

## ORIGINAL RESEARCH ARTICLE

### A mobile app for public legal education: a case study of co-designing with students

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The sharp decline in levels of state-funded legal support has highlighted the importance of publicly available sources of legal information for facilitating access to justice. Mobile apps present an opportunity to provide legal information that can be targeted at particular audiences. University law schools, sometimes in partnership with civil society organisations, are beginning to engage their students in cross-disciplinary projects to create mobile apps, which can provide free legal information and guidance to the public.

The aim of this case study was to evaluate one such project which involved the co-design of a mobile app for the purpose of disseminating information on employment law. Law, education and computing academics worked with undergraduate law students over a period of 3 months and the prototype app was reviewed by legal advice charities. The findings have implications for how universities can work across disciplines and in partnership with civil society to provide opportunities for their students to use technology to apply their disciplinary knowledge to enhance the public good.

**Keywords:** mobile app; public legal education; bricolage; co-design; law tech; employability

#### Introduction

This article reports on the introduction and evaluation of a mobile app design project, *Digital Justice*, into a distance learning undergraduate law degree module run by the Open Justice Centre<sup>1</sup> at The Open University Law School.

*Digital Justice* was devised as an addition to their portfolio of clinical legal education (CLE) activities undertaken by law students either as part of a credit-bearing undergraduate module W360: *Justice in Action*, or on an extracurricular basis. In addition to the *Digital Justice* innovation, the Open Justice Centre has utilised technology in a number of contexts to deliver CLE projects, such as its online free legal advice clinic and the development of a smartphone-based virtual reality application for the development of professional legal skills (Ryan 2019; McFaul and FitzGerald 2020).

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<sup>1</sup> <http://law-school.open.ac.uk/open-justice/>

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CLE is a pedagogy that foregrounds experiential learning methods by engaging students in professional activities such as providing legal information, advice or guidance to clients (Bloch 2010; Giddings 2013; Jones, McFaul, and Ryan 2017; Maharg 2016). Given the increasing relevance of technology in the practice of law, CLE practitioners are beginning to experiment with ways to engage their students in practical projects which utilise technology for the purposes of delivering *pro bono* legal services and for the development of student employability skills (Ryan and McFaul 2020). One emergent theme within this field is harnessing mobile apps for the purpose of promoting access to legal information. Providing accessible sources of legal information is recognised as essential for addressing legal needs (Pleasence and Balmer 2014), and mobile apps present an opportunity to develop and provide legal information that can be targeted at particular audiences. Utilising websites and mobile apps for this purpose are starting to be used by civil society organisations to engage with their client base, although there is considerable variation in the extent and range of engagement.

Existing apps and websites seem to fall into three main categories: *information* (such as Advice Now<sup>2</sup> or Legal Utopia<sup>3</sup>); *streamlining/organising procedures online* (e.g. Claim Technology<sup>4</sup>) and *brokering* between providers and users (e.g. The Jeanie Project<sup>5</sup>). In line with these developments, CLE courses are also beginning to experiment by utilising mobile apps to provide *pro bono* legal information and guidance. *Digital Justice* represents one such initiative.

The *Digital Justice* work reported here was a pilot for a scalable, interdisciplinary, *pro bono* legal project which would allow students to work collaboratively with each other, and with law and computing academics, to utilise technology to address unmet legal needs. This pilot phase took place during 2019, with eight Open University law students tasked with working in two small groups of four to develop a prototype mobile app that would provide information on aspects of employment law. The prototype was shared with civil society partners for review as a proof of concept for publishing an app in the future.

The focus of the work was to answer these three research questions:

RQ1: How can legal education students help improve the access to, and public understanding of law through technology-enabled solutions?

RQ2: How can university module convenors introduce learning activities into CLE that can engage students in real-world settings?

RQ3: What is the role that legal charities/organisations can play in terms of RQ1 and their engagement with students?

