William & Mary Bill of Rights Journal

Volume *12 (2003-2004)*
Issue 3 *Symposium: International Conference on the Legal and Policy Implications of Courtroom Technology*

Article 2

April 2004

Introduction: What Have We Wrought?

Fredric I. Lederer
William & Mary Law School, filede@wm.edu

WILLIAM & MARY BILL OF RIGHTS JOURNAL

VOLUME 12 APRIL 2004 ISSUE 3

SYMPOSIUM: INTERNATIONAL CONFERENCE ON THE LEGAL AND POLICY IMPLICATIONS OF COURTROOM TECHNOLOGY

INTRODUCTION: WHAT HAVE WE WROUGHT?

Fredric I. Lederer*

In 1876, Alexander Graham Bell uttered the famous words, "Mr. Watson, come here, I need you,"[1] and the modern information age was born.[2] At least some of the current consequences of that call are clear to all. We use cellphones everywhere, perhaps while receiving e-mail on our wireless computers or PDA's in "hotspots" such as the local Starbucks. Children communicate with multiple friends via instant messaging, often while allegedly doing their homework. One source reports that ninety-three percent of all information created in 1999 was created in digital form.[3] The legal profession, like most others, has not been unaffected.

* Chancellor Professor of Law and Director, Courtroom 21, William & Mary Law School. The Courtroom 21 Project is the world's center for courtroom and related technology demonstration, research, experimentation, and education and training. Located in William & Mary School of Law's McGlothlin Courtroom, it includes the world's most technologically advanced trial and appellate courtroom. The official Web site of the Project is http://www.courtroom21.net.

[1] Eric Thoreson, Comment, *Farewell to the Bell Monopoly? The Wireless Alternative to Local Competition*, 77 OR. L. REV. 309, 312 (1998).

[2] Reasonable people clearly can date the origins differently. I would argue that the ability for individuals to communicate personally and quickly, and ultimately directly, with others throughout the nation and the world was the true beginning of the information age.

[3] Kenneth J. Withers, Electronic Discovery: The Challenges and Opportunities of Electronic Evidence, Presentation to Federal Judicial Center, National Workshop for Magistrate Judges (July 23–25, 2001), *at* http://www.kenwithers.com/articles/sandiego/slide02.html.

Lawyers can be bombarded concurrently by the office telephone, the personal cellphone, multiple e-mail account receipts, and, of course, the fax, all likely while retrieving documents or the latest news from the Web,[4] and quite possibly while preparing for a videoconference. In firms, document collaboration via intranets, client service via extranets, and even annual associate reviews via worldwide 360-degree data collection[5] are now possible and increasingly used. Civil discovery of electronically produced or stored information is becoming vexatious as the technical issues involved can be as complex as the legal ones.[6] The practice of law has changed forever,[7] but what of our courtrooms and the disputes that are resolved in them on a daily basis?

Hollywood's movies tend, with amazing consistency, to depict highly traditional courtrooms, without technology, in which trials are entirely dependent upon the oral advocacy skills of trial lawyers. The real world is different. It is rare to glimpse a real courtroom on the local evening news that does not include at least computer monitors, if not more elaborate technological devices. Today's courtrooms are increasingly likely to make technology available to counsel and the court. The issues that we seek to address are the consequences of these courtrooms and their use of technology.

The origins of today's technology-augmented courtrooms are unclear. In one sense, their direct ancestor is the traditional courtroom in which counsel uses documentary and demonstrative evidence to convey information visually to the factfinder. If we were to look for their origins in electronic terms, we could try to find the first playing of a record or audio tape to a judge or jury. It is possible, however, that the first real "high-technology courtroom"[8] was that of U.S. District Judge Carl Rubin who presided in the 1980s over a complex tort trial in which counsel installed computers in the courtroom and then left them in place. The "godfather" of the high-technology courtroom is almost certainly the Honorable Roger Strand, now a senior U.S. district judge, whose Phoenix courtroom and whose own famous pioneering efforts played a major role in popularizing courtroom technology and its effective use. Whatever the origins, today's reality is clear;

---

[4] *See* Douglas E. Litowitz, *Has Technology Improved the Practice of Law?*, 21 J. LEGAL PROF. 51, 51 (1997).

