Carpentry Maintainer Interviews - 2017

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Introduction

Our September Community Call focused on community perspectives related to lesson Maintenance for the Carpentries. Community members on the calls identified several areas of growth and improvement for the Carpentry maintenance process. To follow up on these conversations and gain actionable insight into the experience of our Maintainer community, in October 2017, Carpentry staff (Erin Becker) and Steering Committee member (Christina Koch) initiated one-on-one conversations with Software and Data Carpentry Maintainers. Semi-structured interviews were conducted between October and November 2017 (see **Appendix A** for interview questions). A total of twenty-two Maintainers were interviewed, representing 46% of current Maintainers. Maintainers were also invited to submit comments and responses to interview prompts by email. Three responded by email. In total, twenty-five Maintainers (52%) responded either by email or via interview.

This report summarizes some of the themes that appeared during these conversations and discusses action items (page 9) that are in progress or planned for resolving some of the issues that were identified.

Findings / Themes

How did people become Maintainers?

Thirteen of the interviewed Maintainers (52%) said that they had volunteered for or applied for the position. Ten (40%) recounted being invited (or voluntold) to be Maintainers.

- *Greg Wilson asked me to.*
- *I became [a Maintainer] by invitation from Greg.*
- *Greg Wilson said "You're a Maintainer." and I said "Ok."*
- *Tracy made me the Maintainer of the lesson.*
- *Tracy and Greg emailed me out of the blue.*
- *Greg Wilson asked me to be a Maintainer.*

What do people like about being a Maintainer?

Interviewed Maintainers identified several aspects of the Maintainer experience that have been rewarding and enjoyable. These include the ability to influence the overall direction of Carpentry lessons, opportunities to interact with the community (particularly for Maintainers who don't have time to teach), the ability to have a broader impact on the research community than they get from teaching at their own institutions, and the chance to learn new things.

Opportunity to shape the lesson
- *I like that I can shape the direction of the teaching.*
- *Good to get to participate in and have ownership over that set of materials.*
- *I like being able to control how the repository develops over time.*
- *I teach this lesson a lot - it has been good to see my ideas come into fruition.*
- *I like being active in the lesson development.*
- *If you like [a particular topic], then go be a Maintainer so you can have a say.*

Interacting with the community
- *Generally, I do enjoy interacting with the open source community.*
- *Nice to interact with new contributors and help them get used to the workflow.*
- *Like being able to welcome people in the community through the PR system. Having that first interaction is very nice.*
- *Like being involved with the community in a formal way.*
- *Nice to have something I can do even if I can't physically go somewhere.*

Ability to have a larger impact
- *Nice to know that [the lessons] will have a life beyond my undergraduates.*
- *Like contributing to a lesson that is being taught a lot more than my own personal lessons. Pretty huge impact.*
- *[Enjoy making] something that everyone can use.*

Chance to learn new things
- *I think it has, especially in the early days, gotten me a lot better with Git and GitHub.*
- *At the same time, I learn something about the structure of the lessons.*

What are some of the major issues?

Common issues identified by Maintainers included a need for more guidance in the maintenance process, and more help from additional Maintainers for their lesson. Maintainers did not feel like they were part of a larger Maintainer community. Most Maintainers were not in regular contact with their co-Maintainer(s), and many had never had a conversation with their co-Maintainer(s). Maintainers from six of the twelve lessons interviewed (50%) stated that they were overwhelmed and/or wanted more Maintainers for their lesson.

Overwhelmed / want help
- *For [my lesson] could use another Maintainer or two.*
- *[Co-Maintainer] has been very inactive.*
- *Having another Maintainer to tip the scales would be good.*
- *[Co-Maintainer is] really quiet this year.*
- *I need help!*
- *Hard when you get busy. Maybe we should maintain more Maintainers per lesson.*
- *[Co-Maintainer] seems to have kind of flounced off.*
- *[Co-Maintainer] was really quiet for 4-5 months. I didn't see any involvement in PRs. Before that [co-maintainer] was usually very frequent respondent.*

Want guidance
- *Would love to have, not exactly guidance, but someone outside coming in to say what the overall structure and aims are. I don't have any problems doing that myself, but it's a community and should be a community decision. Or could be a committee decision. Shouldn't be one person's decision.*
- *There probably is a guide to being a Maintainer somewhere, but I haven't read it.*
- *I need more mentoring as a Maintainer starting out.*
- *I'm thinking, boy there must be a process for this and am I missing it somewhere?*

Maintainers also commented that they weren't sure what authority they had with respect to directing changes to the lesson and that the role of a Maintainer within the community wasn't clear. Some stated that there were multiple roles wrapped up in the job of Maintainer, including community management and creative lesson development. Others stated that the job of the Maintainer should be limited to deciding whether or not to merge PRs.