This work was underpinned by the educational approach known as *bricolage* (Scanlon *et al.* 2013; Sharples *et al.* 2014). Bricolage is ‘creative tinkering’, using existing tools and resources to engage in innovation relating to a clear educational goal. Like innovation in many other areas (such as product design or engineering), it consists of a well-informed process of ‘trying it out to see how it works’. This should then result in a growing evidence base, upon which new concepts, theories

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<sup>2</sup> <https://www.advicenow.org.uk>

<sup>3</sup> <https://legalutopia.co.uk>

<sup>4</sup> <https://claimtechnology.co.uk>

<sup>5</sup> <https://thejeanieproject.org.uk>

and approaches are formed. Bricolage is a key part of the Technology-Enhanced Learning (TEL) innovation process, as evidenced in the ‘Beyond Prototypes’ report (Scanlon *et al.* 2013).

Several elements from Figure 1 are exemplified through this work. For instance, ‘*technology developments in wider society*’ here refers to the use of the existing, and widely used, Wordpress platform, which was utilised for this work, and also the use of current mobile apps to facilitate the provision of legal information and education to the general public and other interested parties (e.g. charities who support legal matters). ‘*Practical research and expertise*’ came from both the computing academic (an associate lecturer, or AL) and the students (who provided content expertise on legal issues). Not the least, the law and education academics also contributed their expertise in terms of designing the activity initially, and also in the research design used to investigate the impact of the work. These two elements were instrumental in

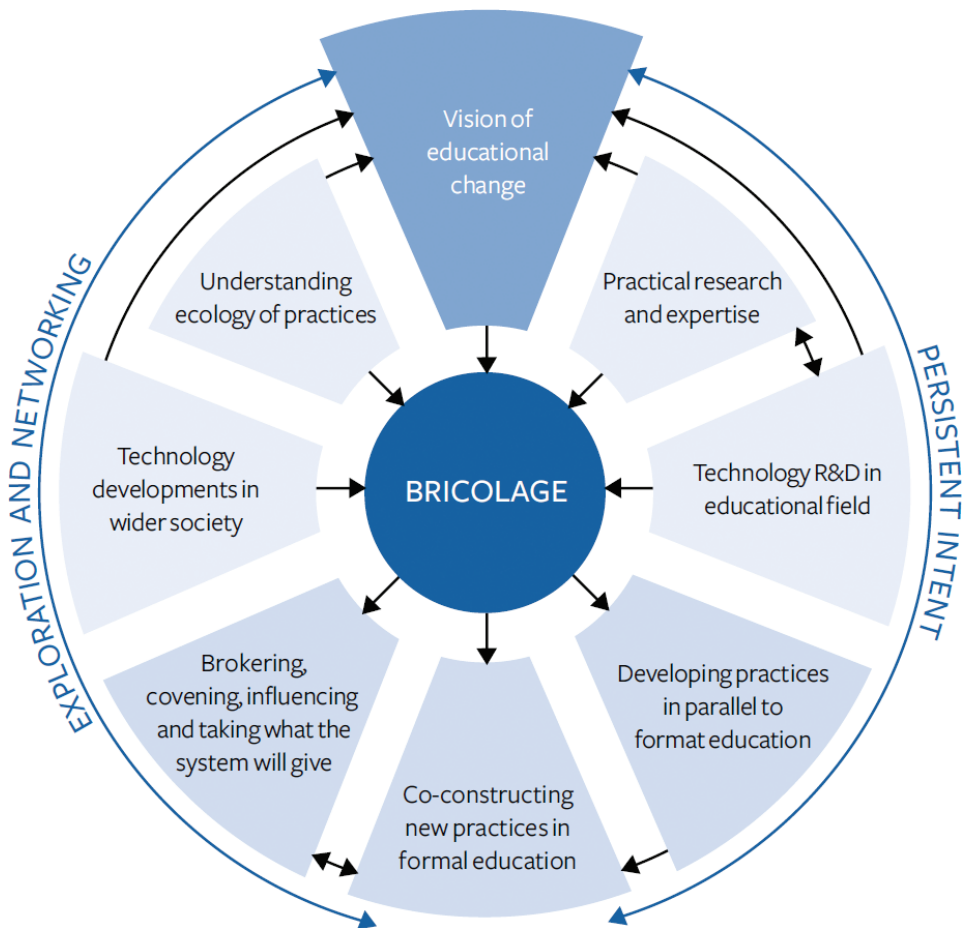


Figure 1. Beyond prototypes model of the TEL innovation process.

