Annual Meeting Reports

Usability and Information Design: Creating Author Instructions that Work

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All companies say that it's all about the customer; in the case of author instructions, it's all about the authors' needs. Effective author instructions use some psychology, some research, and some simple text and aesthetics to meet author needs to raise compliance and lower frustration during the publishing process.

During this session, Annette Priest focused on basic methods for conducting usability studies: Determine the focus, study the characteristics of your audience, gather information, and then recruit participants to see how the instructions or information are being received. Robert Schumacher emphasized that those who create the interactions bear a responsibility to the users regarding that experience. Usability should focus on specified goals and tasks that the user has in mind (not what the creator of instructions thinks the user thinks).

Publishers can perform their own usability studies, although many companies will perform all the tasks needed for studies, and planning is key. In addition to asking yourself what you know about your authors and what data you have, Schumacher suggested answering these questions:

- What (objective) do you need to learn?
- What (thing) are you testing?
- Whom (users) are you testing?
- What tasks need to be done?
- What data do you need to collect?

You should watch and, if possible, record your authors at work on your current site or a site prototype to gauge what is truly usable. You need to be able to measure whether revisions improve usability, Priest said, so think about what you will measure—whether it is how quickly, how easily, or how correctly a user can complete a task. You will also want to measure how satisfied a user is with the experience and with his or her work in completing the task.

Knowing what features you want for instructions or your Web site is not enough, Schumacher said. You have to know how to put those features together in a way that makes it easy for users to understand, use, and remember. User experience is affected not just by clear instructions but by clean aesthetics and more.

Yvonne Blanco, of Cell Press, focused on her real-work illustration experiences and how clear instructions can smooth the submission and illustration process. Some of the journals in the Cell portfolio do not have as clear instructions as others, and she can see how that affects the usability of illustrations that come to her. Authors will skim over instructions, she said, if they’re too complex or vague. When she thinks about what she would like to receive from an author, she thinks of the principles of design: order, relationships, simplicity, and then color and typography.

For a cleaner look and for directions that might appeal to authors, the speakers recommended keeping these tips in mind:

- Use visual examples.
- Use common language and units of measure.
- Revamp and change as needed to help your authors.

Blanco recommends using stylistic guidelines; give size ideas to make the authors think about what size they need to work in. She emphasized that visual examples help authors to wrap their minds around what an end product might be.

She will be working on revamping the instructions in the Cell portfolio that authors don’t follow as readily as other instructions. Following the above principles, she hopes to see increased compliance when the instructions are relevant to authors, clear, specific, and easy on the eyes—in short, author instructions that work.

Best Practices

- Have an end result in mind for your instructions and think of ways to measure the end results and the steps of the process.
- Ask questions internally and externally (What are the goals? Whom are we targeting?) before you begin the process.
- Watch your target audience use your Web site or other products in real life to see how they navigate and where they get distracted or frustrated.
- Think about using rankings with your volunteer testers to gauge how an option is being viewed across the spectrum of volunteers.
- Use plain language.
- As you create instructions, limit options (such as file types) so that your authors know exactly what is needed.
- Be malleable in your work, revise, and listen. You are responsible for the experience of your users.

Important Resources from the Speakers

- [https://readability-score.com/](https://readability-score.com/). Plug in your current instruction text to get a feel for how readable it is.

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Legal Issues for Editors and Publishers in Confronting Misconduct Allegations

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Allegations of misconduct are common in publishing, and editors and publishers can expect to be faced with misconduct allegations at some point. Legal issues can vary widely, from allegations of copyright infringement for publishing allegedly plagiarized material to requests and subpoenas for reviewers or reviewers’ identities to whistleblower status of an editor or reviewer who identifies possible misconduct during the review of a manuscript. Issues can include accepting anonymous allegations and threats of suit for defamation. In this session, Debra Parrish reviewed the relevant regulations affecting misconduct allegations and provided pointers on how editors and publishers can minimize the risk of litigation associated with author and reviewer misconduct.

Parrish began by offering definitions of research misconduct that differ by country, institution, and profession and noted that the legal definitions can differ from the moral ones. It is important for editors and publishers to understand the basic legal principles surrounding misconduct allegations, including roles during a misconduct investigation, when to take action (and when not to), who can prompt action, and what action to take.

Probably the most common types of research-misconduct allegations faced by editors are those of copyright infringement, plagiarism, and image manipulation, Parrish said. Copyright involves a bundle of rights that are typically assigned to the journal, although some of them are now more commonly retained by the author or the author’s institution. There are no moral rights in US copyright law, and most copyright infringement cases involve a “fair use” defense. The Digital Millennium Copyright Act (DMCA), signed into law in October 1998, extends the reach of copyright while limiting the liability of providers of online services for copyright infringement by their users. DMCA provides a formal process for notifying organizations that host allegedly infringed content—the DMCA take-down notice; to avoid liability after a take-down notice is received, the publisher must remove the content from its site while waiting for a judge to decide the case. Damages for copyright infringement typically range from $750 to $30,000 and can be as high as $150,000 for intentional infringement.

Allegations of plagiarism, the wrongful appropriation of someone else’s idea as one’s original work, are also commonly brought to editors and publishers as research misconduct. In the United States, there is no such thing as self-plagiarism, said Parrish, and duplicate publication is allowed by law provided that it does not infringe on the copyright of a journal. In cases of alleged plagiarism, the relationship between the authors of the two publications is important inasmuch as it is implicit, although often misunderstood, that each researcher in a collaborative effort can use the results of the research independently of the others. Researchers and editors should keep in mind, however, that funders (the National Science Foundation in particular) hold authors to high standards of attribution and that plagiarism findings can result from incomplete attribution.

Parrish continued by discussing the roles of the various organizations involved in publication of scientific research in investigating research misconduct. Editors and publishers often ask whether they should investigate or participate in investigations of potential misconduct. In the United States, as in most other countries, research institutions are primarily responsible for investigating alleged misconduct by their faculty and staff. Investigations can begin at the request of one of the authors, the funding source, the editor-in-chief or managing editor of the journal, or the university. Parrish advised editors and publishers to leave investigation to the institution, although they may be asked to provide information related to the peer-review process for use in an investigation. Allowing institutions to investigate can mitigate suits for violation of due process or First Amendment rights, for defamation, for intentional infliction of emotional distress, and for tortious interference with a contracted business relationship.

During an investigation, it may be appropriate for the publisher to issue an expression of concern; when an investigation is complete, a correction or retraction is often necessary. Postcorrection action, such as banning a researcher from publishing in the journal, can also be taken. But as Parrish pointed out, in the case of misconduct investigations, the process is often the punishment.

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- Some recommended reading:
  - Don't Make me Think: Revisited (S Krug).
  - Cost-Justifying Usability: An Update for the Internet Age (RG Bias and DJ Mayhew).
  - Letting Go of the Words: Writing Web Content that Works (J Redish).
  - Forms that Work: Designing Web Forms for Usability (C Jarrett, G Gaffney, and S Krug).