[5] Used by Kirkpatrick & Lockhart, LLP.

[6] Indeed, the Courtroom 21 Project has created a Select Panel of Special Masters for Electronic Discovery Disputes.

[7] *See generally* RICHARD E. SUSSKIND, TRANSFORMING THE LAW, ESSAYS ON TECHNOLOGY, JUSTICE AND THE LEGAL MARKETPLACE (2000).

[8] There are no binding definitions of what constitutes a "high-technology courtroom." We ordinarily refer to a courtroom with at least an evidence-presentation system as being "technology-augmented" or "technology-enhanced." Customarily, a "high-technology courtroom" has sufficient installed technology — usually including case and courtroom management; electronic access to legal authorities and court records; evidence presentation; remote appearances via videoconferencing; and the necessary electronic infrastructure to support and control the courtroom — as to be visibly a good example of the use of multiple major courtroom technologies.

technology in the courtroom is becoming an increasingly important aspect of the American judicial system.

Analysis of current data collected by the Federal Judicial Center shows that approximately one-quarter of all U.S. district court courtrooms are technology-augmented, if not completely "high-tech."[9] Some, such as the U.S. District Courthouse in Portland, Oregon, are entirely high-tech.[10] Although we have no statistics, we know, if only from the visitors who come to Williamsburg to attend Courtroom 21 Project presentations in the McGlothlin Courtroom,[11] that state courts throughout the nation have installed, or are considering installing, high-technology courtrooms. Some, such as the Nineteenth Judicial Center in Orlando, Florida, are national leaders. Others are just beginning.

One of the trends that can be seen in new courthouses such as the New Castle County Courthouse in Delaware, and renovated facilities such as those of the historic Philadelphia Court of Common Pleas, is the creation of an initial high-technology courtroom with the concurrent wiring of other courtrooms for cart-based portable evidence-presentation technology. The Courtroom 21 Court Affiliates, an organization of state, federal and non-U.S. courts and government agencies interested in the efficient and economical use of courtroom and related technology now numbers in excess of 2,000 judges and 2,500 courtrooms.[12] We are so convinced of the importance of technology-augmented trial practice that every second-year law student at William & Mary receives mandatory hands-on training in the use of evidence presentation that must then be used in fourth-semester trials as part of our compulsory Legal Skills Program.[13] And, we know that an increasing number of U.S. law schools, as well as some of those in Australia, the United Kingdom, and soon, New Zealand, have or are creating technology-augmented moot courtrooms for student instruction.

---

[9] ELIZABETH C. WIGGINS, ET AL., FED. JUD. CTR., FED. JUD. CTR. SURVEY ON COURTROOM TECH. 8 (2003) (draft ed.) (Of 1,366 U.S. district court courtrooms, for example, 363 have permanently installed laptop computer wiring and 370 have some form of nonprojector (i.e., computer monitor) displays for the jury. "Ninety-four percent of districts have access to an evidence camera and 66% to a digital projector and projection screen.").

[10] All of its ordinarily used sixteen courtrooms are high-technology courtrooms; only the one courtroom used for visiting judges might not qualify.

[11] As well from information reported to us by our pro bono Deputy Director for Courtroom Design and Technology, Martin Gruen, an active and well-known high-technology courtroom designer, information from firms such as DOAR Communications and ExhibitOne who have installed many such courtrooms, and reports from the Courtroom 21 Court Affiliates.

[12] *See* Courtroom 21 Affiliates Program, *at* http://www.courtroom21.net/affiliates/index.html (last visited Apr. 8, 2004).

