute Resolution in International Business-to-Consumer E-Commerce*, 20 B.U. INT’L L.J. 125, 150, 153 (2002) (arguing ODR is most effective when used to resolve online e-commerce disputes).

<sup>44</sup> Cole and Blankley, *supra* note 43 at 198. *See also* Llewellyn J. Gibbons et al., *Cyber-Mediation: Computer-Mediated Communications Medium Massaging the Message*, 32 N.M. L. REV. 27, 32-35 (2002) (describing how the different forms of mediation may be conducted online and outlining their limitations).

<sup>45</sup> *See* David A. Larson, *Brother, Can You Spare a Dime? Technology can Reduce Dispute Resolution Costs When Times Are Tough and Improve Outcomes*, 11 NEV. L.J. 523, 532 (2011) (“Technology is, in essence, a fourth party at the table.”); Alan Gaitenby, *The Fourth Party Rises: Evolving Environments of Online Dispute Resolution*, 38 U. TOL. L. REV. 371 (2006); ETHAN KATSH & JANET RIFKIN, *ONLINE DISPUTE RESOLUTION: RESOLVING CONFLICTS IN CYBERSPACE* 93 (2001) (in contrast to traditional ADR, there are four parties involved where “[t]he ‘fourth party,’ the new presence ‘at the table,’ is the technology that works with the mediator or arbitrator.”).

locations.<sup>46</sup> However, it has potential for serving as a platform for resolving certain offline disputes as well. Issues such as cost savings and convenience, geographical proximity of parties, and avoidance of complex jurisdictional issues may encourage resort to ODR even for offline disputes.<sup>47</sup> Other matters, including disputes involving intense and potentially violent emotional situations between parties or situations where there are serious issues of security and safety, such that sitting face-to-face could be traumatic or dangerous to one or the other of the parties, may also be appropriate for online methods. Power dynamics and demographic influences such as race, gender, and disability may also exert differences through online means of interacting, which could be important in resolving certain kind of disputes. The availability and efficacy of the form of technology utilized, of course, has its own impact on the interactions between parties and hence, the utility of ODR as a method in any given dispute. While teleconferencing or videoconferencing is an increasingly available technology, the prevailing services available to date, primarily offer asynchronous, text-based communication between parties enhanced, in some cases, by computer software.<sup>48</sup>

---

<sup>46</sup> Am. Arb. Ass'n, *Consumer Due Process Protocol*, available at <http://www.adr.org/sp.asp?id=22019> (last visited Apr. 8, 2010). Recent projects sponsored by the Better Business Bureau, the American Arbitration Association, and other organizations suggest the possibilities of online conflict resolution for online transactions as well as other kinds of disputes. See generally George H. Friedman, *Alternative Dispute Resolution and Emerging Online Technologies: Challenges and Opportunities*, 19 HASTINGS COMM. & ENT. L.J. 695 (1997).

<sup>47</sup> Larson, *supra* note 45; Goodman, *supra* note 43.

<sup>48</sup> Telephonic mediation affords some ability to interact from a distance, but lacks the advantage of "face-to-face" contact often deemed critical in mediation and dispute resolution processes. For examples of telephonic mediation applications, see MARTIN DOMKE, CONSUMER DUE PROCESS PROTOCOL, DOMKE ON COM. ARB. § 16:14 (Larry Edmonson et al. eds., 3d ed. 2003) (describing use of telephonic mediation in lemon law programs in Consumer ADR by the National Futures Association (NFA) and indicating that the National Association of Securities Dealers (NASD) is currently conducting a pilot program utilizing telephonic mediation). For a description of practical methods of utilizing telephonic communication, see Suzanne J. Schmitz, *Telephone Mediations: Tips for Doing Them Well*, 4 DISP. RESOL. MAG. 32 (Summer 2003). Technical constraints have limited the widespread use of video-conferencing, the availability of which is often viewed as critical to the success of online mediation. As one scholar noted in 2000: "When videoconferencing on the Internet becomes about as easy to use as the telephone, online mediation will come into its own." See, e.g., Bruce L. Beal, *Online Mediation: Has its Time Come?*, 15 OHIO ST. J. ON. DISP. RESOL. 735, 737 (2000). A variety of other factors have thus far contributed to limitations in its widespread

Virtual worlds offer unique opportunities for ODR. First of all, they expand the opportunity for online interaction and therefore, the creation of a new set of disputes generated entirely online. Relationships are formed and broken in virtual worlds, businesses created and dissolved, intellectual property invented and borrowed, land purchased and rented. Consequently, disputes specific to residents of a virtual world may be resolved through in-world mediation or arbitration, provided all parties find it advantageous to engage in such processes and believe in their efficacy.<sup>49</sup> The fact that participants interact through anonymous avatars from geographical points all across the world creates complex jurisdictional dilemmas and difficulties that may best be resolved in the virtual space where they arose. It is also possible that disputes arising out of other kinds of online transactions may also be brought into virtual worlds for resolution.

---

accessibility. Stephen J. Ware & Sarah R. Cole, *Introduction: ADR in Cyberspace*, 15 OHIO ST. J. ON. DISP. RESOL. 589, 593-94 (2000) (“Online mediation will not manifest fully until videoconferencing becomes commonplace and the following apply: (1) video cameras and microphones are built into computers; (2) videoconferencing software is bundled with computers; and (3) modems are fast enough (i.e., ‘broadband’ or 512 kilobytes per second and greater) to accommodate videoconferencing.”). While Voice-Over-Internet Protocol/Session Initiation Protocol (VOIP/SIP) advancements in technology have enhanced availability of video-conferencing and upgrades have been made in computer software packages and modems, the use has not become widespread. *See also* Sarah N. Exon, *The Next Generation of Online Dispute Resolution: The Significance of Holography to Enhance and Transform Dispute Resolution*, 12 CARDOZO J. CONFLICT RESOL. 19 (2010), <http://cojcr.org/vol12no1/19-54.pdf>. One additional factor, not to be underestimated, is the difficulty for practitioners of mediation and dispute resolution to adapt to change. *See generally* Lenden Webb, *Brainstorming Meets Online Dispute Resolution*, 15 AM. REV. OF INT’L ARB. 337, 395 (2004) (noting resistance to change even in the face of changing technology but stating: “While there are many challenges to working in an online format for ODR, the requisite technology that was lacking three years ago is now here. Technology has adapted. Mediators must either adapt or suffer Darwinian consequences.”).

<sup>49</sup> Presently, there is no official dispute resolution system offered by Linden Lab, and the efficacy of dispute resolution to resolve disputes between parties depends on the extent to which each party to a dispute recognizes the value of informal methods where issues such as real party identity and enforcement of agreements may be limited. For one proposal regarding the establishment of an in-world system of dispute resolution in Second Life, see Sarah E. Galbraith, *Second Life Strife: A Proposal for Resolution of In-World Fashion Disputes*, 2008 B.C. INTELL. PROP. & TECH. F. 090803 (2008).

Virtual worlds also remain viable places in which to consider the potential for resolving certain real-world disputes, particularly those arising between parties separated by large geographical distances or those for which actual face-to-face confrontation maybe difficult to impossible due to the potential for physical violence, high emotional impact, or other fear or harm by one or another of the parties.<sup>50</sup> Ultimately, they may act as laboratories in which to study the impact of different kinds of technology on the dispute resolution process.

As set forth in more detail below, virtual worlds provide a number of unique opportunities for ODR. Among other things, both asynchronous and synchronous text-based and voice communication may be accommodated. Emotional expression may be enhanced through gestures and other visual and verbal cues. The physical space may be designed to facilitate whatever kind of atmosphere and symbolism by way of the arrangement of the setting and parties may be most conducive to resolving a particular dispute. Through the medium of an avatar, it is possible for parties to sit face-to-face in an immersive visual setting designed to facilitate communication and dispute resolution. There is a feeling of immediacy, yet the parties may be convening from different points of online access across the world. The feeling of being in an imaginative, foreign environment may encourage more creative, unbounded forms of problem-solving. As with law teaching, virtual worlds present a new frontier for the development and evaluation of ODR, and law students may learn mediation skills applicable online and offline while engaging in discussion and strategies regarding the effective use of virtual worlds as platforms for ODR.

#### **D. Virtual Forums for Solving Real-World Legal and Social Problems**

Virtual worlds may also serve as social and political advocacy tools and as platforms in which to explore multi-faceted and interdisciplinary problem solving of complex real-world social

---

<sup>50</sup> While none have specifically analyzed the viability of online mediation in the context of virtual worlds, several scholars have advocated for the online resolution of offline disputes. *See, e.g.*, Arno R. Lodder & John Zeleznikow, *Developing an Online Dispute Resolution Environment: Dialogue Tools and Negotiation Support Systems in a Three-Step Model*, 10 HARV. NEGOT. L. REV. 287, 300 (2005) (“There is no reason why offline disputes could not be resolved online.”); *see also* Goodman, *supra* note 43, at 1. (arguing that online dispute resolution concerns “two types of disputes: those that arise in cyberspace and those that arise offline”).

problems.<sup>51</sup> A growing number of non-profit organizations and grassroots movements are using virtual worlds and other web-based interactive environments to enhance their advocacy initiatives.<sup>52</sup> There are established communities of practice, organized and providing assistance around themes of non-profits, social justice advocacy, and real education, among others. Successful applications to real-world problems have included fundraising, petition campaigns, public education and awareness campaigns, wiki-style citizen input for social, political, and legal reform, community building, organizing and

---

<sup>51</sup> Virtual worlds have been utilized as venues for solving real world problems and for training people in certain kinds of complex problem-solving. For example, the Canadian border control has utilized Second Life in training in how to respond to real-world issues that arise on the borders, where post-9/11 security concerns do not permit trainees to enter certain real geographical zones. CASE STUDY: LOYALIST COLLEGE, [http://wiki.secondlife.com/wiki/Case\\_Study:\\_Loyalist\\_College](http://wiki.secondlife.com/wiki/Case_Study:_Loyalist_College) (last visited Jan. 15, 2012). A virtual quarry permits simulated response to situations that may arise in quarries, including issues of personnel safety and investigation of problems. edevUoD, *A Second Life Virtual Quarry*, YOUTUBE (Jul. 13, 2009), <http://www.youtube.com/watch?v=NoMfjK3NLg>. Urban design problems of lands in Cairo have been tackled in a multi-disciplinary program connecting American and Egyptian students. Draxtordespres, *The Kansas To Cairo Project Part #1*, YOUTUBE (Nov. 18, 2010), [http://www.youtube.com/watch?v=\\_GPcW2Q-b24](http://www.youtube.com/watch?v=_GPcW2Q-b24). The U.S. Army has begun utilizing virtual worlds for certain kinds of education and treatment of Post Traumatic Stress Disorder (PTSD), where it may be productive to engage individuals in simulated contexts as a means of developing problem-solving and coping skills that they could apply in the real-world. *DoD Gives PTSD Help 'Second Life' in Virtual Reality*, U.S. ARMY, <http://www.army.mil/article/50751/dod-gives-ptsd-help-second-life-in-virtual-reality/> (last visited Jan. 15, 2012). The utility of virtual worlds and Web 2.0 for galvanizing complex problem-solving and social or legal reform initiatives is the subject of a separate research project by the author and beyond the scope of this paper. See Andrea Seielstad, *The Promise of Virtual Worlds in Global Justice Education (Poster Presentation)* (June 28, 2009), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1427027](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1427027).

<sup>52</sup> These environments are typically referred to as “Web 2.0,” referencing what has been termed a second-generation of Internet application, and are characterized as web-based means of facilitating communication, collaboration, information sharing, and user-centered design. This iteration of Internet usage has led also to the development and evolution of web-based communities, web applications, and hosted services. Web 2.0 includes social-networking sites like MYSpace, FACEBOOK, YOUTUBE and other video-sharing sites, wikis, blogs, mashups, and folksonomies. For a more full description of Web 2.0, see Tim O’Reilly, *Web 2.0: Design Patterns and Business Models for the Next Generation of Software* (Sept. 30, 2005), available at <http://oreilly.com/web2/archive/what-is-web-20.html>. See also Tim O’Reilly & John Battelle, *Web-Squared: Web 2.0 Five Years On* (2010), [http://assets.en.oreilly.com/1/event/28/web2009\\_websquared-whitepaper.pdf](http://assets.en.oreilly.com/1/event/28/web2009_websquared-whitepaper.pdf) (“Web 2.0 is all about harnessing collective intelligence.”).

recruitment of membership and volunteers. Virtual worlds also provide unique opportunities for empirical research, multi-disciplinary and global strategy development, brainstorming and other collaborative problem-solving activities, and the modeling and practice of demonstrations, meetings, or other events planned in real life.<sup>53</sup> The opportunity for “face-to-face” interaction, multi-layered communication, and three-dimensional visual graphics provide unique opportunities for generating multi-media presentations. While virtual worlds hold the potential for a certain amount of escapism from real life, there is much that can be harnessed and brought to bear on real-life problems as well. That is the challenge that law schools should consider in designing curricula and courses responsive to the complex issues and rapidly changing technological uses of our age.

