

# **THE AUTOMATED LEGAL CLINIC: FAMILY DIVISION, APPELLATE SECTION**

KATHERINE L.W. NORTON\*  
MORGAN A. GRAY†  
WESLEY M. OLIVER‡

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\* Associate Dean for Faculty Scholarship, Director of Clinical & International Programs, Associate Professor, Thomas R. Kline School of Law of Duquesne University.

† Ph.D. Candidate, Intelligent Systems, University of Pittsburgh; Adjunct Professor, Thomas R. Kline School of Law of Duquesne University.

‡ Professor, Thomas R. Kline School of Law of Duquesne University.

## I. INTRODUCTION

The potential of modern technology to enhance access to justice is frequently touted.<sup>1</sup> However, with some notable exceptions,<sup>2</sup> most legal technology research and development has not been aimed towards expanding access to justice.<sup>3</sup> Nevertheless, the enthusiasm for legal automation should translate to the work of legal aid organizations. In the case of law school clinics, training law students to design automated systems not only gives the clinic the benefit of a system that allows better use of limited human resources but also trains students in issue spotting, design thinking, project management, and identifying ways in which technology can be used to answer legal questions or manage legal processes. The potential is extraordinary, but accounts of actual projects are now needed to show that the potential can be realized.<sup>4</sup>

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<sup>1</sup> See, e.g., Sherley E. Cruz, *Coding for Cultural Competency: Expanding Access to Justice with Technology*, 86 TENN. L. REV. 347, 357–72 (2019); J.J. Prescott, *Improving Access to Justice in State Courts with Platform Technology*, 70 VAND. L. REV. 1993 (2017) (exploring the potential for innovations in legal technology to improve access to the justice system).

<sup>2</sup> See, e.g., Amy J. Schmitz, *Expanding Access to Remedies Through E-Court Initiatives*, 67 BUFF. L. REV. 89 (2019) (exploring online dispute resolution tools in contexts such as small claims and property tax disputes); Amy J. Schmitz & John Zeleznikow, *Intelligent Legal Tech to Empower Self-Represented Litigants*, 23 COLUM. SCI. & TECH. L. REV. 142 (2022) (same).

<sup>3</sup> For example, TurboTax, while marketed towards individuals, does not make tax filing free. Even much of the legal technology development in the academy community has been with a profit motive and is intended to be used by more sophisticated parties, rather than low-income individuals needing legal aid. For example, Lex Machina is a Silicon Valley startup that spun out of a joint project of Stanford University Law School and Computer Science Department. It “provides subscription access to data and technology-enabled analytics regarding litigation decision support, peer company benchmarking, patent portfolio evaluation, and outside counsel selection and management.” *Lex Machina Closes \$4.8M Series A Funding Led by Cue Ball Capital*, LEX MACHINA <https://lexmachina.com/media/press/series-a-funding/> (last accessed June 16, 2024). A Duke Law School report captures a real quandary that developers face: “We’ve struggled to have a business model – are we a social enterprise? How can we monetize without charging people we serve?”. See Kelli M. Raker, *From Founded to Funded: Challenges & Visions for Justice Tech*, DUKE CENTER OF LAW & TECH (Oct. 2023), [https://law.duke.edu/sites/default/files/images/embed/from\\_founded\\_to\\_funded\\_challenges\\_visions\\_for\\_justice\\_tech\\_oct2023.pdf](https://law.duke.edu/sites/default/files/images/embed/from_founded_to_funded_challenges_visions_for_justice_tech_oct2023.pdf).

<sup>4</sup> See Claire Johnson Raba, *Low-Income Litigants in the Sandbox: Court Record Data and the Legal Technology A2J Market*, ST. JOHN’S L. REV. (forthcoming 2024). In order to effectively develop legal technologies that assist with addressing the justice gap, there is a great need for data to evaluate the effectiveness of these advances and to assist in their development. Some argue that it is necessary to create greater access to court record data for analysis to aid in this evaluation. *Id.* at 1–11. Given that this data collection is only in its

In that vein, we hope to add our granular perspective to the conversation about how legal technology can be used to enhance access to justice while training students. In this essay, we offer a case study of our efforts to work with law students in the Tribone Center for Clinical Legal Education at the Duquesne Kline School of Law to produce and implement an automated system to ensure that litigants who seek relief from custody determinations in family court have potentially viable legal issues for appeal. In Pennsylvania, where our clinical program is located, those appealing custody decisions must satisfy very demanding procedural requirements in their notice of appeal, which must be made within thirty days of the trial court's determination. Pro se litigants with viable appellate issues are often precluded from taking an appeal because their notices of appeal fail to include essential information. Students in our clinic worked with a computer programmer to design, tweak, test, and implement a computer program that would assist pro se litigants in ensuring that they had satisfied the procedural requirements for a custody appeal and that would enable screening attorneys and students in the clinic to determine whether a litigant who had filed such initiating documents had satisfied these requirements.

## II. BACKGROUND

Those with low income do not have access to justice in the same ways as others.<sup>5</sup> Low-income litigants often cannot afford counsel or court costs, have difficulties with procedural and substantive law, and do not have the time or bandwidth to address their legal needs given the energies that they must dedicate to daily necessities.<sup>6</sup> It is incumbent upon lawyers and law students to remediate these problems, not only by rendering pro bono services, but also by creating automated solutions to bolster the services they provide. The next section will address one innovative approach taken by lawyers and law students in Pennsylvania, but first, this section sets forth the

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infancy, to continue to develop effective technologies to aid in closing the justice gap, it is important to report on the effectiveness of developed programming, even antidotal accounts.

<sup>5</sup> See Mary C. Slosar, *The Justice Gap: The Unmet Civil Legal Needs of Low-Income Americans*, LEGAL SERVICES CORPORATION (Apr. 2022), <https://justicegap.lsc.gov/resource/2022-justice-gap-report/> (providing information relating to the needs and hurdles experienced by low-income Americans when they attempt to access the civil justice system). This report was published by Legal Services Corporation, a major funder of low-income legal services in the United States.

