

Pirate Talks

– How to prepare and deliver excellent presentations

Harold Thimbleby, Swansea University, Wales

Pirates famously say “AARRR.”

In a Pirate Talk, AARRR is a mnemonic for **A**udience,
Action,
Remember,
Route, and
Reflection.

Every speaker wants their audience to remember something, even if only that they have been entertained; better, they want their audience — or at least some of them — to go on to do and achieve new things, to act and take forward their inspiration from the talk. Put bluntly, if a talk does not have an effect, what was the point? To achieve an effective outcome, the route from where the audience starts from to where the speaker wants to lead them needs planning and mapping out. Pirate Talks help systematically work out the route.

The last **R** of AARRR is less often emphasised: Pirate Talks aim to get better. A key insight is that what the audience needs to be able to do to learn from a talk is closely aligned to what a speaker needs to do to continually improve the quality of their own talks. Many poor talks happen because the speaker has not tried to improve over a period of giving *previous* talks — their talks have become routine and dull, with the speaker perhaps confusing comfortable habit for effectiveness.

Pirate Talks are a memorable way to be effective, to not only set higher standards but also to help speakers aim at excellence, to aim at continual improvement. The simple mnemonic AARRR also helps chairs and other audience members to facilitate speakers to do better.

Key Words: Talks, presentations, lectures, keynotes, speeches.

DOI: 10.24982/jois.1716017.005

1 WHAT DO PIRATES SAY? ... “AARRR”

I’ve sat through many talks and panels. Sometimes they are brilliant and engaging, but sometimes — too often — I struggle to pay attention. Sometimes I don’t even struggle, but drift into my own world. Worse, is when the speaker is a senior person who should have had years of experience behind them, yet their talk is mind-numbing. Why? Why didn’t they get some training and get better and better as they prepared and delivered many presentations over their career? Somehow their standards were low, and somehow they never noticed so they never got better.

Pirate Talks are the solution.

Pirates say “AARRR,” and Pirate Talks, with their mnemonic **AARRR**, are a clear and attractive way to remember how to give great talks, as well as how to participate in panels or in other forms of presentations. Pirate Talks also suggest ways to help chair sessions and panels.

In any role, you can encourage yourself and others to use the Pirate Talk method.

1.1 If “Pirate Talks” are the solution, what’s the problem?

Looking around audiences, it is very rare, if ever, to see that the the audience are in rapt attention. Usually many are dozing, or lost in their own worlds with their laptops or mobile phones open.

Clearly, the quality of a presentation has most to do with the presenter. Unfortunately, even calling it a *presentation* helps make the technology of presentations, typically PowerPoint, seem central. I think very misleadingly, presentation tools have become scapegoated as “evil” [1], thus distracting attention from the *person* and their planning and goals that lie behind the presentation.

I've been wondering about how to remember and understand the important things that work for effective talks, and how to avoid the basic mistakes.

It isn't just me: many others have noticed the problems and offered thoughts, frameworks and solutions [2–7]. A profound problem is that the poor quality of bad presentations is self-perpetuating: we bring up students with it, they then expect it as the norm, and some of them in turn become lecturers themselves . . . just repeating the poor experience of lecturing they had. Too many people think “this is how it is.” Worse is that after a few years, the common confusion of experience and expertise [8] leads people to think that, because they have experienced and given many talks, they *must* be good at what they do.

Strictly, these are *symptoms* of a problem: the problem itself here is the indifference and even reluctance of people to think about how they and others give talks, let alone think about or question how to model, measure, improve or help others give better presentations. Peer reviewed journals which are the touchstone of quality (not just in science) want papers about their subjects, not the human experience of how to deliver their subjects¹ — yet ironically, journals are about presentation, and many started life at conferences of presentations. Scientific journals want empirical, theoretical, hypothesis-testing ideas; they want objective writing, not emotion and feelings. None of these ideals align well with improving the delivery of presentations, let alone the awareness that it may help to think about presentation.

The hypothesis of this paper, then, is that Pirate Talks are better than what almost everyone is already doing; and if not, I urge everyone to think about why their methods are better, experiment, publish and more widely disseminate their techniques. Pirate Talks as an idea is also fun and memorable, and does not come across as critical or undermining lecturers who lack confidence and experience. It is a constructive and powerful approach.

2 SPELLING OUT THE MNEMONIC “AARRR”

AARRR stands for **A**udience, **A**ction, **R**emember, **R**oute, **R**eflection.

AARRR covers the essentials:

- **Delivery:**

Who is your **audience**, what do you want them to **do** and **remember**, and what **route** will you use to get them there? . . . if you don't know, the audience hasn't a hope of figuring it out!

- **Improvement:**

What **reaction** did you get, what did you **reflect**, and what will you **revise**? In short, how will you get better?

2.1 **A**AARRR — Audience

Do you know your audience? What assumptions do they have, what do they already know and understand (or think they understand)? How will you find out? If it is a mixed audience, what sorts of people are represented in your audience? What's in your talk for them?

What do you want to say? That may not help your audience! What does your audience want to hear? That may not help your audience. You have to *align* (another A for AARRR!) what they want with what you want to get them to remember.

¹This paper was previously rejected by about ten professional journals, including educational journals. It seems from the feedback from editors is that communication is not a subject that journals want to explore, yet, ironically, journals exist to communicate their subject matter — they are not interested whether they are effective at what they do. Indeed, this is much like most presenters giving talks: the point is to communicate, yet awareness of the ways in which communication can be more or less effective is proudly ignored.

What are you *not* going to say to this audience? Leaving things up to your audience's imagination will help them engage.

It is very hard to keep your audience and what they need in mind as you struggle with your presentation tools (like PowerPoint or Prezi or even a PDF document): it is very tempting to talk to PowerPoint — you need to write down bullet lists — and PowerPoint will let you tell it everything. PowerPoint is sitting right in front of you, listening to your every word. But PowerPoint is *not* your audience.