### III. DEVELOPMENT OF VIRTUAL MEDIATION CLINIC

#### A. Entering the Frontier

In the summer of 2006, I joined a colleague, Susan Brenner, an expert in criminal law and its applications in cyberspace, in exploring the possibilities of teaching law in Second Life. At that time, I could not even fathom the concept of such a bizarre world, let alone navigate effectively online. To the extent I understood what it was about,

---

<sup>53</sup> There is a growing body of research testing the efficacy of virtual worlds for the teaching and doing of complex problem-solving. *See, e.g., Virtual World Offers New Locale for Problem Solving*, PENN STATE LIVE, <http://live.psu.edu/story/34908> (last visited Jan. 15, 2012) (research conducted at Penn State indicates virtual worlds are viable for teaching collaborative problem solving but there is a steep learning curve); Greg Welch et al., *3D Medical Collaboration Technology to Enhance Emergency Healthcare*, 4 J. OF BIOMED. DISCOV. COLLAB. 4 (2009), <http://www.cs.unc.edu/~welch/media/pdf/Welch2009ab.pdf> (virtual training for technology-enhanced medical delivery effective through high-fidelity visual and aural sense of presence); Andrew Cram et al., *Using Virtual Worlds to Elicit Differentiated Responses to Ethical Dilemma*, PROCEEDINGS ASCILITE SYDNEY 2010, available at [http://mq.academia.edu/AndrewCram/Papers/543202/Using\\_virtual\\_worlds\\_to\\_elicit\\_differentiated\\_responses\\_to\\_ethical\\_dilemmas](http://mq.academia.edu/AndrewCram/Papers/543202/Using_virtual_worlds_to_elicit_differentiated_responses_to_ethical_dilemmas) (virtual worlds effective for ill-structured problems with ethical dilemmas); Vanessa Chang et al., *Evaluation of Collaborative Learning Settings in 3D Virtual Worlds*, 4 INT’L J. OF EMERGING TECH. IN LEARNING 6 (2009) (virtual world collaborative learning is particularly effective for Generation (“Gen”) Y learners who learn from doing and discovering, are visual learners, like to work in groups, enjoy combining education with entertainment, and multi-task with relatively short attention spans).

moreover, I was reluctant to venture into such a realm.<sup>54</sup> I looked briefly at the webpage, opened the registration page, but stopped at the very first input screen, unable to decide upon a suitable name for my new identity. A few weeks passed, my colleague raised the issue again, directing me to a number of articles about real-world corporations, politicians, universities and other entities that had started projects in Second Life. Finally, I went home one night, selected a name and entered the world.

Because it is instructive for those new to virtual worlds to be able to visualize what one might expect, I include here a brief description of my opening experience. I appeared, well, my avatar appeared, at the first station on Orientation Island and saw land, trees, water, and a number of other avatars. Standing atop the hill as a virtual newbie avatar, looking out over this strange vast world actually provoked a real feeling of dizziness. Initially, there is no point of reference, no map, nothing to ground your sense of place or time. I felt queasy, nervous, filled with anticipation and some dread. An avatar lurched closer to me, and another, “Oh no,” I thought, “What if they come near and start talking, who are the people behind the avatars, responsible for their choices and words, what are their intentions, are they griefers? Hackers? What if they are disturbed, creepy, or dangerous, hiding anonymously behind their avatars and filled with vengeful or capricious intentions?” Someone approached me and I flew up into the air, then sped out over the ocean with my arrow keys, touching down awkwardly on a small boat. It felt safer out there, away from the main orientation hub, incubating and hatching new avatars by the dozens. The hub appeared as a small island in a vast blue sea, and I was

---

<sup>54</sup> Frankly, the idea rather terrified me. Several fears informed my reluctance. First, I was primitive in my technical skills, experienced only in basic email use, word processing, web use, and a few other applications like PowerPoint, and a bit negative in my thinking about use of technology. I had never chatted online, exchanged instant messages, or text messages, or even pondered the online social world. I am not a player of video games, or even board games. Second, as a social justice lawyer and clinical teacher, I perceived that there were enough real social problems to take a hand at solving before escaping to a virtual world where a new set of social problems undoubtedly were being created, and I did not yet see how virtual technology could support and advance real-world education and advocacy. Third, I was daunted by the prospect of squeezing in time for another activity for which there would undoubtedly be a very steep learning curve. And, finally, I was afraid, afraid of the strange and unknown people I might encounter, afraid of some kind of disturbing cyber-attack or exposure to other disturbing events or interactions, and just plain afraid of the unknown.

floating alone on a boat. I drew some breaths. But soon, I saw feet dropping down from the sky above me, another avatar, more adept in using the avatar radar and mapping devices, had spotted me and came to greet me. "Hello," it said. "Hello," I wrote. Then it flew away, disappearing quickly into the horizon. That was harmless enough, bobbing in the sea beneath a bright blue noon sky was surprisingly relaxing, and I began to see what an enjoyable adventure this could be. After some minutes orienting myself to the controls and tabs on my screen, I gathered myself and flew back to the island to begin my orientation.

More than five years later, I have evolved from fearful explorer to senior resident and virtual educator. I have now taught a number of classes in Second Life and collaborated with others in their teaching experiments, bought and sold virtual land, traveled widely, attended live music and art exhibits (created in both real and virtual media), become virtually multilingual (through the use of online glossaries and tutorials and translator devices that can be applied to an avatar), joined a number of organizations and communities working on initiatives both in and outside of Second Life, performed as an actor, and a paid one at that, flown by rocket-ship into outer space, parachuted off buildings and cliffs, skydived, scuba dived; and, yes, for those thinking about entering a virtual world, I must disclose that I have been assaulted, caged, sent into orbit, disintegrated, blown up, and, fortunately, brought back to virtual life. Despite some undisputedly negative and mildly traumatic encounters, the experience overall has been one of the most intellectually and socially challenging and transformative ones of my professional life, and this itself is a reason to recommend the experience to academics and others in search of innovative and transformative experiences to consider participating in a virtual world. At the very least, and getting back to the point of this article, virtual worlds also can be extraordinarily rich places in which to teach an array of subjects, including law, and to develop fundamental professional skills and perspectives.

Drawing from lessons learned from early pioneers to virtual world teaching, I focused my efforts on developing a way to enhance the teaching of lawyering skills and perspectives utilized in mediated dispute resolution, adapting and expanding upon expertise and course assignments performed as a "real" or "offline" professor of law. The process of developing a Virtual Mediation Clinic involved several stages: (1) a period of exploration, observation, and cultural adaptation in Second Life, (2) course design and planning, (3) a preliminary in-

world teaching experiment, (4) reflection, modification, and planning of a more sophisticated class, and (5) second, third, and fourth expanded teaching demonstration. I have also had time to reflect on each teaching experience, while observing and reflecting over an extended period of time upon the viability and evolution of virtual worlds as places to teach. All iterations have confirmed that there are many outstanding advantages to teaching lawyering skills in a virtual world. While I have yet to venture past simulation of real and virtual disputes, these experiences have laid the foundation for an expanded and fully-integrated virtual mediation clinic, where students could learn skills critical to the mediation process, while resolving in-world and real-world disputes.<sup>55</sup>

### **B. Exploration and Cultural Adaption**

Teaching in virtual worlds involves considerable investment of time, adapting to new technologies and new social and geographical environments. The learning curve can be steep, the process time-consuming, especially for persons unfamiliar with virtual worlds, or online social networking and communication. In the beginning, it is necessary to become oriented with the lay of the land and the tools for moving, communicating, searching, and otherwise navigating in the virtual world. It is also important to master the methods of communication and interaction available.<sup>56</sup> It takes time also to develop an identity with which one is comfortable, including hair, skin tone, body shape, and other physical characteristics, as well as clothing and accessories that reflect or express an external representation chosen by the person behind the avatar.<sup>57</sup>

---

<sup>55</sup> It is important to note that all teaching demonstrations conducted thus far involved the use of simulation and role play, but no real clients or parties. Class discussion focused, in part, however, on the extent to which real mediation (or other types of lawyering) could be performed in virtual worlds, or might otherwise be utilized in solving real-world disputes and problems. The author continues to evaluate the viability of virtual worlds for real-client, or real-party legal work and clinical education, but this subject lies beyond the scope of this paper.

<sup>56</sup> See *infra* notes 119-125 and accompanying text.

<sup>57</sup> As discussed in more detail below, identity development and representation is one of the more interesting aspects of interacting via avatars in virtual worlds. Distinguishing characteristics such as race, gender, and age, for instance, exist in virtual worlds only to the extent they are modeled by avatars, and individuals are free to choose these characteristics and change them as they see fit. Additionally, there are accoutrement and characteristics (i.e., one may choose non-human avatars) one can assume only in virtual worlds. It then becomes possible to try out different

There is no substitute however, for hands-on exploring, utilizing the search engines to help find places and events of interest to the resident. My explorations took me to educational events about tools, techniques, and opportunities unique to Second Life, as well as to topics of real-world importance, art and music venues, scientific museums, cultural centers, political and philosophical discussions, religious centers, and “outdoors” events. In each event, I observed in awe the creative ways others were utilizing the platform and interacted, and asked questions of participants. My approach was anthropological in nature: I observed, participated, and asked questions about the experiences and perspectives of others who had preceded me in entering the world. In doing so, I gained important information about the context, the world, and different subcultures, and I gained confidence interacting, moving, and communicating in such an environment. Eventually I bought and sold land, enrolled in and created groups, and contributed to the Linden economy, purchasing hair, clothing, glasses, books, translators, and office equipment, among other things, and interviewing entrepreneurs striving to make money. I became more adept at communicating in a predominantly text-based online environment, acquired basic technical knowledge about the platform and supplementary means of interacting in voice and through networking applications other than Second Life, and adapted to the geographical and cultural landscapes created in this thriving virtual world.

Additionally, I formed important relationships and networks with people from all over the world who brought unique experiences and skills to Second Life, many of whom had designed educational centers or had already begun teaching in Second Life. These relationships were critical to my success in developing my course. Indeed,

---

persona, which is particularly good for examining the impact of race, gender, age, social status, and other factors in mediation role plays or other exercises in dispute resolution. Students also become more keenly aware of the assumptions and stereotypes they make about gender and, based upon my experience thus far, are much more motivated and willing to discuss the impact of such issues on the success of the mediation, the power dynamics between the parties, etc. *See discussion infra* Parts IV.B.6. Faculty members also must decide upon the key features of their Second Life teaching identity; one must decide how many of one’s real life characteristics to import or whether and to what extent to adapt to the more offbeat virtual culture. As with other tools, Linden Lab provides assistance through tutorials available on Orientation Island, Help Island, and there are other places to learn about the tools and applications available in Second Life.

colleagues I have met only in Second Life, from universities and disciplines entirely different from my own, granted me space in their virtual universities and training centers. They also designed and built my classroom based on specifications I provided to them, allowed me to observe classes and demonstrations of their own, and provided generous technical and other support. This potential for collaboration and sharing of information and expertise is another extraordinary feature of working in virtual worlds.

### **C. Course Design and Planning**

After the initial exploratory phase, it became possible to begin planning for a concrete teaching opportunity. There were many potential legal applications to consider. Virtual worlds, where there is no internal rule of law other than what is created and enforced by residents and imposed by a few terms of service and the host entity's rules, present unique opportunities to explore the role of law in ordering human interaction, commerce, and society. They also illustrate and bend traditional jurisdictional principles, providing opportunities to reflect upon where law exists and should be situated and should be enforced when problems arise between people or entities. Substantive areas of law, such as intellectual property, contract, property, and torts may also be illustrated and applied in unique ways in virtual worlds. Virtual worlds are places also well suited for doing simulations or other applied exercises. Any subject could potentially be taught in virtual worlds, using the platform for hosting distance-learning courses, irrespective of whether they made direct use of the context.

For a test project, I chose to use Second Life to teach students about mediation, engaging them in simulated role plays wherein they would learn the skill and process of mediation (and represent clients referred to mediation) while critiquing and reflecting upon virtual worlds as a place to do online mediation. Two factors contributed to this decision. First, I already was scheduled to teach a course in Alternative Dispute Resolution in which students were expected to do some simulation and practice of skills. So the opportunity was there, without proposing radical curricular change, to do an applied exercise in Second Life. Secondly, my preliminary investigation of the virtual world suggested it would be an excellent place in which to develop online mediation training, where students could gain skills and perspectives important to acting as lawyers in mediation proceedings,

while reflecting on the emerging field of technology-mediated dispute resolution.

After deciding upon an appropriate context in which to situate a teaching demonstration, it was necessary to plan the details. Early planning involved the preparation of suitable orientation materials and a manual to assist students in joining and adapting to the basic technical, cultural, and communication features of Second Life.<sup>58</sup> Additionally, we canvassed popular literature and news accounts detailing novel and real-world applications in Second Life, to assist with the orientation and setting of context for the exercise. Other issues at the forefront of preliminary planning included securing in-world space and facilities for conducting classroom exercises,<sup>59</sup> developing safety and security protocols,<sup>60</sup> and ascertaining the

---

<sup>58</sup> Two work-study students that attended University of Dayton School of Law (UDSL), Adam Krumholz, Class of 2008, and Erin Hayne, Class of 2007, were adept in gaming and other skills, and they assisted immeasurably in this process, focusing a student's eye on the world and what was important to know as a newcomer. Also, I consulted during this time with my colleague, Susan Brenner, at UDSL and a number of other Second Life colleagues, including Ali Andrews, Bryan Mnemonic, Bengoshi Shakkyo, and Marblecat Cathcart.

<sup>59</sup> Virtual land may be purchased or leased, or utilization of space may be negotiated in land held by others for in-kind services or other terms. Educational discounts are available for the purchase of private islands. *See supra* note 26. Once land is acquired, it is necessary also to construct and furnish a facility that facilitates the type of learning environment and activities anticipated for the project. One can build these facilities using tools and programming languages available in Second Life, or one can retain the services of builders and developers in Second Life. In my case, I was fortunate to forge a collaboration with Ali Andrews of Northern Illinois University, who has built Glidden University and constructed a skylab designed for my class. I furnished the lab myself. This part of the process involved searching the classifieds for office furniture, teleporting to a variety of virtual stores to canvass the options, selecting tables and chairs (and other furnishings) with a look and feel that I wanted for the room, purchasing them with a click of my mouse and a link to my credit card, teleporting back to the classroom, and arranging them around the room. It is much easier than shopping in real life, I might add.

<sup>60</sup> As described more fully below, it is necessary to develop a plan for preventing and responding to unwanted and hostile attacks and intrusions in virtual worlds. Just as in real life, people come to virtual worlds with many different intentions, good and bad, and there are some different methods of harassment available in virtual worlds that must be taken into account and navigated when they arise. Linden Lab maintains terms of service and a set of community standards prohibiting certain activity and providing for a method of responding and reporting such incidents. *See Community Standards: Welcome to the Second Life World!*, SECOND LIFE, <http://secondlife.com/corporate/cs.php>; *Second Life Terms of Service*, SECOND LIFE, <http://secondlife.com/corporate/tos.php>; Jermei Linden, *Filing an abuse report*,

technical requirements and compatibility of Second Life with student laptops and law school wireless and bandwidth capabilities.<sup>61</sup>

#### **D. Teaching Demonstrations**

There is no substitute for experience. So, armed with basic knowledge of and navigational familiarity with Second Life, I decided to incorporate a virtual mediation unit into the syllabus for an Alternative Dispute Resolution course scheduled for a group of first-year law students. I placed the unit, on online mediation, midway through the semester so there would be time to orient the students to the virtual platform.

