Continuing Legal Education Presentations

January 30, 2015

Jan 30th, 10:15 AM - 11:00 AM

Beyond the Law: Connecting with Expertise in Other Fields

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Introduction

For a variety of reasons, law school graduates might find themselves in need of advanced degrees or continuing education in other disciplines. The trend toward concentration within specific areas of the law redoubled in the 1970s as the American Bar Association and state bars began recognizing and creating specialist certifications in various areas of the law. By 2012, an article in *The New York Times* started with the simple statement "The twilight of the generalist law degree is here."[1] This sunset accompanies rising expectations of legal professionals for greater expertise in other fields. Increasingly lawyers are asked to be equally conversant in legal as well as other business or technical matters.

When professional exigencies stretch experienced attorneys into other areas of the law, those attorneys likely have a list of preferred places to go for guidance. Various statewide institutes of continuing legal education, like the Institute of Continuing Legal Education in Georgia, have a robust assortment of institute and program offerings to consult. Chapters of the American Bar Association offer workshops, conferences, journals, and websites to assist. Colleagues and law school classmates form informal continuing education networks to steer each other to beneficial sources. To be sure, there have always been hornbooks and casebooks to consult that reacquaint and update professional knowledge of topics seldom encountered since law school.

The how-to and where of navigating to the best, most-current resources and continuing education opportunities in fields beyond the law might be less obvious. American lawyers generally have undergraduate degrees in other fields.[2] However, as they gain more experience as lawyers, they get more removed from the intensive study of that other field. Consider how physics has changed since 1970.

Physics, as an example, might be far afield, but Joseph R. Carvalko and Cara Morris strongly state in their recent book, "… to represent a client's interests competently where law, science, and technology come together, an advocate must be qualified to analyze techno-scientific information as if it were within his or her sphere of knowledge."[3]

The ABA does track a growing interest among its members for additional resources to help them engage areas outside the legal arena. Lawyers might find additional office management, personnel management, and software training beneficial to having a smoother work-life environment. In the courtroom, lawyers are not called to act as

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[1] Victor Fleischer, "The Shift Toward Law School Specialization." *The New York Times* (October 25, 2012) http://dealbook.nytimes.com/2012/10/25/the-shift-toward-law-school-specialization/?_r=0 (accessed December 17, 2014).

[2] Exceptions being bachelor in legal studies degrees and pre-1970 graduates with an American LL.B.

[3] Joseph R. Carvalko and Cara Morris, *The Science and Technology Guidebook for Lawyers* (Chicago, IL: American Bar Association, 2014), xiii.

expert witnesses, but a basic knowledge of a scientific or technical field could help frame questions and confidently embrace a given complexity. Globalization has made at least reading fluency in languages, such as Spanish, Germany, and French, a helpful skill for lawyers with international portfolios.

The following tips are to provide basic, but vetted, resources for pursuing continuing education in areas outside of the law. None of these resources alone will make a person an expert, and all require genuine effort, time, and practice to pursue. Although, Colton Harris-Moore was able to learn to fly a plane by reading a manual, how many folks would honestly volunteer to take that first flight?

Online courses

Online degree programs fit the schedules of professionals better than the higher education model of the 20th century that demanded on-campus and in-class attendance. Many online courses are asynchronous. Students log on to complete requirements and reading on their schedule without any mandatory meeting times that require participants to be online and interact together. A recent article published in *Journal of Educators Online* found that older students achieve better in online courses than their twenty-something counterparts. The article also notes that older students "report that they have very positive learning experiences in online courses."[4]

University of Phoenix, which began as a platform to make higher education degrees assessable to working adults, launched its online campus in 1989. Through extensive advertising, University of Phoenix became the image of Internet higher education for the late 20th century. Slowly traditional universities began to explore online delivery of classes as part of their degree programs.

The economic downturn in 2008 fueled the growth of online courses, as newly unemployed professionals sought to brush-up and retool.[5] Concurrent reductions in public funding to institutions of higher education prompted academics to seek ways to expand their student enrollment and reach new markets.