[13] We also offer a cutting-edge Technology-Augmented Trial Advocacy course, Technology-Augmented Law Office Management course, and our Legal Technology seminar, in addition to more "traditional" technology-related courses such as those dealing with intellectual property.

The United States holds no monopoly over high-technology courtrooms (although it does have by far the most of any nation in the world) or courtroom technology. Australia holds some of the world's leading legal-technology pioneers,[14] and in this issue Ros Macdonald of QUT University in Queensland, Australia, and Anne Wallace, Deputy Executive Director of the Australian Institute of Judicial Administration, report on the state of courtroom technology in Australia in their article, *Review of the Extent of Courtroom Technology in Australia*.[15] Singapore has made unique contributions in its integrated use of legal technologies, and in his article, *The Confluence of Law and Policy in Leveraging Technology: Singapore Judiciary's Experience*,[16] the Honorable Richard Magnus describes Singapore's accomplishments in this area. Our northern neighbor, Canada, has spent significant effort in this area, especially in Ontario and British Columbia. Julian Borkowski summarizes the Canadian experience in *Court Technology in Canada*.[17] Given William & Mary's historical connection to Great Britain, we are pleased that the contributors to this issue include the Honorable Jeremey Barnett and Lord Justice Henry Brooke whose respective articles, *The United Kingdom*[18] and *The Legal and Policy Implications of Courtroom Technology: The Emerging English Experience*,[19] inform us of what is occurring in the "mother country," including the innovative installation of courtroom technology wiring in all of England's courts. David Pimentel describes for us the International Criminal Tribunal for the Former Yugoslavia's use of technology in *Technology in a War Crimes Tribunal: Recent Experience at the ICTY*.[20]

Although it is helpful to have a better picture of what is happening around the world, the fundamental question we seek to address is: what are the legal and policy implications of the use of courtroom technology? At its very heart is the question: what have we done for, and to, ourselves and our legal systems through the adoption of these technologies? Although it is not the purpose of this introduction, nor of the following articles, to describe in detail the various technologies that we discuss, let me attempt a brief introduction through the following. Let us suppose that we are present in a judge's chambers as she meets with counsel and court staff in a forthcoming case:

---

[14] Among some of the many Australian contributions have been the judicial use of videoconferencing, digital recording of courtroom proceedings, and integrated Web-based multi-media case management.

[15] Ros Macdonald & Anne Wallace, *Review of the Extent of Courtroom Technology in Australia*, 12 WM. & MARY BILL RTS. J. 649 (2004).

[16] Richard Magnus, *The Confluence of Law and Policy in Leveraging Technology: Singapore Judiciary's Experience*, 12 WM. & MARY BILL RTS. J. 661 (2004).

[17] Julian Borkowski, *Court Technology in Canada*, 12 WM. & MARY BILL RTS. J. 681 (2004).

[18] Jeremy Barnett, *The United Kingdom*, 12 WM. & MARY BILL RTS. J. 687 (2004).

[19] Henry Brooke, *The Legal and Policy Implications of Courtroom Technology: The Emerging English Experience*, 12 WM. & MARY BILL RTS. J. 699 (2004).

[20] David Pimentel, *Technology in a War Crimes Tribunal: Recent Experience at the ICTY*, 12 WM. & MARY BILL RTS. J. 715 (2004).

Judge: *I'm glad that we could get together in-person for this last pretrial conference. I might add that I appreciate the efficiency of our Internet-based docketing system that allowed you to set this up without disturbing my staff. I've reviewed our case management system; we go to trial three weeks from today. Our primary task today, as you know, is to review your courtroom technology plans pursuant to our standing court rule.*