There are many variations on talks, including:

- Panels are often a series of short, closely related talks. Often the speakers are so keen to say things, the time slot overruns. The Pirate Panel would start by the chair asking everyone in the audience if they have any questions. Get a few questions going. Soon people in the audience start disagreeing with each other. Now is the time to start the panel, as there is energy and engagement — and the panel presenters now know the audience.
- At conferences, pirates often sit in on earlier talks to reconnoitre the audience and how well the AV [audio visual] system works. They scrutinise other speakers to see what things work best with the audience — and what don't. They also make friends with the technicians!
- At interviews and some other events, it is absolutely critical that you have worked out how to fit in with the audience's requirements. You may be given *exactly* five minutes and not a second longer — you may literally have the plug pulled on you. How will you meet your audience's requirements? (In this case, you'll have to practise and make sure that you can be faster!)
- Impromptu (or talks made to look impromptu). It is very easy if you are talking without preparation to maunder, and fill the room with your wisdom. Unfortunately, your opinion of yourself and the audience's are different. Ask yourself: what is in it for the audience. Often the audience is best served by your asking: (i) be positive (ii) what is the information you must convey — the fire exits are over there? —, and (iii) then shut up.

2.2 AARRR — Action

Assuming your Pirate Talk is not just amusement, in the long run, there is no point your audience staying unless it leads them to take some new action in their lives. You are going to tell them something, but why? Why — because you believe if they hear what you are telling them, they will do something or change some behaviour.

However, if you haven't worked out what this action is, it is very unlikely your audience will be able to work it out. Their lives are busy, and as soon as you've finished they will go back to their lives.

There is a whole area of “getting things done” (GTD), and one of the first rules is if you do not plan you are unlikely to get many things done. How, then, will you help your audience plan their action that you want them to take? How will you change their perspective so action seems inevitable? Can you change the rules or the rewards? Can you start some action in your Pirate Talk itself — an exercise or an exercise in pairs, perhaps?

2.3 AARRR — Remember

Sometimes called “take homes” or (more formally) “learning outcomes” — what do you want the audience to remember? What do they need to learn that they can put into action?

Here are some memorable thoughts:

- Prepare for the end. What's the final impression you want to leave?

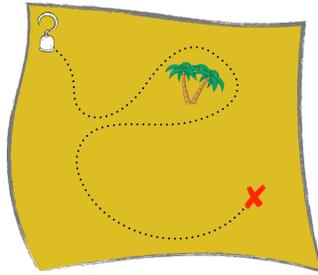


Fig. 1. The classic treasure map. Start with a hook, and plan the route past points of interest or surprise and on to the buried treasure. Treasure is of course the future possibility opened out by finding it.

- “If you don’t know where you are going, you won’t know when you don’t get there.” — Yogi Berra
- “Begin with the end in mind.” — Stephen Covey
- “Work backwards.” — George Polya

Maybe you want them to remember you are cool, you need contacts, you’ve got solutions to their problems, or maybe you want them to learn a specific solution or skill during the talk or session you are running. The short point is that if you don’t know what your audience is supposed to remember, they won’t remember it. They will remember something like one of your diverting stories instead, or a joke.

Sometimes your organisation or its media department just wants the audience to remember *their* corporate image, logo and slide format. Pirates resist, unless it helps their presentation. Pirates fly their own flags!

Once you know what you want the audience to remember, what is your *hook* that will help your audience remember?

It can be fun to keep referring to your hook in creative ways to rub it in. Brief, personal stories make for good hooks. Remember, the best pirates have hooks — and the best piratical hooks have *one sharp point* that draws the audience in.

- Move the (pirate’s) hook to the front.
- Show don’t tell.

In a nutshell, if *you* haven’t worked out *the* take home, your audience certainly won’t!

Remember that often what you think you want to say is way more than what the audience needs to remember; it is very tempting to fill talks with things you “need” to say — but think very carefully, piratically, whether all this helps. Pause, slow down, let empty space give the audience time to think. If you have bullet points, go through all your slides and delete a bullet point off each one. Kill the least useful bullet point. Anyway, pirates should be using cannon balls not bullets — by the time a pirate is shooting bullets, the advantage is lost!

2.4 AAR[R]R — Route

Now you know your audience and what you want them to remember, plan the route from A to B. You will probably use a program like PowerPoint or Keynote, or something like Word’s outliner if you are just working on a script to read: these tools readily allow you to develop and rearrange your talk. Do this continually, thinking about the route from A to B and what is relevant to it and what is a diversion, which probably you should delete.

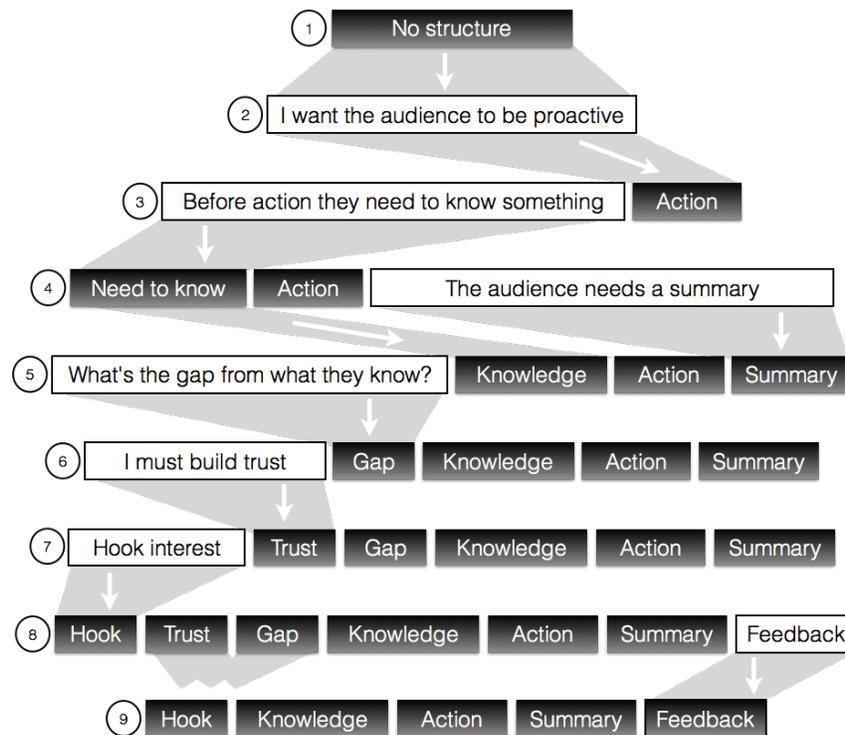


Fig. 2. An example of developing a Pirate Talk (line by line, starting at the top) that you might use to incrementally tie it to a throughline. You have lots of choices, but experiment to find the best pattern, mutually improving your talk and your choice of route to what you want the audience to remember. The numbered lines are discussed further in the paper in section 2.4.