Note: Adapted from Figure 1 in Scanlon *et al.* (2013), with thanks to the TLRP/TEL programme for permission to use this figure.

contributing to the ‘*Vision of educational change*’, which aimed to innovate the teaching of CLE in the W360 module.

Bricolage itself is strongly linked to *experiential learning*, or ‘learning by doing’ (see e.g. Kolb 1984), where those involved in the project learned primarily through engagement with others, and in the process they all worked together to produce the required output. In this case, ‘others’ comprised several stakeholders, including students, academic staff and industry partners, who played specific roles in the project. At the core of experiential learning is **experience** and **reflection**, the latter of which was conducted through written reports (by students) and by interviews (with all three stakeholder groups). The interview process, and the research design as a whole, is explored in the next section.

## Method

The ‘learning by doing’ process that the students engaged in was facilitated by the AL from the ‘School of Computing in the Faculty of Science, Technology, Engineering & Mathematics.’ This AL had particular expertise in mobile app designing and use of the Wordpress platform, which was used as the underlying technology for this project, to explore the feasibility of the work in a low-cost and low-risk manner.

A technical report (Byrne 2019) to accompany this article gives the full details of the practicalities of the work. Agile project management principles were adopted for the delivery of the project. The project was divided into four phases over the course of a 16-week period. In phase one, students were familiarised with the aims of the project, the project methodology and the tools. In phase two, students began building the foundations for a workable solution through generating ideas and prototyping. In phase three, students refined their design, and in phase four, they reflected on the process of undertaking the project. Communication was carried out at a distance by email and video conferencing through Adobe Connect and WhatsApp conversations.

The Wordpress platform was used by the students for creating the content and how it would be structured; the output of this had two websites (one per team). The content was also published on a mobile app interface as a proof-of concept in this pilot – the programming for this was carried out by the AL. The app was published in both Android and iOS formats through the gonative.io emulation platform.

The final outputs from the teams can be found online (<https://gonative.io/share/jjobqp> and <https://gonative.io/share/popwlj> for the app simulations, and <http://team1.ojapp.org.uk> and <http://team2.ojapp.org.uk> for the website versions). Screenshots from the app simulations can be seen in Figure 2, and the website in Figure 3.

Once the project work was completed, and W360 students had reflected on their experiences in their module assignment, the prototype app was reviewed by three charities working to support client groups who would benefit from increased access to legal information and guidance. ‘Support through Court’ provides volunteers to support litigants in civil courts without legal representation, ‘Litigant in Person Network’ provides support and guidance for civil society organisation seeking to support litigants who do not have access to professional legal representation, and the St. Giles Trust supports ex-offenders and those at risk of offending. All had existing relationship with the Open Justice Centre and all had some experience of using information technology for communicating legal information to their respective client groups.

Semi-structured interviews were conducted with 14 stakeholders (6 students; 6 partners from industry/charities and 2 academic staff). Interviews were carried out