To understand better the growth and viability of online degree-credit courses, the Sloan Consortium (now, the Online Learning Consortium) began tracking and publishing annual reports of online course enrollments in 2003. The report in 2013 indicated that

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[4] Thomas A. Simonds and Barbara L. Brock, "Relationship between Age, Experience, and Student Preference for Types of Learning Activities in Online Courses." *Journal Of Educators Online* 11, no. 1 (2014): *ERIC*, EBSCO*host* (accessed December 16, 2014).
[5] Steve Kolowich, "Recession May Drive More Adult Students to Take Online Classes." *Chronicle Of Higher Education* 55, no. 19 (2009): A11. *Education Research Complete*, EBSCO*host* (accessed December 15, 2014).

fully one-third of students enrolled in higher education were taking at least one online course.[6] With experience, the effectiveness of online courses also seems to have improved. In 2012, 77% of academic leaders rated learning outcomes in online courses as equal to, or better than, traditional classroom instruction.[7]

But the movement to provide more educational opportunities online is not limited to established universities. Other organizations have divested their educational opportunities of formal admissions prerequisites and of degree program entanglements. Apple's iTunes U has a variety of videos, podcasts, eBooks, PDF files. Most are led by well-reputed professors from across the county, notably early adopters from Stanford University and Harvard University. For-profit continuing education suites, like Lynda.com and the Khan Academy, began years earlier and have been growing in popularity and scope.

Lynda.com

Before the explosion of online education, there was Lynda.com. Lynda.com began providing online training in 1995 and has steadily recruited an established cadre of quality instructors and expanded its offerings from a focus on technology. The company finds its main market among large organizations seeking to offer a single platform for continuing education in general office skills, both human relations and software interactions. Users can choose from a variety of general office skills such as: web development, leadership skills, successful project management, negotiations, social media management, and effective communications.

The site currently boasts more than 100,000 video training sessions. Lynda.com allows viewers to select specific two to seven minute chapters within modules to focus in one narrow aspect of the course. The computer software tutorials provide clear instructions with screen captures and video which allow the viewer to pause the videos and practice hands-on before continuing with the session. Most versions of Microsoft Office products and cloud-based systems, like Dropbox, have courses. Lynda.com also has informative courses on getting comfortable with a new Android, iPad or iPhone and for setting up a mobile office.

Most sessions have at least one chapter that is freely available, but the overwhelming majority of tutorials require a subscription. The site offers several plan options from the

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[6] Online Learning Consortium. "2012—Changing Course: Ten Years of Tracking Online Education in the United States," http://onlinelearningconsortium.org/survey_report/changing-course-ten-years-tracking-online-education-united-states/ (accessed December 15, 2014).
[7] Ibid.

basic $25 for one month access to $375 for annual subscriptions with downloading privileges.[8]

Khan Academy

Begun in 2006 by former hedge-fund manager, Salman Khan, the Khan Academy represents the next step in the process begun by University of Phoenix, but it is geared more toward secondary education. While the majority of its students reside in the United States, as of February 2014, Khan Academy is used in classrooms to supplement traditional learning environments in 200 countries.[9] This familiar source focuses on basic high-school level studies in mathematics and computer programming.[10] For legal professionals, the courses on statistics and computer security are of potentially more use than basic mathematics.

The professional evaluations of this resource are mixed. Subject area experts point out flaws in the content and shortcomings in the theoretical explanations, and public statements by founder and instructor about his lack of preparation have not helped build confidence.[11] Nevertheless, various school districts around the United States have been using this platform with measurable positive results.[12]

Campus Centers for Continuing Education

The trend in higher education institutions has been toward offering more online programs, but this trend is not consistent for all degrees or at all universities. For example, although Executive MBA programs are quite common, not all universities include any online component. The University of Georgia's Terry School of Business is an exception within Georgia, which offers a 50-50 split between online and in-class.[13]

In order to enroll in online courses, taught by local professors, potential students should also consult a university or college's center for continuing or professional education. Individual universities offer hundreds of courses and certificate programs online. The