The first few seconds are really important, both for you and for your audience. If you want your audience to be passive, now is the moment to train them you are not interested in them (tell them what they already know, like the title of your talk and how wonderful you are); or if you want them to be active, now is the moment to be interested in them:

“I am really pleased to be with such wonderful people like you today. Thank you for coming out on a night like this! Can I start by asking you all a couple of questions...”

If you want any interaction in your presentation, *start off* interactive.

(If you ask a difficult or poor question, everybody will hope somebody else will answer it, or they will pretend it is a rhetorical question. Instead, think of things to do: for instance, ask for a vote, say a show of hands, or ask people to think and write down their answers: then even if only one person speaks out the answer, everybody has at least had a chance to think. Try not to ask questions you know the answer to as the audience will feel set up.)

A very simple route that often works well is to start with a scenario, a story or problem (perhaps out of your own life so you and the audience naturally identifies with it) that is unresolved or creates tension; then at the end of the Pirate Talk, to return to the same story and resolve it using what you want your audience to remember. Chris Anderson, the curator of TED talks, emphasises stories [9, 10] and his complementary discussion to ours is recommended.

Is your route obvious or a mystery? For example, starting with problems, for which your take home is the solution can be better than providing a solution without the motivation, even though your goal is to help the audience remember the solution. Jo Boaler [11] gives some great examples from

teaching mathematics: let your audience make mistakes in a problem you set, then you rescue them. What you want them to remember is the general solution, and the route you take them on is their own problem solving.

Chris Anderson [9] uses *throughline* to describe the planned connecting theme running through the route of the talk. A useful exercise is to write down your throughline in under 15 words — it isn't just a brief description of the goal, but maybe of the twists, unexpectedness and surprises for the audience. "More choice actually makes us less happy" perhaps. "Pirate Talks take audiences across even rough seas but always with a treasure map." The throughline is about the route. Figure 2 makes the throughline idea clearer.

In figure 2, initially your talk is a sequence of slides ①; the temptation is to keep adding slides. Then ② you realise you want a Pirate Talk where the audience is encouraged to take action over the issue you are talking about. You start to think more about a throughline: what does the audience need to know ③, and once they know that what can they do? Next ④, following the Pirate Talk structure: who is your audience? A first step could be to establish the gap between what they know and what you want them to know ⑤ — here, you'll also improve the new knowledge slides. Next, you could start off building some trust ⑥ in you as a speaker — why should they listen to you? Now the talk's route takes them from you as an engaging speaker to them taking action. But might you start ⑦: what is the hook to grab their attention?

Pirate Talks have reaction and feedback ⑧ — so the audience hears how other audience members are going to take actions forward, and so you can improve. Finally some steps are removed to focus on the throughline better ⑨.

Figure 2 is only one model: but it shows how you can think about the audience and experiment as you develop a talk.

2.5 AARR[R] — Reflection

Reflection, the last R of AARRR, means three things:

- ask for a **R**eaction to get feedback,
- **R**eflecting on it,
- and then **R**eview and **R**evision: improving what you do.

Perhaps there are too many Rs here? AARRRrrrr...?

2.5.1 Ask for a reaction

Do you know how successful you were in getting the audience down your route to what you wanted them to remember? Often talks and panels include questions from the audience. Why don't you also ask the audience some questions? What's the most useful thing I said for you? How could I improve the pictures/text to be more readable? Don't leave before you get some feedback, at least don't always leave without feedback — without reflective feedback, you will not be able to improve. Did the audience really go from A to B? How can you give a better talk next time?

Audiences are very bad at giving useful feedback unless you give them specific questions to help you.

Poor speakers often disappear immediately after their talks, so they never find out. They never hear the questions and new ideas from the audience that pirates bask in.

2.5.2 Reflect on it

If you do not reflect about your Pirate Talk, you can't get better (except by pure luck). Where did it go well, where could it be improved? How do other people talk, and what can you learn from them?

2.5.3 Revise to improve

Finally, right after your talk, revise it so that next time you look at it or need it for the next presentation it is better! You can remember all the slides that confused you; fix them. You can remember the spelling mistakes; fix them. You can remember the better slide order you could have used — well, fix it! (Somebody might ask you for a PDF, so fix the errors before you give it away.) If you don't revise your talk or presentation, what use was it to reflect?

Many people do a lot of preparation for their presentations (even over several years on their research project) and they fall into the trap of thinking their presentation is the *end* of their work: finally they get to talk about what they have been doing!

No!

The presentation is when you finally start to understand what you have been doing, what people are interested in, and how you can go on to develop even better ideas. Your presentation and the thought you put into organising it and filtering it down to the powerful hooks is the foundation for building bigger things. Why should it be the end, when you are asking the audience to start from where you have just got to? If you have convinced your audience of something worthwhile to think or do or achieve, why not be convinced yourself?

2.6 AARRR[R] — Rules

Pirates don't say "AARRR[R]" (that is, with far too many Rs) but occasionally they *are* overwhelmed with rules. The conference organisers may insist you prepare a talk following *their* guidelines or talk templates, and these will very likely conflict with the aims of an effective Pirate Talk. Other common format rules imposed on you might be PechaKucha, TED talks, or minute madness talks. A very common restriction is that there will be no questions (because the conference is badly planned or running late or both, or even that the organisers feel questions are unhelpful).

For example, standard advice for a scientific paper is to follow the IMRAD structure — start with the Introduction, then Methods, then Results, And Discussion, or some such structure. Indeed, many scientific papers follow these traditional structures very closely [12, 13]. You might want to negotiate with the editor whether this is most appropriate for what you want to do (see also section 9, below). A paper is an archival document, and a presentation is a performance (a bit like the script for a play): there is no deep reason why a performance's throughline should be forced into a written journal's traditional and perhaps limiting structure. For example,

This journal requests a "Material and methods" section in papers that should provide sufficient detail to allow the work to be reproduced, and that methods already published should be indicated by a reference . . .

Indeed, this already seriously limits what can be considered, even for a journal. The method of the present paper, in fact, was reviewing thousands of presentations of variable quality, and seeking common patterns, and identifying good practice, interviewing speakers both good and bad. Pirate Talks are a solution, so the methodology we want to be reproduced is not the methodology that constructed it. In general, the gap will mean the journal's requirements have to be negotiated. (Of course, the same will apply to conference papers and posters.)

In a university or college environment, your talk may be assessed on how closely it follows similar rules.² But remember that a talk is not a paper, and a Pirate Talk is certainly not a paper. On the other hand, you don't always have to give Pirate Talks — think of it as experimenting with a different style, and you may discover new things that help your future talks.