Plaintiff's counsel: *Thank you, Your Honor. As our e-filed motion shows, we have largely, but not entirely, agreed on how we all wish to proceed. We will open using the Court's document camera and a PowerPoint presentation. Defense will proceed traditionally. On the merits, counsel for each party will use notebook computers with one of the high-end specialized evidence presentation programs; we anticipate showing a videotape while Defense wishes to display a DVD. We both will use the courtroom's display screens so that witnesses can annotate the evidence using both the small witness touch-screen in front of the witness and the wall-mounted large screen behind the witness stand. We will present one witness remotely from India while Defense has served notice of its intent to use the Court's videoconferencing for two witnesses from Brussels. We each have one previously recorded multimedia deposition. And, we understand that the jury will review all of our electronic evidence, except the depositions, during deliberations using the Court's deliberation room display technology. [To defense counsel] Have I missed anything significant?*

Defense counsel: *Only that we both have made arrangements with the Court's official reporter. We have arranged to have the real-time transcript sent via the Internet to both our offices and our remote experts and to use the Courtroom Connect wireless Internet connections at counsel tables. We would appreciate it if the Court could advise us in advance of trial as to whether the Court plans to publish its multimedia transcript live to the Web during trial. That could be useful to both parties. Oh, and with the Court's prior consent we'll use the Court's videoconferencing for a remote sign language interpreter and, if need be, for one of the witnesses from India who may only speak Hindi.*

Judge: *That accords with my understanding of your filings along with your notice of your intent to use pretty much all available technology during closing argument. Now, what you don't agree on is the proposed immersive virtual reality, correct?*

> Defense counsel: *Yes, Your Honor. As you may recall, at our first conference — the one we conducted using Web-based videoconferencing from our offices so that we didn't have to drive to the courthouse — Plaintiff's counsel stated that she planned to offer a computer-produced incident recreation of their theory of the case, to be supported primarily by their experts, and we litigated the admissibility of that. Now, counsel would like to take one of the survivors from this tragedy and place him into a computer recreation of the building that collapsed. They actually want him to give us what amounts to an on-site description before the collapse. The witness will wear a special headset with goggles that will make it seem to the witness that he is in the building again, and not the courtroom well. As he walks around the well, if he is permitted to do so, we will see what he sees on the courtroom displays, as if we were behind his eyes. Your Honor, we believe that this offends any number of the rules of evidence and is certainly unfairly prejudicial. To be more specific, let me cite . . . .*

All of the above is real and can be done today, including the immersive virtual reality.[21] In fact, Michigan has even legislatively created a civil "cybercourt," a court based on the Courtroom 21 Project's McGlothlin Courtroom, which, in

---

[21] *See* Fredric I. Lederer, *The Potential Use of Courtroom Technology in Major Terrorism Cases*, 12 WM. & MARY BILL RTS. J. 887 (2004) (describing the use of immersive virtual reality in the 2002 experimental Courtroom 21 Laboratory Trial, *United States v. NewLife MedTech*) [hereinafter Lederer, *Terrorism*]. For a review of today's courtroom technologies see, www.courtroom21.net/technology/index.html, describing the technologies in the McGlothlin Courtroom, the world's most technologically advanced trial and appellate courtroom; *see also* COURTROOM 21 PROJECT, THE USE OF TECHNOLOGY IN THE JURY ROOM TO ENHANCE DELIBERATIONS (2002), *available at* http://www.courtroom21.net/articles/jurytech/report.pdf (detailing the results of a year and a half of Courtroom 21 empirical and legal research efforts funded by the State Justice Institute); DEANNE C. SIEMER, EFFECTIVE USE OF COURTROOM TECHNOLOGY: A JUDGE'S GUIDE TO PRETRIAL AND TRIAL (2001); Fredric I. Lederer, *Courtroom Technology — A Status Report for Trial Lawyers*, A.B.A. CRIM. JUST. (forthcoming Spring 2004); Fredric I. Lederer, *The Road to the Virtual Courtroom? A Consideration of Today's — and Tomorrow's — High-Technology Courtrooms*, 50 S.C. L. REV. 799, 803–27 (1999) [hereinafter Lederer, *Road*]. For discussions of evidentiary issues, see generally Fred Galves, *Where the Not-So-Wild Things Are: Computers in the Courtroom, the Federal Rules of Evidence, and the Need for Institutional Reform and More Judicial Acceptance*, 13 HARV. J.L. & TECH. 161, 198–274 (2000) (discussing admissibility concerns regarding computer generated exhibits (CGEs) and suggesting how the Rules of Evidence should be interpreted and amended in order to encourage the use of CGEs); Fredric I. Lederer, *Some Thoughts On the Evidentiary Aspects of Technologically Presented or Produced Evidence*, 28 Sw. U. L. Rev. 389 (1999) (discussing the evidentiary issues of best evidence, authentication, hearsay and unfair prejudice).