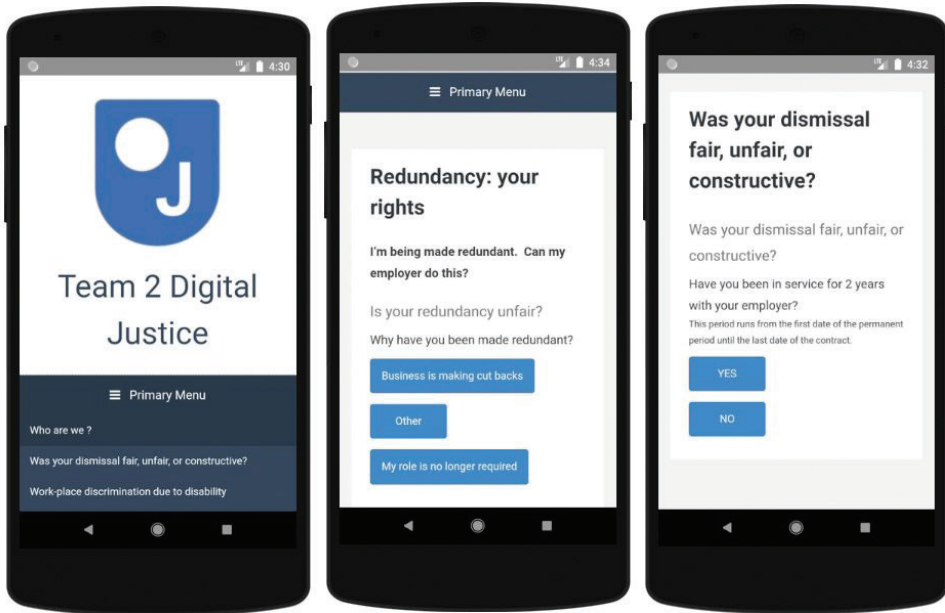


Figure 2. Screenshots of the digital justice app in the gonative.io simulation.

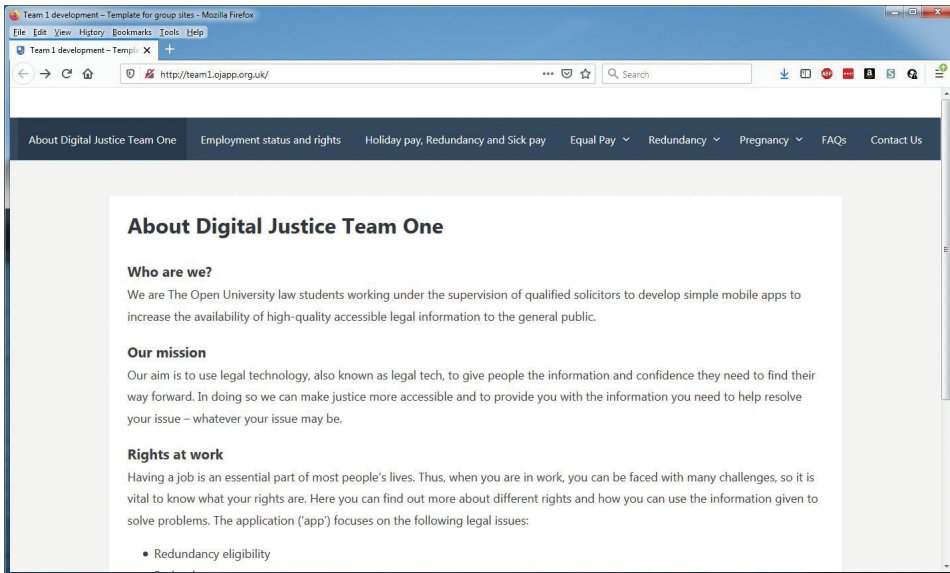


Figure 3. Screenshot of the digital justice website for team 1 in a web browser.

by an independent researcher, and transcripts were generated by an independent transcription service. Transcriptions were coded by two of the authors using nVivo. They used a thematic analysis approach, in a heuristic process (and based on guidance from Saldaña 2009) as follows:

- (1) Initial coding (first cycle) of three interviews was carried out by the two authors independently to find evidence to be able to answer the research questions

relating to this work. This used a combination of open/emergent coding and the use of pre-assigned codes based on initial reading ('pre-coding') of the transcriptions.

- (2) The two authors then discussed the codes, how they had arisen and how they related to related categories. The authors also agreed upon common codes and categories going forward (second-cycle coding).
- (3) To improve intercoder reliability, the third author was asked to scrutinise two transcripts and apply the agreed coding protocol to ensure nothing had been missed and to feedback on the suitability of the protocol.
- (4) Once the coding protocol had been agreed, all transcripts were subsequently coded by both authors. Any additional codes that arose were shared swiftly and discussed/agreed between the two authors in order to update the shared protocol.
- (5) Throughout the coding process, the two authors met regularly to discuss their coding progress and to ensure intercoder agreement (Campbell *et al.* 2013) as far as possible.

The interviews varied in length from 16 to 66 min (the average was 30 min; total combined interview time was 459.5 min, equating to just over 7.5 h), with an overall 11,658 words transcribed.

## Results

We consider our findings from the perspectives of the three main stakeholders: students; academic staff; and partners from industry/charities, as illustrated in Table 1. Firstly, a summary of prominent themes articulated by both staff and students is presented, before separate consideration of issues pertinent to students and academic staff. Finally, a summary of findings from the partner interviews is offered.