<sup>6</sup> See Rebecca L. Sandefur, *What We Know and Need to Know About the Legal Needs of the Public*, 67 S.C. L. REV. 443 (2016) (discussing how socioeconomic inequalities can turn into justice inequalities); D. James Greiner, Dalie Jimenez & Lois Lupica, *Self-Help, Reimagined*, 92 IND. L. J. 1119, 1128 (2017).

general problem low-income individuals have in accessing the courts, some places to begin in addressing the problem, and the role of legal technologies.

### A. *The Justice Gap*

The justice gap continues to plague the legal profession. Courts—and ultimately justice—are simply not accessible to those with the greatest need. Despite any progress that has been made since COVID-19 on incorporating technology into the court process to create accessibility, it is simply not enough.<sup>7</sup> The need for new approaches and solutions to assist low-income unrepresented litigants, particularly with civil legal matters, is necessary to ensure that the courts are accessible to all individuals.<sup>8</sup> Civil legal matters concerning housing, benefits, employment, family, and healthcare directly impact the lives of low-income Americans.<sup>9</sup> In fact, 74% of low-income households experienced a minimum of one civil legal problem in 2021.<sup>10</sup> This 74% likely “grossly underestimates” the actual need due to the fact that these statistics only account for individuals that have completed the full intake process at a Legal Services Corporation (LSC) funded service provider, as it does not incorporate those who sought assistance from non-LSC funded programming like law school legal clinics, or those who simply did not seek assistance due to the overwhelming nature of the legal process.<sup>11</sup>

Despite this great need, a number of low-income individuals are unable to receive the necessary assistance.<sup>12</sup> Specifically, for these civil legal problems, 92% of low-income Americans do not get “any or enough legal help.”<sup>13</sup> In 2021, of the 1.9 million low-income individuals who sought assistance from civil legal aid providers, only one out of two were able to receive any form of assistance.<sup>14</sup> Other data has shown that in 80% of family law cases, at least one party is unrepresented.<sup>15</sup>

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<sup>7</sup> See Avital Mentovich et. al., *Legitimacy and Online Proceedings: Procedural Justice, Access to Justice, and the Role of Income*, 57 LAW & SOC'Y REV. 189, 209 (2023). See also Benjamin P. Cooper, *Preliminary Thoughts on Access to Justice in the Age of COVID-19*, 56 GONZAGA L. REV. 227, 240 (2021).

<sup>8</sup> See Slosar, *supra* note 5.

<sup>9</sup> *Id.* at 33–34.

<sup>10</sup> *Id.* at 8.

<sup>11</sup> *Id.*

<sup>12</sup> *Id.* at 8–9.

<sup>13</sup> *Id.* at 7.

<sup>14</sup> *Id.* at 9.

<sup>15</sup> Michele N. Struffolino, *Taking Limited Representation to the Limits: The Efficacy of Using Unbundled Legal Services in Domestic-Relations Matters Involving Litigation*, 2 ST. MARY'S J. ON LEGAL MALPRACTICE & ETHICS 166, 197–98 (2012).

The problem is not just that low-income individuals are unable to seek counsel.<sup>16</sup> Rather, they tend not to seek recourse by way of litigation at all. Often, individuals may not view their issue as a legal matter but rather as a private, family matter or as a case of “running into bad luck.”<sup>17</sup> Or, the costs associated with going to court, like missing work, finding transportation, and paying for childcare are an impediment. The feelings of anxiety when threatened with a legal problem can be paralyzing for some would-be litigants.<sup>18</sup> Of course, an effect of poverty is that the basic need to provide food, shelter, transportation, medicine, and education comes at the cost of utilizing the legal system, even if resources do exist.<sup>19</sup>

### 1. Limited Legal Services

Because of these limitations, a form of legal aid known as “limited legal services” has become a popular model among low-income individuals, assisting approximately 3.7 million people per year.<sup>20</sup> Limited legal services, also known as unbundled legal services, do not provide full legal representation.<sup>21</sup> Instead, they are designed for volunteer attorneys to perform discrete legal tasks and help individuals navigate procedural hurdles.<sup>22</sup> These tasks can range from drafting letters or pleadings to assisting with the completion of legal forms, and could, in some cases, entail offering legal advice.<sup>23</sup> But the beneficiaries of these services do not typically find general legal advice to be as useful as completing concrete tasks like filling out forms, since following through on that advice poses its own set of challenges.<sup>24</sup>

Nonetheless, even without providing full legal representation, a benefit of limited legal services is helping individuals navigate the procedural

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<sup>16</sup> See generally Rebecca L. Sandefur, *Accessing Justice in the Contemporary USA: Findings from the Community Needs and Services Study*, AM. BAR FOUND. (Aug. 2014), [https://www.americanbarfoundation.org/wp-content/uploads/2023/04/sandefur\\_accessing\\_justice\\_in\\_the\\_contemporary\\_usa\\_aug\\_2014.pdf](https://www.americanbarfoundation.org/wp-content/uploads/2023/04/sandefur_accessing_justice_in_the_contemporary_usa_aug_2014.pdf).

<sup>17</sup> Sandefur, *Legal Needs of the Public*, *supra* note 6, at 448–49.

<sup>18</sup> Greiner et al., *Self-help Re-imagined*, *supra* note 6, at 1128–30.

<sup>19</sup> *Id.* at 1128.

<sup>20</sup> Deborah L. Rhode et al., *Access to Justice Through Limited Legal Assistance*, 16 NW. J. HUM. RTS. 1, 5 (2018).

<sup>21</sup> *Id.* at 2.

<sup>22</sup> D. James Greiner et al., *The Limits of Unbundled Legal Assistance: A Randomized Study in a Massachusetts District Court and Prospects for the Future*, 126 HARV. L. REV. 901, 904 (2013); Andrew C. Budzinski, *Reforming Service of Process: An Access-to-Justice Framework*, 90 U. COLO. L. REV. 167, 183–84 (2019).

<sup>23</sup> Rhode et al., *supra* note 20, at 5.