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8 Lynda.com, "Software training & tutorials," http://www.lynda.com/plans?bnr=topbeamember_newsite (accessed January 8, 2015).
9 Daniel Light and Elizabeth Pierson, "Increasing Student Engagement in Math: The Use of Khan Academy in Chilean Classrooms." *International Journal of Education and Development using Information and Communication Technology (IJEDICT) 10*, issue 2 (2014): 103-119.
10 Irene E. McDermott, "Lifelong Learning on the Web." Online Searcher 37, no. 3 (2013): 35-37. Business Source Complete, EBSCOhost (accessed December 16, 2014).
11 Karim Kai Ani, "Khan Academy: The Hype and the Reality." *Educational Digest 78*, 6 (2013): 23-25.
12 June Kronholz, "Can Khan Move the Bell Curve to the Right? *Education Next 12*, 2 (2012):16-22.
13 Emory University. "Goizueta Business School. Modular Executive MBA Program,"http://goizueta.emory.edu/degree/emba/memba/index.html (accessed January 8, 2015). Georgia State University Robinson College of Business. "Robinson Executive MBA," http://execmba.robinson.gsu.edu/about/program-structure/ (accessed January 8, 2015). Georgia Institute of Technology. Scheller College of Business. "Executive MBA Program," http://scheller.gatech.edu/degree-programs/mba/executive-mba/ (accessed January 8, 2015).

ed2go site offers a convenient portal to several Georgia schools. However, Emory University and Georgia Tech each have separate sites.[14]

The investment for certificate programs can be quite steep in terms of number of course hours and tuition. At the University of Georgia Center for Continuing Education, the Chartered Tax Professional Online Certificate Program can run close to $1900 and requires 180 hours of coursework. A certificate in Principles of Market Research requires just over $1000 and 200 hours of coursework.[15]

MOOCs

Carnegie Mellon University led the way in 2001 when it began the Open Learning Initiative (OLI) with completely open and free college-level online classes. A slow-building wave began. The term "Massive Open Online Course" or MOOC was coined around 2008, and their presence became unavoidable by 2012, the "Year of the MOOC."[16] These are online courses without pre-requisites (of experience or institutional affiliation), like the continuing education course, but seemingly limitless enrollment caps. By design or necessity, a MOOC relies more on student participation and interaction with each other than on feedback from instructors. A practicing attorney might not have time or the credentials to enroll in an executive MBA program to get better versed in marketing, but he or she could enroll in a MOOC from Stanford University, and learn through virtual interactions with literally tens of thousands of like-minded students.

While search engines return results for a given topic and "MOOC," it is efficient to consult the offerings of the major course aggregators. In the United States, many platforms exist for MOOC delivery, but three main services dominate the field: edX, Coursera, and Udacity. All three emerged in 2012 as cooperative efforts with courses and professors from major U.S. universities. The non-profit edX hosts MOOCs from MIT, Harvard University, University of California—Berkeley, Wellesley College, Georgetown University and the University of Texas system.[17] Coursera is a for-profit venture that more closely resembles traditional classroom-style experience with

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[14] Emory University. "Continuing Education. Course Catalog," http://ece.emory.edu/catalogDetail.php?CatalogID=245 (accessed January 8, 2015). Georgia Tech Professional Education. "Browse Subjects," https://pe.gatech.edu/subjects (accessed January 8, 2015).
[15] The University of Georgia Center for Continuing Education. "Chartered Tax Professional," http://www.georgiacenter.uga.edu/courses/accounting-tax-prep-and-financial-management/chartered-tax-professional (accessed January 8, 2015). And The University of Georgia Center for Continuing Education. "Principles of Market Research," http://www.georgiacenter.uga.edu/courses/market-research/principles-of-market-research (accessed January 8, 2015).
[16] Emily Longstaff, "The Prehistory of MOOCs: Inclusive and Exclusive Access in the Cyclical Evolution of Higher Education." Journal of Organisational Transformation & Social Change 11, no. 3 (2014): 164-184. Business Source Complete, EBSCOhost (accessed December 10, 2014).
[17] edX. "Find Courses," https://www.edx.org/course (accessed December 17, 2014).

videotaped lectures. Currently enrolling courses have professors from Duke University, Johns Hopkins University, University of Maryland, and other notable institutions.[18] Udacity initially emphasized computer science offerings, but since the inclusion of the University of California system, it has introduced a wider array of entry-level courses.[19] Like Coursera, Udacity is less interactive than edX. Taking courses on either platform is free but participants must pay a fee to receive a certificate of completion (or college credit).