The key thing is to think about how to balance giving a good presentation with following the rules, baring in mind how closely you feel you need to follow the rules. One solution might be to

²Teaching has the perennial problem that teaching and learning are different things. So if you have to give a talk following IMRAD, you may learn something about talks and IMRAD, but you should not learn that a good talk must follow IMRAD.

do a Pirate Talk, but treat it as the “Introduction,” quickly run through the middle, then ask people to have “Discussion” with you afterwards — as part of your standard Pirate Talk reflection.

In the long run, the best solution is to run your own conferences and workshops.

2.7 Short presentations, vivas, job interviews & other structured presentations

Sometimes the rules are there for a reason, or following the rules will make the difference between getting a job (or a PhD) and not getting a job (or PhD). Sometimes the interview panel will be relaxed, and transported by your eloquence; sometimes they will interrupt at exactly 5 minutes (or whatever deadline you were given) and cut you off mid-sentence. The rule is, you are not in control of your audience. Be clear that your goal is to succeed, not to tell your audience everything. Less is more.

The first A of AARRR is Audience. There are lots of things you are proud of and may want to tell them. But the issue is what helps *them*. Be ruthless in taking *their* point of view as you prepare your presentation. What are *their* criteria? If you can practice with a mock viva or interview panel, that will help — but make sure your mock audience has actually been “on the other side” and know what they are doing. It is far better to come out even crying after your mock interview and learn something to reflect on (the last R of AARRR), than come out crying after a real interview with no recovery possible (well, not until next time anyway).

Most presenters over-run. Your solution, then, is to practice against the clock before you start. Your solution is to aim to take less time than you are offered; your audience will be relieved (especially if they are facing a day of tedious interviews).

I think if you can start an interview with a prepared presentation, that will give you an advantage, as you can say what you have prepared before being bombarded with questions. So tell the interview panel ahead of time you plan to make a presentation — surprising them at the interview is not the time to do it. If they say no, stand up and say you are nervous and you’ve prepared a two minute presentation, and you are *sure* they have two minutes to listen to your well-prepared case, and it is to help them and to help you overcome nerves . . . or whatever is the truth to put you back with the initiative.

3 ON BECOMING A PIRATE: HOW TO TAME YOUR FEAR AND YOUR AUDIENCE

It is hard to imagine a timid pirate! Yet many people find speaking in front of an audience nerve-wracking, and those of us who don’t still find it nerve wracking and all too often behave as if we fear for our lives.

We speak too fast or we ramble, we have a slide nobody can read, we think the audience is criticising us. Somebody asks a question we can’t answer, we run out of time, or we haven’t got enough to say. We say something nobody in the audience understands. We might get emotional and the AV will won’t work. Why are we here even? Worst of all, we criticise ourselves.

Pirate Talks start with the audience.

The audience are on your side. That sea of blank faces — that’s what audiences look like. Look at the audience and appreciate them. They appreciate you. They are eager for you to talk to them. Look at them, as individuals, and talk to them. It also helps members of the audience who are hard of hearing to see what you are saying.

Start your talk by thanking them: this is a great place, you are great people, thanks for coming to my talk.

Eye contact is good, but blank faces are normal; appreciate support, but don’t look for it: just assume people are supporting you (at least until *proven* otherwise . . . when it might be time to get your cutlass out).

The audience are not and never will be telepathic. They have no idea what is going on inside your head, and in particular they cannot hear your critical voice. In fact, you are doing fine.

But it is scary, and practice helps. Going on courses is a surprisingly painless way of learning [14] — the people running the courses know very well how scary talking and public speaking can be, and they are good at making people feel at ease and their courses are often fun and enjoyable experiences.

If you have an important talk to give — and all talks are important for the people who are listening — practise it first. Not only practise what you are saying, but practise how you want to work with your audience, how you want to breathe. Don't just practise your talk, but try pausing, try walking around, try unplugging the projector and just saying what you want to say. Have experienced, critically supportive speakers in your audience.

If you want to sound like you are talking to yourself and ignoring the audience, go right ahead and practise in front of a mirror or in the shower. No; please practise with a critically supportive audience (organise two or three people at least), and even better in the same sort of space you will have to give your talk.

Better still, go on a course and take talking seriously; it will change your life — and it will change the lives of the people in your audience, because that is why you give talks.

Too many people think preparation means preparing exactly what you want to say. No. Preparation means becoming comfortable so you can be authentic — which may mean feeling uncomfortable, but being happy with it.

The best way to become like a pirate is to just behave like one. You have said AARRR. You have thought about your audience, what you want them to remember (not too much!), how you want them to get there. Afterwards you will reflect and count your wounds: have you still got all your arms, legs and eyes? Next time, maybe you'll have a wooden leg, eye patch and a hook for your hand, but you'll be a real pirate at last.

4 HOW TO DESIGN TALKS AND SLIDES

Many people give detailed advice on how to design slides, how to use PowerPoint, Prezi, Keynote, or PDF, how to style slides and transitions. It's quite complex stuff, and some of the advice is very detailed. If you work for some organisations, they will have a "corporate style" complete with logos and rules, perhaps even a PowerPoint template you must use.

All this advice is misleading.

It makes you focus on the wrong things.

If you are not careful you will end up "talking to PowerPoint" as you prepare your talk ("I need to say this as well . . .") rather than talking to your audience. The audience wants the pirate, not the animated bullet points. It does not want or need the logo in the right place on each slide; it wants to engage with *you* and you to engage with *them*.

Go to other people's talks, decide what slides work (if any!), which you like and why. Start by copying those. Notice which slides presenters put up and apologise for — "sorry you can't read this" — and *don't* copy those!

Certainly learn how to use PowerPoint, Keynote or whatever so that when you prepare a talk you are *not* thinking about PowerPoint. Every time you think about PowerPoint (how does it work? What design shall I use?) you are not thinking about your message.

Think about your AARRR.

When you give a talk, once you've got the stuff working — forget PowerPoint. Talk to your audience. It's harsh to say it, but if a pirate was still struggling with firing their canons in the right direction when they were attacking, it's a bit late to find out. Play with PowerPoint until whatever you want to do with it is second nature.