As the unit approached, planned activities fell into place while new issues presented themselves. With a larger class size than expected, I had to arrange for more in-world spaces for students to conduct mediation role plays. Each group needed a main mediation room and a place for private caucus.<sup>62</sup> Because it was necessary to run small group exercises simultaneously and not all could be accommodated in our classroom, it became necessary to negotiate spaces on other sims<sup>63</sup>

---

SECOND LIFE BLOG (Feb. 24, 2011) <http://community.secondlife.com/t5/English-Knowledge-Base/Filing-an-abuse-report/ta-p/700065> (describing abuse guidelines and reporting procedures). Residents must also learn how to effectively respond to different unpleasant or harassing encounters. All educational programs must have a contingency plan and set of protocols that students and faculty may follow when faced with certain disruptive situations as well as to protect privacy and personal security and sensibility.

<sup>61</sup> With any online environment or technology-assisted educational opportunity, it is necessary to factor in technical capacity and support. The basic requirements are access to a computer with an online connection, headset, and microphone (to utilize voice). Downloading Second Life does not require a terribly high-powered computer, although there can be some issue with graphics cards particularly when operating on low-end laptops and with Vista operating system. See *System Requirements*, SECOND LIFE, <http://secondlife.com/corporate/sysreqs.php>. (login required). As set forth in more detail below, in my two demonstrations, all students were able to utilize their own laptops or have access to other computers that enabled them to utilize Second Life effectively. There were wireless bandwidth issues encountered in the law school that prohibited our ability to conduct the exercises while simultaneously in the building that we solved by doing them after hours and on weekends so that students could work from home. Also, some students did have laptops with graphics cards that did not adequately support Second Life.

<sup>62</sup> Each room must be placed outside of the chat range (virtual hearing distance) of each other space, or discussion from different groups performing exercises simultaneously will overlap.

<sup>63</sup> A “sim” is an immersive simulation or virtual space designed and created by a person or group that has acquired land in Second Life.

whose owners were able to provide a reasonable degree of security and privacy. Additionally, it was necessary to revise and adapt the orientation materials, taking into account the rapidly dynamic environment of Second Life, as well as the specific requirements of this class. To legitimize and contextualize the exercises, it was necessary also to assign an array of readings on online mediation and technology-mediated dispute resolution as well as virtual worlds and Second Life. Finally, there were many logistics associated with the selection, writing, and adaptation of role plays, and their assignment to students and their groups.<sup>64</sup>

Given the need for students to have some comfort understanding and navigating the virtual context in which applied exercises would be performed, it was necessary to do an orientation a few weeks before the scheduled exercises. This process introduced students to the necessary technical and cultural features of the virtual space in which they would perform their mediations while identifying and providing opportunities to troubleshoot a variety of unanticipated technical problems.<sup>65</sup> For a variety of technical reasons, it was necessary for

---

<sup>64</sup> Although this is an aspect of any course taught through simulation and role play, the virtual medium presented new opportunities for relaying information (i.e. in the format of notecards where one can write and save text, group notices, Instant Messages in Second Life) as well as for designing problems and disputes appropriate for a virtual medium. For instance, online mediation provides opportunities to resolving e-commerce or other disputes between residents or parties who interacted or transacted business only electronically, or online. Additionally, it may be utilized to resolve certain real-world disputes, and the issue of what disputes may best be suited for the media is an important one.

<sup>65</sup> On the day of the appointed orientation class, we met together in our law school classroom. Most students had laptops that allowed them to connect with a wireless network within the law school, and I assumed we would all be able to enter the virtual world and talk through key orientation material. However, once a few students logged into the virtual application, no one else was able to enter. The problem was diagnosed as a bandwidth capacity problem with the law school wireless network, and the solution was to schedule all in-world class exercises so students could participate from home. A few students initially reported problems utilizing the virtual application from their individual computers (and one did not have his own computer). However, by the day of the scheduled exercises all students were able to access a computer from which they could enter and participate effectively in Second Life. Faculty interested in utilizing this kind of learning need to be prepared to assist students in identifying and troubleshooting technical problems, or otherwise ensure that all students have access to computers and network connections that can run the relevant virtual platform. In some cases, this may be provided by distance learning or information-technology support departments, which

students to do their in-world class exercises from network access nodes located outside the law school. By the time set in the syllabus for doing the exercises, every student was able to gain access to a computer that could run the program, create an account and communicate, and move effectively via his or her avatar, and become oriented to the virtual world and its methods of interacting and communicating in order to participate effectively in the online mediation exercises at the scheduled times and places in the virtual world. Additionally, they submitted transcripts, critiques, and reflections of each exercise, and they prepared final papers focused on an aspect of the experience in the context of technology-mediated dispute resolution. Students performed two role plays in the virtual world, comparing them with many more conducted in class. At that time, the platform only offered text-based communication. Class discussion about the experience took place in the physical classroom within our law school.

Based upon the experiences and feedback of the first class, I expanded upon the first teaching demonstration, creating and offering a second stand-alone course, an intensive one-credit class called Virtual Online Mediation.<sup>66</sup> Students performed in Second Life multiple role plays of different kinds of simulated real life disputes and one between Second Life residents. Some involved two parties and a mediator, others multiple parties and co-mediators, yet others mediations, parties, and attorneys. Some discussions were conducted purely in text chat, others in voice, a choice of communication that became an option between the first and second rounds of my teaching.

In contrast to the first teaching demonstration, some class discussions were held entirely online, sitting in a virtual “lecture” hall before a screen that projected power point slides and photos. As with the first experience, students performed and critiqued each role-play, submitted transcripts of text-based sessions and summaries of ones conducted in voice, and completed focused reflection papers on aspects of the experience, again in the context of online mediation. As a faculty member, I observed, critiqued, responded to unexpected events and technical disruptions, and played some roles myself during the course, multi-tasking in ways I was not accustomed to before

---

was not an option in my case and is something that needs to be assessed by any faculty member or department considering new technology.

<sup>66</sup> The course was designed to fit a one-week “intrasession” offered at the half-way point of each semester.

teaching in a virtual world. The opportunity to repeat teaching of this class over a two-year period, moreover, allowed for critical reflection of and improvements in the management and delivery of the class exercises.

#### **IV. EVALUATING VIRTUAL WORLDS AS PLATFORMS FOR LAW TEACHING**

##### **A. Assessment of Teaching Demonstration**

The overall impact and quality of the teaching and learning experience for both students and faculty were exceptional. The level of student engagement far surpassed that of equivalent experiences performed only in the traditional classroom. Many noted how the immersive online environment and the sense of disorientation and newness encountered when entering such a world caused them to focus greater concentration on the exercises. Others indicated that the opportunity for interacting through an avatar paradoxically made the role-playing feel more “real,” such that they took the exercises more seriously. At the same time, this feature enabled students to step outside of traditional comfort zones, speaking more freely, with less inhibition, than in real life or reflecting upon discomfort encountered as an avatar in ways that made them reflect on basic assumptions from real life. Students took time to delve into the parties’ problems during role plays conducted in-world, more so than they often do in the classroom. They developed basic skills such as problem definition, problem solving, listening, facilitating, and they acquired good basic mediation skills. They invested more time in many cases to discuss the experience among themselves or with me. Their reflection papers were extraordinarily insightful, critical, and reflective.

With respect to what traditionally would be called the “classroom” component, the discussion following the exercises, both the ones held in class and the ones held in-world, was about the best I have ever had in a law school class. Without exception, students were lively and passionate. They engaged in detailed and informed critique about the experience, their skill development and roles, the platform, the field of online dispute resolution, and mediation techniques. They made many critical observations about the role of verbal and nonverbal communication in law practice and dispute resolution, the role of emotion and methods of expressing and interpreting emotion both in face-to-face settings and in online or virtual environments, the role of assumptions about race, gender, socio-economic class on human

interaction, and the importance of power to the dynamics of mediation. They thought broadly also about the institution of online mediation and how even to establish an online mediation service for real life and virtual disputes. While there were undoubtedly problems and glitches in the technology, even those glitches often galvanized productive discussion, such as discussions about the viability and limitations of virtual worlds and other forms of technology in resolving real-world disputes. Overall, the students were thinking broadly and more narrowly, creatively, and practically. They were absorbed, enthusiastic, thoughtful, energized, engaging, and inspiring their classmates and teacher in new and effective ways.

Finally, the interaction between students and faculty is also different in virtual worlds, in ways that allow for more open and egalitarian exchange. The virtual world tolerates more clever and creative character development than is often fostered in standard simulated exercises; indeed, one has to create a new identity through an avatar and think about how that avatar will look and behave in the new world in which it emerges. This factor, together with the newness of the physical and cultural environment, contributes to a different way of communicating that may be conducive to fostering new and productive student-faculty dialog and interaction. The culture in virtual worlds is different from everyday life, certainly as compared to the legal academy, as are the methods of communicating and interacting, and these differences may provoke new ways of learning.<sup>67</sup> While one must guard against making the environment too casual or ridiculous (and certainly, offensive to anyone), it is possible to provoke serious discussion and learning while accommodating a more creative and interactive atmosphere in the virtual classroom. Overall, my experience has been highly positive. It has enriched my teaching of alternative dispute resolution assisting students in developing skills critical to their role as mediators, problem-solvers, and representatives of parties in disputes while introducing students to the field of online mediation and legal issues unique to virtual worlds.

---

<sup>67</sup> For instance, a professor rooted in a more staid and pedantic persona in a typical, terrestrial classroom can don a nose ring, diamond bling shoes, tattoos, enter class on a plane or rocket ship, thereby engaging students in and altering the learning environment in new ways. Students, too, can create clever characters, accessorize them with signature objects, experiment with different types of professional identities, and otherwise communicate and shape the atmosphere of the learning environment in ways not possible in real life.

The following sections analyze more critically some aspects of virtual worlds as teaching environments that may be of particular importance in assessing whether and how to integrate virtual world experience into law school education.

## **B. Challenges**

### **1. Adaptive Investment**

When contemplating integrating virtual world experience into real life education, serious consideration must be made of what will be required to do so. Developing the ability to teach effectively in a virtual world requires a considerable adaptive investment of time, technical learning, cultural exploration, networking, and intellectual inquiry. There is a steep learning curve, particularly for those with little or no prior experience with virtual worlds, gaming, or online social networking applications. A virtual world is not merely a software package or distance-learning platform involving mastery of certain technical features, although one certainly must acquire some technical mastery; rather, it is a world, an environment requiring immersion and adaptation.

While one may download application software, create a user profile, and enter a virtual world within minutes, in order to utilize and navigate effectively in such an environment, one must learn the different modes of communication, understand how to navigate within the “physical” rules of the world, become familiar with the technical tools for building and scripting, create an identity, and become comfortable interacting through the medium of an avatar. It is necessary to explore, observe and participate in various events and activities. Attending educational events, visiting sites created by educators, and networking requires significant skills and time commitments. While wikis, video demonstrations, guidebooks, and materials prepared by others may provide useful assistance; there is no substitute for personal experience and immersion. Indeed, the process of setting up a class in a virtual world is more like setting up a class in a foreign country than launching an online distance-learning course. There are cultural and psychological dimensions that must be ascertained and interpreted, in addition to the technical and pedagogical. The time and means that need be invested in order to be

able to competently evaluate a virtual world as a place to situate real teaching should not be underestimated.<sup>68</sup>

## 2. Financial Costs and Risk

Developing a presence in a virtual world also may involve a significant financial commitment. One needs some kind of space in which to teach, which generally requires purchasing or leasing virtual land, incurring a purchase price, and monthly maintenance fees.<sup>69</sup> To design a suitable facility in which to teach, it is necessary to hire a builder to develop a suitable teaching space (or acquire the skills necessary to do this), a programmer to develop scripts to command or customize any movement or interactivity in the space, as well as to build or purchase furniture, streaming video equipment, monitors, and other teaching aids and accessories.<sup>70</sup> Even in an open-source platform, which promotes free access, manipulation, and redistribution of source code, it would be necessary to invest considerable resources, expertise, and time in customizing the space in which to conduct the class activities.

While terms of service and community standards provide some processes and protection for participants who invest time and money developing a teaching experience, it is important to remember that most virtual worlds, other than those that may be open-source, are products created by private corporations. As such, these virtual worlds may lack many of the protections, e.g., with respect to land use and ownership, individual and group membership, and artistic and political

---

<sup>68</sup> Depending on one's experience with virtual worlds and social networking applications, as well as one's technical expertise, it may be necessary to spend hundreds of hours acclimating oneself and developing sufficient knowledge and expertise of the virtual worlds' tools and properties in order to be able to ascertain whether and, if so, how to integrate virtual world experience into a law school class.

<sup>69</sup> See *supra* note 59.

<sup>70</sup> One may, as I have in my teaching, arrange to use teaching space owned and developed by other institutions, but this also requires a significant investment of time in developing working relationships and negotiating the details of such arrangements. In doing so, it may be necessary to draft written agreements to lease virtual space or retain other technical and support services necessary to prepare appropriate teaching spaces. This process is complicated by the fact that it may be difficult to ascertain the real identities of some persons or entities with virtual presences and expertise. Moreover, if a teaching institution does not buy its own land and develop and maintain its own technical support, an aspect of control is lost that will require ongoing investment of time networking and managing collaborative relationships that will sustain ongoing partnership and support.

expression that restrain government and private action when one offers programs in terrestrial or “first-life” programs. Presently, the ability to negotiate or create binding contracts with the corporate provider is extremely limited.<sup>71</sup> To participate therefore, a teacher or other representative of a teaching institution must agree, as a condition of membership, to abide by certain rules and terms of service, and they must be prepared to invest whatever time, resources, and money may be necessary to develop a suitable educational program that can be operated within a corporate environment owned by another entity. The sponsoring institution does not negotiate an agreement with the corporate provider when it wishes to develop a teaching program, but must instead develop a presence through the virtual presences of individuals, who create memberships and avatars. Students and teachers alike become the end-users of this virtual product, bound by the same rules and terms of service as all other users from across the world.