MOOCs, generally, are not easy courses and require a great deal of self-discipline and motivation. Convenience should not be mistaken for watered down content. Beginning physics is still physics, and the flexibility requires a more diligent and conscientious student. Some estimates put course completion at around 10% for classes in the sciences.

Professional Organization Education and Publications

Professional organizations have embraced the Internet as a means to extend continuing education opportunities to their members. Some offerings are for CEU credit. Others are for more general edification only. While some keep most of the content and research password protected for members' eyes only, other organizations are more inclusive.

In recognition of the interdisciplinary nature of the legal field, various groups within the American Bar Association offer continuing education podcasts and webinars that bridge potential knowledge gaps and enable its members to explore, and stay current in, other fields. The Science & Technology Law Section has a series on neuroscience and the law that includes the following topics: memory and lie detection, competency issues, and substance dependence. For about $50, viewers can hear a neuroscientist describe the science of memory: its formation and its retrieval over time.[20]

Beyond the online courses, many organizations offer professional newsletters that highlight major developments to help interested professionals stay current. In the *ABA Techreport 2014*, Joshua Poja reported that a quarter of the responding attorneys consult online newsletters daily to stay abreast of various fields.[21]

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[18] Coursera. "Courses," https://www.coursera.org/courses (accessed December 17, 2014).
[19] Udacity. "Nanocourses and Courses," https://www.udacity.com/courses#!/all (accessed December 17, 2014).
[20] ABA Shop. "Neuroscience and the Law: Memory and Lie Detection," http://shop.americanbar.org/eBus/Store/ProductDetails.aspx?productId=219602 (accessed December 16, 2014).
[21] Joshua Poja, "Legal Research." *ABA TechReport 2014*. http://www.americanbar.org/publications/techreport/2014/practice-management.html (accessed January 7, 2015).

Business Organizations

In the *2014 ABA TechReport*, Adriana Linares writes that running a successful practice in today's market requires software competency and sound business sense well beyond expectations of the past. This potentially underappreciated area of continuing education for practicing attorneys has some of the most widely available tools and online courses from professional organizations representing various areas of industry.[22]

International Licensing Industry Merchandisers' Association (LIMA)

The United States Patent and Trademark Office education site points to the International Licensing Industry Merchandisers' Association (LIMA) education page for continuing education in licensing. LIMA is an international organization of industry leaders. At the most intensive level, LIMA offers a Certificate of Licensing Studies. The successful certificate candidate must complete and pass six months of online coursework, a final paper, and a certification exam (all online). They also have a series of self-paced webinars for informative targeted sessions on a variety of topics. The three upcoming webinars for 2015 are $200 for ninety-minute sessions and include "Anatomy of a Licensing Agreement," "How to Build a Licensing Plan," and "The Ins and Outs of DTRs."[23]

American Institute of CPAs (AICPA)

In addition to individual webinars, the AICPA offers program certificates to recognize more in- depth pursuits of accounting knowledge. According to the site, a survey of Top 100 accounting firms predicts growth in the areas of forensics/fraud and financial litigation support. To develop professional competency in those areas, the AICPA is marketing a new "Fundamentals of Forensic Accounting Certificate Program." The full program contains nineteen individual courses, each about ninety minutes in length.[24] The enrollment price and course length are comparable to taking continuing education courses at a university. The AICPA also offers less intensive courses with a lower price tag that include over sixty general accounting, auditing, regulatory ethics, and tax topics

