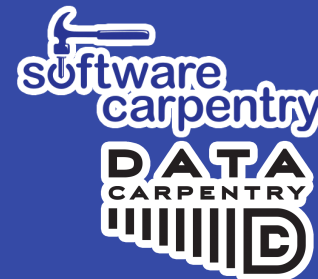




Carpentry Teaching Practices

Challenges



- Diversity of backgrounds and skills
- Regardless of content or pace, perhaps...
 - 10% of room lost
 - 10% of room bored
 - ... if you manage that, you're doing well!
 - 'Lost' ones higher priority – use your helpers
- Split class by skill level?
 - Dunning-Kruger effect
 - Instead ask specific questions in pre-assessment

Things we Can Do!



- **Communicate skill level clearly** before workshop
- **Provide multiple exercises** for advanced learners
- **Ask advanced learners to help** people next to them
- **Get non-teaching instructor and helpers to monitor** for problems, intervene early

No class can ever meet everyone's individual needs!

Other Practices



- Sticky notes on laptop lid
 - **Green:** ok, finished exercise, **Red:** I have a problem!
 - Discreet, can keep working, instructor can quickly check state of class
- Minute cards at lunch time, use sticky notes
 - **Green:** one positive, **Red:** one negative, a question
- One up, one down
 - At end of each day
 - Go round class, ask for alternate positive/negative points without repeating

***Minute cards anonymous, one-up-one-down is not
Each has strengths & weaknesses***

Other Practices



- Learners use their own machines
 - Learners like machine to be set up for real work
 - VMs don't really work
- Collaborative note-taking
 - Use of Etherpad/Google Doc, good for sharing code and data
 - Bit of a winner with learners!
 - Advanced learners can answer questions
 - Etherpad/Google Doc - discover issues

Other Practices



- Pair programming
 - Good practice in real life too!
 - For assistance, clarifying misconceptions
 - Strongly prefer flat vs. theatre-style seating
- Peak-end rule
 - People judge experience on most intense point, and at end
 - So finish on a high note!
- Embrace your mistakes!
- Instructor notes
 - Many lesson materials have them

Code of Conduct



- <http://software-carpentry.org/conduct/>

Code of Conduct

Software Carpentry workshops are community events intended for networking and collaboration as well as learning. We value the participation of every member of the scientific community and want all attendees to have an enjoyable and fulfilling experience. Accordingly, all attendees are expected to show respect and courtesy to other attendees throughout the workshop. The same standards of behaviour are expected in Software Carpentry spaces online.

To make clear what is expected, everyone taking part in Software Carpentry events and discussions—instructors, helpers, organizers, and learners—is required to conform to the following Code of Conduct. Organizers will enforce this code throughout events, but you may also contact us directly by email at admin@software-carpentry.org. All communication will be treated as confidential.

Code of Conduct

Software Carpentry is dedicated to providing a harassment-free experience for everyone, regardless of gender, sexual orientation, disability, physical appearance, body size, race, nationality, religion, or choice of text editor. We do not tolerate harassment of participants in any form.

1. Harassment includes offensive verbal or written comments related to gender, sexual orientation, disability, physical appearance, body size, race, or religion, sexual images in public spaces, deliberate intimidation, stalking, following, harassing photography or recording, sustained disruption of talks or other events, inappropriate physical contact, and unwelcome sexual attention.
2. All communication should be appropriate for a professional audience including people of many different backgrounds. Sexual language and imagery is not appropriate for any event.
3. Be kind to others. Do not insult or put down other participants.
4. Behave professionally. Remember that harassment and sexist, racist, or exclusionary jokes are not appropriate.

Participants asked to stop any harassing behavior are expected to comply immediately. People violating these rules may be asked to leave the event or be excluded from the online venue at the sole discretion of the organizers, without a refund of any charge that may have been levied.

Thank you for helping make this a welcoming, friendly event for all.

This code of conduct is a modified version of that used by [PyCon](#), which in turn is forked from a template written by the Ada Initiative and hosted on [the Geek Feminism Wiki](#).

Code of Conduct



- Our workshops (and other virtual meeting spaces) are welcoming, safe spaces
- Reminding attendees...
 - Host *must* remind during registration
 - Instructors *must* remind at start of workshop
- Makes expectations and consequences clear
- Violations are very rare, but have happened
- Instructor has right to sanction disruptive students

If a Violation Happens...



- Depends on severity and whether it was intentional
- Can warn them, ask them to apologise, and/or expel
- Can also walk out if participants or hosts not supporting your attempts to enforce the Code of Conduct
- In either case, contact appropriate Carpentry admin as soon as possible
 - admin@software-carpentry.org
 - admin@datacarpentry.org

Why not a MOOC?



- Good reasons to support this...
- We did this in 2010-2011 – unsustainable!
 - Changing videos, finding presenters, ...
- ***Doing significantly outperforms watching***
- Easier to help with setup problems
- Experimenting with real-time remote instruction!
 - Works well for this Instructor Training course