<sup>24</sup> Rhode et al., *supra* note 20, at 12–13.

hurdles of the justice system.<sup>25</sup> One empirical study found that among the 128 self-represented litigants sampled, there was overarching uncertainty around the legal procedures that might impact the outcome of cases, including knowing when and how to submit necessary forms, filings, and paperwork.<sup>26</sup>

But even the best of pro bono programming with free legal assistance can only work if low-income litigants know of its availability and can successfully qualify for the program itself. Often, to qualify for these limited services, a low-income litigant must both be “income-qualified” and able to articulate their legal need.<sup>27</sup> But even this is a barrier, as individuals often do not have an understanding of the substantive law in order to identify or convey their legal needs.<sup>28</sup> This inability to identify and convey the legal issues makes it very difficult to find and ultimately qualify for a limited legal service.<sup>29</sup> And yet, legal aid and low-income legal service providers are still overwhelmed by the sheer volume of individuals in need of services.<sup>30</sup>

## 2. Law School Clinics

Law school clinics also play a small part in addressing the growing justice gap. Law clinics are charged with teaching students the skills of lawyering, while also typically giving students direct client interaction.<sup>31</sup> Often, clinical law students are working with the most vulnerable of populations, low-income litigants.<sup>32</sup> This comes with unique learning opportunities and challenges for students. Specifically, they see the challenges, including disparate treatment, that low-income litigants face when trying to access the justice system. Students feel frustrated when clients do not return phone calls or do not utilize the available services.<sup>33</sup> Thus, part

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<sup>25</sup> *Id.* at 2–4.

<sup>26</sup> Natalie Anne Knowlton et al., *Cases Without Counsel: Research on Experiences of Self-Representation in U.S. Family Court*, INST. FOR THE ADVANCEMENT OF THE AM. LEGAL SYS. (May 2016), [https://iaals.du.edu/sites/default/files/documents/publications/cases\\_without\\_counsel\\_research\\_report.pdf](https://iaals.du.edu/sites/default/files/documents/publications/cases_without_counsel_research_report.pdf).

<sup>27</sup> See Slosar, *supra* note 5. Identifying an issue as legal and knowing how to seek the appropriate services is particularly difficult for low-income individuals. See generally, Sandefur, *Legal Needs of the Public*, *supra* note 6; Sandefur, *Accessing Justice*, *supra* note 16.

<sup>28</sup> See Sandefur, *supra* note 16, at 11–13.

<sup>29</sup> See Slosar, *supra* note 5, at 44–45.

<sup>30</sup> Slosar, *supra* note 5, at 9.

<sup>31</sup> See AMERICAN BAR ASSOCIATION, Standards and Rules of Procedure for Approval of Law Schools, Standard 304 (explaining the scope and purpose of law school clinics).

<sup>32</sup> Stephen Wizner, *The Law School Clinic: Legal Education in the Interests of Justice*, 70 *FORDHAM L. REV.* 1929, 1934–35 (2002).

<sup>33</sup> *Id.*

of the training that students have to receive to effectively represent low-income litigants is understanding the issues relating to the justice gap.<sup>34</sup> These considerations are also the first step in understanding how technology can effectively assist lawyers and students with addressing the justice gap.

### 3. Legal Technology

Thus far, legal technology has almost exclusively focused on for-profit legal services or court efficiency.<sup>35</sup> Computation has been utilized to facilitate mass e-discovery projects, client billing, legal research, legal strategy, and even jury selection.<sup>36</sup> Legal research tools, such as LexisNexis, have further expanded over the past year to incorporate generative AI models as a research tool.<sup>37</sup> However, these tools and systems are often only available to large law firms or corporations.<sup>38</sup>

Since the COVID-19 pandemic, there has been a boom in utilizing virtual meeting platforms to assist with court proceedings.<sup>39</sup> These virtual proceedings allowed courts to continue during the pandemic and furthered court efficiencies.<sup>40</sup> Even though videoconferencing was utilized in court proceedings prior to the pandemic, its use has evolved from limited circumstances such as immigration and bail hearings to a regular court occurrence allowing for remote testimony, evidence submission, and other conveniences for the court process.<sup>41</sup> While the use of videoconferencing has helped expand court accessibility to more litigants and increased court efficiency, the threshold problem of how to close the justice gap remains.

However, computational systems, in the form of litigation decision support systems, have begun to work their way into the arena of legal services and automated assistance for pro se litigants.<sup>42</sup> One key example is decision support systems, which encompass a variety of technologies designed to help

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<sup>34</sup> *Id.* at 1936–37.

<sup>35</sup> Emily S. Taylor Poppe, *The Future is Bright Complicated: AI, Apps & Access to Justice*, 72 OKLA. L. REV. 185, 189 (2019).

<sup>36</sup> See Jan L. Jacobowitz & Justin Ortiz, *Happy Birthday Siri! Dialing in Legal Ethics for Artificial Intelligence, Smartphones, and Real Time Lawyers*, 4 TEX. A&M J. PROP. L. 407, 409 (2018).

<sup>37</sup> See, *Lexis+ AI*, LEXISNEXIS, <https://www.lexisnexis.com/en-us/products/lexis-plus-ai.page> (last visited July 8, 2024).

<sup>38</sup> See, Taylor Poppe, *supra* note 35.

<sup>39</sup> See Kaitlyn Filip & Kat Albrecht, *Virtual Justice: Measuring Perceptions of Fairness in Civil and Criminal Courts*, 54 LOY. U. CHI. L.J. 1067, 1069 (2023).

<sup>40</sup> See *id.* at 1072–74.

<sup>41</sup> *Id.* at 1073.

<sup>42</sup> Raymond H. Brescia et al., *Embracing Disruption: How Technological Change in the Delivery of Legal Services Can Improve Access to Justice*, 78 ALB. L. REV. 553, 553–54 (2015).

individuals untrained in the legal system understand their legal rights and the remedies available to them in the justice system. As decision support systems have continued to develop as a potential solution to the justice gap, funding sources have also become available to assist in the development of these solutions.<sup>43</sup> These have facilitated decision support systems that help with legal aid intake processes, programs to provide resources and referrals, and programs that provide legal wellness check-ups.<sup>44</sup> These programs help individuals get the assistance that they need. For example, legal wellness checkers help unrepresented individuals identify if they may have legal issues requiring attention and then guide these individuals to resources to help them avoid negative outcomes such as default judgments.<sup>45</sup> Given the effectiveness of these support systems and the technology utilized by large law firms, the continued development of legal technology is not only necessary to but the future of legal practice.