These realities have significant implications for the development of real-world teaching experiences. For instance, although perhaps rare, it is possible to lose or have disrupted all or part of an institution’s investment and certain of its members’ rights to participation. This may occur also without much, if anything, by way of notice or due process. Such adverse action can occur through failure to pay timely land use or membership fees,<sup>72</sup> changes in group membership, group-

---

<sup>71</sup> Case Western Reserve University has apparently negotiated an arrangement with Linden Lab to operate Case Western’s own private grid in Second Life in an effort to address some of the privacy and security issues, as well as to gain greater control over the administration of virtual research and educational opportunities. See Marc Parry, *Case Western Reserve U. Debuts Private Version of Second Life*, CHRONICLE OF HIGHER EDUC. BLOG (May 7, 2009, 3:59 PM), <http://chronicle.com/blogs/wiredcampus/case-western-reserve-u-debuts-private-version-of-second-life/7150>. Depending on the results of this demonstration, it may be possible for other educational institutions to negotiate arrangements to sponsor secure spaces for their instructors and programs.

<sup>72</sup> Monthly fees are assessed by the corporation for land owned and must be paid by an individual user who has provided payment information. Typically, a credit card is billed monthly, with notices provided by email. It is necessary, therefore, to be sure that the institution designate a single individual to maintain accurate payment information and communication information and that such individual be vigilant in monitoring communication from the corporate sponsor. Steps to ensure adequate institutional oversight and access of account information should be taken. Failure to make timely payment, or errors in accounting practices, could result in the termination of account, the forfeiture of land and inventory created and held by

owned land,<sup>73</sup> and suspending or banning membership for reported or perceived violations of the Community Standards or Terms of Service.<sup>74</sup>

---

users, and limitations to the ability to re-enter the virtual world. The terms of service govern the notice and process that will ensue in the event of nonpayment.

<sup>73</sup> It is possible to create groups of two or more members and, in Second Life, for such groups to jointly own land. This may create additional complications. For instance, if the membership of individual members expires or is cancelled, Linden Lab may cancel the group and its access to land may also be forfeited or restricted, at least temporarily. Careful attention must be taken in the creation and management of groups, including management of group ownership of lands used in educational exercises.

<sup>74</sup> It is important to review carefully the Community Standards and Terms of Service (TOS) to ensure that students, faculty, and administrators participating in an educational exercise will be able to comply with them. Additionally, the processes available to review alleged violations of TOS and Community Standards should be reviewed to ascertain the risk in the event of a violation. Linden Lab provides for a written and electronic appeals process, but may implement immediate suspension upon a finding of a violation. The process is entirely resolved and controlled by Linden Lab. Depending on penalty, such action may disrupt an individual's ability to participate and, in cases of termination of an account, may result in significant loss of objects, scripts, written notes, photographic or video images, and other things created and stored in the Second Life inventory and servers. For a first-person account of an instance of suspension due to using coarse or offensive language, see e.g., *Warning or Suspension from Second Life over Protest Against Copyright Erosion and Opensource*, SECOND THOUGHTS BLOG (May 6, 2009), [http://secondthoughts.typepad.com/second\\_thoughts/2009/05/warning-or-suspension-from-second-life-over-protest-against-copyright-erosion-and-opensource.html](http://secondthoughts.typepad.com/second_thoughts/2009/05/warning-or-suspension-from-second-life-over-protest-against-copyright-erosion-and-opensource.html). I had a similar experience when a neighbor reported me for installing a colorful piece of kinetic art on my property. I was particularly struck how Linden Lab acted immediately upon the report, removing the artwork and citing me for a violation of a Term of Service, without investigating the accuracy of the report or the motives of the reporter (who, in fact, was trying to buy up all the land in the region and was engaging in aggressive practices to intimidate and encroach upon the interests of others who refused to sell). While I did appeal and was eventually successful, the action was taken first and, if I had not checked my email within a few days, it may have been a permanent action. At least one lawsuit has been filed challenging Linden Lab's termination of an account for a suspected violation of a Term of Service. See *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593 (E.D. Pa. 2007). The case resulted in a confidential settlement, wherein Bragg's membership rights were fully restored. Benjamin Duranske, *Bragg v. Linden Lab – Confidential Settlement Reached; 'Marc Woebegone' Back in Second Life*, VIRTUALLY BLIND BLOG (Oct. 4, 2007), <http://virtuallyblind.com/2007/10/04/bragg-linden-lab-settlement> (“The parties agree that there were unfortunate disagreements and miscommunications regarding the conduct and behavior by both sides and are pleased to report that Mr. Bragg's ‘Marc Woebegone’ account, privileges and responsibilities to the Second Life community have been restored.”).

Because of the one-sided nature of property and contractual relationship, virtual worlds have been likened to feudal societies, with the developers acting as lords that both grant the virtual property and rights available to users and provide the laws that protect them.<sup>75</sup> While some scholars have argued that this power imbalance is unfair and advocated for explicit property rights for virtual users,<sup>76</sup> others observe that stronger rights could override express contracts between users and developers and compromise the ability of developers to protect against abusive acts that could undermine the quality of the experience for other users. Until such property rights are bestowed, however, the fact remains that user rights and remedies, *vis-à-vis* investments in virtual land and objects, are limited by and large to those available under the developers' terms of service and what may be attained through communication and developer-sponsored review processes. While the law is yet undeveloped, it is not clear that adequate offline legal remedies would exist in instances of developer interference with virtual land and property or user rights; at the very least, the legal standards to be applied to such litigation would be uncertain. While criminal or tort liability may be recognized where users do things with serious offline consequences, such as make death threats, engage in money laundering, terrorist organizing, or upload malware, review of developer actions may be quite limited.<sup>77</sup>

One response to the concern over control or privacy and security is to utilize an emerging open source alternative such as OpenSimulator Metaverse, also known as OSGrid or OpenSim (hereinafter "OpenSim").<sup>78</sup> This platform enables universities to install OpenSim

---

<sup>75</sup> James Grimmelmann, *Virtual World Feudalism*, 118 YALE L.J. POCKET PART 126, 127 (2009), available at [papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1331602](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1331602)

(stating with respect to Second Life developer Linden Labs, "What offline governments can do only after lengthy legal proceedings, Linden does unilaterally, just by changing an entry in a database. What's more, Second Life's Terms of Service give Linden the right to do so for any reason whatsoever.").

<sup>76</sup> Joshua A.T. Fairfield, *Anti-Social Contracts: The Contractual Governance of Virtual Worlds*, 53 MCGILL L.J. 427 (2008).

<sup>77</sup> See Orin S. Kerr, *Criminal Law in Virtual Worlds*, U. CHI. LEGAL F. 415 (2008). See also Grimmelmann, *supra* note 75 (noting that for now, offline courts should review only Linden's adherence to fair procedures in important individual cases, rather than ruling on the legitimacy of its land practices in general or trying to hear virtual land disputes directly).

<sup>78</sup> OSGRID: THE OPEN SOURCE METAVERS, <http://www.osgrid.org/index.php> (last visited Jan. 27, 2012). For more information about OpenSim and its interoperability

on their servers and place security measures in place to safeguard student privacy as well as the content of their courses and intellectual property that may be at risk.<sup>79</sup>

In addition to the serious concerns that arise with respect to real investments and teaching enterprises with respect to corporate sponsors, there is risk involved in creating collaborative relationships with other virtual world participants. Disputes over subcontracts or arrangements with other users concerning use of virtual land and building space may arise. Those disputes are complicated by the unique interactivity available in virtual worlds, wherein participants assume new and anonymous identities, as well as the global, multi-jurisdictional possibilities that may arise. Absent clear and enforceable offline contracts with parties with known identities and geographical locations, self-help and other negotiated remedies may be one's only recourse in such instances.<sup>80</sup> While proposals have been made for the creation of an official dispute resolution system, none yet exist.<sup>81</sup> These limitations and challenges in securing compliance with and resolving disputes arising out of agreements and alliances created in virtual worlds must be carefully evaluated in the development of real educational initiatives.

### 3. Legitimacy, Security and Liability Concerns

#### *a. Perceptions of Legitimacy & Concerns for Student Safety and Wellbeing*

Persons unfamiliar with virtual worlds, as well as those who have prior experience as gamers or participants in online social environments initially may question the legitimacy of utilizing a virtual world for real-world teaching. As with many new technologies, the idea of interacting in a virtual world via the medium of an avatar, cloaked in anonymity, may at first seem fantastic, foreign, and perhaps ridiculous. For some, it may conjure up ideas of video or fantasy game playing and indeed, it is a place where such playing may take place.

---

with Second Life, see Brian White, *A Bridge Between Virtual Worlds*, MIT TECH. REV. (Aug. 11, 2008), <http://www.technologyreview.com/web/21203/page1/?a=f>.

<sup>79</sup> See Maria Korolov, *OpenSim Security 101*, HYPERGRID BUS. (Mar. 11, 2010), <http://www.hypergridbusiness.com/2010/03/opensim-security-101>.

<sup>80</sup> Developers like Linden Labs generally will not resolve disputes between residents, including those that maybe acquire vast tracts of virtual land and for leases, often with covenants, with other residents.

<sup>81</sup> See *supra* text accompanying notes 41-50.

Others may focus on the non-educational opportunities for social networking or commercial pursuit that abound, including the potential for exposure to the adult entertainment industry, which does have a presence in virtual worlds.

An article in *The Chronicle of Higher Education* raised a number of concerns related to the legitimacy and effectiveness of virtual worlds for serious teaching.<sup>82</sup> While its focus was on whether and to what extent educators or academic institutions may be held accountable for harassment and assault that students may encounter in virtual worlds, it sounded a cautionary alarm for educators (and their administrative superiors) thinking of bringing students to a virtual world. It described the myriad ways student participants could be harassed, assaulted, or otherwise exposed to violent or objectionable interactions or experiences and the limitations imposed by accepting the sponsoring company's terms of service in a virtual world where legal remedies have not yet been identified. "We have enough trouble dealing with violence, assault, and sexual harassment in real-world," stated the article, "but few of us—even campus lawyers—know how the law applies in virtual realms vended by companies whose service terms often conflict with due process in academe."<sup>83</sup> Educators, pioneering teaching in virtual worlds, have engaged in extensive debate and reflection about this subject as well.

There are indeed some very real concerns associated with bringing students to virtual worlds for real-world teaching exercises. As noted earlier, just as in real life, or elsewhere on the Internet, it is possible to be exposed to persons and content that may trouble the sensibilities of both students and faculty. There can be emotional, psychological, and moral consequences and reactions to experiences encountered in virtual worlds different from those that may occur in real-world interactions. For instance, while one can always move quickly away or simply log off of the program or one's computer to escape an

---

<sup>82</sup> Michael J. Begeja, *Second Thoughts About Second Life: Will You Be Held Accountable for Requiring Students to Enter a Virtual World With Online Harassers*, CHRONICLE OF HIGHER EDUC. BLOG (Sept. 14, 2007), <http://chronicle.com/article/Second-Thoughts-About-Second/46636>.

<sup>83</sup> *Id.* The article goes on to describe how administrators and budget officers may be unaware of the online transactions taking place by faculty or programs, "any one [of which] could result in personal institutional liability with few, if any, processes in place to resolve legal or ethical complaints."

unpleasant encounter, a virtual assault or exposure to griefer<sup>84</sup> obscenity, may nonetheless be very disturbing and have a lasting psychological impact beyond the moment of encounter. Participation in virtual worlds may be associated with, or even facilitate, problems with addiction.<sup>85</sup>

*b. Control Over Privacy and Security*

There also may be very real security and privacy concerns to entering any online environment. Interactive internet sites and social networking applications expand the opportunities for people to connect worldwide, literally by a click of a switch or a mouse, and with that increases the opportunities for unsuspecting users to be lured into dangerous or fraudulent situations. Virtual worlds accommodate the option of remaining anonymous behind a fictitious avatar and name, thereby providing for a measure of security to those who enter them. However, it is nonetheless possible for persons to intentionally or sometimes unwittingly, through disclosure of key identifying details about them, to reveal personal information to other participants such that they may be identified in real life. This, in turn, provides opportunities for real-world interaction that could lead to threatening or stalking behavior, or occurrences of credit card and identity theft.

When one enters virtual worlds for real purposes, such as to teach a law school class, anonymity is necessarily modified for course

---

<sup>84</sup> Griefing involves the harassment of one resident by another for the sake of doing so. See Jamais Cascio, *The Griefer Future*, INST. FOR ETHICS AND EMERGING TECH. (June 27, 2008), <http://ieet.org/index.php/IEET/more/2491>. For more information on the phenomenon of griefing and cyberbullying and suggested solutions, see Charlie Devereux, *Anarchy On-Line*, CNN.COM (Aug. 23, 2007), <http://www.cnn.com/2007/TECH/08/23/virtual.bullying>.