theory, can sit with no human beings physically present in its courtroom.[22] In short, what we call "courtroom technology" provides courts and lawyers substantial enhancement in the trials and decisions of cases of all types. What we are as yet unsure of, however, is at what systemic cost.

We often say that courtroom technology use is justified by:

- Improved accuracy;
- Faster and cheaper proceedings;
- Enhanced access to witnesses and evidence;
- Use of new forms of evidence;
- Enabling greater participation from those otherwise excluded from the process; and
- Enhanced transparency via giving the public and journalists a better understanding of court proceedings.[23]

There is common agreement that courtroom technology ordinarily augments at least a jury's comprehension and memory of the evidence and also saves a substantial amount of time.[24] The remaining goals listed above are demonstrably true as can be seen in part from our simulated pretrial conference. Unfortunately, the achievement of those goals and perhaps others is only a part of the story. What we have not yet adequately focused on is how the use of courtroom technology affects dispute resolution specifically and the legal system more generally.

I have suggested that installing and using courtroom technology is often similar to a child's balloon. If one presses in at one point, another, pragmatically unpredictable spot will bulge out. Press too hard, and the balloon bursts. Some years ago, I wrote:

> Any evaluation of today's high-tech facilities necessarily raises the following questions:

---

[22] Participants would appear via videoconferencing and evidence could be introduced through the Internet. *See generally* Lucille M. Ponte, *The Michigan Cyber Court: A Bold Experiment in the Development of the First Public Virtual Courthouse*, 4 N.C. J.L. & TECH. 51, 58–66 (2002) (detailing plans for the Michigan Cyber Court, which is scheduled to be the nation's first fully-virtual public courthouse). The Michigan court does not as yet have an actual functioning high-tech courtroom due to financial constraints. The Courtroom 21 Project was involved heavily in the effort to create the court. Among other matters, I was privileged to give members of the Michigan House a tour of the McGlothlin Courtroom and to answer their questions about courtroom technology — all by videoconferencing from Williamsburg.

[23] *See, e.g.*, Fredric I. Lederer, An Introduction to Technology Enhanced Trial and Appellate Courtrooms, Computer Slide Presentation at the 8th Court Technology Conference (Oct. 28, 2003), *available at* http://www.ctc8.net/presentations/E-19_Introduction_to_Courtroom_Technology.pdf.

[24] We should note that, however accurate these assumptions may be, we have only limited scientific data from the courtroom environment supporting them.

- Do they work?
- Do they improve the administration of justice?
- What is necessary to create and operate these facilities?
- To what extent, if any, do they disadvantage some parties, counsel, or others?
- What are the collateral consequences of high-technology litigation?
- Are technology-augmented litigation and high-technology courtrooms consistent with traditional humanistic goals?

These are far from unimportant matters; our future depends upon their answers. In September 1998, deeply concerned about the direction that our legal systems were traveling, the Courtroom 21 Project, supported by the William & Mary Bill of Rights Institute and the American Bar Association Sections on Litigation and Criminal Justice, conducted an international Working Conference on Technology Augmented Litigation. "The threshold question to be considered was whether large-scale technology use at trial was desirable or hurtful."[25]

The 1998 Working Conference was our first attempt to come to grips with the increasingly pressing questions of utility and effect. The 2004 International Conference on the Legal and Policy Implications of Courtroom Technology, the Conference whose articles formed this symposium, is our present and greater effort.