### III. CLINIC BACKGROUND

#### A. Family Law Appellate Pro Bono Project

One particularly difficult process for low-income litigants (and even for lawyers) is the appellate process. During almost every law student's first year, they are required to prepare an appellate brief as well as argue it, and they will often tell you how terrifying this process can be. Law students, however, are not required to follow the procedural requirements associated with these briefs, such as filing location, number of copies required, and digitalization of the briefs.<sup>46</sup> Yet in practice, this is a major component of the appellate process.

Child custody appeals in Pennsylvania are particularly difficult for unrepresented litigants. Appeals dealing with children have a truncated filing deadline as well as additional initial filing requirements in order for the

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<sup>43</sup> Technology Initiative Grant Program, LEGAL SERVS. CORP., <https://www.lsc.gov/grants-grantee-resources/our-grant-programs/tig> (last visited July 8, 2024). The Technology Initiative Grant Program is one of many funding sources available to support the growth of the utilization of innovative technology as a resource to support legal service providers, expand their capacity, and create new ways to assist those in need.

<sup>44</sup> W. Preston Battle IV et al., *Artificial Intelligence: State of the Industry and Ethical Issues*, TENN. BAR J., Mar. 2018, at 24, 26. The program directs individuals to personalized forms, pamphlets, and videos to assist the individual with learning about their particular issue. *See also*, Bridget Gernander, *Access to Justice Made Easy (Well, Easier)*, BENCH & BAR MINN., Aug. 2019, at 16, 18.

<sup>45</sup> *See* Neighborhood Legal Services Legal Wellness Tool, NEIGHBORHOOD LEGAL SERVICES, <https://nlsa.us/legal-wellness-tool/> (last visited July 8, 2024).

<sup>46</sup> *See generally* PA. R. APP. P.



appeal to not be deemed waived.<sup>47</sup> This includes filing a notice of appeal (which includes the necessary procedural history and demographic information), requesting a transcript (or fee waiver for transcript), and filing a concise statement of errors complained of on appeal.<sup>48</sup> The concise statement identifies the litigant's issues with the trial court's process and determination. This statement must be carefully crafted to ensure that issues are not waived or dismissed, and it is often drafted without access to the transcript.<sup>49</sup> Even for a seasoned attorney, following these heavily procedural rules can be difficult. Failure to follow the rules can result in waiver of the appeal.<sup>50</sup> For a low-income unrepresented litigant who struggles with procedural law, these requirements present a nearly insurmountable hurdle.

From these known struggles, the Family Law Appellate Pro Bono Project was born. The Project is a unique limited legal service developed in Allegheny County, Pennsylvania (Pittsburgh being the seat of the county) to help low-income litigants take child custody appeals, among other family law services.<sup>51</sup> The Project is designed to help qualifying low-income litigants appeal a lower court child custody decision and provides the litigant with full representation in the child custody appeal process.<sup>52</sup>

However, the challenges faced by low-income individuals has led to underutilization of this beneficial limited legal service. While the Project offers a needed service, qualifying for it is tricky. A low-income litigant qualifies for the program if: they have a household income at or below 125% of the federal poverty guidelines; they have a final court order; the appeal would be timely; and the appeal is meritorious.<sup>53</sup> Once individuals are

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<sup>47</sup> See PA. R. APP. P. 1925.

<sup>48</sup> See PA. R. APP. P. 904, 905, and 1925.

<sup>49</sup> PA. R. APP. P. 1925. See also *Commonwealth v. Hansley*, 24 A.3d 410, 415 (Pa. Super. Ct. 2011); *In re L.M.*, 923 A.2d 505, 508–09 (Pa. Super. Ct. 2007). While these timelines are not always a bright line rule in family law cases, it does pose a hurdle as it is within the discretion of the court to find waiver. .

<sup>50</sup> Sarah Reeves, Comment, *Appellate Waiver in Pennsylvania and its Effect on Litigants' Rights to Appeal*, U. PA. J. CONST. L. 650, 651, 653 (2023).

<sup>51</sup> *Family Law Appellate Pro Bono Pilot Program*, PALAWHELP.ORG (last updated Feb. 14, 2020), <https://www.palawhelp.org/organization/family-law-appellate-pro-bono-pilot-project>. See *Pittsburgh Pro Bono Partnership*, ALLEGHENY COUNTY BAR FOUNDATION, <https://www.acbf.org/about-us/pittsburgh-pro-bono-partnerships/> (last visited Apr. 17, 2024); Law in the Family, *Episode 22 - Technology and Pro Bono Appeals: An Allegheny Co. Pilot Program Aims to Bring Greater Access to Pro Se Custody Appeals*, PA. BAR ASS'N FAMILY L. SECTION (Dec. 1, 2022), <https://podcasters.spotify.com/pod/show/lawinthefamily/episodes/Episode-22---Technology-and-Pro-Bono-Appeals-An-Allegheny-Co--Pilot-Program-Aims-to-Bring-Greater-Access-to-Pro-Se-Custody-Appeals--Katherine-Norton-and-Morgan-Grey-e1r6ugf>

<sup>52</sup> *Family Law Appellate Pro Bono Pilot Program*, *supra* note 51.

<sup>53</sup> *Id.*

determined to be income qualified for the program, they must complete an application indicating how the lower court made an error of law or abused its discretion.<sup>54</sup> Unfortunately, this qualifying requirement hinders participation because often, litigants will simply express that they do not agree with the order that the trial court has entered.<sup>55</sup> For example, litigants may indicate on their intake forms that they do not agree with the judge as the judge did not listen. This disagreement is not enough to qualify for the Project, as it does not meet the requirement that an appeal be meritorious.<sup>56</sup> However, if conveyed in terms of appealable issues, such as the judge did not appropriately enter the evidence or did not evaluate factors related to the best interests of the child, these litigants would qualify. This leaves non-qualifying litigants without the assistance of the program, which leads to individuals not moving forward with their appeals because they cannot otherwise overcome the procedural hurdles of the process. As a result, even meritorious cases may never move forward for the appellate court's review.<sup>57</sup>

### *B. Considerations for Increasing the Number of Qualifying Litigants*

The question therefore arose as to what could be done to help these litigants qualify for the Project. The increasing use of technology to aid individuals in accessing the court system presented an opportunity to utilize technology with this particular need.<sup>58</sup>

As discussions developed on how to best address this need, it was important to ask the correct question: What do low-income litigants need to successfully utilize this pro bono appellate program? A number of considerations had to be taken into account, including issues specific to pro

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<sup>54</sup> Professor Norton has served as a reviewing attorney for the project since its inception. This anecdotal information comes from years of her experiences trying to qualify low-income litigants for the project.

