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# Defining Information Policy: Relating Issues to the Information Cycle

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*The emerging field of information policy is difficult to define, given that issues often overlap other policy areas. The most useful definitions of information policy refer to steps in the information cycle, from creation to use. Another approach to delimiting the scope of information policy has focused on classification of issues. This article combines these approaches by relating information policy issues to steps of the information cycle. These issues are underpinned by economics, and influenced by differing perspectives of interested parties. The importance of information policy to academic librarians is briefly discussed.*

*KEYWORDS information policy, information cycle, information policy issues, academic librarians*

## INTRODUCTION

Information policies affect everyone daily, whether they realize it or not. In the simplest sense, policies are the rules and guidelines that provide structure to our lives. They contribute to an orderly society. Furthermore, information flows everywhere. By inference then, information policies pervade our world and activities. But what specifically does this mean? What is Information Policy as a field of study? How does it relate to the Library and Information Sciences? Concepts of information policy can be ill-defined even for those who deal with them regularly.


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## AN EMERGING FIELD

Starting around the 1960s, the rapid technological developments of the computer and Internet ages resulted in the emergence of many new information-related issues. The increased ease of creation, distribution, access, and copying of information created new questions and concerns. Publics now demand greater accountability by democratic governments and expect transparency of government information. This includes recent trends for providing open access to data generated by public funding, including research results. At the same time, governments have become more secretive in the name of national security and combating terrorism. As cell phone and other mobile technologies have proliferated, and communication via social media has become commonplace, more personal data is being collected by both governments and commercial enterprises. Increased computing power allows for mining of big data sets to identify individual actions and preferences. Privacy of individuals' information can be easily compromised. Misinformation can be widely spread, leading to instances of defamation or public bullying. The rights of free expression are being challenged as the anonymity of some social media forums has emboldened commentary. Conversely, certain entities have attempted to control others by suppressing information contrary to their interests and by limiting access. Unauthorized copying and use of creative works has become a pervasive issue as many users mistakenly equate access with free use or they seek to avoid paying for content. Creators and publishers have pushed back to retain rights to their works and intellectual property, and to preserve income.

Competing interests have prompted debate of these issues. This gave rise to a number of public laws, especially within the past decade or so (McClure and Jaeger, 257–58). Examples from the United States include the Copyright Act of 1976 as amended (17 USC. Sec. 101 *et seq*. 2009), the Digital Millennium Copyright Act (17 USC. Sec. 1201-05. 1998), the Electronic Communications Privacy Act (18 USC. Sec. 2510-22 and Sec. 2701-12. 1986), the USA PATRIOT Act (HR 3162, 107th Cong. 2001), the Technology, Education and Copyright Harmonization (TEACH) Act (S 487, 107th Cong. 2001), and the Children's Internet Protection Act (PL 106-554. 2001). However, law enactment and policy development lags behind the rapid pace of technology development. New issues arise as new technology is implemented in the marketplace. Lengthy debate can follow before suitable compromises are established. Legal battles arise as policies are interpreted differently by different parties. Ambiguities are often sorted out through multiple court cases and further legislation.

These laws affect the production and use of information within society. In general, these issues underpin the field of Library and Information Science. They involve the very foundations, principles, and ethical practices of the profession. Common information policy issues relate to on-going concerns

about access to information, privacy rights, intellectual freedom, copyright protections, and interrelated topics. These issue areas generally have long histories (Browne, 261–62; Duff, 72). The relative ease of modern day electronic data collection, transmission, and sharing has added complexity.

These information policy issues not only concern library and information science professionals, but also span a wide array of disciplines and interest groups. The field of information policy is becoming a broader and more interdisciplinary subject area (Braman, 2). One might readily surmise that information policy is a subfield or specialization within a broader area concerning policy development and application in general. However, information policy has not been recognized as a cohesive area of study, or as a subfield within Public Policy. While Public Policy deals most directly with government decision-making, information policy tends to be broader in scope. It also entails market-driven practices that may develop apart from government oversight (Orna, 550–51). Information policy development has been fragmented among many disciplines (Rowlands, 17). Much of the literature, though, still resides within publications associated with the Library and Information Sciences (Browne, 261; Duff, 77).