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[22] Adriana Linares, "Tech Training." *ABA TechReport 2014*. http://www.americanbar.org/publications/techreport/2014/technology-training.html (accessed January 7, 2015).
[23] International Licensing Industry Merchandisers' Association. "LIMA Webinar Series," http://www.licensing.org/education/webinar-series/ (accessed January 7, 2015).
[24] AICPA. "Fundamentals of Forensic Accounting Certificate Program," http://www.cpa2biz.com/Content/media/PRODUCER_CONTENT/generic_template_content/featured_products/forensic_landing.jsp (accessed January 7, 2015).

(such as, capitalized costs and depreciation, fundamentals for LLCs and partnerships, and deferred income).[25]

American Statistical Association (ASA)

Another hot area of growth is in statistical analysis. The main professional organization of statisticians in the United States, American Statistical Association (ASA), requires members to attend at least sixty hours of professional development annually to remain accredited.[26] During 2014, the ASA offered approximately two webinars per month on topics including: adaptive design and also clinical trial data tabulation and analysis.[27] One would expect a similar schedule to appear for 2015, but the page has nothing listed this year, yet. Although the association provides archived versions of web-based lecture programs on its LearnSTATOnDemand page, the current list of videos are all several years old.

The Conference Board

Big business analysis and issues are the bailiwicks of The Conference Board. The organization began in 1916 by two business leaders who wanted to bring together major heads of industry to talk about issues common across industries. It is easy to create a guest account to gain additional access and register for webinars. Anyone can access the online news magazine *The Conference Board Review*, which offers provocative features on major business news and trends.

Of particular interest are its archived webinars on performance management, risk management, public relations campaigns, and attracting top talent. Upcoming webinars include a session entitled "The Subtle Impact of Exclusion: Overcoming Unconscious Bias" for attorneys drawn more into human resources and compliance. Registration for archived and live webinars runs between $100 and $200, and courses are frequently updated and repeated.[28]

Science Organizations

The intersection of science and law is a precarious border of an investigation for justice and a pursuit for understanding. Even the terminology used in the fields can cause

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[25] ____. "AICPA Store," http://www.cpa2biz.com/AST/AICPA_CPA2BIZ_Browse/Store/OnlineSubscriptions.jsp (accessed January 7, 2015).
[26]American Statistical Association. "ASA Board Statement on Continuing Professional Development: Its Importance for Statisticians and the Role of the ASA." http://www.amstat.org/education/cpd.cfm [(accessed January 7, 2015).
[27] Internet Archive WayBack Machine. "ASA Web-base Lectures page," http://web.archive.org/web/20140724002643/http://www.amstat.org/education/weblectures/index.cfm (accessed January 7, 2015).

[28] The Conference Board. "Webcasts." https://www.conference-board.org/webcasts/ (accessed January 7, 2015).

confusion. Although both rely on evidence, "in law, we speak about the weight of evidence needed to convict… or reach a … verdict, or for finding probable cause. In science … we speak in terms of validation or falsification."[29]

Cognizant of the changing theories and new research, lawyers must also be careful that the best statistics and science is used. As science continues to evolve in areas critical to the law, it's harder to discern what is relevant and what is too tentative to be reliable or have been reliably executed. A study of forensic analysis found that 60% of the trials it reviewed had examples of "invalid forensic science."[30] Finding reliable and current information on forensic science is a challenge and scientific journal papers can be overly technical for scholars outside the field.

American Medical Association (AMA)

Medical professionals are strongly encouraged to complete hours of continuing education credits each year, although this instruction is not the uniform mandate that it is in the legal profession.[31] For physicians, one of the main accrediting bodies is the American Medical Association (AMA), which awards its own distinctive Continuing Medical Education (CME) credits, known as AMA Physician's Recognition Award (PRA) Category 1 credits, to vetted programs and webinars.