<sup>55</sup> *Id.*

<sup>56</sup> *Id.*

<sup>57</sup> *Id.* When meritorious cases do not reach the court they have a cascading impact. Often issues that directly impact low-income individuals do not reach the court's ears due to the difficulties and costs of the appellate process. See Robert B. McDuff, *M.L.B. v. S.L.J. and the Right of Poor People to Go to Court*, 18 MISS. C. L. REV. 5, 5–6 (1998).

<sup>58</sup> American Bar Endowment Opportunity Grants support new initiatives, including those using technology, to further access to justice. See *Opportunity Grants*, AM. BAR ENDOWMENT, <https://abendowment.org/opportunity-grants/> (last visited Apr. 17, 2024). Additionally, technological tools have been deemed a method to assist in closing the justice gap. However, through the years, this has been met with skepticism by lawyers, the bar, and the bench. See generally Benjamin H. Barton & Deborah L. Rhode, *Access to Justice and Routine Legal Services: New Technologies Meet Bar Regulators*, 70 HASTINGS L.J. 955, 957 (2019).

se litigants, the implications of having lower income, and the mechanics of utilizing technology within the existing pro bono program.

One consideration was figuring out how to help low-income litigants identify appealable child custody issues. As such, reflecting on how to develop an accessible intake process was important. The process had to avoid adding to the mental load of litigants or place additional burdens on them. Given what we knew about participation in the program, we also sought to demystify the procedural aspects of the appellate process. All of this had to be considered in light of the ethical implications of utilizing a computer-based intake process.<sup>59</sup> In addition, we had to consider the complexities of the legal system and pay attention to how non-lawyers understand the legal process and the language of the court.<sup>60</sup>

Another concern was technology accessibility. This included issues faced not only by low-income litigants but also by attorneys in the pro bono program. On the litigant side, these concerns included internet availability, familiarity with technology generally, and knowledge of technological resources.<sup>61</sup> On the attorney side, we sought to find a mechanism that worked within the existing pro bono project. Given the time that it took to develop and recruit attorneys for the initial project, it was important to ensure that the program would further the mission of the existing project and not hinder its utilization. In addition, we also had to ensure that any solution did not create additional burdens on volunteer attorneys, who have limited availability and often were not primarily practicing in the family law field.<sup>62</sup>

With these considerations in mind, we created a framework aimed at facilitating the screening process for the pro bono program. We applied for and were awarded an American Bar Endowment Opportunity Grant, which provided the funding to consult, design, and ultimately deploy a computational system, specifically a litigation decision support system. The ultimate goal was to develop a system to help individuals identify issues for

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<sup>59</sup> See generally Ed Walters, *The Model Rules of Autonomous Conduct: Ethical Responsibilities of Lawyers and Artificial Intelligence*, 35 GA. ST. U. L. REV. 1073 (2019) (discussing the ethical implications of artificial intelligence use in the law).

<sup>60</sup> See, e.g., Bridget Gernander, *Access to Justice Made Easy (Well, Easier)*, BENCH & BAR MINN. 16, 18 (2019).

<sup>61</sup> Within the United States exists a technology gap and digital divide, as not everyone has the same access to these tools and resources. See COUNCIL OF ECON. ADVISERS, MAPPING THE DIGITAL DIVIDE 7 (2015); Peter K. Yu, *The Algorithmic Divide and Equality in the Age of Artificial Intelligence*, 72 FLA. L. REV. 331, 341 (2020).

<sup>62</sup> In part, a hope of the development of the program is to create a process that prepares an appeal in a way that is easy to initiate for a volunteer attorney, streamlining these time sensitive aspects of the appeal process and allowing the attorney to focus on the substantive aspects of the appeal.

appeal and prepare appeal initiating documentation, thereby increasing the utilization of the pro bono program.<sup>63</sup>

### *C. Partnering with the Duquesne Kline Family Law Clinic*

Knowing the needs and goals of the program, we made sure to seriously address the concerns that could impact the success of the pro bono program. Some of these concerns included the availability of technology, the ability to fit the technology within the existing program, and the capacity of the program to help with legalese and procedure issues.

The key to addressing these concerns was to focus on making the justice system more accessible, which was done by partnering with an organization familiar with the needs of low-income litigants and the difficulties that they face when interfacing with the justice system. In order to develop effective legal technology, an understanding of legal services and the issues surrounding access to justice is necessary.<sup>64</sup> Ultimately, we partnered with the Thomas R. Kline School of Law of Duquesne University's Family Law Clinic. This allowed for the development of a program that could be understood and utilized by clinic-trained student attorneys, who would create an intake packet that would be shared with the reviewing attorney and ultimately the attorney taking the pro bono appeal.

Specifically, by partnering with the Clinic, we were able to train students to utilize the computer program assuring that: technology knowledge and availability would not discourage participation in the program; ethical concerns would be addressed given the supervision provided by a licensed attorney; issues relating to legal language and procedure would be moot; and flexible design options would be allowed for the program itself. With this partnership created, we were then able to shift our focus to the ultimate program design.

## **IV. THE DECISION SUPPORT SYSTEM**

The next step was to focus on the system itself and the legal considerations. For child custody appeals in Pennsylvania, there is a relatively limited realm of possibilities for appealable issues.<sup>65</sup> The first step was to group these potential areas for appeal into types such as: jurisdictional requirements; requirements for standing; factors relating to the best interest

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<sup>63</sup> Amanda Robert, *ABE Supports 12 'New and Critical Initiatives' Through Annual Grant Program*, ABA DAILY NEWS (Feb. 9, 2022).

<sup>64</sup> See Raba, *supra* note 4, at 49 (explaining that building effective legal technology tools requires sufficient data to understand the landscape of the problem).

<sup>65</sup> 23 PA. CONS. STAT. §§ 5321–40 (2024).

of the child; presumption challenges; evidentiary issues; relocation factors; and factors relating to grandparents.<sup>66</sup> From there, we could move to system development, focusing on how to best ensure that low-income litigants have the necessary materials for review.