<sup>85</sup> Computer and video-game addiction has been the subject of many reports and media accounts. See, e.g., *Internet Addiction around the World*, PBS.ORG (Feb. 2, 2010), <http://www.pbs.org/wgbh/pages/frontline/digitalnation/virtual-worlds/Internet-addiction/game-addiction-counseling.html?play> (last visited Jan. 15, 2012). A documentary, "Second Skin," released in Aug. 2009, profiles some of the dangers of Internet and gaming addiction, among other concerns. For a description and critique of the movie, see Daniel Terdiman 'Second Skin' Documentary A Bleak Look at Life of Online Gamers, CNET.COM (Mar. 7, 2008), [http://news.cnet.com/8301-13772\\_3-9889170-52.html](http://news.cnet.com/8301-13772_3-9889170-52.html). But see *Virtual Reality Game Helps Drug Addicts Recover: New Therapy Associates Tone with Cravings to Reduce them in Real-world*, ABC NEWS (Nov. 5, 2007), <http://abcnews.go.com/GMA/OnCall/story?id=3819621&page=1>. For a comprehensive discussion of some of the psychological impacts of virtual world interaction, see ELIAS ABOUJAOUDE, *VIRTUALLY YOU: THE DANGEROUS POWERS OF THE E-PERSONALITY* (2011).

participants, at least with respect to the teacher and fellow students, who may share information with one another. Course participants should be instructed not to share personal details about themselves or others in class, and other protocols may be instituted to preserve student privacy and confidentiality.<sup>86</sup> Finally, researchers, teachers, and others creating and posting original materials and content on virtual world servers as they may be inadvertently giving away intellectual property rights.<sup>87</sup>

#### 4. Privacy and Personal Data Collection

A number of scholars have identified ways in which privacy may be compromised through participation in virtual worlds and grappled with solutions for the increased protection of privacy rights.<sup>88</sup> Likening the surveillance on virtual worlds to Jeremy Bentham's Panopticon, Joshua Fairfield explains: "The denizens of virtual worlds are

---

<sup>86</sup> For instance, the work space may be secured against non-participants or alternative names may be used, for participants as well as the class itself and any groups that are created, on all course-related materials posted in the virtual world. However, compliance with Family Education Rights and Privacy Act, 20 U.S.C. § 1232g (1974) [hereinafter FERPA] would require that student records and identifying information be strictly stored in offline environments or within the confines of an OpenSim, open source, server controlled by the university. FERPA is a law that protects the privacy of student education records. *Id.*

<sup>87</sup> For example, the Terms of Service of Second Life provide that a person grants content license to Linden Labs by virtue of hosting it on the Linden servers. *Second Life Terms of Service*, SECOND LIFE, <http://secondlife.com/corporate/tos.php> (section 7.2 states "You agree that by uploading, publishing, or submitting any Content to or through the Servers, Websites, or other areas of the Service, you hereby automatically grant Linden Lab a non-exclusive, worldwide, royalty-free, sublicenseable, and transferable license to use, reproduce, distribute, prepare derivative works of, display, and perform the Content solely for the purposes of providing and promoting the Service. You understand that this license enables Linden Lab to display, distribute, promote, and improve the Service. You agree that the license includes the right to copy, analyze and use any of your Content as Linden Lab may deem necessary or desirable for purposes of debugging, testing, or providing support or development services in connection with the Service and future improvements to the Service. The license granted in this Section 7.2 is referred to as the 'Service Content License.'"). Those interested in protecting intellectual property rights and other content must utilize other platforms such as OpenSim that allow installation on one's own secure servers. For a broader discussion of copyright protection in virtual worlds, see Maria Korolov, *Opensim Grids Embrace Copyright Protection*, HYPERGRID BUS. (Feb. 15, 2011), <http://www.hypergridbusiness.com/2011/02/opensim-grids-embrace-copyright-protection/>.

<sup>88</sup> See e.g., Joshua Fairfield, *Escape Into the Panopticon: Virtual Worlds and the Surveillance Society*, 118 YALE L.J. POCKET PART 131 (2009).

constantly under surveillance by ‘game gods,’ the private companies that design, maintain, and administer virtual worlds. The game gods then must comply with government requests for call details, wiretaps, stored chatlogs, and other business records. The result: ‘game gods’ cameras are on all the time and the footage reaches law enforcement and the intelligence community.”<sup>89</sup> While it may be argued that courts should apply more stringent protections to the privacy interests of those who venture online,<sup>90</sup> the law is yet developing, and courts in the United States are struggling to determine what constitutes a reasonable expectation of privacy under the Constitution.<sup>91</sup>

Private data collection, used for social and marketing research, is another phenomenon with any kind of online environment that must be taken into consideration. Novel online environments such as virtual worlds may cause people to be lulled into false expectations of privacy, while their activities and economic information may be tracked and processed.<sup>92</sup> While a number of legislative proposals have been generated in Congress,<sup>93</sup> until such time as protections are in place, participants must be mindful of the potential uses of data generated by them when they move around virtual worlds.<sup>94</sup>

---

<sup>89</sup> *Id.*

<sup>90</sup> *Id.* at 134. (“As people move their lives online, courts should recognize that rights move with them by articulating a reasonable expectation of online privacy. Rights to privacy do not stop at the gateway to virtual worlds.”).

<sup>91</sup> *Id.* (citing, *e.g.*, *United States v. Cox*, 190 F. Supp. 2d 330, 332 (N.D.N.Y. 2002); *State v. Reid*, 914 A.2d 310 (N.J. Super. Ct. App. Div. 2007)).

<sup>92</sup> *See* Fairfield, *supra* note 88, at 132. The potential for data extraction and utilization for private marketing exists in all online environments. Those familiar with FACEBOOK and MYSPACE, for instance, will observe how the ads posted reflect their own locale, age, familial and social status, and other interests. It is possible to extract data for other purposes also, *i.e.*, for the purpose of measuring which group of people in the world has the biggest brain, as once measured by scores in the FACEBOOK-sponsored PLAYFISH game “Who Has the Biggest Brain.” *See* Kristian Segerstrale, *So Who Really Has the Biggest Brain*, PLAYFISH BLOG (Oct. 23, 2008, 6:54 PM), <http://blog.playfish.com/2008/10/23/so-who-really-has-the-biggest-brain/> (noting the results are: Montenegro, Serbia, and Israel as first, second, and third; the U.S. finished 91st, with Californians and Hawaiians having the biggest brains, while South Dakotans and Vermonters measured the lowest).

<sup>93</sup> Aaron Ricalde, *Congress Takes Aim at Spyware: Inside the Capitol, Three Bills Designed To Protect Consumers From Malicious Spyware Are Duking It Out*, BLOOMBERG BUSINESSWEEK (June 18, 2007), [http://www.businessweek.com/technology/content/jun2007/tc20070618\\_693312.htm](http://www.businessweek.com/technology/content/jun2007/tc20070618_693312.htm).

<sup>94</sup> Fairfield, *supra* note 88, at 133 (“Eventually, every movement, every gesture in virtual worlds will be tracked and processed by private companies. The government should take the lead in protecting consumer privacy from private

### 5. Potential for Interference in Classroom Exercises

Another legitimate concern involves the potential for interruption and disruption of classroom exercises. This may occur due to technical failure on the virtual world grid or with respect to the internet connections or computers of each participant. One must also account for potential in-world interruptions by persons other than those enrolled in the course.<sup>95</sup> Both sets of concerns can and must be

---

invasion by extending enforcement of law on data leaks to virtual worlds, by enforcing existing law requiring informed consent prior to the collection of personal information, and by enacting new law creating property rights in personal information so that consumers will have adequate control if they decide to sell their information.”).

<sup>95</sup> Through virtual land ownership, one may define and limit access to a region to certain course participants. Otherwise, it is possible for others to enter and observe, or disrupt, real class exercises. In my experience, I taught my class in a public space owned by another university, utilizing a design feature very high up in the sky to reduce traffic. We did not restrict access, and I did not have that capability without seeking permission from the land owners who were not always online when I conducted my classes. I also rehearsed with students some protocols for responding to people from outside the class, and I was always present to intervene. During the course of our exercises, we did have a few people enter. However, once informed that a real life educational exercise was going on, no one interrupted further. Some stayed to observe out of curiosity, which they were invited to do; others left courteously. Students reported some mild distraction, and some reported that they engaged privately in conversation with some “intruders” while the exercise was ongoing, but it did not detract from the learning.

Outside of class, a colleague and I did have a random encounter from someone who utilized a radar device to locate us in the Skylab and who for some period of time after his initial encounter engaged in some kinds of harassing and stalking behavior through different avatars that he would create. However, through verbal warnings and application of Second Life reporting standards, it was possible to address this issue, and it is now a subject of warning in my orientation materials and introductory class discussion. Usually, verbal directives are sufficient to guard against disruption.

During every class session, unexpected visitors have happened upon a session. Fortunately, each time I have been successful in avoiding disruption by engaging the visitor in dialog, informing him or her via private Instant Messaging that it was a real class exercise and inviting quiet observation but not active participation in the activity underway. Most asked me a few questions, observed for a few minutes, then politely left. Sometimes I do multiple student role plays or other sessions at the same time, rotating the ones I view first-hand and reviewing the others via transcripts. Students are advised that visitors are permitted but should not be disruptive and are advised to contact me immediately with any issues. Thus far, these protocols have worked well. Additional security protocols, such as purchasing and controlling access to land, could also be employed, but my sessions have always been conducted

anticipated and accounted for in designing a real educational experience. As with other educational initiatives that rely on technology, a contingency plan must be developed to address technical issues that arise during class exercises and activities, and course instructors or organizers must anticipate having to assist students in troubleshooting problems that interfere with their ability to use the medium effectively. A variety of protocols may be utilized to limit and respond to disruptions that may arise while course exercises are underway.<sup>96</sup>

#### 6. Reflections on Risks and Opportunities to Mitigate

While these concerns may provide a basis for many educators to have “second thoughts about Second Life,”<sup>97</sup> they are neither insurmountable, nor inherently different from risks imposed in engaging students with other forms of experiential learning and field work. There is risk of harm, physical, psychological, and emotional, any time one does field work or otherwise brings students into contact with real communities and real people, especially when one does legal work on behalf of clients involving resolution of conflict and disputes. Any work requiring research and entry into the internet increases the potential for exposure to online types of harassment or exposure to pornographic or otherwise objectionable material outside the scope of your intended search. Virtual worlds do alter the risk of exposure in ways different from real life fieldwork or general online interaction. As vast, open worlds, rather than separate internet sites, they permit

---

in non-restricted spaces where anyone may roam. Depending on the nature of the discussion and the extent to which student privacy or other confidential information may need to be exchanged, however, additional security measures may need to be taken in the design of the course space.

<sup>96</sup> These include, but are not limited to: (1) purchasing or leasing virtual land and acquiring the rights to restrict access only to approved course participants, (2) posting rules where visitors can view them and using verbal commands and discussion to address situations that arise, see *supra* note 95, (3) muting the voice of disruptive conversation, and (4) purchasing virtual disabling devices, or weapon, that can literally blast or otherwise remove the offending avatar from the virtual classroom. While the last option may have moral implications for those uncomfortable with weapons or other self-help remedies that impact another person, the cultural and technical differences between real life and virtual worlds do permit (and in some cases require) different means of interacting.

<sup>97</sup> Michael J. Bugeza, *Second Thoughts About Second Life*, CHRONICLE OF HIGHER EDUC. (Sept. 14, 2007), <http://chronicle.com/article/Second-Thoughts-About-Second/46636>.

wide latitude of movement and exposure to other persons via avatars. The anonymity may limit the opportunities to hold accountable those who do destructive or harassing actions, or commit violations of the corporate community standards,<sup>98</sup> but provides also unique protection from real-world harm if properly guarded by class participants, because there is no ability for real-world contact unless one expressly divulges one's identity and, thereby, authorizes the contact through means outside of the virtual world.

Every educator and educational institution ultimately must make an independent determination about whether, and to what extent, to incur the risks associated with entering virtual worlds, and some may decide the potential risks outweigh the benefits. Those that decide to proceed, joining thousands of others in offering real-world learning experiences for students, however, are well advised to take care in the development of protocols and orientation materials that address the issues of concern. As with other experiential learning, course syllabi must clearly describe the experience and expectations for students. They also may lay out informed consent documents or disclaimers that faculty or universities deem advisable for liability purposes. It is essential also to create and monitor carefully, orientation materials and processes for incoming students.

If one takes care to do that, it is possible to avoid or mitigate against unwanted harassment or disruptions and create a unique and effective educational experience for students. Remember, even in real life, it is possible to be harassed or attacked, receive and consider disturbing and unwanted information, and have accidents that may incur liability for someone. Clinical programs, in which students learn through solving real-world problems for clients, are particularly prone to this, but standard academic courses have their risks as well. New experiences always suffer from the fear of the unknown and the absence of scripted institutional or legal responses to injuries or complaints that may occur. However, my experience, as someone who is very cautious and risk-averse by nature, is that it is possible to have a safe and highly engaging educational experience in virtual worlds,

---

<sup>98</sup> The Second Life Community Standards prohibit certain conduct; however, enforcement of such standards is controlled by Linden Lab and limited only to ongoing access to participate in Second Life. Corporate confidentiality and privacy concerns—as well as real ways Second Life residents may shroud their real life identities, may limit the ability or private parties to identify and hold others accountable for actual harm inflicted in Second Life for the purposes of real-world legal liability or other kinds of actual damages or relief.

while analyzing and listening to others about the potential risks and appropriate ways of responding to unexpected events.

### C. Opportunities

#### 1. Representation and Interaction via Avatar

In selecting an online environment for an academic course or educational activity, the medium through which people interact is a critical factor. Virtual worlds provide the unique opportunity to interact through the medium of an avatar, a visual representation or proxy of a person, that has a name, identity, appearance, and can move around the virtual world and interact with others.<sup>99</sup> Upon entering a virtual environment, a person may be said to be interacting through both a “corporeal” and a “digital” body, inextricably linked by the mind behind both.<sup>100</sup> The creation of multiple avatars or digital representations is also possible.<sup>101</sup> Explains one social scientist researcher:

Using both graphical and text-based systems, users log into remote computers and engage in real-time communication and interaction with one another and the virtual space . . . .Users create digital presences, either via textual descriptions or graphical representations . . . . The bodies users create and use in virtual spaces become inextricably linked to their performance of self and engagement in the community . . . . Avatars and textual bodies facilitate interaction, shape and solidify identity, as well as more generally mediate users engagement with the world.<sup>102</sup>

---

<sup>99</sup> The online definition of avatar is a graphic digital representation or a real person in cyberspace. See Marion Boberg et al., *Designing Avatars*, Proc. of the Third Int’l Conf. on Digital Interactive Media in Entm’t and Arts, 349 ACM INT’L CONF. PROC. SERIES 232-39 (2008), <http://dl.acm.org/citation.cfm?id=1413679&bnc=1> (follow “Full Text” link for PDF) (“An avatar is a presentation of a user. This can mean a graphical 2D or 3D presentation through which the user can interact with the environment (e.g., in an online world), an icon (e.g., in a chat forum), or a textual description (e.g., in a Multi user dungeon MUD). The word Avatar comes from the Hindu word of *avatara*, ‘descent of god’ or ‘incarnation.’”).