Here *are* five rules:

1. If you have to give a talk sometime that might need PowerPoint (or Keynote, etc), start using it *now*, and start plugging it in to projectors so you find out how multiple screens work, how remote controls work, and so on. It is a complex beast, and you really need to get to grips with it. (Light Table and Slide Sorter View should be your friends — that’s the main technical advice I’ll give you.) Sure, start by putting together a draft talk — then get out, get well away from PowerPoint, and think about your message and your audience. You are not presenting to PowerPoint but to an ocean of people.
2. If you are using a laptop for a presentation, switch off everything on it — like wireless and other applications — as you do not want any surprises like a virus update or a text message intruding in the middle of your talk.
3. I always resist when I am asked for a PowerPoint or USB of my talk beforehand. I want to play with my talk as I watch and learn from other speakers, and from what the audience enjoys. If I hand over control of my talk too soon, I can’t make changes, and I can’t play with it to rehearse it (as I rehearse I change my mind about the structure, etc), so the rehearsal is an important learning experience for me. Also, if I give them PowerPoint, are they using the same version of PowerPoint I am — and will I be familiar with their version when I give the talk? I want to use my own laptop and with software I understand. For example, the keystroke that makes the screen go blue is useful — it helps you pause, helps the audience listen to you — but you need to know it works, and the most reliable way to make sure it works is to use your own laptop with your own software you are used to.
4. If asked to talk at a conference, I always ask if I can give a talk immediately before lunch, and not give the first one of the day. That way, I get to understand the dynamics of the audience in the morning, the AV and the rest of it. Also, since nobody is scheduled to follow me, I can be more relaxed about timing. Pirates don’t get worked up over timing.
5. Don’t over-fill slides. Small text is hard to read. Going to the edge means it may get clipped off by the projector, the screen, or be invisible to the audience because of obstructions.

Perhaps don’t use PowerPoint; if it (or any bit of the IT or AV) gets in your way, it will certainly not help you or your audience. *Do check it works for your own kit before standing in front of an audience — if nothing else, the adrenalin of the performance will make fixing problems even harder and even more embarrassing!*

Pirates win by surprise. The audience is on your side, and they will love somebody who is authentic and not trapped into any of the horrors of bad PowerPoint presentations.

Then forget all the rules, and just do a great talk *for your audience*.

Giving a great talk is about communicating. Steven Pinker’s *The Sense of Style* [15] is an excellent book on writing well, but also on what underlies writing well: on communicating well and understanding the ways we fail to communicate well. For example, the “curse of knowledge” is that we know so much about what we are saying, we think it is easier to understand than it is — and we create convoluted sentences and story lines we find easy that our audience cannot grasp because they do not have the knowledge we have, ironically the very knowledge we are trying to communicate.

Figure 3 shows Pinker’s advice for writing . . . just replace his words writing, write, writer, and reader with presenting, present, presenter, and audience. Don’t forget, though, that a Pirate Talk is spoken, and written scripts often sound written: your written language can get too flowery and pensive, and lose all spontaneity.

5 HELPING PIRATES – DON’T LET TECHNOLOGY KEELHAUL YOU

If Pirate Talks are a good thing, it follows that the organisers, audiences and chairs of talks could help pirates, and help people become better pirates. The main thing, I think, is to help speakers *think*

How do you write?

The answer is “for an audience.” But not to impress them.

The Classic style helps them discern something you know they’d be able to see, if only they were looking in the right place. Happily, this also makes writing easier. We never feel any difficulty when we are pointing out something to somebody next to us.

Understood this way, writing isn’t a performance, a confrontation or a matter of ramming information into someone else’s brain.

It’s the writer and reader, side by side, scanning the landscape. The reader wants to see; your job is to do the pointing.

Fig. 3. Steven Pinker’s advice for writers, from [15].

about their presentations, rather than just doing what they normally do.

Do the speakers know about Pirate Talks? Do the speakers know about the audience and what it wants? Do they know what they want the audience to learn from or do after their talk?

Ask them what their key point is — have they worked it out? Ask them what they prepared *specifically* for *this* audience — preferably giving them enough time to do something about it! And then when you introduce them, clapping at the start of a talk is good, and encourages everybody. And finally, give them a bit of feedback at the end in private, maybe supplemented with formal audience feedback.

A common error in preparing presentations is to talk to PowerPoint (or equivalent), not the audience. PowerPoint make this even more tempting since it can generate audience notes automatically — so a speaker tends to write notes, not a talk. One solution, then, is to ask people to prepare a talk as they usually do, then make notes (even better, make one side of notes) *then delete all slides that are covered in the notes.*

“You don’t need to agree with me, but, if you don’t agree, you do need to think of an idea better than mine! Build on my errors. If you don’t like AARRR, think of something better that helps you more: but don’t disagree and do nothing.”

Is the talk going to actually work — is its technology going to work, and is its content going to work for the audience? Has the speaker got compatible technology? How will you introduce the speaker, how will you manage their timing, and how will you manage the audience (questions, hecklers, etc)? Has the speaker got water? (Hot drinks are a bad idea in case the speaker burns their tongue.) What is your plan for when the speaker over-runs (a good reason to forbid speakers reading scripts)? Have you questions or other ideas for when the speaker does not show up, or gives a very short talk?

At conferences and workshops, there are many speakers. It is hard to remember everyone’s names (some people have names you need to find out how to pronounce) let alone remember their talk titles as well! Do you know what the speaker’s plans are after their talk — are they going to disappear, or stay around for individual questions? If you are paying them to give a talk, they owe it to you to stay around and chat afterwards — and not just to their friends, but to younger people in the audience.

Make sure you have the details or at least a programme — but the best thing to remember is the talk is about the speaker, not about the chairman, so the less you say the better. Maybe: “I don’t know anything about this next subject, but we are really looking forward to learning about it. Let’s give the next speaker a huge welcome!”

At a conference or workshop, how will speakers transition? One good solution is to give speakers an image which they put as their first slide. They can then go onto the stage during the previous speaker’s question time, set up, and show this first slide — without encroaching too much on the

previous speaker's presence. (Make the first slide something like a nice picture of the countryside; if their first slide is their title and name, then this is a bit of pressure for the speaker finishing off.)

If you are running a conference, it can be very difficult to balance the logistics of the conference and looking after speakers — and even harder if you are interested in what they are talking about, as listening and time keeping are hard to do both at once. Get somebody else to chair: running a conference and chairing a session are different jobs.

It is always surprising how often technology fails. The pirate has to be prepared that their presentation may not work.

There are obvious things that can be done in preparation to mitigate problems: take a laptop, take all cables (so you can plug into VGA, DVI, HDMI) and chargers, international plugs and converters, a spare USB stick. If you need sound, consider taking a portable amplifier/speaker. If you have “resources” (e.g., videos) make sure they are in the presentation and have the right aspect ratio for your projector — don't wait till you are using them in front of an audience to find out they are clipped (or don't even work). Don't rely on any wifi or internet working without first checking.