Our approach addressed the intake process, where financial eligibility for the pro bono project and potential legal issues are determined. This ultimately resulted in the creation of a single pipeline reliant on two different decision support systems, detailed below. The motivation behind the creation of both systems was efficiency and simplicity for the low-income litigant. Much of the information needed to determine financial eligibility and relevant legal issues is repetitive and cyclical. By recycling information already collected in one step and by batch processing<sup>67</sup> similar tasks, we could effectively process six distinct tasks in two steps. The information used by both systems was obtained via questions asked to litigants directly, or on their behalf, such as through intake personnel. Both tasks relied on the user answering specific and easy-to-understand questions. Two legal experts familiar with the area determined what questions needed to be answered by litigants to determine financial eligibility and potential legal issues. Specific care was paid to formulating questions to avoid implicit and underspecified language. By paying attention to the language used in the questions, we expect to receive better, more accurate answers from users and continue to facilitate utilization of the pro bono program.

#### *A. Financial Eligibility*

The first decision support system was focused on financial eligibility for the pro bono project. This system simultaneously processed three distinct tasks:

1. Determining whether an appealable order exists;
2. Determining whether the applicant is financially eligible for the program; and
3. Automatically drafting a petition for the litigant to proceed in forma pauperis, including support documents (financial statement and draft order).

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<sup>66</sup> *Id.*

<sup>67</sup> By batch processing, we refer to the process of accomplishing multiple tasks in a single procedure.

Of course, basic information like biographical information, the date of a court's appealable order, and other procedural details can be recycled for a number of purposes. At a slightly more complex level, the same information that is used to determine financial eligibility for the pro bono program is also used to draft the petition for the litigant to proceed in forma pauperis. Because both programs concern financial eligibility on nearly identical standards, the information can be recycled. This can be incredibly effective in aiding low-income litigants by alleviating some of the strain on their available bandwidth. Often, low-income litigants become frustrated with the system and the need for repetitive information within the necessary initiating documentation.

At this stage, information about an applicant's income, public support, debts, and obligations were collected. The system automatically determined whether the applicant was financially eligible for the program. If the system determined that the applicant was not eligible, it returned a logfile with all relevant information explaining in detail why the applicant was refused on the grounds of financial eligibility. With this output, a human could verify whether a proper determination was made as to financial eligibility. If the system determined that the applicant was financially eligible for assistance, a similar document was returned for a human to verify, and the system automatically drafted an application to proceed in forma pauperis, along with supporting documentation.<sup>68</sup>

### *B. Determining Legal Issues*

The second decision support system was centered on legal issues. This system simultaneously processed three distinct tasks:

1. Determining whether there is any point of error that is appealable;
2. Drafting a Concise Statement of Errors Complained of on Appeal;  
and
3. Drafting a Notice of Appeal.

This system was designed to target issues related to child custody and addressed the following issues:

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<sup>68</sup> Incorporating student attorney and supervising attorney review and verification addresses the ethical concerns that often come up when utilizing legal technology. For example, this ensures that legal issues are not missed due to input error. It also allows opportunity for further explanation when needed. *See generally* Drew Simshaw, *Ethical Issues in Robo-Lawyering: The Need for Guidance on Developing and Using Artificial Intelligence in the Practice of Law*, 70 HASTINGS L.J. 173 (2018).

1. Presumptions in cases concerning primary physical custody;
2. Standing of the parties with respect to custody;
3. Partial standing of the parties with respect to custody;
4. Relocation of the child;
5. Issues as to evidence, such as the ability to present evidence or call witnesses;
6. Determinations of jurisdiction such as initial jurisdiction, exclusive and continuing jurisdiction, jurisdiction to modify custody determinations, temporary emergency jurisdiction, etc.;
7. Issues with respect to a judge's determination of child custody under 23 Pa. Cons. Stat. §5328;
8. Enforcement and contempt of custody orders;
9. Consideration of criminal convictions in custody decisions; and
10. Consideration of child abuse in custody decisions.

This system functions as a basic expert system, in the form of decision support. According to Ashley, “legal expert systems deal with narrow areas of law but have enough ‘knowledge and expertise’ in the narrow domain to ask a client user pertinent questions about his/her problem, to customize its answer based on the user’s responses, and to explain its reasons.”<sup>69</sup> In our case, the decision support system functioned by leading the user through a system of questions to determine potential legal issues. This was accomplished by modeling language in statutes pertaining to child custody. The structure of these statutes is easily translated to a logic capable of assessing potential issues for appeal. This reasoning is similar to how a lawyer may deduce whether the requirements of a statute have been met. Take, for example, 23 Pa. Cons. Stat. § 5327, pertaining to presumption in cases concerning primary physical custody:

§ 5327. Presumption in cases concerning primary physical custody.

(a) Between parents.—In any action regarding the custody of the child between the parents of the child, there shall be no presumption that custody should be awarded to a particular parent.

(b) Between a parent and third party.—In any action regarding the custody of the child between a parent of the child and a nonparent, there shall be a presumption that custody shall be awarded to the parent. The presumption in

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<sup>69</sup> KEVIN D. ASHLEY, *ARTIFICIAL INTELLIGENCE AND LEGAL ANALYTICS: NEW TOOLS FOR LAW PRACTICE IN THE DIGITAL AGE* 8 (2017).

favor of the parent may be rebutted by clear and convincing evidence.

(c) Between third parties.—In any action regarding the custody of the child between a nonparent and another nonparent, there shall be no presumption that custody should be awarded to a particular party.<sup>70</sup>

This statute is translated to the following logic:<sup>71</sup>

Condition = Presumption of Custody Analysis

While Condition == True:

Q1: Does this case involve primary physical custody?

if Q1

Condition = False

Return: “Based on the input, it does not appear that there is an issue with respect to the presumption because the case does not involve primary physical custody.”

else-if Q1

Q2:

if Q2

Q3: Did the court apply a presumption to either party?

if Q3 == Yes:

Condition = False

Return: “The trial court erred because the court wrongfully applied the presumption to one party when both parties are parents under 23 Pa.C.S.A §5327.”

if Q3 == No:

Condition = False

Return: “Based on the input, it does not appear that there is an issue with respect to the presumption because the court did not apply a presumption to either parent.”

if Q2

Q4:

## 1. Breaking Down the Law

With the help of legal experts, the logic of each statute was modified in the above manner to effectively analyze whether the provision of a statute has

<sup>70</sup> 23 PA. CONS. STAT. §5327 (2024).