## DEFINING INFORMATION POLICY

If the area of information policy is to gain recognition as a separate discipline in its own right, it needs some definition. Various definitions of *information policy* may be found in works of Braman; Burger; Duff; Jaeger; Maxwell; McClure and Jaeger; Mêgnigbêto; Montviloff; Pajaro and Betancourt; Porat; Rowlands; Schement and Curtis; Weingarten; and Yusof, Basri and Zin. Some definitions focus primarily on the role of governments in shaping society.

> Pajaro and Betancourt defined national information policy as "the array of guidelines and directives guiding preparation of planned actions to guarantee universal access to information in order to pursue all kinds of activities (social, economic and political), thereby helping achieve a country's development goals" (23).
>
> Information policy can best be understood as the set of specific goals created by governments to shape the creation, access, management, exchange, security, display, collection, and other uses of information. (McClure and Jaeger, 257)
>
> Information policy [is] the combination of laws, regulations, rules, and guidelines that steer the creation, management, and use of information. (Jaeger, 841)
>
> Information policy. . .is the societal mechanisms used to control information. (Burger, 6)

> Information policy is comprised of laws, regulations, and doctrinal positions – and other decision making and practices with society-wide constitutive effects – involving information creation, processing, flows, access, and use. (Braman, 3)
>
> Information policy [encompasses] the set of all public sector laws, regulations, and policies that encourage, discourage, or regulate the creation, use, storage, communication, and presentation of information. (Weingarten, 79)

Other definitions are broader or recognize influence within community, commerce, and organizations.

> Information policies. . .are social, political, legal, economic and technological decisions about the role of information in society. These decisions operate both at a societal level when applied to national and international policy, and at an instrumental level, as they impact the creation, dissemination, use and preservation of information. (Maxwell)
>
> Information policy is the set of strategies and actions defined at a geographical or institutional level in order to satisfy information needs expressed by people and assure development goals. (Mêgnigbêto, 144)
>
> Information policy attends to the issues raised by the combined efforts of information technologies (computers and telecommunications) on market and nonmarket events. (Porat, 207)
>
> Information policy includes "all policies relating to the allocation of resources for purposes of institutionalizing information and for providing access to channels of communication" (Schement and Curtis, 166).
>
> Applied to the field of information, policies provide guidance for the design of a strategy and [programs] for the development and use of information resources, services and systems. (Montviloff, 7)

This array of definitions represents differing perspectives and interests pertaining to how information flows.

One way to try to define the scope of information policy, irrespective of political or organizational boundaries, is to relate it to the processes involved in the information cycle, from creation to use (Browne, 270–71; Braman, 3). The information cycle encompasses the creation, production, distribution, access, and use of information. Certainly, each of these five steps in the information cycle could be further subdivided (Browne, 272; Braman, 3). For clarity, the five steps provide a basic framework on which to superimpose an array of issue areas common to the study of information policy. An advantage of using the steps of the information cycle in the definition of information policy is that it focuses on processes rather than any specific method. Such definitions still apply regardless of whether information content is produced

and distributed as a print book, electronic book, webpage, mobile phone application, or some other technological means not yet invented.

## CLASSIFYING ISSUES IN INFORMATION POLICY

Another approach to defining the scope of information policy is to examine the types of issues that might be included. Duff (77) and Yusof, Basri, and Zin (205–10) attempted to categorize issues of information policy based upon what topics were found in scholarly literature. McClure and Jaeger (257) provided a list of information policy issues relevant to national-level government activity. The Congressional Research Service and others have used a categorization based on goals and objectives (Eisenbeis, 94; Rowlands, 20). Similarities can be seen between these itemizations (Figure 1). However, these lists fail to establish parameters by which information policy issues might be distinguished from related policy subfields (such as media policy or education policy). The relationships between identified issues and steps in the information cycle also may not be readily apparent.

In Figure 2, major information policy issues have been organized in relation to the steps in the information cycle. Issues were aligned with steps where they occur most prominently. This illustration is designed more to facilitate understanding of the realm of information policy rather than to mirror reality. In actuality, there are no hard boundaries between each step in the information cycle, as steps may overlap. The issues that arise at one step can also affect other steps in the process. Issues spanning more than one step typically affect steps that are immediately adjacent or those that occur later in the cycle. For example, copyright issues have been placed in the production step, given that copyrights are attached to an information commodity as it is produced. However, that copyright protection also affects how the item is distributed, how readily it can be accessed, and how it can be used or reused.