### *Common perspectives from staff and students*

Some common perspectives from students and staff have been alluded to, already. One prominent shared concern was student ways of working and teamwork dynamics. Students didn't always work effectively in their groups but successful collaboration seemed to lend itself to better outputs:

Table 1. Themes resulting from the analysis.

Outline of Results			
Common student/staff perspectives	Student perspectives: <ul style="list-style-type: none"><li>• Motivations</li><li>• Process</li><li>• Lessons learned</li></ul>	Staff perspectives: <ul style="list-style-type: none"><li>• Topics</li><li>• Online environment</li><li>• Working practices</li><li>• Motivations</li><li>• Expectations</li><li>• Working with others</li><li>• Lessons learned</li><li>• Technology</li></ul>	Partner perspectives <ul style="list-style-type: none"><li>• Current and potential use of mobile apps</li><li>• Content</li><li>• Accessibility</li></ul>

What I've learnt through the process is actually the teamwork is perhaps more important than we kind of anticipated in the sense that the students who worked most effectively together were able to divide tasks between themselves. So they were able to kind of say, well, I'll do this bit. I will do that bit. And then that was a quicker process of working. When they worked more individually, then although they achieved a lot, perhaps it wasn't quite the same because it's quite hard to do that when you're kind of working more on your own. (Academic A)

There were also time issues – both students and staff felt that more time should have been made available for the work. However, as this was only a pilot, it was difficult to anticipate this beforehand:

I think it was a lot for students to achieve in a very short period of time, and I think students are always underestimate how much time these things take. And we talked to the students about... You know, this is an hour a week, two hours a week at most. I think a lot of them spent considerably more time on it than that. So I think in terms of the time commitment it is much more significant than we thought. (Academic A)

Frustrations with sporadic or partial student participation was reported:

'When you're working in team and you, you, you know that there are lots of deadlines, you know there are lots of commitment and when you acting in certain way like this, it has a huge negative impact for other team members. (Student C)

Both staff and students could see a clear link to employability and upskilling, at the very least in terms of increased awareness of a different way to provide legal information but potentially also in terms of creating and editing web content through the Wordpress platform. However, a tension was that, because of this work being a pilot and not released publicly, some students lost some motivation once they realised this was the case:

Well, I would say, as soon as I found out that it wasn't really going anywhere, it, kind of, losing its sparkle a little bit, I was, like, oh, we really made a difference, and then they're, like, yeah, it's not being released. (Student D)

However, the potential was still there:

If you're in an interview and somebody said, how have you applied technology in an innovative way to solve a legal problem, you know. (Academic B)

### ***Additional student perspectives***

#### *Motivations*

Students applied to take part in the project either on an extra-curricular basis or as an additional CLE project that could contribute to a credit bearing module. They were motivated to take part by a range of factors, the most prominent, in addition to

career development, were an interest in the potential of technology in the delivery of *pro bono* legal services and a desire to contribute to the social justice aims of the Open Justice Centre by exploring how technology could be used to increase access to legal information, especially to disadvantaged groups:

I'm not a wiz, a tech wiz by any means, but I find it really interesting and I also like that you can reach such a wide audience ... it's a brilliant idea for people to access legal direction ... with legal aid removed entirely for majority of people. (Student B)

### *Process*

Students agreed that they should focus on a range of common employment issues that would have a broad appeal to members of the public:

We decided that, ah, we were going to focus on problem topics that will be really prominent for the public... Ah, for instance, equal pay, um, holiday pay, sick pay, those, and redundancy, those [...] topics are very common for people. (Student C)

A key concern for students was making the legal information relevant to these areas accessible and accurate. They used a decision tree approach to help guide the user through the areas of law so that an unambiguous answer could be provided, 'though it didn't want to be, like, an, a really complicated answer. It just has to be yes or no really' (Student A). Perhaps not surprisingly for law students, the accuracy of the legal information provided was the main challenge, ahead of the aesthetics, or even the functionality of the app. One respondent commented that it 'felt quite hard to get our, like, heads around it at the beginning coz ... a claim for equal pay is quite complicated' (Student A).