<sup>71</sup> We produce only a portion of the translation of the statute for illustrative purposes.



been met and the legal consequences thereof. Ultimately, the system identified any potential issue based on the plain language of the statute, and if none was found or the statute did not apply, the system would return the result that no appealable errors were uncovered.

Each statute was decomposed, and logic was coded based on the following procedure: First, a legal expert examined each statute and determined what a litigant could claim or avail themselves of under a statute, what a litigant needed to show to avail themselves of that statute, and what questions best captured that logic. Second, the logic identified above was coded in a hierarchical manner. Broad, threshold questions were asked first. In the example above, the first question is whether the case involves primary physical custody; if not, the statute does not apply. From there, follow-up questions were asked to “cover” the entire language of the statute. Then the system determined whether a judge made an error or there was no appealable issue.

In the example above, if the case involved primary physical custody, the system next asked whether the dispute was between *both* parents. If yes, the program asked whether a presumption was awarded. If no, the program began another line of questioning that assessed another part of the statute, in this case, subsection (b). If a presumption was awarded, the system pointed out a judicial error because a presumption cannot be given to either parent under 23 Pa. Cons. Stat. § 5327(a). If not, the system ended because when the dispute is between both parents, the rest of the statute does not apply.

The system continued forward, analyzing statutes in this manner.<sup>72</sup> Each single issue of the ten above was addressed. The system was designed to, at a minimum, ask a single threshold question with respect to each of the ten issues. This was designed to ensure that no appealable errors were missed. Because legal rights were at stake, we ensured that human evaluation occurred at appropriate points.

After the system finished running, the system outputted a file containing a long-form explanation, or logs, of the system’s conclusions. Here, every single issue identified by the legal experts that was considered by the program was given an explanation. With this output, the system provided an explainable record of not only what issues were found, but also what issues were not found. If the system identified an appealable issue, the system automatically drafted a Concise Statement of Errors Complained of on Appeal, providing boilerplate language identifying the error. The information leading to the development of the Concise Statement of Errors was provided in an intake format, assisting the reviewing attorney in

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<sup>72</sup> The model’s output is deterministic, meaning specific answers to each question will lead to a definite answer.

accepting the case and preparing for the appeal itself. A Notice of Appeal, specific to the biographical information identified in the first program, was also produced.

All documents automatically drafted by the system were subsequently reviewed by an attorney.<sup>73</sup> This system was designed with the intent of making the intake process and initial stages of an appeal more efficient. It is not intended that this system will eliminate the need for a lawyer altogether. Moreover, in our pipeline, lawyers, law students, and programmers were available along the way to assess the system and its inputs and outputs. Because Duquesne Kline School of Law offers *Coding for Lawyers*, an introductory class in the Python programming language, the system is sustainable and maintainable for future generations. A number of students who know how to program in Python have been and are continually trained to use the system and are capable of updating the system if need be. This is a key component because if the language of a statute is updated, law students who know how to program will be able to effectively analyze existing code and implement changes where necessary.

Ultimately, the system is an explainable, interpretable, and otherwise understandable way of making determinations as to whether individuals are financially eligible for pro bono assistance and whether there are any appealable legal issues available. All of this occurs while keeping in mind program accessibility.

## V. SURPRISING RESULTS

In this past first year that the new application/intake process has existed, there have been anticipated benefits as well as a few unexpected but wonderful benefits. These benefits ranged from more litigants being accepted into the program (anticipated) to discovering alternative legal options for pro se litigants beyond the appellate process (unexpected). Falling within the best of the unexpected benefits, we have also seen an impact on student involvement in guiding the future of legal services.

### A. *Anticipated Benefits*

The primary objective, and ultimate benefit, of developing this program was to improve the intake process to help litigants fully express their meritorious issues for appeal, thus qualifying them for the pro bono project. In fact, we were able increase the number of individuals screened for the pro

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<sup>73</sup> The expert system is deterministic and logs itself, meaning all conclusions reached by the expert system were available for review by the student attorney, supervising attorney, and ultimately the attorney taking the pro bono appeal.

bono program from two in 2020 and 2021,<sup>74</sup> to ten in the first months of the computational system's deployment from January to March 2023. This success was accomplished through the guided interview prompts that students utilized, which assisted litigants in articulating the errors that they believed the trial court made. Following the computer system prompts, litigants were able to easily identify what legal issues could be raised on appeal (such as if there were issues relating to the best interest factors or evidentiary decisions). At the end of its utilization, the system produced a full intake sheet expressing the issues discovered for appeal. The intake document allowed for edits to be completed by the student attorney, in case there was additional information that the pro bono attorney would need either to review the case for acceptance into the pro bono project or if the information was necessary to assist with the appeal itself.

Additionally, due to the complete nature of the documentation prepared through the intake process, the initiating appeal documents were already drafted and ready for review by a volunteer attorney before being filed. This removed the timing hurdle that appears as a result of the tight, thirty-day timetable for filing an appeal related to child custody.<sup>75</sup> The attorney was provided with drafted fee waivers, a notice of appeal, a concise statement of errors raised on appeal, as well as the detailed intake sheet. This allowed the volunteer attorneys to focus their energies on appeal briefing and argument, focusing on the substantive legal issues. This further helped with recruitment of volunteer attorneys and their ability to take on a pro bono appeal by removing the hindrance of that initial timing hurdle.

Finally, the program prompts made it easy to quickly determine if there were any bars that would prevent an individual from moving forward with an appeal. Specifically, it quickly identified whether an appeal was ripe and timely and whether issues were properly preserved and appealable. This ensured that only individuals who were eligible for an appeal were reviewed for acceptance into the pro bono project, which helped volunteer attorneys move the appropriate cases forward. In addition, the program also helped low-income litigants in an unexpected way by identifying alternatives.