The creation step of the information cycle involves translating ideas into tangible forms, such as research notes, manuscripts, presentations, inventions or social media posts. Therefore, policies associated with this step often deal with protecting rights to free expression and preventing censorship. These policies are counterbalanced by policies advocating civil discourse, such as user policies prohibiting profanity and discrimination. Related policies aim to protect creators of information from forms of intellectual property theft, such as software piracy, corporate espionage, and patent and trademark infringement. Knowledge creation often involves interpreting data sets. Computer technologies have made it easy to gather and analyze large quantities of data very quickly. This has raised concerns about how data is collected, managed, stored, protected, shared, combined, documented, and ultimately used. Some research granting organizations (for example, the National Insti-

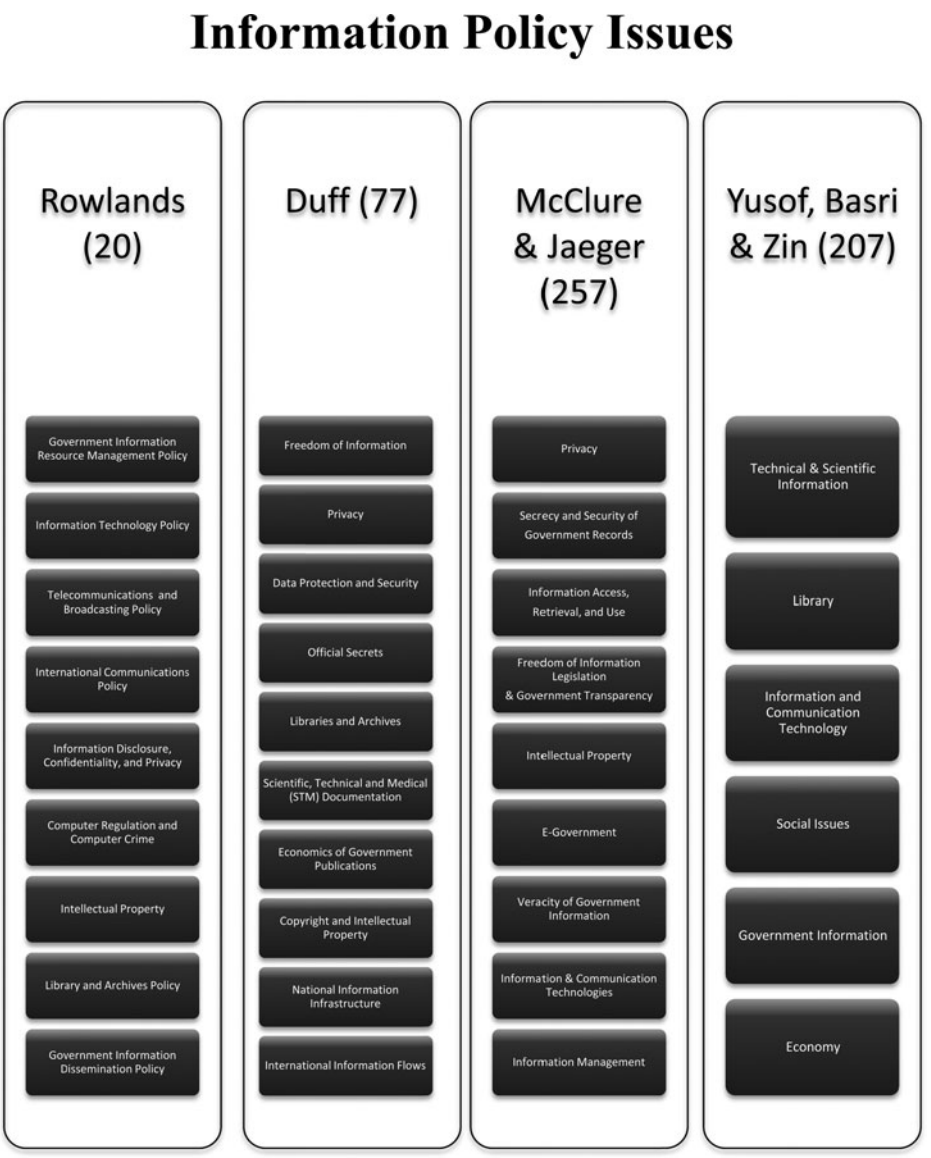