The AMA Online Learning Center is a clearinghouse of all of the association's PRA Category 1 courses. The site currently offers seventy low-cost, open enrollment online courses. Students may view the courses at their leisure. To obtain organization-recognized course credit or certificates of participation, enrollees are required to complete learning assessments (usually a five-question quiz) and course evaluations.[32]

Most courses have been recorded within the past six months. The offerings span a wide range of topics such as the Affordable Care Act, quality measurements of health care practices, professional contract negotiations, billing practices, records security, trends in improving patient experience, and medical ethics.

American Society of Civil Engineers (ASCE)

The American Society of Civil Engineers makes available its continuing education webinars at a considerably higher cost. Nevertheless, anyone may access the same

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[29] Joseph R. Carvalko and Cara Morris, *The Science and Technology Guidebook for Lawyers* (Chicago, IL: American Bar Association, 2014), xiii.
[30] Brandon L. Garrett and Peter J. Nuefeld, "Invalid Forensic Science Testimony and Wrongful Convictions," *Virginia Law Review 75*, 1 (2009).
[31] American Medical Association. *State Medical Licensure Requirements and Statistics 2014* (Chicago, IL: American Medical Association, 2013), 65-66.
[32] ____. "Continuing Medical Education (CME)," http://www.ama-assn.org/ama/pub/education-careers/continuing-medical-education.page? (accessed January 6, 2015).

content and review the same information that the society promotes to its professional civil engineers. ASCE on-demand learning webinars and seminars are described as efficient options for engineers "[to] gain practical, real-world knowledge" from programs developed by experts in the field.[33]

The site offers an overwhelming catalog of webinars for tips on assessing aging structures, waste containment, roadway projects, wetland modeling, winning federal contracts, and more. Webinars range in length from sixty to ninety minutes and cost around $200 for non-ASCE members.

ChemWeb

Pharmaceuticals, particularly their risks and research & development, represent another emerging area of additional professional growth among lawyers. ChemWeb.com provides a portal for relevant and vetted sites for deeper understanding for free, however, visitors are asked to register and become members for full access. *Alchemist* is a brief biweekly online newsletter, listing articles in research and development in chemistry. The ChemWeb site includes archived old issues back to 2004. Under the "News" tab, the site includes product and company information for tracking research developments and industry news.

National Clearinghouse for Science, Technology & the Law (NCSTL)

The NCSTL site brings together resources for members of the legal and scientific communities. Forensic scientists developed this site for themselves, and it offers a helpful window into their professional discourse and resources.

Under the "Education & Training" heading users find a variety of videos. Of particular interest among the seven titles listed specifically as "Training" is "Forensic Science Course for Capital Litigators." Registration and credit awards for this course are available through the Florida Bar. Under the "Lectures by Renowned Experts" tab, researchers can find several older videos and their transcripts on the impact of post-traumatic stress disorder on the criminal justice system and on the role of DNA evidence as related to human rights.[34]

National Academy of Sciences (NAS)

For 150 years, the National Academy of Sciences (NAS) has been the nation's largest private non-profit organization for exploration and research in the many scientific fields. The merged National Academies' website (which includes NAS and its subgroups:

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[33] ASCE "On-Demand Learning" http://www.asce.org/continuing-education/on-demand-learning/ (accessed January 6, 2015).
[34] National Clearinghouse for Science, Technology & the Law. "Education & Training," http://www.ncstl.org/education (accessed January 6, 2015).

National Academy of Engineering, Institute of Medicine, and National Research Council) offers a range of podcasts from several radio series that aired on public media and Vimeo and YouTube videos that address advances in science and major national issues.[35]

The National Academies also provide links to many reports and proposals, written by its members in response to emerging developments, and also its much-heralded *Proceedings of the National Academy of Sciences of the United States of America*, which turns 100 this year.

Government Agencies' Resources

Various agencies within the federal government also promote continuing education resources on their websites, however, visitors are most likely to find newsletters and reports rather than in depth internal training tools. These resources would be of most benefit to professionals already well-acquainted with the disciplines and interested in staying abreast of current developments. The few agencies that do have video continuing education tools use third parties for their development and delivery.