In its most basic form, the question that was presented to our conferees was whether the changes that courtroom technology may cause to our legal systems are fundamentally fair. In the United States, we would be inclined to ask whether they accord with "due process." However, given the different legal systems involved, we thought it best to concentrate on fundamental fairness. In approaching this and related questions, our noted speakers chose to concentrate on key areas of concern.

After the various authors have summarized the extent of courtroom adoption in our varied nations,[26] Dr. Elizabeth Wiggins of the Federal Judicial Center sets the stage for our remaining commentators with her article, *What We Know and What*

---

[25] Lederer, *Road*, *supra* note 21, at 827–28.

Attended by judges, lawyers, administrators, support professionals, and experts in the area, the Working Conference concluded that:

- The adoption of courtroom technology was ongoing and likely unstoppable;
- Courtroom technology was desirable;
- Known problems involving electronic incompatibility of evidentiary files required resolution through creation or adoption of standards;
- It is too early in the adoption of technology to attempt to regulate its use in any thorough fashion but that liberal use of pretrial notice and disclosure is at least helpful in avoiding problems

Id. at 828.

[26] This introduction and Elizabeth C. Wiggins's article, *What We Know and What We Need to Know About the Effects of Courtroom Technology*, 12 WM. & MARY BILL RTS. J. 731 (2004), summarize the situation in the United States.

We Need to Know About the Effects of Courtroom Technology,[27] that both summarizes the extent of courtroom technology use in the U.S. district courts and "reviews some of the major claims and concerns raised in response to certain of those technologies. In doing so, it sets forth a framework for identifying and empirically addressing the pressing policy issues surrounding the use of the technologies."[28] What should never be forgotten is that most of the legal and policy issues that surround the use of courtroom technology cannot properly be discussed and evaluated without empirical data that demonstrates the real-world effects of that technology on people. Surmise and assumption are easy. They are also, as we have found in the Courtroom 21 Project, all too often wrong.

Lord Justice Henry Brooke, one of the world's leading high-technology jurists, shares with us his article, *The Legal and Policy Implications of Courtroom Technology: The Emerging English Experience*,[29] to give us a British perspective. Iria Giuffrida presents a European Union (EU) perspective in *Legal, Practical and Ethical Implications of the Use of Technology in European Courtrooms*.[30] Although most courtroom technology has emerged in nations with English common-law adversarial legal systems, the importance of the EU in our ever more tightly interwoven world is self-evident.

There are any number of specific topics of substantial importance, and we are fortunate that a number of the most important ones are dealt with in the articles in this issue. The Honorable Nancy Gertner, U.S. District Judge for the District of Massachusetts, addresses concerns about remote testimony in *Videoconferencing: Learning Through Screens*,[31] and in doing so she also briefly addresses the electronic presentation of evidence at trial. Daniel Stepniak, of the University of Western Australia, contributes *Technology and Public Access to Audio Visual Coverage and Recordings of Court Proceedings: Implications for Common Law Jurisdictions*.[32]

In the age of terrorism we ought not ignore the potential impact of technology on terrorism trials. In my article, *The Potential Use of Courtroom Technology in Major Terrorism Cases*, I argue for the comprehensive use of courtroom technology in major terrorism cases not only to ensure fair and efficient trials but also to make those trials such models of justice and efficiency that they can affect the "hearts and minds" of those who might be tempted to commit terrorist acts against us.[33]

One of the major uses of courtroom technology is to assist those who might not

---

[27] *Id.* at 731.

[28] *Id.*

[29] Brooke, *supra* note 19.

[30] Iria Giuffrida, *Legal, Practical and Ethical Implications of the Use of Technology in European Courtrooms*, 12 WM. & MARY BILL RTS. J. 745 (2004).

[31] Nancy Gertner, *Videoconferencing: Learning Through Screens*, 12 WM. & MARY BILL RTS. J. 769 (2004).

