The Scholarly Communications System incorporates and expands on the more familiar concept of scholarly publishing and includes both informal and formal networks used by scholars to develop ideas, exchange information, build and mine data, certify research, publish findings, disseminate results, and preserve outputs. This vast and changing system is central to the academic enterprise, which makes it central to the work of academic librarians.

The traditional system of scholarly publishing is collapsing under the weight of an unsustainable business model that insists on costly artificial barriers to control access to information. Scholars, publishers, and foundations around the world are experimenting with business models in which the costs of publication and dissemination are funded by the knowledge producer or his sponsors. Libraries can be instrumental in leading their universities to build infrastructure and funding to support these alternative models.

When authors sign away full copyright, reuse of their own work is often hindered. Copyright is actually a bundle of rights, which may be given away (in writing only!) in whole or in part. Specific rights include:

- to reproduce;
- to distribute;
- to make derivatives (adaptations); and
- to publicly perform or display.

When publishing, authors may elect to use addenda or negotiate to keep some rights for themselves. While traditional publishers usually require authors to transfer full copyright, open access publishers usually do not. Learn more at http://www.scholcomm.acrl.ala.org/node/8.

Copyright basics every librarian needs to know:

- Protection is granted automatically once a work is fixed in a format;
- Only a very little amount of creative originality is necessary to warrant protection;
- Registration, while beneficial in some cases, is not necessary;
- Most colleges and universities do not claim that scholarly publications are “works made for hire”, allowing copyright to vest with the author(s), not the institution;
- Joint authors hold equal and full copyright in the work.

Allowable reuse of copyrighted works depends on both the person using the work and the license granted when publishing. If the author wishes to reuse a work, but did not negotiate the right to do so, his or her ability to reuse will be limited by Fair Use. If someone who is not the author wishes to reuse a work, he or she will also be limited by Fair Use, unless the author(s) published the work under a Creative Commons license, which clearly stipulates what others may and may not do with a work. More at Creative Commons: http://creativecommons.org/.

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Open access material is online and free of charge and is available two ways: publishing and archiving. Open access publishing generally refers to journals and other published material that are freely available online; open repositories generally house materials that may have been published in subscription based journals but have been made openly available via an institutional or discipline-based repository or on a website. Both models are supported by a range of business models and are fully compatible with copyright, peer review, and tenure and promotion processes. See Peter Suber's Open Access Overview for an excellent review of open access: [http://www.earlham.edu/~peters/fos/overview.htm](http://www.earlham.edu/~peters/fos/overview.htm).

More and more institutions and funders worldwide are establishing mandates that require researchers to make their published material available openly and freely. In the United States, notable examples of faculty mandates include those at Harvard, Stanford, MIT, and Kansas. Notable examples of funder mandates are from the U.S. National Institutes of Health and the Canadian Institutes of Health Research. For information on developing an institutional mandate see [http://www.arl.org/sparc/advocacy/campus/](http://www.arl.org/sparc/advocacy/campus/).

Open source, open access, open education, open data, open science: what all of these movements share is a commitment to the removal of barriers to access and the removal of restrictions for use. Sharing research, code, educational materials, data, and scientific processes allows for the free flow of knowledge and information as well as the use and re-use of research, and can be supported by a range of business models. While most librarians have heard of open source and open access, the latter three movements included above are also fast gaining momentum.

Notions of authorship and scholarly publishing are rapidly evolving in the digital age. We are seeing an emergence of new models of scholarship in every discipline that include new forms of presentation of scholarly works, new modes of interaction with scholarly works, new styles of peer review, new business models and distribution models, and a growing trend toward models that encourage a free flow of information exchange through a variety of open access models. See ARL's Ithaka-sponsored study on new publication models faculty in all disciplines are creating or utilizing: [http://www.arl.org/sc/models/model-pubs/pubstudy/](http://www.arl.org/sc/models/model-pubs/pubstudy/).

Worldwide researchers, authors, editors, reviewers, publishers, funding bodies, university administrators, libraries, and others who support the life cycle of scholarship are re-evaluating the traditional system of scholarly publishing and communication. Discussions about what appears to be a changing model for scholarship are being held at academic institutions all over the world. For assistance in starting discussions, see the ARL/ACRL Institute on Scholarly Communication’s guide on developing a scholarly communication program at [http://www.arl.org/sc/institute/fair/scprog/](http://www.arl.org/sc/institute/fair/scprog/).