### *Lessons learned*

Notwithstanding concerns around online group working and the time commitment of the task, students generally reported feeling very positive about the experience of participating in the project: 'There are so many things good about this project' (Student C); 'I really, really enjoyed it and I would have done it again' (Student B).

They appreciated the input offered by both legal and computing academics in their role leading the project. Students perceived this as providing an enriched experience and found the challenge of using technology to solve realistic legal problems to be engaging and interesting:

I could have spent hours doing that, because it does suck you in and it's very interesting. (Student B)

You were kind of thrown into a new area of law... to make the decision tree, you really had to know pretty much everything about that area to be able ... to make it make sense. But that was a good way to learn. (Student A)



### *Additional university staff perspectives*

#### *Topics covered*

Students were guided towards the topic of employment law, as there were many resources already in place on the module website to support the exploration of this by students. However, the accuracy of the information provided in the prototype apps was not assessed by academic staff, as this wasn't the main aim of the task. Academic staff did state that, should this information be made available in the public domain (as, for example, a finished app released through more widely), then assuring that the information was correct would be critical. Another point noted was the need for what was quite complex information to be broken down into smaller units – which, for law (and other complex subjects, especially where they may be caveats) could be a challenging task for students to engage in.

#### *Online environment*

Academic staff was very much in favour of using an online environment for the project, as it mirrored their normal everyday actions (for both staff and students) and the technology was readily available and supported through the institution. Students worked with the AL via Adobe Connect sessions; these were recorded for others to catch up with, at a later time. Screen-sharing, presentations and shared whiteboards were used to enable effective communication. Staff reported that they found the technology worked 'fairly flawlessly' (Academic B) and thought that it supported the work well, although they admitted that face-to-face communication might have been more effective in building up relationships between the students, who mostly hadn't worked together before.

#### *Students' working practices*

Academics reported that students were very enthusiastic, almost to the point of trying to do too much too quickly. However, they were very self-sufficient and were willing to experiment and try things out and find answers for themselves. When working with the AL, issues tended to be raised at regular meetings, rather than in-between meetings, although students were able to contact the AL at any time. Due to this, it was considered that they likely didn't have issues to raise with the staff in between meeting times, or else they saved them for those meetings. The time expected that students would spend on the project was around 16 h (1 h/week for 16 weeks), although the academics felt, by the end of the project, that this was likely to have been insufficient.

The two teams of students varied in their working practices. One team took an individualistic approach, with team members writing discrete units of content on their own, to combine at the end. The other team worked more collaboratively and took group decisions about how the work should progress and who worked with whom. There was an online forum that was used for group communication; however, the students also set up their own WhatsApp group, an action that they initiated independently of the project coordinators.

#### *Mission, motivations and rationale*

The staff was very keen that this should be made into a useful exercise for the students, rather than just using the technology for the sake of it. They were also keen to

link this work to the overall mission of the Open Justice work, which seeks to provide a bridge between the wider community and the Open University. Additionally, they wanted to test out the process as a ‘proof of concept’ to test how law students could work with somebody possessing technical expertise to find out whether it would be valuable to them (and hopefully enjoyable) and – more importantly – to see whether it *could* be done.

### *Expectations*

Expectations from the start were mixed; staff was somewhat wary of working outside their discipline and also had fairly low level of expectations of the students, as this was a novel and untested activity. Academic staff did not consider that there would be a finished, ‘polished’ app, but rather that it was the process of engaging with the project that was more important:

It was more about, kind of, the process of learning and understanding, of creating an artefact as opposed to they must create an artefact that’s perfect. So we had very little expectation around that. (Academic A)

Response time to and preferred communication channels for student enquiries were clarified with them from an early stage to manage their working practices and expectations in terms of how they worked with academic staff.

Academic staff hoped that students would gain some understanding of how to use the digital tools, and to apply this understanding, alongside their knowledge of legal issues, to create the app.

The notion of student collaboration was also raised as an important issue. Academic staff took care at the start of the project to warn students of the challenges of the teamwork aspect, particularly since this would largely be conducted online. However, as seen in the following section, working with students in teams was highlighted in both students and staff interviews as a particularly sensitive issue.