Unclear authority of Maintainers
- *Not sure if it's the job of the Maintainer to dictate the direction of the lesson.*
- *One of the things I struggle with is when someone makes a suggestion - gauging how important the change is. If I unilaterally changed things, how would the rest of the community respond?*
- *I'm not sure how much decision power I have … when there are questions that we need some input from other people, sometimes they don't move on because people don't reply, and I don't know if I have the ability to make decisions if no one else says anything.*
- *I just went ahead and made the changes. Not going to claim I don't like that . . . I don't know if I have authority.*
- *It would be useful to know what you guys think is small enough to merge unilaterally.*
- *I think that de facto I've assumed it is our job to dictate the direction of a lesson . . . Wasn't anyone else's job. If someone says something and I don't agree with it, I don't think it should be up to me to veto their ideas. Strange that it should be my final call. Arbitrary. Why should I be the one to make the decisions?*
- *One of the issues for a community set of lessons is if you are doing more than maintaining and actively guiding/shaping/building/growing. I don't feel authorized to do that unilaterally. . . It's a strategic vision question. Don't know who that goes to.*
- *I wonder if what I'm doing is appropriate.*

Unclear role of a Maintainer
- *Something that has never been clear to me is to what extent the Maintainer is the community manager vs someone who handles day-to-day vs a more creative role in lesson development.*
- *I think [a Maintainer is] a person who is intermediate between leadership (staff) who has a bigger role in developing overarching themes and concepts and the people who are actually teaching the lesson. Nice intermediate step where we can bridge the gap between what the lesson is supposed to teach, what the workshop is supposed to cover, and how it is actually being taught.*
- *The Maintainer role for the mature lessons is trivial. We see some PRs and decide to merge them or not . . . My role is minor changes.*

Many interview respondents talked about negative feelings tied to their work as a Carpentry Maintainer. Guilt and feelings of failure were widespread.

Negative feelings
- *I like doing it when I remember, but I've been the most forgetful person.*
- *I've done a terrible job.*
- *I don't really like the experience of being a Maintainer. Feel guilt about not doing anything but don't know if there's anything to do. Feel like I'm ignoring these PRs but don't know if anyone cares. Don't know if I should merge them - who is this person, why do I care. How do I know if I should merge this or not? Feel like I'm in a void.*
- *I feel very guilty that I don't pay more attention to [my repo].*
- *I thought I had to participate [in group meetings] to be a Maintainer, but I haven't lived up to that.*
- *I've been derelict.*
- *Want to apologize. Not too involved.*

Another common issue identified was increased workload and other issues with handling contributions from new instructor trainees.

Issues with new trainee contributions
- *Most of the PRs we get for instructor training are typos and not important. Or major changes and we're like "it's working".*
- *"In theory from instructor training it would be better if we did it this way" - better if we heard from people after they taught about how the lesson went and what they did or didn't use.*
- *Wouldn't say I don't like it, but makes it harder, when we receive PRs that are kind of driven by somebody trying to suggest to improve the lessons but sometimes driven by "I need to do this because they told me to" and they'll change something just to make a change. Kind of exploding this lesson because everyone wants to add things.*
- *The work itself is fine and typically not a high workload but you get those days where you wake up to a bunch of notifications because of an instructor training event.*
- *You just get these random PRs with random stuff that doesn't help because they have to submit a PRs and it's not bad but not necessary and a bunch of Issues sitting there that no one wants to deal with.*
- *I think it's really good that we ask new Instructors to provide a PR but also, really good, but some negative aspects. People who are submitting PRs that seems like a small change but have a lot of side effects.*

Interviewees had suggestions around changes to the Carpentry Maintenance model and lesson development process to help resolve the issues of overwhelming contributions from new trainees.