<sup>100</sup> T.L. Taylor, *Life in Virtual Worlds: Plural Existence, Multimodalities, and Other Online Research Challenges*, 43 AM. BEHAV. SCI. 436, 439 (1999).

<sup>101</sup> A single person, with one corporeal identity, may create more than one identity within a single virtual environment, change that identity over time, and may inhabit more than one world. *E.g., id.* at 439-41 (describing the phenomenon of plural existence in online environments).

<sup>102</sup> *Id.* at 438.

As the “visual signifier” for the virtual participant, there is often high significance placed on the creation of an identity that one displays to the online public and communities in which one interacts.<sup>103</sup> “Over time, avatars have become more complex creations, rendered in three-dimensional forms with an extensive range of animated movements that aid in the expression of the avatar’s personality and supplement various social interactions.”<sup>104</sup> Unique names may be selected depending on the system structure of the virtual environment, as may other characteristics. Avatars may be humanoid, or assume animal, robotic, cartoon, or other identities of their making or choosing.<sup>105</sup> Gender, race, age, and other social characteristics may be assumed and modified in response to a particular situation or experience.<sup>106</sup> Body shape, skin, hair, and eyes may be modified by virtual world tools, and may be obtained or purchased through in-world vendors. Residents may make, trade, obtain for free or purchase a virtually limitless wardrobe of clothing, and other personal adornments or attachments. They can don business suits or cloaks, fedoras or horns, adorn themselves with jewelry and tattoos, and bring with them to any session a variety of gadgets and accessories, including laptops, pen, and paper. Additionally, animation overrides and gestures may be obtained to change and enhance the attributes of an avatar’s walk and movement.<sup>107</sup> Virtual identities, different from those behind the avatars

---

<sup>103</sup> Katherine Rector, *Role-Play in MMOs: How Avatar Characteristics Affect the Game Play Experience*, (2006), [www.trinity.edu/adelwich/worlds/articles/trinity.katherine.ector.pdf](http://www.trinity.edu/adelwich/worlds/articles/trinity.katherine.ector.pdf) (reporting results from a study of the impact of avatar characteristics on the role-play experience of players of Massively Multi-Player Online Role-Playing Games (MMO)). While virtual worlds are not games, avatars are the representation through which people interact in both environments. Therefore, there are similarities in the characteristics of avatar creation and identity and its impact on virtual impact and experience may apply.

<sup>104</sup> Sun Joo Ahn et al., *Avatars*, in William S. Bainbridge, *LEADERSHIP IN SCIENCE AND TECHNOLOGY: A REFERENCE HANDBOOK* 695-98 (2011).

<sup>105</sup> Generally, avatars are humanoid in appearance, although some choose to be the Second Life equivalent of robots, “furries,” or alternative identities.

<sup>106</sup> While the default gender choice for a party’s gender may be the party’s real-life gender, many choose to try out other genders, or try to remain androgynous or gender neutral. A Second Life forum poll reflected the following: Male playing male—41.95%, Female playing female—40.05%, Male playing female—14.45%, Female playing male—3.55%. MICHAEL RYMASZEWSKI ET AL., *SECOND LIFE: THE OFFICIAL GUIDE* 76 (2007). Complexities arise where parties form virtual friendships and have not disclosed their true gender identities.

<sup>107</sup> As with other avatar attributes, animations determine the avatar’s walk and gestures like hand-waving or nodding; animations also allow avatars to walk, swim,

in real life, may be created and expressed through choices made in avatar development, limited by the imagination and willingness or freedom, in the case of an assigned classroom exercise, for instance, of each participant to do so.<sup>108</sup>

In any virtual world learning experience, participants require orientation to the concept of interaction via an avatar, as well as assistance in creating their online identities. This requires that some time and training be offered in advance of any planned exercise so that participants will be able to create an identity that is comfortable for them and understand some basic concepts around avatar identity, communication, movement, and interaction.<sup>109</sup> Given the possibilities and the responsibility for fostering a constructive learning environment, some degree of professionalism and decorum will be expected of parties attempting to engage in real-world applications, whether it be to offer services to resolve real-world disputes online, or to teach. In classrooms, educators may consider also creating guidelines and standards for decorum appropriate to the learning environment, although too many guidelines may stifle the opportunity to break out of traditional models and be new or different in one's expression. Students may be encouraged to be professional or creative, depending on the setting or assigned simulation; they may be encouraged also to try out different persona as they do their role plays. While some control of the environment and avatar development and behavior may be necessary, too much control may deny students and

---

jump, fly, and do many other things. Second Life provides a stock of basic animations in each avatar's inventory, and they may be activated as desired by the user. A myriad of other animations may be found in Second Life, often for free or for a nominal price. Sophisticated and flashy animations, however, can cost many thousands of Linden dollars. Animations may be created using an external application such as Poser or Avimator (a free version) and imported into Second Life.

<sup>108</sup> See Boberg, *supra* note 99, at 233. (“[U]sers often want to create distinctive and diverse avatars that reflect their personality or cater for experimentation with an imaginary identity”). As described by another social scientist, however, avatars do not act independently, rather, “we write identity through them.” Stephen Webb, *AvatarCulture: Narrative, Power and Identity in Virtual World Environments*, 4 INFO. COMMUN & SOC'Y 560 (2001).

<sup>109</sup> See *supra* note 99. In addition to preparing an orientation manual, I typically offer a number of sessions several weeks in advance of the planned exercises specifically regarding the properties of avatar design, movement, and communication such that students will have time to create and adapt their avatars and gain some basic comfort in interacting via their digital identity.

faculty the opportunity to engage in truly new and innovative ways. Virtual worlds support physical and cultural environments very different from offline ones, accommodating different means of relating and communicating, and allowing students freedom to explore and create characters of their choosing in which to interact can greatly enrich the learning experience and class discussion.

The opportunity to design and change avatars also provides unique opportunities to enhance skills development through simulation and role-playing. For instance, students assigned to play different roles may create and step into whole new identities in addition to studying the facts of the part assigned to them. Gender or race-specific roles, in particular, may be enhanced by students transforming into an avatar representing distinguishable characteristics, and students in their preparation of this new identity will be forced to reflect critically on what makes someone female or male, white or black, and to what extent our representations are affected also by stereotype. Strangely, this opportunity to fashion new identities may make simulations seem more “real” than if conducted face-to-face in a classroom, contributing to more serious effort in performing simulated roles and more effective learning and skills development. The performance of role plays, moreover, can be greatly enhanced, as participants may alter their avatars’ gender, appearance, or style to fit different roles assigned to them.

With appropriate guidance regarding avatar design and character development in advance of simulated exercises, students may engage in more authentic and engaged role playing than they typically do when sitting face-to-face with classmates known to them. Additionally, through online networking and group “list-serves” available in-world, it may be possible to recruit or collaborate with theater students or others who may be interested in playing particular parts. Overall, avatars present very interesting opportunities for designing complex and interactive simulations, creative role-playing, and student learning.<sup>110</sup>

---

<sup>110</sup> For other examples of educational simulation experiences conducted in-world, see Stephanie Gerald & David M. Antonacci, *Virtual World Learning Spaces: Developing a Second Life Operating Room Simulation*, 32 *EDUCAUSE QUARTERLY* 1 (Nov. 2009), available at <http://www.educause.edu/EDUCAUSE+Quarterly/EDUCAUSEQuarterlyMagazineVolum/VirtualWorldLearningSpacesDeve/163851>; Michelle Honey et al., *Teaching in virtual space: Second Life Simulation For Haemorrhage Management*, *Proceedings Ascilite Auckland*, COMMC’N NURSING RES. 1222-24 (2009), <http://www.ascilite.org.au/conferences/auckland09/procs>

## 2. Immersive, Collaborative Learning Environments

Extensive research has demonstrated the importance of collaborative interaction in the learning process, documenting its significance in promoting “mutual reflection of actions and problem solutions, . . . motivation and stimulation as well as assessment and control of progress.”<sup>111</sup> These observations have given rise to a growing body of research in computer-supported collaborative learning.<sup>112</sup> When communicating across distance, utilizing computer technology or other media tools, it can be particularly difficult to capture emotional content and convey emotional states in the way one is accustomed in face-to-face conversations. Yet, the ability to convey and interpret socio-emotional content is “vital for building relationships that need to go beyond purely factual and task-oriented communication.”<sup>113</sup> Such ability is critical to the ability to learn and model legal problem solving, dispute resolution, and other lawyering skills. With text-based communication, one loses important verbal indicators of expression such as intonation and accentuation. Telephonic or voice-communication lack means of mediating non-verbal communication such as facial expression, gesture, and posture. While video-conferencing alleviates some of these concerns, it may present different problems, e.g., when people are distracted by external influences, when people must change the active window to handle electronically shared data or other computer-generated material.<sup>114</sup>

---

/honey-interactive-session.pdf. See also Pavlos Kallonis & Demetrios G. Sampson, *Implementing a 3D Virtual Classroom Simulation for Teachers' Continuing Professional Development*, PROC. OF THE 18TH INT'L CONF. ON COMPS. IN EDUC. (2010), [http://www.ask4research.info/Uploads/Files/Publications/En\\_Pubs/1288090357.pdf](http://www.ask4research.info/Uploads/Files/Publications/En_Pubs/1288090357.pdf).

<sup>111</sup> Marc Fabri et al., *Mediating The Expression Of Emotion In Educational Collaborative Virtual Environments: An Experimental Study*, 7 INT'L J. VIRTUAL REALITY 66 (2004).

<sup>112</sup> Noreen M. Webb, *Constructive Activity and Learning in Collaborative Small Groups*, 87 J. EDUC. PSYCHOL. 406 (1995); see also Amy S. Wu et al., *Scaffolding Group Learning in a Collaborative Networked Environment*, in COMPUTER SUPPORT FOR COLLABORATIVE LEARNING: FOUNDATIONS FOR A CSCL COMMUNITY 245 (Proc. of CSCL 2002).

<sup>113</sup> Fabri, *supra* note 111, at 69.

<sup>114</sup> *Id.* (citing J. McShea et al., *Characterizing User Control of Video Conferencing in Distance Education* (CAL-97 Proc. Exeter U. 1997) (“[B]ecause of the non-immersive character of typical video-based interfaces, conversational threads during meetings can easily break down when people are distracted by external

The ability to interact in virtual worlds provides an effective alternative means of communicating emotional and social meaning in ways that are educationally beneficial. Not only does the avatar allow for some additional visual means of conveying non-verbal communication, but the highly immersive nature of interacting in a virtual world contributes to effective communication and learning. As one scholar of collaborative virtual environments and avatar interactivity explains:

[Collaborative Virtual Environments (CVEs)] are a potential alternative to these communication tools, aiming to overcome the lack of emotional and social context whilst at the same time offering a stimulating and integrated framework for conversation and collaboration. Indeed, it can be argued that CVEs represent a communication technology in their own right due to the highly visual and interactive character of the interface that allows communication and the representation of information in new, innovative ways. Users are likely to be actively engaged in interaction with the virtual world and with other inhabitants. In the distance learning discipline in particular, this high-level interactivity where the users' senses are engaged in the action and they "feel" they are participating in it, is seen as an essential factor for effective and efficient learning.<sup>115</sup>

Additionally, interaction through an avatar may contribute to a way of expression and social interaction that may be different for many students; for example, avatar interactions may foster critical reflection about communication processes that are at the heart of most lawyering and dispute resolution activity. The process of assuming a whole new identity and interacting in Second Life fosters critical reflection about one's manner and style of presentation, preferred communication styles, and identity. Persons reticent and inhibited in real life may become outgoing and gregarious, and vice versa. Participants become more attuned to the nuances of communication, the extent to which they rely on verbal cues, and are comfortable with written means of expression, the assumptions that we make about what we are able to discern in face-to-face interaction, and the extent to which interacting via an avatar and other online communication media impact the communication process. These reflections and experiences present

---

influences or have to change the active window, for example to handle electronically shared data.”).

<sup>115</sup> *Id.* at 69-70. These observations have certainly been consistent with my own observations of student learning experience in the three instances in which I have integrated the virtual world experience in a class.

very valuable lessons to future mediators, problem-solvers, and practitioners of law, whether they intend to engage in traditional practices or to engage in online forms of law practice.

A number of studies and applied medical research have confirmed the way in which interacting through an avatar may significantly change the social dynamics of interaction, impacting traditional power structures as well as stereotypes and fostering more collaborative learning. Students with certain disabilities, language accent, or other cultural characteristics, social phobias or feelings of alienation in the broader law school environment may find it easier to participate in classroom exercises and discussion in a virtual world environment. All may be compelled to reflect on the impact of visual and verbal cues such as race, culture, gender, disability, among others, on the dynamics between persons and their ability to effectively understand and resolve disputes. Virtual world engagement compels reflection on other issues as well, most notably, the impact of digital literacy and access to technology on the efficacy of any kind of online dispute resolution or other interaction.

### 3. Multiple Modes of Interactive Communication

Virtual worlds provide a forum for synchronous, face-to-face mediation, through a proxy—an avatar. Both voice and text-based communication is possible, although text-based communication remains the primary means of verbal communication. With text-based dialog, residents speak through the typing of written words. A group of people may chat together in the same virtual location, and there is instant messaging for private conversations between two individuals. The group chat is public within a certain chat range.<sup>116</sup> Avatars also may instant message from any location in-world, whether they are in the same virtual location or not. It is possible to carry on multiple conversations simultaneously through instant messaging with different avatars, subject only to the multitasking limitations of the people behind the avatars. One limitation for many real-world applications is that private instant messaging may only take place between two

---

<sup>116</sup> The chat range is twenty in-world meters. It is important to understand the chat range and distances in any space created or used for real-world applications. Chat may be heard through virtual walls by anyone entering the chat range by land or air, and individuals may suddenly teleport in without announcement. Radar detection devices and other gadgets may be designed or purchased to detect the presence of people, if privacy is desired within a certain space.

individuals. In virtual worlds, like Second Life, it is possible for several individuals to talk privately through instant messaging.