[32] Daniel Stepniak, *Technology and Public Access to Audio-Visual Coverage and Recordings of Court Proceedings: Implications for Common Law Jurisdictions*, 12 WM. & MARY BILL RTS. J. 791 (2004).

[33] Lederer, *Terrorism*, *supra* note 21, at 903.

have equal opportunity to avail themselves of full and equal participation in the process. There is a strong and growing assistive courtroom-technology movement. We are fortunate that Peter Blanck, Ann Wilichowski & James Schmeling of the Law, Health Policy, and Disability Center at the University of Iowa have provided us with *Disability Civil Rights Law and Policy, and Accessible Courtroom Technology.*[34]

"Courtroom technology" inherently suggests courtrooms and trials. Yet, trials only take place when alternative means of dispute resolution have been unsuccessful. Technologically assisted Alternative Dispute Resolution (ADR) is a matter of great importance[35] and Amy and Scott Moeves discuss the implications for ADR in *Two Roads Diverged: A Tale of Technology and Alternative Dispute Resolution.*[36] In April 2004, the Courtroom 21 Project conducted a proof-of-concept international commercial mediation, a picture of which can be found in this issue.[37] The 2004 Courtroom 21 "Laboratory Trial" involved the effort by an American company to have a British construction firm build a hotel in Baghdad, financed by an Australian firm, with insurance coverage provided by a Norwegian company, and security advice provided by a Japanese consultant. The contract was imperiled by Iraqi instability. As the mediator sat in the center of the McGlothlin Courtroom in a rotating, high-technology command chair, remote parties appeared from England, Norway, and Australia in their efforts to inexpensively and quickly resolve their dispute — documents were available to all via the Internet. This too is "courtroom technology."

If lawyers and judges are to use and be affected by technology, what is the role of the law school? Wayne Miller and Kenneth Hirsh, of Duke University School of Law, speak to this question in *Law School Education in the 21st Century: Adding Information Technology Instruction to the Curriculum.*[38]

We know that these subjects are both important and weighty. As we approach them and others, the burden is on us to conduct a continuing cost/benefit analysis when we seek to employ courtroom and related technologies.[39] In updating our 1998 list of questions we may wish to ask, for any given courtroom technology:

---

[34] Peter Blanck et al., *Disability Civil Rights Law and Policy: Accessible Courtroom Technology*, 12 WM. & MARY BILL RTS. J. 825 (2004).

[35] The Courtroom 21 Project takes pride in the fact that Drew Swank, now the Courtroom 21 Project's Senior Litigation Fellow, conducted the first known experimental ADR use of videoconferencing during the 1996–1997 academic year.

[36] Amy S. Moeves & Scott C. Moeves, *Two Roads Diverged: A Tale of Technology and Alternative Dispute Resolution*, 12 WM. & MARY BILL RTS. J. 843 (2004).

[37] The photograph appears opposite the first page of this introduction.

[38] Kenneth J. Hirsh & Wayne Miller, *Law School Education in the 21st Century: Adding Information Technology Instruction to the Curriculum*, 12 WM. & MARY BILL RTS. J. 873 (2004).

[39] In doing so, we ought to be careful not to assume that traditional practice is ideal. For those who are prone to the "if it ain't broke, don't fix it" school of thought, I posit the case of the first person to devise a wheel. Adequacy ought not to be the enemy of improvement.

- Does the technology work?
- Does the technology affect or is it affected by other courtroom and related technologies?
- Can the people who are to use the technology use it effectively or is special training desirable or required and if so who will supply it and at what financial and opportunity cost?
- To what extent will the people who are to use the technology use it effectively even if training and support are supplied?
- What will happen when the technology, or its users, inevitably fails?[40]
- Will the technology use affect traditional roles and jobs and, if so, how; is technological unemployment or restructuring likely or necessary?
- Does the technology affect the way that people behave or are perceived to behave, and, if so, how?[41]
- Is the technology authorized, prohibited, or otherwise affected by statute, rule, or custom and, if so, to what degree?
- Is the use of the technology affected by constitutional concerns, primarily by the Bill of Rights?
- What is the legal profession's and the public's likely reaction to the use of the technology and its effects; will they see the technology use as affecting the fundamental fairness and accuracy of the dispute-resolution process?
- How will the acceptance, rejection, or modified use of the technology be regarded by the public in light of our changing world?[42]