Maintenance model suggestions
- *I do prefer more permissive models. There's a discussion in the Maintainers list about reviews from community members. If Maintainers have to be the only people doing reviews, too much work. If you're asking the community to be involved, doing a review is an excellent way. I'm not sure how instructor training is structured now but before you had to submit a PR. If now it was a PR or review it would be a good introduction to the OS community.*
- *Maybe for each lesson, create an intro to contributing to this lesson. Every lesson needs help with different things. Guide is currently really hidden - needs to be improved and summarized. Guide them to what they can change. This eliminates the problem of getting unwanted PRs.*
- *Was a very good idea to ask for new Instructors, instead of putting in PRs, to do Issues. Saw this on the Maintainers list. Change priority.*
- *What I would like is people to understand the flow of proposed changes and fixes, moving through from Issues to a discussion to an agreement on a tentative solution to someone saying they can do it to doing a PR then discussing it and merging it.*

Many interviewees were interested in the idea of being more active with the broader Maintainer community and provided guidance on their prefered modes of engagement. Some also mentioned concerns about increasing their time involvement with the Maintainers group.

Role of a Maintainer community
- *Getting to know the community - getting to know people's philosophies around maintenance would be a huge first step.*
- *Would like to interact more with the other Maintainers to ask them more about how we can deal with people's first PRs so it doesn't feel personal to the person contributing.*
- *For me as long as I have time I would like to interact as much as possible. Would like to make new friends and new connections. I also want to learn from the other Maintainers as well because no one knows everything.*

Prefered communication channels
- *I would prefer meetings if they were at a convenient time. Slack sounds nice though . . . if I had a pressing question.*
- *A place to bounce questions or ideas off of - Slack or a call.*
- *Anything asynchronous is easier.*
- *Do we have a Google Group? Are we using email? Just GitHub? It's all over the place. Confusing.*
- *I like the idea of a call. The way my schedule works, if I block time to do something, I can do it, but if it's floating in the ether it falls to the background (like a Slack channel).*
- *I think Slack is good . . . Also can have scheduled meetings because we can see each other and talk and people can know you better.*

Concerns about time commitment for more involvement
- *Seems to me that the amount of traffic on [the mailing list] is appropriate. . . kind of an antisocial aspect with starting [a new] job.*
- *I'm happy with the state of things with the Maintainers list. I enjoy when there are conversations there - shared experience is kind of fun - but I don't feel like I need more stuff in my life right now.*

Action items

1. **Changing to an application model:** To reduce feelings of guilt and pressure to be a Maintainer, we are changing to an application-based model for recruiting new Maintainers. Maintainers who want to retire can do so without guilt, knowing that there will be someone to take on their role moving forward.
2. **Recruiting new Maintainers:** In November, the Carpentries put out a call for new Maintainers to join the Maintainer team. There were 23 applicants, of which 22 were invited to join Maintainer onboarding. These new Maintainers will be ready to start work by the end of January 2018.
3. **Providing training for new Maintainers:** A pilot curriculum for onboarding new Maintainers has been drafted. This curriculum will be tested with the new Maintainer cohort. Contributions from existing Maintainers are welcome. Existing Maintainers are also invited to join the Maintainer onboarding.
4. **Facilitating interactions among Maintainers:** Monthly meetings for the Maintainers community have been scheduled and are advertised on the community calendar and the Maintainer Etherpad. Maintainers are invited to contribute agenda and discussion items for the first meeting in January. A Maintainers Slack channel has also been created within the Software Carpentry workspace. Contact Erin Becker if you would like an invitation.
5. **Rethinking Instructor checkout process:** A task force including relevant parties (e.g. Maintainers, Trainers, Mentors) will be formed to determine how best to modify Instructor checkout to better serve the needs of our community and lesson structure. Contact Erin Becker if you would like to be involved with the task force.

Appendix A: Interview Questions

1) How did you become a lesson Maintainer? How long have you been a Maintainer?
2) What do you like / what is rewarding about being a maintainer?
3) What do you not like about maintaining a lesson?
4) As a maintainer, do you want to be connected with other maintainers? Or do you prefer working on your own? How involved do you want to be?
5) Do you want to keep maintaining a lesson?
    a) **YES:** How could Software/Data Carpentry support you as a maintainer? What could we do to make your job easier?
    b) **NO:** How could Software/Data Carpentry have done a better job supporting you as a maintainer? What could we have done to make your job easier?
6) Do you have any concerns or opinions about the lessons? A wish list of things you'd like to do or lessons you'd like to see?
7) What kind of structure do *you* think would be helpful to maintain the lessons? Should it be a goal of the SWC community to produce new lessons? If so, how should that happen?