Make sure your battery is fully charged or the laptop is plugged in — and switched on at the wall or at the other end of the extension cable. You should check that the laptop is *really* plugged in — if it has a battery, it may seem to be plugged in, only for the battery to die during the talk because it wasn't properly switched on. Most laptops have some way of saying they are charging; check they are.

If the speaker is using the room's own PC rather than their own laptop, make sure the software versions are compatible. Make sure every slide works — there may be problems with fonts and aspect ratio. If a talk needs converting between presentation software, say from Keynote to PowerPoint, you can be certain the transitions won't work as expected. Check them out. Ideally, try and get a talk after a break (or be first of the day), so you can use the break to check everything works perfectly without doing it in front of the audience.

It is even more surprising how often technology fails because it is badly designed or badly installed. Often AV technology in a room has evolved and got complicated: the people who install it understand it, but they don't understand that a speaker is under pressure to speak, and sorting out instructions (even if there are any!) is a huge burden. Often the instructions have obviously not been tested on anybody else: they say what the AV technicians think is obvious, but what's obvious to a technician is not obvious to somebody struggling to get their laptop projected when an audience is pressurising them. Anybody who writes instructions or builds or installs AV equipment should sit through a few lectures to see how the kit works — and how to make it work even better.

People who design and build presentation software seem to focus on the presentation alone rather than the whole experience of presenting. Too often a presentation starts by showing the audience the whole talk while there is fumbling getting things to work: this isn't the fault of the presenter, but the fault of the AV equipment and its design. Showing all the slides undermines the surprise and theatre of a good presentation. It is surprising that there is never any easy way to set up a presentation without exposing its insides. Having several people on stage trying to sort out presentation problems is a clear symptom that presentation software and technology still has a long way to go!

It is nice to imagine a future that when projectors are plugged into laptops or PCs, they say “this is what you audience will see – do you want to show it? And here are some choices for pictures (like the conference logo) to use while you get the talk sorted out.” Why aren't there easy ways to check the sound? And so on; presentation software has not yet been designed to support presentations, just showing slides and making notes.

Improving presentation software is the concern of the field of Human Computer Interaction, which is taught in computer science degrees; arguably the reason presentation systems are so bad is because people have been uninspired by design teaching and they are then unable to put it into effective action. Had they been taught with Pirate Talks or more inspirational teaching, everybody else would benefit from improved systems [16].

You are the chair of talk not just because you want a good talk, but you want your audience inspired, and in turn that audience will go out into the world and make a difference. The leverage of a good Pirate Talk is one of the best ways to make things happen — one person, or more, is going to go and make a big difference.

6 INTERNATIONAL (OR NERVOUS) PIRATES

Audiences are in awe if you are not a native speaker and you go to the trouble of giving a presentation in a their language. They will be very grateful you are speaking in their language, even a little of it. At least find out how to say Good morning, or I love London (or where ever you are!). If you come to Swansea (where I live) the best way to start a talk is to say “I’m so glad I’m not in Cardiff!” You are then immediately at home. Find something fun to say — ask a local for advice — and be clearly pleased to be with *this* audience in front of you. They will appreciate it.

Here are a few additional thoughts to bare in mind.

It’s hard to give advice without knowing where you are on the spectrum of competence and nervousness, so some suggestions here may seem extreme for *your* ability, but all contain a perspective and motivation that you should consider however good you are.

- Enjoy it. Depending on your fluency, you may like to start off by saying you are learning the language, and ask the audience to laugh with you at any mistakes you make — you want people to enjoy your talk, and if they do you will.
- If your nerves or your competence in the language are such that you need to read a script — halve its length, and hand it out instead of reading it. Make your presentation a visual show, not a test of language; after all, your audience can read your script.
- Don’t be afraid to ask for help from the audience.
- Get help to check the wording you use on any slides. If you are not sure of pronunciation, make good use of your slides to let the audience read what you’d have liked to have said verbally. (Many web sites can speak words and may help you pronounce tricky words.)
- Please don’t make spelling or grammatical mistakes on your slides — get somebody fluent to go over them with you.
- Relax, speak slowly, but **do not use up all of your time**. Your word speed is likely to be much slower than native speakers — if the audience get impatient with what may be for them hard work trying to follow your talk, then relieve them by finishing early. Just say less. Ask them to read the paper, or take handouts.
- Ask people to chat to you afterwards, to avoid anyone asking tricky questions in front of the whole audience.
- Your job is to get somebody excited (and find out who they are); focus on the audience’s goals, not yours — you do not need to tell them everything.

7 SURPRISE

Pirates usually surprise at the beginning of their action. Half way through (as in this section) or at the end, when the audience is already accustomed to the onslaught, makes it much harder to pull off surprise effectively.

8 THE TOP TEN BAD HABITS OF LANDLUBBERS

1. Landlubbers have not thought through what added value and drama actually delivering their presentation in person can achieve for their audience. The audience could have stayed at home and watched something on TV. Landlubbers present in a way that looks like they don't need to be there and YouTube would have been just as good if not better. Why are you standing in front of the audience giving a presentation? What does the talk have for the audience that is present right in front of you? Landlubbers talk as if the audience is not there. The audience turned up to see you and engage with you; why not ask them a question? (At least, why not get a show of hands? The audience will feel engaged, and you can get a sense of what they are interested in.)
2. Reading a script, and not even standing up to read it! How can landlubbers engage with their audience when they read a script? Audiences can read faster than you can talk, and they would probably have preferred to have been given the script to read in their own time. (Written speeches are very hard to script because the tone of writing is different from the tone of speech; written scripts are usually far too sophisticated and lose life when read aloud.)
3. Many talks fail — or aren't as good as they could have been — because the landlubber spent their time “talking to PowerPoint” (spending a lot of time sitting at a computer writing stuff that PowerPoint sucked out of them — a problem also mentioned in section 5) and they lost sight of the fact that they should have been talking to the audience, and using PowerPoint as a tool, not as a word processor. The symptom is a lot of text, complex slides, lots of bullets, lots of fancy transitions. Sometimes it happens because the presenter is confused about the difference between audience notes (handouts) and a presentation. They are different, and one of PowerPoint's beguiling features is that it can make handouts far too easily from bad presentations. If you really want your audience to remember key points, give them an abstract, a list of key points, or anything *completely different* from your slides; even a blank sheet of paper and a pen so they can make their own notes — for some audiences (especially students at the start of the year) it may be worth taking the time to explain how to take notes [17].
4. Landlubbers do not use emptiness, pauses or white space. They talk too fast, have cluttered slides, and do not look at people in the audience. A presentation is theatre, so use pauses for effect and emphasis, not as holes to fill in with your next point.
5. Landlubbers apologise. I'm sorry you can't read this slide. I had to cut the bottom off the graph. This table is too small to read, but . . . You aren't expected to understand this formula but . . . Clearly, landlubbers do not spend the effort beforehand thinking about the audience to avoid doing things they have to apologise for, nor did they practise and debug the talk before presenting it!
6. Landlubbers try to tell their audience everything (and often ramble while doing so), another symptom of having not worked out what their presentation is about for the audience in front of them. Landlubbers say too much. It is always better to give a short talk with the audience wishing for more, than a long talk and the audience wishing for less. Pirates, in contrast, think of their presentations as *the start* of a relationship with some people in the audience. They give those people a hunger to find out more from them!
7. Landlubbers panic and feel like they will get sea sick and would rather walk the plank! They should not worry: the audience is not telepathic, and has no idea what you haven't said. Most of the audience will remember their first talks and they are on your side. If it truly is a panicky talk, don't apologise, instead ask for help, and get your audience on your side:

“This is the first time I have spoken to a professional and such an experienced audience. Thank you so much for inviting me and for your support. I would love to have your feedback about how I can do even better next time — and there will be a next time!”

8. Landlubbers think of their presentations just as things to get over with, as the end of all their work. In contrast, pirates think of their presentations as ways to reflect on their thinking, to improve their ideas and to make progress, as ways to engage an audience on their project. Why do people talk to an audience if not to get them to take up and carry on with the ideas they remember? And if you want the audience to carry on, why not you too? Thus a pirate sets out to help their audience, and the work of speaking clearly improves the pirate’s own thoughts, and often, in fact, leads them to new insights that would not have happened without the pressure of preparing a wonderful — piratical — talk and getting feedback from the audience.
9. When landlubbers *do* give a nice talk, they don’t write it up or think of other ways of spreading it so more people can benefit from it! (See [15, 18] for complementary helpful advice on writing.) What about filming it even?
10. When landlubbers talk, there isn’t a hook; there is nothing specific (or too many things) for the audience to remember. There was nothing to draw them in, or too much of it was confusing — what did the speaker want them to take away? The audience was not engaged, the presentation wasn’t aligned with their knowledge and experience, and probably the landlubber had no idea. Nothing hooked the audience because the landlubber didn’t carefully work out what *their* hook was. Of course, real pirates have no problems with hooks (and they prefer pistols to bullet points).
11. Not only can’t landlubbers count, but they think what they do is fine. They underestimate the value of “deliberate practice” [8]. They do not try to challenge their own thinking and go beyond it. In the world of presentations, there are many inspiring “pirate stories” and landlubbers don’t bother read them and to think about how other people have solved their problems, and perhaps how they could do better. For presentations, see [9, 19–22] etc — not all of them will inspire you of course, but if not, you should ask yourself: Why not *and what can I do that works for me?* What are you doing that is better than these professionals? For a discussion of the generic issues, which go way beyond presentations, see [8, 23, 24].

9 PIRATES AREN’T VICTIMS

Those of us at universities live in a culture of increasing uniformity and automation, as well as assessment of our “performance.” We have to provide lecture notes, we have to have a syllabus and learning outcomes. We have to have good feedback. We pour out material — probably reading it from the notes or bullet points on the slides — and hope the students absorb it. The students ask if stuff is in the exams, and we cannot tell them because that would be cheating. I am not sure why students attend such lectures when books are easier to learn from; I am not sure why we provide notes when books (and many free online courses) are done to much higher standards — and also help students realise there are many sources of information they can use.

The model of pouring information into students’ heads is called the Nurnberg Funnel [25], and it fits computerisation and even automatic assessment nicely. We end up being more worried about students cheating than being inspired [26].

But once we as lecturers focus on the negative things, things get worse. Our students learn that this is how to lecture, and they in turn — when they leave university and start giving presentations — will impose the style on everyone they present to.

Part of the cycle is that students are asked to assess lecturers; they will assess our lecturing based on the unhelpful expectations we gave them, so the system encourages us to meet lower and lower expectations, not get better at lecturing. You, too, are a survivor of poor lecturing when you were a student.

It takes a huge effort to even recognise being a victim and then to rise up to overturn the culture: but that is what pirates do.

1. Why do you want to lecture rather than have your audience (e.g., undergraduate students) learn in other ways? Explain your excitement and motivation for the topics to your audience.
2. What is your call to action? Pirates need shipmates! You surely do not just want your audience to know stuff they can regurgitate in exams; you want them to do something with what they have learned. Even if it is obvious to you, most audiences do not know what the right action is, and if not, they will go away and do nothing. Spell out your call to action.
3. Handing out notes identical to your slides passivates students. That PowerPoint and Keynote make it *so* easy to do does not mean it is always the right thing to do! Do not design your talk to make a handout! Presentations and handouts are different things, despite how presentation tools make them seem the same. Teach your students about *active* note-taking, such as using Cornell Notes or guided notes [17].
4. Many universities require the lecturer to keep an attendance register. This gives out the signal to students that the university think attendance is more important than engagement or learning. So: take over. Make your own scheme (on paper or computerised) that satisfies the university data collection requirements *but more importantly* asks students to assess the lecture: what did they want to learn, what did they actually learn, what do they want to learn next lecture? (Maybe you have better assessments.) I had a lot of success with a very simple more/less/what & comment choice, and asking for a comment if the space I'd left for more or less (of what) was not big enough. Better, asking the question often stimulated discussions.

If your students don't know the answers to these questions, you need to become more piratical. AARRR! Who is your audience, what do you want them to remember . . . and so on. It is interesting that what the students need to ask themselves about their learning and engagement is exactly what you need to ask yourself when reviewing lectures.