### *Working with others*

Both academics said that they enjoyed the experience of working with each other, particularly as they were from different disciplinary backgrounds (law, education and computing):

Being able to work with another academic in a different discipline has been incredibly enriching. And I have learnt so much through this process...It really makes you think about law from a different kind of perspective. (Academic A)

### *Lessons learned*

Having the right kind of students in the group was important in terms of the work getting done. Students were asked beforehand to submit 200 words on why they should be selected for the project, which helped to filter out those who may not have taken the work seriously. However, one student dropped out because they realised that the app was not going to be released publicly, and that was important to them. Other

students may have been put off from engaging, as much of the work was done in an extracurricular fashion, and so they may not have had time to do this.

Both academics interviewed stated that they thought the students should have been given better clarity and structure: 'A much more clearer brief about who this was for and why we're doing it' (Academic A). A clearer and stricter timetable made available at the start of the project, with set dates for meetings and deadlines for specific outputs, was suggested for the next phase of the project, as the academics felt that too much flexibility was given to the students:

I think we gave them too much space to, kind of, think, and that's quite challenging, particularly when they've got a lot of pressures from [...] their courses and, and everything else that they're trying to work on. (Academic A)

In addition, more awareness and help resolving sub-optimal group dynamics was felt to be an important future consideration by the academics, who now had a better knowledge of this kind of issue as a result of this project.

The project was felt to be scalable, and potentially could be rolled out to a larger number of students, provided that there was budget and appropriate management to support this through further AL engagement. A recurring feature throughout the staff interviews was the feeling that 'this was possible' and 'our students could do this', resulting in a very positive atmosphere amongst the module team.

### *Technology*

The finished prototypes were considered to look professional and usable. They also looked 'complete', in that all menu options led somewhere (there were no 'page not found' errors etc.) and there were no fragmentary sections. Staff felt that the user experience would be positive, but were keen not to impose their views and suggested that more authentic user testing would result from interaction with the target user group (see section relating to 'partners').

The look-and-feel of the prototype app was also considered to be of a high quality, a 'clean' quality. Part of the reason for this was the use of the pre-existing Wordpress platform that provides a ready-made design (although also limits what can be changed in the user interface).

I am truly amazed at what they've created. I honestly didn't think that we'd create something as good as what they've created. (Academic A)

### ***Partner perspectives***

#### *Current and potential uses of mobile apps*

Representatives from the partner organisations reported that they did not currently use mobile apps to disseminate legal information to their client groups. However, they were aware of the attempts within the free legal advice sector to utilise these technologies for the purpose of providing information, signposting to services and, in some cases, to provide simple legal diagnostic tools. All participants were of the view that there was considerable potential for this type of technology to make a positive contribution to the existing ecosystem of free legal advice, information and guidance: 'There

is a role, definitely a role, for an app like this' (Partner B). However, despite widespread recognition of the positive potential of this type of technology, this potential has yet to be realised partly due to lack of attention to design and user testing:

We fall down certainly internally in the sector in understanding how we go about implementing technology as part of a process to address problems and find solutions. (Partner D)

### *Content*

The *Digital Justice* app focused on providing information on employment law issues. Partner feedback on the relevance of the content largely depended upon the needs of their own clients. Although it was accepted that this area of law would be of broad interest, it was reported that specific information on particular problems would be most useful to support their clients: 'You can get generic types of issues, but most people are surprisingly specific' (Partner B).

Other feedback focused on the idea that although mobile apps can be useful in providing more than just general information and guidance but could more usefully be designed as problem-solving rather than information-giving tools.

### *Accessibility*

Responses to the functionality of the app were largely positive in the context that it was a prototype, rather than a polished, market-ready product. It was considered generally easy to navigate but respondents suggested that slimming down the amount of content and working to improve the navigation to make the experience more manageable and welcoming for the user: 'I think it could do with some work simplifying it and making it really obvious for the navigation as well' (Partner E). Responses also highlighted the need to make it clear to the user that the intended purpose of the app was key to accessibility, highlighting what you're able to do and giving people clear outcomes at the end of the series of questions that are currently on the platform is good because I think that's a really key thing that we know a lot of users really want from services. (Partner D)

## **Discussion**

The results from the semi-structured interviews provide useful insights into the issues raised by our research questions:

### ***RQ1: How can legal education students help improve the access to, and public understanding, of law through technology-enabled solutions?***

Our research findings demonstrate that there is a potential for undergraduate law degree students to utilise technology to improve public understanding of law and thereby increase access to justice. The prototype app was viewed positively by partner organisations working in the free advice sector and they recognised that this type of applied use of technology has the potential to provide tangible benefits. However, the

findings show that for such applications to succeed in the real world, a significant and sustained time investment needs to be made to ensure that the end-product is of sufficient quality. Quality in this context includes being accessible, accurate, functional and relevant to the specific needs of the intended audience.