**FIGURE 1** Classifications of information policy issues.

tute of Health and the National Science Foundation in the United States) are now guided by policies that specify that investigators must submit data management plans with their grant proposals. Policies addressing the creative process are closely tied to concerns about both transparency and privacy of information that affect the use step of the information cycle.

The production step of the information cycle deals with the added value provided by an employer or publisher to edit, format, index, and

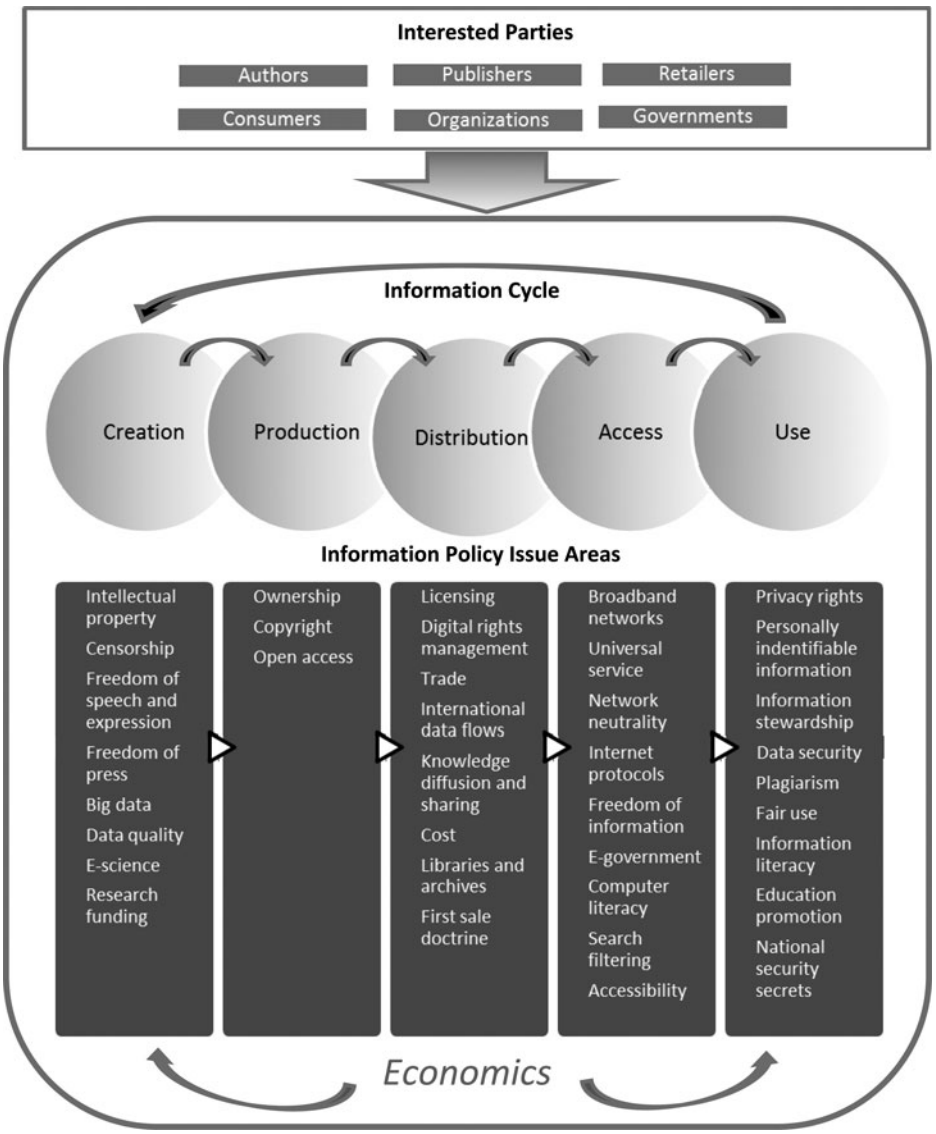


**FIGURE 2** Information policy issues in relation to the information cycle.

package information content or manufacture inventions or artifacts. This step frequently involves the transfer of ownership and copyright from the originator of content to the producer organization. In cases of work for hire, the employer (such as a business or government agency) generally retains ownership of the creative work even after the author/creator departs the organization. From the moment of creation, modern copyright laws give authors and creators exclusive rights to publish and sell their works and prevent copying and modification by others, with some exceptions for fair