---

[40] This is a major concern. All courtroom technology is potentially subject to real or perceived failure for at least a short moment. Often it is enormously difficult to determine what, if anything, has gone wrong. Sometimes counsel may simply have failed to turn a computer on, for example. At other times, a major courtroom infrastructure component may have physically failed. *See* Fredric I. Lederer, *High-Tech Trial Lawyers and the Court: Responsibilities, Problems, and Opportunities, An Introduction*, Courtroom 21 Court Affiliates Conference (2003), *available at* http://www.courtroom21.net/HighTech%20Trial%20Lawyers%20and%20the%20Court.pdf; *see also* Fredric Lederer, *Courtroom 21 Court Affiliates Protocols for the Use by Lawyers of Courtroom Technology* (draft ed. Mar. 2004), *available at* http://www.courtroom21.net (also in Fredric Lederer, *Technology-Augmented Courtrooms — Progress Amid a Few Complications, or the Problematic Interrelationship Between Court and Counsel*, N.Y.U. ANN. SURVEY OF AM. L. (forthcoming 2004)).

[41] For example, how does videoconferencing affect truth-telling and the perception of credibility? The question itself, however, is intentionally broad. It could include details as small as judicial distraction while engaging in e-mail correspondence while on the bench or the possible effects on counsel, judge, witnesses and jurors from live multimedia Web publication of the court proceedings.

[42] We may live in an increasingly technology-dependent world, but that doesn't necessarily mean that the public wants technology-dependent trials or mediations, for

- What are the cost and resource implications for courts, lawyers, and other persons involved in the potential use of the technology?
- To what extent, if any, does the use of the technology affect the traditional nature of the adversary system?
- How will the use of the technology potentially affect legal education and ongoing professional continuing legal education?
- How could the use of the technology affect the need for, or perception of the need for, other changes, whether technical, legal, or social?
- *What are the other possible, not yet recognized, consequences of the technology?*

Chief Justice Burger once observed:

> Ideas, ideals and great conceptions are vital to a system of justice, but it must have more than that — there must be delivery and execution. Concepts of justice must have hands and feet or they remain sterile abstractions. The hands and feet we need are efficient means and methods to carry out justice in every case in the shortest possible time and at the lowest possible cost. This is the challenge to every lawyer and judge in America.[43]

The Courtroom 21 Project celebrated its formal tenth anniversary this past August. That decade has taught us that courtroom and related technologies can provide us with "efficient means and methods to carry out justice in every case in the shortest possible time and at the lowest possible cost." That, however, is not enough. The reason for the 2004 Courtroom 21 International Conference on the Legal and Policy Implications of Courtroom Technology and the discussions that we trust that it and the following articles will inspire[44] is to ensure that we do not obtain efficiency and financial savings at the cost of real or perceived justice or, indeed, that intangible "soul" that so inspires the people's acceptance of our legal system. Let us take care that when we complete what may well be only the first great courtroom technology revolution, we can ask without irony or self-reproach and with profound trust and self-satisfaction, "What have we wrought?"

---

example. On the other hand, it might be highly undesirable for the courts to be regarded by the public, legislature, and executive branch as inefficient and outmoded.

[43] ELIZABETH FROST-KNAPPMAN & DAVID S. SHRAGER, THE QUOTABLE LAWYER 179 (rev. ed. 1998) (quoting Warren E. Burger's address to the San Francisco meeting of the American Bar Association as reported in *Vital Speeches*, October 1, 1972).

[44] A follow-up working conference is scheduled for February 2005 in New Orleans.