Voice interaction is another option. Many virtual worlds now utilize “proximity based” usage models, which take into account the physical location of residents and allow them to determine from what location the voice is coming through stereo headphones.<sup>117</sup> It is therefore possible to moderate the volume and pitch of their voice, whisper, shout, sing, or hum,<sup>118</sup> and to determine whether the voice is coming from the person to their left or right, close by, or more distant within a virtual space. Alternatively, it is possible between persons in different virtual spaces via instant messaging. Perhaps most distinctively, virtual worlds provide opportunities to engage simultaneously—subject to one’s ability to multi-task—in multiple public and private conversations with persons in close virtual proximity and at a distance using voice or text-based communication.<sup>119</sup>

The technology of virtual worlds evolves and changes quickly and it is necessary therefore to be attentive and adaptive to such changes. While the technology has not yet been perfected, it is possible to integrate the different forms of communication available online and in virtual worlds into teaching exercises. Doing so, provides interesting comparative experiences that enhance class discussion about the role of communication in professional skills development and learning.<sup>120</sup>

---

<sup>117</sup> In the spring 2007, Linden Lab integrated voice capabilities for Second Life residents. The details of the test project may be found at SECOND LIFE, <http://secondlife.com/> (last visited Jan. 27, 2012).

<sup>118</sup> *Id.*

<sup>119</sup> Video-technology is not yet on the horizon for the Second Life platform. A number of third-party possibilities exist for its integration; *but see, e.g.*, Aimee deNoyelles & Kay Kyeongju Seo, *Understanding Communication Processes in a 3D Online Social Virtual World*, EDUCATING EDUCATORS WITH SOCIAL MEDIA: CUTTING-EDGE TECHNOLOGIES IN HIGHER EDUCATION 169 (Charles Wankel ed., 2011).

<sup>120</sup> In Apr. 2007, when I brought my first class to Second Life, voice was not yet activated for general use. By Feb. 2008, however, it was possible to utilize. Students in the latter class did initial role plays first in text-based chat, then voice, and we utilized both for class discussion. While some, including myself, experienced intermittent ability to use the microphone capabilities requiring everyone to resort to text-chat, the class discussion about written versus verbal communication was very rich and heated. Some preferred the text-chat, others the voice and they were able to discuss the characteristics and assumptions behind each in light of their own communication styles and preferences. By Feb. 2009, it was also possible to

#### 4. Nonverbal Communication

Another aspect of communication with online platforms is the extent to which nonverbal cues may be utilized to convey emotion or other meaning typically reflected in human communication. With any text-based form of communication, such as group chat or instant message (and text message), symbolic supplements to written speech are available; for example, emoticons such as smiley faces, faces with frowns, and tears that may be inserted into the text to convey a feeling.<sup>121</sup> Additionally, there are a myriad of acronyms and text messaging shorthand that are applied in virtual environments like Second Life or wherever people interact online (e.g., instant messaging, cell phone text messaging, PDAs, web sites, blogs, and newsgroup postings).<sup>122</sup> Students long acculturated to social networking and text messaging will often have fluency in verbalizing “nonverbals” through such symbols and proxies. Some time should be spent reviewing the online language however, and students may be challenged to focus in their exercises and role plays on the extent to which communicating online in this way affects the communication and problem-solving process, particularly where conflict and highly emotional disputes are involved.

In addition to these written methods of communication, virtual worlds provide limited opportunity for expression through gestures; eventhough, scripts are applied toand activated by the students enabling their avatars to move. While gestures enable avatars to perform many types of movement, a number of these may be utilized

---

communicate by voice remotely and by private, or group instant message, and several students made effective use of this in their mediation sessions.

<sup>121</sup> For instance, those communicating in MSN messenger may insert a number of yellow faces conveying a variety of expressions into their texts. There is a corresponding lexicon of typed symbols as well. Lexicon of emoticons: smile :), open-mouthed smile :D, winking smile ;), surprised smile :-0, smile with tongue out :P, hot smile (H), angry smile :@, confused smile :S, embarrassed smile :\$, sad smile :(, crying face :'(, disappointed smile :|, angel (A), baring teeth smile 8o|, nerd smile 8-|, sick smile +o(, party smile <o), sleepy smile l-), thinking smile \*-), don't tell anyone smile :-#, secret telling smile :-\*, sarcastic smile ^o) eye-rolling smile 8-).

<sup>122</sup> While the millennial generations may be well versed in the lexicon, there are a number of glossaries and lexicons available online. *See, e.g.*, SAN JOSE STATE UNIV., [http://slisweb.sjsu.edu/sl/index.php/Second\\_Life\\_Lexicon](http://slisweb.sjsu.edu/sl/index.php/Second_Life_Lexicon) (last visited Jan. 27, 2012); URBAN DICTIONARY, <http://www.urbandictionary.com/browse.php?character=D&page=213> (last visited Jan. 27, 2012).

to communicate emotion or other feeling.<sup>123</sup> Additionally, there are privately created scripts that may be purchased to cause an avatar to have facial expression.<sup>124</sup> Without requiring students to purchase scripts for expression of avatar emotion, and depending on the goals of the course or exercise, the basic gestures do provide a means for students to experiment with physical means of emotional expression, thereby reflecting more critically on interpersonal communication in ways they might not do if engaged only in class discussions and role plays.

Finally, there is the issue of cross-cultural communication. Virtual worlds can be exceptional places in which to enhance cross-cultural communication skills and understanding.<sup>125</sup> A huge cultural divide exists between those who are familiar with online text-based chatting environments and those who are new to it. The language, vocabulary, meaning, and relative level of comfort with virtual and online environments differs substantially between members of these groups and should be assessed in any applied activity or teaching exercise involving multiple participants. Given the global nature of virtual online environments, there is also the issue of foreign language translation and other cross-cultural interpretation. There is limited opportunity for language translation in virtual worlds through application of scripts, called babblers or translators, that automatically translate the text of the avatar's speech into another and vice versa. This can facilitate basic communication between residents who do not share a common language or who wish to increase the level and understanding of their conversation in a common language. However, the translation is often inaccurate, so users must guard against taking meaning too literally, especially if it offends or makes limited sense.

---

<sup>123</sup> Second Life gesture animations include: angry\_fingerwag, angry\_tantrum, blowkiss, bow, clap, courtbow, cross\_arms, crouch, curtsy, express\_afraid, express\_anger, express\_bored, express\_cry, express\_embarrassed, express\_laugh, express\_repulsed, express\_sad, express\_shrug, express\_surprise, express\_wink, express\_worry, fist\_pump, impatient, jumpforjoy, peace, point\_me, point\_you, salute, shout, among other actions and antics. For a complete list, see GESTURES, [www. Wiki.secondlife.com/wiki/Gestures](http://www.Wiki.secondlife.com/wiki/Gestures) (last visited Mar. 14, 2012).

<sup>124</sup> A number allow users to click on a certain kind of smile or expression from a panel of choices visible on the screen. Others try to automatically gauge the emotion of the user from certain words. Despite their availability, such scripts are not widely used and require an additional level of multi-tasking activity for users.

<sup>125</sup> See Elizabeth Churchill & Sara Bly, *Culture Vultures: Considering Culture and Communication in Virtual Environments*, 21 SIG GRP. BULL. 1, 6 (2000), <http://elizabethchurchill.com/professional/pubs/Papers/FXPAL-PR-00-072.pdf>.

Additionally, the text-based nature of communication may allow a greater degree of understanding between people with limited speaking and listening skills in a foreign language. Particularly among the European languages, written cognates often may be recognized, even without knowledge of correct pronunciation. Basic grammar may be ascertained, at least at a level that permits one to recognize and understand what another is saying. With written online translation, there is also the opportunity to slow down the communication, as well as to consult a dictionary or glossary of terms, in order to understand what someone is saying. While the communication may not be excellent, people with limited knowledge of another's language may successfully communicate basic information and ideas, using a combination of written text, in-world or independent translators or dictionaries, recognition of cognates, and global emoticons. In telephonic or face-to-face verbal conversation, the pace and pronunciation, among other verbal and non-verbal cues, may limit the ability of people to communicate between different languages.

#### 5. Proxemics—Creating, Modifying, and Utilizing Space

Virtual worlds provide nearly limitless possibilities for finding or designing environments in which to conduct teaching exercises. Real life classrooms and campuses, offices and meeting spaces may be replicated for marketing purposes or to create a look and feel comfortable to students and faculty. Alternatively, it is possible to create imaginative sky labs or underwater vessels and to integrate features that one would not commonly find in most classrooms, including dance floors, gardens, swimming pools, rocket launching stations, helicopter and airplane pads, bars and cafes.<sup>126</sup> Learning spaces may be formal and informal, indoors and outdoors, on land, at sea, or in outer space. Spaces may be dynamic and features changed for different events or purposes. Furniture may be set out and arranged

---

<sup>126</sup> The classroom designed for my class, for instance, is a Skylab located 612 meters above the main continent and main campus of Glidden University. It has two rooms with round tables for mediating, a formal classroom sitting area and interactive board, and two casual relaxing places: a cozy sofa and sitting chair area in front of a fire place, and inner tubes floating in a pool beneath a grape arbor. The idea was to create a welcoming and relaxing place for students to come and visit and reflect, while accommodating our formal classes and exercises. Additionally, we utilized space in other places, including some very nice arbitration and mediation rooms designed by another mediation project, a board room in an Italian community, a library, classroom, and outdoor grassy area located elsewhere in Glidden.

in infinite arrangements. It is possible, to a much greater extent than in real life, to accommodate and experiment with proxemics, atmosphere, and many other features of environmental design. For instance and drawing from experience teaching mediation, it is possible to compare and contrast the impact of environmental surroundings on the mediation process and to discuss the potential this has for enhancing (or impeding) the dispute resolution process for different kinds of disputes and parties. While there is both an expense and a technical component to designing appropriate spaces in virtual worlds, it is also possible to network and collaborate exchanging services and ideas in such a way that may permit utilization of space funded and created by others.

#### 6. Collaboration and Networking

One of the most exciting features of Second Life is the opportunity for networking and collaboration. Sitting in your home or office it is possible to interact and work with people across continents, disciplines, cultures, ages, educational background, and many other social differences that separate people from one another, even the institutions and towns where we are physically located. This exponentially expands the opportunities for collaboration and learning. There are groups and list serves that connect people in a common interest or purpose, like distance learning, or real life education. There are places and communities that foster every kind of educational, cultural, philosophical, and social engagement that one can visit by instantaneously teleporting to them. For instance, one can attend a lecture on Making Objects in Second Life then teleport instantaneously to a Japanese Tea Ceremony conducted in Japanese, or to a political discussion of European leftist politics, or even a Tibetan meditation center or church service. One can observe, listen, speak, as well as activate poses and other scripts that enable one's avatar to participate physically, e.g., by sitting at a table, lifting a teacup, dancing, or clasping one's hands in meditation.

By attending events and exploring communities and initiatives created by others, by reading the Second Life news, and joining groups organized around common purposes, one can easily connect with people and form real and productive collaborations. For instance, in setting up and implementing my teaching project, I have received tangible benefit and assistance from numerous people, all of whom I have met only in Second Life and in many cases do not even know a real life identity. This has ranged from concrete technical assistance in

the design of my classroom and troubleshooting technical problems that have arisen in-world to real intellectual and doctrinal insights about teaching. Some have provided creative ideas and inspiration, others building and scripting assistance and advice. To the extent I have knowledge about their real lives, I know that colleagues with whom I have worked and benefited in Second Life span five continents and many different regions in Canada and the Americas. Some are educated formally; others have very little by way of higher education, but Second Life affirms that it is possible to know much and have much wisdom through many alternative routes in life. What is banal and simple in one context, moreover, may be novel and revolutionary when applied in another. The climate for engagement and assistance, sharing of knowledge and expertise in such frontiers is very rich. Somehow common fears and barriers that often exist in real life are minimized in Second Life, at least in most cases. There is a frontier spirit, excitement, and enthusiasm that motivate people to share widely and freely in very significant and tangible ways. Because of this, the opportunities for mutual engagement, sharing, and collaboration are limited only by the willingness and creativity (and interpersonal skills and other personal characteristics) of those who enter.

#### 7. Cross-Cultural and Comparative Competency

The opportunity for cultural exchange and immersion is also extraordinary in virtual worlds. In many ways, in fact, Second Life represents a kind of a study abroad experience, a semester in the Metaverse,<sup>127</sup> travelling across continents, jurisdictions, and time zones. The experience is initially so foreign from what one is accustomed to in everyday life that it provokes that kind of thought-provoking dissidence and reflection about one's own assumptions and views that happens when one travels overseas. In constructing their avatars, participants must think carefully about their identities, their race, gender, physical shape, style of dress, among other factors, and the extent to which these are influenced by the cultures and environments in which we live. In speaking and interacting with other residents, assumptions about communication style (i.e., whether one

---

<sup>127</sup> See STEPHENSON, *supra* note 8 (citing “The Metaverse is a fictional virtual world” where humans, as avatars, interact with each other and software agents in a three-dimensional space that uses the metaphor of the real-world. The word *Metaverse* is a compound of the words “meta” and “universe.” See *supra* note 12.

prefers written or verbal communication), the role of nonverbal communication, physical distance, kinesics, and other characteristics come to light. Social differentiation, stereotypes, and power dynamics present in real life are revealed, in a world created by inhabitants masked as avatars and measured by what they do, say, and create in the new frontier. The absence of written law and formal legal rules reveals the role law plays in society and why and how it may develop in human society. The disarming juxtaposition of real-world expectations with new virtual realities creates a unique opportunity for heightening awareness of the different factors that comprise identity and socio-cultural affiliation. Indeed, virtual worlds with their own cultures and subcultures, class and status, and modes of interacting, force one to recognize the importance of context in interpreting meaning from experience and in understanding problems and disputes. In the legal community, the very absence of law provokes insights into its importance in maintaining social order and the manner in which it is construed and interpreted. Work in virtual worlds provokes “disorienting moments” through which significant and complex learning may occur.<sup>128</sup>

Additionally, there is the opportunity to learn about the cultures and languages of others, which is highly relevant to the lawyer of the twenty-first century. Many residents have created cultural centers to foster interaction between people from common cultural backgrounds, as well as cross-cultural learning and exchange. While English is the prevailing language used in San Francisco-based Second Life, many other languages are spoken in Second Life. Perhaps most importantly, it is easy to connect with people from around the world, on any given subject, political, social, legal, and engage in detailed discussion and debate, drawing from and making comparisons between each person’s local reality. In this way, one becomes aware of political systems and perspectives, social and legal problems and contexts, environmental issues and strategies, and other matters from different parts of the world. The visual, immersive potential of virtual worlds provides opportunities to enhance the impact of cross-cultural understanding and exchange.

