Building a Library Carpentry community in the UK

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Introduction

This editorial briefly describes some of the issues affecting the digital skills and development paths for library and information professionals. It describes how the Library Carpentry community has been nurtured to facilitate building confidence and communication skills relating to data sets, teaching and research. It suggests some longer-term benefits which have been considered in various countries and also the metadata and cataloguing fields in the UK. The application of these ideas is congruent with the current COVID-19 situation. There is an opportunity and arguably a necessity for the UK to develop its Library Carpentry community. Finally, there are several ways you could get involved or learn more.

Library Carpentry is a grassroots initiative to deliver accessible technical training to professionals in the GLAM (galleries, libraries, archives, museums) sector without previous experience in programming or data science. All the learning materials are available freely under a Creative Commons Attribution (CC-BY) license to be used and reused, and there is a network of trained and certified volunteer instructors who can deliver it.

What benefits does Library Carpentry offer?

Library and information professionals commonly use many specific names, acronyms and abbreviations in their daily activities to refer to technical teams, systems and standards. It may save us all time when speaking to close colleagues, but it can be a barrier when speaking with new people unfamiliar with such shorthand or specialist terms.

The problems are particularly visible with language about data and programming. If librarians are confident and competent with such language and techniques, there are many benefits:

- It allows them to better communicate with systems colleagues and researchers, gaining more trust and respect.

- They can be more efficient in their work, perhaps automating a boring and repetitive task, thus reducing the chance of human error and releasing time to improve the service to end users.
- They will gain a greater understanding of the role of software in the research lifecycle, and how their input is connected.
- The data sets they create and maintain will be more sustainable and reusable.

The longer-term benefits are potentially transformative. If we do not act to equip our workforce with the necessary understanding and skills related to basic computing concepts (as provided by Library Carpentry) we will not be in a position to provide cutting-edge services and support for digital scholarship.

Where did Library Carpentry come from?

Library Carpentry may well be different from any training you might have done before: it strives to avoid patronising and info-dumping, and starts where the learners are right now. It has its roots in a series of workshops titled "Software Carpentry" begun in the late 90's by researcher Greg Wilson, who was frustrated with the lack of training in software engineering and good programming practice then available to researchers outside computer science. What made the Software Carpentry approach different was the decision to focus not on getting as much technical content over in as little time as possible but on building confidence in the learners and setting them up to continue learning on their own and as part of a community.

Rather than throwing subject-matter experts into classrooms unprepared, Software Carpentry introduced an instructor training model based on its original successful bootcamp model for researchers, giving new instructors a thorough grounding in effective evidence-based teaching methods. This approach was so successful that "Software Carpentry" rapidly became a well-known brand amongst researchers (at least in STEM subjects) and boot camps, as the workshops became known, would be fully subscribed in days or even hours. Building on this success, a small group led by bioinformatician Tracy Teal developed the first Data Carpentry workshops, based on the same principles and teaching basic data science skills.

By 2013, groups in the US and Europe had started using the Software and Data Carpentry lessons as the basis for technical training for librarians through initiatives such as Data Science Training for Librarians (DST4L) in Copenhagen and in 2015 the Software Sustainability Institute funded James Baker to develop the first curriculum under the Library Carpentry banner. There was also cross-pollination between the Carpentries community and programmes such as The Programming Historian for Digital Humanities.

Fast-forward to 2020: Data Carpentry and Software Carpentry have now merged, and accepted Library Carpentry as the third official syllabus under the umbrella of The Carpentries, to form a global community of those conducting and supporting research, both instructors and learners, with a vision "to be the leading inclusive community teaching data and coding skills."

How has COVID-19 changed things?

Of course, it is impossible to ignore the impact of the current global pandemic. While most university staff were working from home, effective communication has been more important than ever. Lesley English wrote in a recent eNews article about the sudden digital shift in

teaching, across all library services and within teams. Library Carpentry is no exception, and workshops in many countries have been adapted to online delivery. There are advantages, for example there is no longer a requirement for library staff to travel to their nearest workshop which may be hundreds of miles away. Also, workshops have a more episodic delivery, sometimes running over four consecutive half-days rather than taking an intense two consecutive days out of people's busy lives.

Why do we need a Library Carpentry community for the UK?

Library Carpentry lessons are developed by library professionals, for library professionals. It is vital to create a nationwide community to facilitate the development of partnerships between institutions, which will allow the sharing of skills and mind-sets to thrive in this context. Benefits include:

- The capacity to run self-organised library carpentry workshops at a national level, according to our schedule.
- Growth of the instructor pool and the number of active members; this will allow sharing of responsibilities, which reduces the workload on individuals, and enables the running of more workshops, widening their access.
- Raising of the visibility of Carpentry activities at the managerial level; their support is key for librarians to be able to attend workshops.
- Solving common problems by customising lessons and targeting specialist librarians (e.g. data librarians, digital archivists, cataloguing librarians) to workshops.
- Facilitating appropriate post-workshop follow-ups to ensure course content can be utilised in daily practice, improving efficiency.

Conclusions: what can you do?

Does this sound interesting to you? If so there are lots of ways to get involved.

- Check out the list of Upcoming Workshops to find out about opportunities to learn as part of a group.
- Work through some of the workshop materials in your own time.
- Join the Library Carpentry mailing list and subscribe to our blog to get the latest news.
- If there isn't a bootcamp in your area, you can organise one for your workplace, network or community: the process is fully documented and you can self-host or have Carpentries staff facilitate if you have a budget.
- Contact the authors if you would like to be involved in organising or participating in an online UK Library Carpentry workshop scheduled provisionally for later this year with CILIP MDG.
- Contact the authors if you would like to be part of the UK Library Carpentry community.

If you'd like to go further and contribute to the community, here are some more things that you could do:

- Be a Helper for a workshop, supporting the instructor by helping out learners as they work through exercises.

- Be a Co-instructor for a workshop, delivering parts of the lesson alongside a qualified lead instructor.
- Take the 2-day intensive Carpentries instructor training course to become a Certified Instructor able to lead Carpentries workshops.
- Contribute to lesson development or maintenance: even correcting a typo or contributing to a discussion about content is valuable!
- Become a maintainer.
- Develop new lessons (flag up in-development lessons, especially FAIR Data & Software post-sprint).

These views are the authors' own and do not necessarily reflect the views of UKSG.