### *B. The Unexpected*

Not every case is suited for appeal, which is particularly true for child custody cases. In Pennsylvania, when an appeal is filed for a child custody order, all lower court proceedings (with the exception of enforcement) are

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<sup>74</sup> The low number of individuals screened was likely not primarily attributable to the pandemic, as screening was still open and appeals were still moving forward during that time.

<sup>75</sup> PA. R. APP. P. 102; 210 PA. CODE §2185(a)(2) (2024).

stayed.<sup>76</sup> When a custody action is stayed, a litigant cannot request any modification of the set order dictating where the child physically resides or how decisions for the child are made until the appeal is resolved, unless the modification is in the best interest of the child.<sup>77</sup> This can result in a substantial amount of time passing before the appeal is resolved.<sup>78</sup>

Given the implications for a litigant when a child custody appeal is taken, being able to quickly identify if the individual litigant's goals and facts support the lengthy process is imperative. As anticipated, by utilizing the computational system, student attorneys were able to quickly identify if the case was appropriate for appeal and if there was a potential meritorious issue that would qualify the litigant for the pro bono program.

Unexpectedly, however, students were able to utilize the computational system to identify if the case was not appropriate for appeal in light of the litigant's goals. Students were then able to send the litigant in a different direction with resources, and in some circumstances by accepting the case to the clinic. This is because the students were able to utilize the program to quickly identify the issues that were truly impacting the low-income litigant. Often this form of triage was able to identify that an appeal may not be the best course of action for the litigant. For example, in one of the cases screened through the program, it became clear that while the litigant could appeal the order due to the best interest analysis by the trial court, it made more sense to seek a modification due to a change that had happened following the entry of the original order.<sup>79</sup>

This type of circumstance highlighted that the system could be used to help student attorneys, limited legal service providers, and even potentially low-income litigants identify legal issues, thereby acting as a legal "symptom checker." "Check your legal health/wellness" programs have been gradually growing as part of legal aid provider websites over the past few years.<sup>80</sup> These help low-income individuals overcome some of the hurdles associated with available bandwidth as well as legal issue identification. Because low-income

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<sup>76</sup> 210 PA. CODE §1701 (2024).

<sup>77</sup> 23 PA. CONS. STAT. § 5338(a) (2024) (stating that "[u]pon petition, a court may modify a custody order to serve the best interests of the child").

<sup>78</sup> While appeals in Pennsylvania dealing with children are "fast tracked," there is still a significant time that can pass before the appeal is resolved. Specifically, once the appeal is filed and processed, the briefing schedule alone can take fifty-eight days. This does not account for the timing necessary to schedule an argument or comply with the other procedural aspects of the appeal. *See* 210 PA. CODE §2185(a)(2) (2024).

<sup>79</sup> In this specific case, a concern relating to the safety of the family had arisen between the time of the original order and the timetable for appeal. Through the intake process, it became clear that the better path for the litigant was to initiate a new action seeking relief to ensure the safety of the family.

<sup>80</sup> *See, e.g., Legal Wellness Check Up*, NEIGHBORHOOD LEGAL SERV., <https://nlsa.us/legal-wellness-tool/> (last visited Apr. 17, 2024).

litigants sometimes fail to identify issues as legal, having a computer program that essentially works as a legal symptom checker telling litigants whether a specific problem is legal in nature would be immensely beneficial in the child custody arena. It could also help guide the nearly four million individuals a year who utilize limited legal services, making the services more accessible when considering the frequently difficult intake process.<sup>81</sup>

By having law students within the Family Law Clinic utilize the system with our low-income litigants, we also noticed that the process had the positive impact of empowering litigants. Often, the intake or screening process for programs such as the Family Law Appellate Pro Bono Project can cause the litigant to become “unintentionally disempowered.”<sup>82</sup> This disempowerment comes in part from the complicated, unclear, and differing intake processes often used between various programs, and the fact that an individual may still be rejected from pro bono services despite going through the intake process.<sup>83</sup> When taking into account that the appeal process itself is mysterious and that an individual may not qualify for the pro bono program based on their description of the issue, low-income litigants may be further disempowered from participating in the appeal process.<sup>84</sup> However, with the unexpected benefit of the student utilized program acting as a “symptom checker,” students were able to empower litigants with other options for services, helping litigants understand the impact of the various steps they could take to address their legal needs.

In addition, we saw a positive impact on the students and their creativity in solving the justice gap. Students in the Family Law Clinic varied in their level of coding experience. Despite this, all of the students were quick to become active in providing input in the development process of the computational system. They were instrumental in identifying bugs or places where the system could be enhanced. This led to the very detailed nature of the intake sheet developed by the program. Additionally, student creativity led to ideas for future projects, such as general screening tools in other areas of law and other potential uses for the system. For example, could the system be utilized for the preparation or identification of common issues where individuals fail to preserve or address legal issues at the trial court level? Could the system be utilized as a tool to prepare unrepresented individuals for court? As professors, we noticed that the skills students need to be

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<sup>81</sup> See Rhode et al., *supra* note 20, at 5.

<sup>82</sup> Jabeen Adawi, *Changing Every Wrong Door into the Right One: Reforming Legal Services Intake to Empower Clients*, 29 GEO. J. POVERTY L. & POL’Y 361, 389–90 (2022). Professor Adawi discusses the need for reform in legal aid screening and intake process. *Id.* at 378.

<sup>83</sup> *Id.* at 385–87.

<sup>84</sup> See *id.* at 387.

successful lawyers were also enhanced through their involvement in the program. The program enhanced students' ability to issue spot, counsel clients, and problem solve, while also encouraging them to approach clients holistically and address all of their needs, not just their legal problems.

## **VI. LOOKING TO THE FUTURE**

The enthusiasm of our students has made it clear that this program is simply a starting point for their involvement in increasing access to justice through the creation of legal technology that assists low-income litigants. The program model is easily transferable to other areas of law. Further, law students can identify the issues they see directly impacting their clients each day and leverage the implications of being a generation that has utilized technology their entire lives. While the wheels of justice turn slowly, technological advancements are achieved every day. Combining technology with the repertoire of future lawyers could expand access to justice initiatives. Just as limited legal service models combine advice with some document preparation assistance, the same can be done by utilizing technology in the law school setting to further legal service initiatives.