The National Science Foundation (NSF)

The public counterpart to the NAS is the National Science Foundation. The NSF website has a limited number of speeches and no online courses akin to what other organizations have posted, but the NSF does make available breaking news releases on discoveries in twelve major areas (for example, Biology, Computing, Engineering, Mathematics, People & Society, and Physics). Interested parties may set up email alerts to have any news postings sent directly to their in-boxes. Of potential interest are reports entitled, *Selling and Buying Water Rights*, *Local 3-D Printing Hubs Bring Manufacturing Back to US*, *Cybersecurity: It's about Way More than Countering Hackers*, and *Researcher Studies How Different Brain Regions React during Tasks*.[36]

The National Technical Information Service (NTIS)

The National Technical Information Service is a branch of the Department of Commerce, but its educational offerings go beyond even Commerce's expansive scope. Part of its declared mission is "to promote …innovation and… growth by collecting and disseminating scientific, technical, and engineering information to the public and

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[35] National Academies. "Multimedia," http://www.nas.edu/multimedia/index.html (accessed January 6, 2015).
[36] National Science Foundation. "Discoveries," http://www.nsf.gov/discoveries/ (accessed January 4, 2015).

industry…"[37] To this end the NTIS collects descriptions of government-funded scientific, technical and engineering and business resources into its bibliographic database. It includes 600,000 full-text reports published since 1964.[38]

United States Patent and Trademark Office (USPTO)

An exception to the norm among federal agencies' continuing education offerings is the tools promoted by the United States Patent and Trademark Office (USPTO). The USPTO site has an Intellectual Property Awareness Assessment Tool (in Beta II) that allows visitors to test their intellectual property acumen. The assessment is a joint effort of National Institute of Standards and Technology/Manufacturing Extension Partnership. At the conclusion of the assessment, the reviewer receives customized educational materials based on the assessment results.

The test and its results are not legal advice and do not replace comprehensive study of IP law, but individual results can indicate areas that merit further research and study. The assessment covers five general categories: IP strategies & best practices, international IP rights, IP asset tracking, licensing technology to others, and using technology of others. Five additional areas may be included or omitted (as needed): copyrights, design patents, trademarks, trade secrets, and utility patents[39]

Internal Revenue Service

The Internal Revenue Service (IRS) offers continuing education units for tax professionals who successfully complete courses; however, none of the courses are products of the IRS. Instead, the agency relies on accredited and licensed educational institutions to develop the programs. The IRS site provides a portal to all these approved educational partners.[40]

The spreadsheet is overwhelming and appearance on the list does not guarantee that each provider has a course available. In contrast to other services, the majority of these sessions are not web-based. They are more traditional sessions that require participants to attend in person at a designated time.

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[37] National Technical Information Service. "About NTIS," http://www.ntis.gov/about/ (accessed January 7, 2015).
[38] ____. "NTIS Bibliographic Database," http://www.ntis.gov/products/ntis-database/ (accessed January 7, 2015).
[39] USPTO. "Assessment Tool," http://www.uspto.gov/inventors/assessment/index.html (accessed January 4, 2015).
[40] IRS. "Approved Continuing Education Providers," https://ssl.kinsail.com/partners/irs/publicListing.asp (accessed January 7, 2015).

Conclusion

Professionals cannot expect to remain static and complacent in their knowledge base, even when their basic responsibilities remain static. New case law and legislation and regulations are written that demand vigilance and review. Likewise, maintaining expertise in a completely different field is a continual progress.

The advantages of pursuing online certification and courses hinge on their modular nature. They allow participants to customize their learning by choosing only the courses of greatest interest. They also conform to the student's schedule, without requiring any relocation, commuting or committing to a daily, course-dictated schedule.

Professionals can and should consult with experts in other fields. There is no quick and easy substitute for years of in depth study reinforced by practical application. However, retooling is a reality and the approaches discussed above provide credible means to develop a competency beyond the law. By reviewing online course of accredited universities, major education outlets, professional organizations, and government agencies, one can pursue and customize a learning experience to achieve professional development goals.