5. Some lecturers may say they prepared the lectures ahead of time, or even are recycling lectures from last year or using lectures prepared by someone else. Of course, this is very easy, but don't be a victim to a thoughtless process. The least you can do is vary the delivery, even the order of lectures, depending on what the students in front of you want. If the lectures are pre-prepared, what is the advantage of them over books or notes? Tell you students they can read the PowerPoint themselves, but you will give them a real talk about why they should want to learn it. Give demonstrations. Act. Get them to present the lectures. There are indeed many solutions, but the lecturer turning into a puppet isn't one of them.
6. If you do not enthuse your students, next week you will have to tell them more facts, and thus perpetuate the Nurnberg Funnel . . . you (and your colleagues) are training them to expect you to do all the work.
7. We give Pirate Talks so that the audience learns something. Carol Dweck noticed that people have different mindsets: some want to learn and some want to perform. The performers just want to do well, preferably without going to the trouble of learning (and possibly not performing well); in contrast, learners want to challenge themselves — they may seem like they are not performing so well, but they will learn from their mistakes. This is a bigger

subject than we can cover here, but it helps (especially for a series of lectures or for a course) to be clear and to help your students be clear about the choice. Dweck's and Ericsson's books are excellent [8,23].

10 CONCLUSIONS

Pirate Talks are a memorable approach to giving more engaging and successful presentations, as well as an interesting and powerful way to challenge the structure of poor presentations. Asking, "Have you heard of Pirate Talks?" is a more constructive strategy after a poor talk than suggesting the speaker has made mistakes. You can blame me.

Pirates are called pirates because they just AARRR ... and AARRR is a mnemonic for giving Pirate Talks: first, think of the **A**udience and what **A**ctions you want them to take after the talk (if you don't want the audience to take any action, why are you giving a talk?), what do you want them to **R**emember afterwards (what are you teaching them?), what **R**oute do you need to take them on to get them from where they are to what your talk is about and — finally — how can you up your game? Think about ways to **R**eflect to do better talks in the future.

Keep **AARRR** in mind and be yourself. Be true to your goals to excite, enthuse and transform your audience. If you need to rebel against the culture, that is what pirates do. Go and do it.

-
- Why are pirates called pirates? Because they just *AARRR*.
 - How do pirates know that they are pirates? They think, therefore they *AARRR*.
 - To err is human. To *AARRR* is pirate.
 - When the pirate's audience gets the point, they will have an *AARRR AARRR* moment.
 - How do pirates really like to give presentations? Aye to aye.
 - Far be it for me to encourage copyright infringement, but when do you use a movie clip, blame it on piracy ...

ACKNOWLEDGEMENTS

This work was supported by EPSRC grant no [EP/L019272/1] and by See Change (M&RA-P), Scotland. Author's address: H. Thimbleby, Swansea University, Wales. Author's URL: www.harold.thimbleby.net

References

- [1] Tufte, E. R. Powerpoint is evil. *Wired* (2003). URL www.wired.com/wired/archive/11.09/ppt2.html.
- [2] Powell, K. Science education: Spare me the lecture. *Nature* **425**, 234–236 (2003).
- [3] Waldrop, M. M. Why we are teaching science wrong, and how to make it right. *Nature* **523**, 272–274 (2015).
- [4] Bajak, A. Lectures aren't just boring, they're ineffective (2014). URL www.sciencemag.org/news/2014/05/lectures-arent-just-boring-theyre-ineffective-too-study-finds.

- [5] Freeman, S. *et al.* Active learning increases student performance in science, engineering, and mathematics. *Proceedings National Academy of Sciences* **111**, 8410–8415 (2014).
- [6] Clarkson, M. D. Communication training for scientists and engineers: A framework for highlighting principles common to written, oral, and visual communication. In *2016 IEEE International Professional Communication Conference (IPCC)*, 1–8 (2016).
- [7] Harrison, S. & LeBlanc, N. Method SIMPLE: An electronic interactive tool helping nursing students prepare for written and oral presentation. *Nurse Education Today* **43**, 10–14 (2016). URL <http://dx.doi.org/10.1016/j.nedt.2016.04.008>.
- [8] Ericsson, A. & Pool, R. *Peak — Secrets from the New Science of Expertise* (Penguin Random House, London, 2016).
- [9] Anderson, C. How to give a killer presentation. *Harvard Business Review Reprint R1306K*, 50–54 (Summer 2016).
- [10] Anderson, C. *TED Talks* (Headline, London, 2016).
- [11] Boaler, J. *Mathematical Mindsets* (Jossey-Bass, San Francisco, 2016).
- [12] López, X., Valenzuela, J., Nussbaum, M. & Tsai, C.-C. Some recommendations for the reporting of quantitative studies. *Computers & Education* **91**, 106–110 (2015).
- [13] Twining, P. & Heller, R. S. Some guidance on conducting and reporting qualitative studies. *Computers & Education* **106**, A1–A9 (2017).
- [14] Dawson, J. *Speaking in front* (2016). URL www.speaking-infront.co.uk.
- [15] Pinker, S. *The Sense of Style: The Thinking Person's Guide to Writing in the 21st Century* (Penguin, London, 2015).
- [16] Thimbleby, H. Teaching and learning HCI. In Stephanidis, C. (ed.) *Proceedings HCI International, Part I, Universal Access, HCII 2009*, vol. 5614 of *Lecture Notes in Computer Science*, 625–635 (Springer Verlag, San Diego, 2009).
- [17] Jacobs, K. A comparison of two note taking methods in a secondary English classroom. In *Proceedings 4th Annual Symposium: Graduate Research and Scholarly Projects*, 119–120 (Wichita State University, 2008).
- [18] Thimbleby, H. Just write! In Cairns, P. & Cox, A. (eds.) *Research Methods for Human-Computer Interaction*, 196–211 (Cambridge University Press, Cambridge, UK, 2008).
- [19] Berkun, S. *Confessions of a Public Speaker* (O'Reilly, Sebastopol, Calif., 2010).
- [20] Berry, C. *Your Voice & How to Use It* (Virgin Books, London, 1995).
- [21] Duarte, N. *Resonate — Present Visual Stories that will Transform Audiences* (John Wiley & Sons, New Jersey, 2010).
- [22] Duarte, N. *Persuasive Presentations* (Harvard Business Review Press, Cambridge, Mass., 2012).
- [23] Dweck, C. S. *Mindsets* (Random House, New York, 2006).
- [24] Dunning, D. & Kruger, J. Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology* **77**, 1121–1134 (1999).
- [25] Carroll, J. M. *The Nurnberg Funnel: Designing Minimalist Instruction for Practical Computer Skill* (MIT Press, Cambridge, Mass., 1990).
- [26] Lang, J. M. *Cheating Lessons* (Harvard University Press, Cambridge, Mass., 2013).