***RQ2: How can university module convenors introduce learning activities into clinical legal education that can engage students in real-world settings?***

The findings show that students engaged very positively with the overall aim of the app project and were very positive about the opportunity to make use of their legal knowledge in a way that could benefit the public. The opportunity to develop career-relevant applied technology skills was highly valued, findings that resonate with other studies (Davis 2015; Long and Meglich 2013). Working as an online team presented both challenges and opportunities for students, and the findings that lack of engagement of other learners can undermine individual learning confirms other studies (Shirley and Cockburn 2009). However, some students expressed disappointment that the prototype would not be made available publicly. This illustrates an important tension that exists within CLE, the tension between giving students an engaging opportunity to apply their legal knowledge and develop relevant professional skills and the requirement that the end-product is of sufficient quality to have genuine public utility.

***RQ3: What is the role that legal charities/organisations can play in terms of RQ1 and their engagement with students?***

The partner organisations' perspectives show that there is an interest in, and appetite for, using technology to increase access to justice and to supplement the services they are able to provide for their client base. As such, these organisations can be valuable partners for law schools interested in providing opportunities for students to engage in solving real-world legal problems. Such organisations can act as brokers, provide realistic project briefs and a client base who could benefit from the students' work, provided it is of sufficient quality.

**Conclusion**

As a proof of concept, this study has demonstrated that university law students can be empowered to utilise technology to leverage their disciplinary knowledge for the public good using a bricolage approach. This has been achieved as part of a credit-bearing module which also facilitates the development of transferrable employability skills. As such, the findings have the potential to be transferred to other university disciplines to help facilitate direct student engagement with the public. This study also highlights several practical insights to consider when working with students on similar projects and also points to the areas for further research.

Key practical points to consider include the need to communicate clearly with students regarding the level of engagement required:

I still think having done it the first time we can be a lot more clear to students about the kinda commitment, what is expected. And I think we can be a lot more clear about how they need to work more effectively as a group. (Academic A)

Equally important is to have the needs to make the students aware of who the end users are and what are their needs and expectations: I think definitely the most important lesson that we've learnt is that we need to involve users from the start (Academic A).

Other practical points that need to be addressed include having a clear aim as to whether a prototype is being constructed or whether the main purpose is to create an app of sufficient quality to be released to the public. This leads to further questions related to whether one cohort of students would have the capacity to do this, or whether an iterative cross-cohort approach should be adopted.

... interestingly these are problems that are also being encountered in other institutions, which is that if you do build an app, and you teach your cohort through some sort of programme, what happens when they graduate? Do the next lot take up the same app and develop it further? What happens if the information in the app becomes superseded by newer legislation or something? (Academic B)

Finally, the results show that the interdisciplinary nature of the project is a key to making it a success:

It won't work as a kind of individual law project. It has to be interdisciplinary. I think the students learnt so much from [the AL], and I learnt so much from [everyone], and it just wouldn't have worked in the same way if [we were] trying to get them to develop this in isolation. (Academic A)

The study also points the way forward to potential fruitful areas of further research. Firstly, further research needs to be undertaken into how this type of project can engage students, as well as academics, from different disciplines. Secondly, the growing interest in the exciting potential of using technology to empower students to engage with the public raises an important pedagogical question of how the interests of the public as consumers of the app and the interests of students as creators of it should be balanced. To what extent should the students need to engage in a project that helps them develop transferrable skills be prioritised over the requirement to provide a useful product that will have genuine public benefit? This question is key because students themselves placed a high value on the feeling that they were creating something that be used and would be useful. Getting the balance right will enable students to engage in real-world learning that can have genuine civic benefits.

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