---

<sup>128</sup> Fran Quigley, *Seizing the Disorienting Moment: Adult Learning Theory and the Teaching of Social Justice in Law School Clinics*, 2 CLINICAL L. REV. 37, 52-56 (1995-1996).

## 8. Intellectual Engagement and Curiosity

Perhaps the most compelling reason to consider integrating virtual world experience into real-world learning is its potential for galvanizing deep intellectual engagement and a sense of wonder and enthusiasm for all kinds of aspects of human experience. Exploring virtual worlds is gripping and enthralling. At least initially, the process absorbs one in a kind of mind-bending odyssey across continents and virtual spaces. In a time when law faculty are encouraged to make more effective use of technology to enhance student learning,<sup>129</sup> one acquires new technical expertise, new language and modes and methods of communicating, new ways of interacting with persons from diverse backgrounds and disciplines across the globe. It provokes deep reflection about matters taken for granted in daily living. It inspires creativity and curiosity. Even a lawyer, schooled in analytical thinking and writing and well-trained to use words to advocate and problem-solve, may be encouraged to learn programming and building skills or to develop artistic and creative expression. Participating in the life and work of virtual worlds forces one to think outside of the box, inspired by the innovations and talent of others while developing new and imaginative projects and ideas of one's own.

## 9. Enhancing the Teaching of Lawyering Skills

Experience teaching online mediation skills in Second Life has confirmed how virtual worlds may enhance the teaching of skills courses in a number of ways. Online mediation permit skills development via distance learning, which is typically difficult on account of the need for face-to-face role plays and faculty observation and feedback. They permit more creative and curiously more genuine role-playing, certainly more than ones often conducted in offline class settings.<sup>130</sup> Subject to the ability of the instructor to arrange different settings, the impact of proxemics and environmental surroundings may be explored, formal and informal, indoors and outdoors, formal

---

<sup>129</sup> ROY STUCKEY ET AL., BEST PRACTICES FOR LEGAL EDUCATION: A VISION AND ROAD MAP 159-160 (2007) (“If technology is not the future of legal education, it is at least part of the future. Proven and experimental uses of technology will continue to grow, and some components of legal education will be transformed by it. Distance learning is already becoming an accepted part of the landscape of legal education, and interactive computer programs are allowing students to acquire knowledge and skills outside of the classroom setting.”).

<sup>130</sup> The observations in this section are drawn from personal experience and student feedback. There is as of yet no published reflection on such topics.

conference tables versus more casual seating arrangements, etc. Masked by a fictitious name and avatar, the student learner may transcend real-world reputations, perceptions and inhibitions, experimenting in different roles, communication styles, and emotional expression. Traditional gender roles, for instance, may be bent with participants actually switching to male or female avatar shapes and appearances as roles may demand. So too, may other characteristics like race, age, style, and persona. Costumes may readily be donned and changed, and attachments and objects may also enhance communication and character development. While one might imagine the gadgetry and virtual atmosphere could make it difficult to take exercises seriously, my experience thus far has suggested that the reverse is in fact true.<sup>131</sup> These are aspects potentially applicable to any kind of teaching through simulation and role playing.

Virtual settings provide other opportunities unique to the teaching of mediation. They provide opportunities for parties to attempt to resolve problems “face-to-face,” or “screen-to-screen,” if they choose, or via text or voice from a distance. The variety of communication methods allows for flexibility in structuring group discussion and private caucuses, communication between mediator and parties, or lawyer and client. Both text and voice-chat may be utilized, thereby permitting multi-tiered, synchronous, and asynchronous opportunities for communication. While avatars may remove themselves to alternative physical spaces to caucus during group mediation sessions, groups may choose to conduct their private communications via simultaneous private instant messaging.<sup>132</sup> Multiple private group voice or text chats may be conducted simultaneously allowing for parties and attorneys to consult privately while mediating, for

---

<sup>131</sup> While some students expressed concern initially about how realistic the exercises would be in such a novel and fantastic place, in every class I have taught students have been much more authentic in their role playing and more engaged in the assigned exercises than typically occurs in class. Many expressed surprise that this could be the case.

<sup>132</sup> This of course requires that parties have some ability to multi-task, although with text-based chat one can review transcripts of conversations that may have been missed while focusing on another conversation. It is possible to carry on and view under different tabs on the screen multiple individual and group chats. While the voice chat still has intermittent performance reliability causing some participants to lose voice or microphone capabilities periodically, the text-based chat is available as a fall-back provision. Class participants may experiment with different combinations of communication, and indeed, students often find new ways of utilizing the communication options effectively in their role plays.

mediators to caucus privately with parties, as well as for observers or supervisors to be consulted or offer feedback to one or more participants during role plays and mediation sessions. These options permit greater flexibility and some enhanced efficiency. It is also possible to capture transcripts of text-based communication, which enhances the review and supervisory potential of virtual sessions.

Perhaps most effective about virtual worlds is the way in which they inspire critical reflection and innovative thinking about course themes. Going to a place like Second Life is, in many ways, akin to participating in a study abroad program. As with many cross-cultural experiences, conducting classes in virtual worlds galvanizes awareness and reflection about many real-world attributes taken for granted, e.g., power imbalance due to race, gender, technical access or expertise, class, and other attributes that impact disputes and communication about them. Many students are struck by the extent to which they rely on nonverbal cues in face-to-face communication and believe they are able to accurately interpret the ones they observe in others. The impact and importance of communication and emotional expression in dispute resolution jump to life in virtual worlds, where the methods of interacting are so much different than in offline or even other kinds of online interactions. Students readily realize the differences in-world and experiment with ways of emoting and interpreting communication via their avatars, utilizing speech, gestures, emoticons, and other tools accessible to them. The process unveils the importance and complexity of communication in any dispute resolution process.

#### 10. Provoking Reflection on Contemporary Legal Issues

Virtual worlds also are uniquely situated to explore the role of law and dispute resolution systems in new frontiers. As Judge Richard Posner of the United States Court of Appeals for the Seventh Circuit has said: “These role-playing games are laboratories for studying the emergence of rules, because the more people get involved and the more money is at stake, the more rules you need to regulate interaction between people.”<sup>133</sup> Moreover, aside from the terms of service and end-user licensing agreements (EULAs) or community standards required of the private developers of virtual worlds, they are unbounded by law or judicial forums. Central to this awareness is consideration of the role of dispute resolution in social systems lacking formal legal structure and rules. As some have argued, development of

---

<sup>133</sup> Stephanie F. Ward, *Fantasy Life, Real Law*, 93 A.B.A. J. 42, 44 (2007).

formal dispute resolution systems becomes imperative.<sup>134</sup> Others advocate against formal rules and processes, arguing that such rules stifle creativity and social interaction. Linden Lab has amended its EULA to provide for in-world arbitration.<sup>135</sup> For disputes occurring between residents, however, there is as of yet no formal mechanism available in-world, aside from dispute resolution services offered by in-world avatars. This reality provides rich opportunities for discussion and reflection about (1) the importance of dispute resolution systems in on-line communities, games, and virtual worlds, and (2) models of dispute resolution that might be utilized, should dispute resolution be an option. As such, virtual worlds then become good environments to reflect on the traditions and scholarly literature about ODR, its history and methodologies, and its potential uses as well as its limitations. Through preparation and performance of multiple role plays of various in-worlds, as well as offline disputes, students have the opportunity to reflect on the potential uses of virtual worlds in the overall package of tools and platforms available online.

Each time I have taught classes in Second Life, I have been astonished by the quality and depth of the class discussion related to ODR and the potential use and impact of virtual worlds in the array of available ODR platforms.<sup>136</sup> This is not to say that all factors point to

---

<sup>134</sup> See *The Second Life of Judge Richard A. Posner*, NEW WORLD NOTES BLOG (Dec. 7, 2006), [http://nwn.blogs.com/nwn/2006/12/the\\_second\\_life.html](http://nwn.blogs.com/nwn/2006/12/the_second_life.html) (Internet Interview with Richard A. Posner, Judge, 7th Cir., in Second Life discussing issues regarding applying law in virtual worlds. Judge Posner stated: “[W]ith real money being invested in virtual worlds, there need [sic] to be law-like rules to resolve disputes, protect property rights, enforce contracts, protect intellectual property and so forth. I assume without knowing that Linden is the supreme ruler of your world.”). See also Farnaz Alemi, *An Avatar’s Day in Court: A Proposal for Obtaining Relief and Resolving Disputes in Virtual World Games*, 2007 UCLA J. L. & TECH. 6 (2007); see Galbraith, *supra* note 49.

<sup>135</sup> SECOND LIFE, <http://secondlife.com/corporate/tos.php> (last visited Jan. 11, 2012).

<sup>136</sup> Topics of discussion have included: what kind of disputes, in-world as well as offline of virtual worlds or screen-to-screen interaction via avatars different kinds of disputes; the potential use of mediation methods in resolving disputes even absent binding rules of law; the importance of enforceability and clear jurisdictional guidelines to the desirability of selecting mediation to resolve a dispute; the need for and problems associated with certain ethical standards, e.g., with respect to confidentiality, authenticity of party, and mediator professionalism; the need for mediations in online environments to adapt the mediation process and ground rules to issues specific to the technology and methods of communication involved; the importance in any kind of mediation, but particularly those conducted online or in

enthusiastic or widespread utilization of virtual worlds, or that all students embrace their existence or utilization. There is often a critique inspired by what happens there. Students often feel challenged and dismayed by the change in communication effectiveness. They feel bewildered and hesitant about the strangeness of the new environments. They react to feelings of disorientation. They observe and point out limitations in the effectiveness of the technology, the seriousness (or, rather, occasional absurdity) of situations in the virtual environment, the anarchic behavior that they may sometimes encounter. But, this ability to inspire vigorous critique and disorientation contributes also to very effective teaching and learning moments.

## V. CONCLUSION

Virtual worlds are vast, unstructured places whose contours are created and shaped by those who enter and participate. Educators from around the globe are rapidly utilizing and transforming such worlds with innovative teaching strategies. While legal educators have been a bit behind the curve in utilizing such spaces thus far, they hold great potential for enhancing the teaching of law and lawyering skills. Substantive courses such as property, torts, criminal law, intellectual property, and among others, may be brought to life and enhanced in new ways through applied exercises conducted in virtual worlds. They are particularly good places to teach fundamental lawyering skills and perspectives as well.

Mediation and dispute resolution, and associated communication and problem-solving skills, are particularly well suited for developing in virtual worlds, as are other lawyering skills such as, interviewing and counseling and trial advocacy. The opportunities for students and faculty to engage in cross-cultural exchange and networking are another selling feature of virtual world engagement.

Real-life lawyers and mediators have explored virtual worlds as places to advertise and locate clients for real legal representation through virtual worlds like Second Life. Law professors have taught

---

virtual worlds, of providing sufficient orientation, training, and cultural adaptation to the medium as well as to provide guidelines or assistance in avatar creation and development; reflections on party and mediator professionalism and decorum and the need for standards to be developed and precisely situated offline, online, and virtual settings.

applied skills courses in trial advocacy and online mediation. The time will soon come where real mediation and legal services may be offered or enhanced in law school clinical programs through work in virtual worlds. A number of influential recent publications document the need for law schools to better prepare lawyers in their roles and skills as professionals.<sup>137</sup> Virtual worlds offer particular promise for those seeking innovative and cost-effective ways to integrate more professional training and skills development into the law school curriculum. Moreover, as more and more people enter virtual worlds and other forms of online social engagement, generating billions of dollars of commercial transactions and wealth and engendering new forms of intellectual property, contractual arrangements, and disputes, there is increasing need to offer innovative online opportunities for student learning.

To be sure, virtual worlds are not for everyone, nor would they be appropriate for every kind of legal instruction. As with other methods of instruction and available technologies, they must be carefully evaluated prior to integrating them with a particular law school course or educational goal. There are risks and costs as well as benefits. As described more fully above, there are a number of real concerns regarding student safety and security and privacy, and there is a real economic and investment cost. Some concerns may be reduced through proper planning, preparation of orientation, and disclosures of potential safety, security and privacy issues. Potential costs may be reduced through effective networking and collaborations with other institutions and faculty with in-world presence and facilities.

While each institution or faculty member interested in making use of virtual worlds must make its own calculation of the costs and potential risks associated with entering a virtual world in light of the educational goals sought for its use, virtual worlds offer distinct possibilities for enhancing the law school learning experience. This is particularly so with respect to the teaching of lawyering skills and perspectives such as those involved in mediation, dispute resolution, and other kinds of client counseling and problem solving. Doctrinal courses, such as property, contracts, intellectual property, and business or e-commerce may be enriched through virtual world examples and

---

<sup>137</sup> See ROY STUCKEY ET AL., BEST PRACTICES FOR LEGAL EDUCATION: A VISION AND ROAD MAP (2007); WILLIAM M. SULLIVAN ET AL., EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW (Jossey-Bass et al. eds., 2007) (also known as the “Carnegie Foundation Report”).

experiences. It is also possible that real-world clinical courses could make use of virtual experiences, e.g., for supplemental skills training, to harness and develop international and interdisciplinary strategies and information to real-world problems, or to teach online dispute resolution of real disputes.

In virtual worlds, even the sky is not a limit—one literally can travel instantaneously to dizzying heights in outer space unconstrained by gravity or the need for oxygen. How refreshing, for students and faculty alike, to be liberated from one's law books for some moments, to imagine new possibilities, to have the chance to reflect in new ways on the influence and importance of real-world legal rules and other constraints.