use. Authors frequently transfer copyright to a publisher, in accordance with publisher policies, author agreements or contracts. Stipulations vary widely, not only by organization, but also by publishing model (e.g., green open access, gold open access, or traditional subscriptions or sales). Even in cases of self-publishing such as via social media platforms, there are usually vendor policies and user agreements established regarding ownership, copyright, and allowable content.

Policies associated with the distribution step of the information cycle tend to deal with issues of how, when and where information resources are made available and the associated costs. Such policies are typically designated by the producer of the product being offered. However, government regulations and laws may develop to mitigate inequitable and predatory practices. A complex array of policies and practices has arisen as creative works have moved online and are no longer predominately disseminated in print or physical formats. Licensing conditions and digital rights management systems, for example, can limit distribution to a particular user group or individual per purchase, restrict use by minors, or prevent migrating content to another device. Trade and international commerce laws may restrict sale or resale of certain types of products, or transfer of intellectual property, in order to protect national interests. Intermediary suppliers of information, including libraries and archives, may negotiate terms of agreements with distributors. They, in turn, create policies to assure compliance by end users. The first sale doctrine, originally created to allow lending and resale of physical books and recordings, has not held up well in the digital era. Digital content is often licensed under a lending model rather than sold outright with a transfer of ownership. Policy questions and conflicts have arisen as to how much digital content can be shared and used without having to pay additional royalties.

In the pre-Internet eras, issues about access to information predominately involved gaining permission to obtain copies of information. For example, Freedom of Information Acts allow individuals to request government documents. Libraries provided lendable collections of books and physical works, with few restrictions on access. As government, public, and educational information has moved online, issues about making information available and transparent to all potential users has been reflected in policy development. Policies pertaining to e-government and accessibility for those with disabilities emerged. The access step of the information cycle is now dominated by a variety of mechanisms of delivering content electronically, and the means of connecting to that content. Numerous issues are being debated within industry, governments, and user groups regarding fairness and equity in access to broadband networks, universal service, and principles of network neutrality. Policies regarding Internet protocols and search filtering exert control over who can access information and when. User knowledge and computer skills can also be a factor influencing equity of access to

information, and, therefore, policies dealing with computer literacy in education also pertain to this step in the information cycle.

Issues surrounding use of information relating to individual privacy, government secrecy and transparency, and infringements and exceptions to author/creator rights have existed in society for centuries. These issues are being revisited as recent technological developments have made it easier to encroach on rights of others. The ubiquity of electronic information transmission has created cultural shifts regarding the recognition of ownership of information. As conversations have moved online, creative content has become less recognizable as being afforded protections from copying, modification, and reuse without explicit author or publisher permission. Personal information can be more easily obtained, broadcast, and misrepresented, often without the knowledge of the individual. Instances of attacks on data security and integrity have become more frequent for both individuals and organizations, as computer hacking and identity theft have become commonplace. Policy development regarding the use step of the information cycle is now necessary in virtually every organization from small business to national governments. Educational organizations have additional roles and responsibilities for developing guidance about proper uses of information and promotion of information literacy.

Notice that economics can be seen as underlying and affecting information policies in all five described steps of the information cycle (Figure 2). Technological advances have made it easier and less costly to copy and share information. Publishers have responded by pressuring governments to increase protectionist policies to assure profits in a world where business models are quickly evolving. Consumers react to rising prices of commercial information products, limitations on access to information, and the increasing power of information industries to control content. Economic tensions often arise as the desire for open access to information (to support an informed public and to promote progress) conflicts with commercial goals of profiting from the production, distribution, and use of information.

## INTERESTED PARTIES

Many different interested parties attempt to influence information policies (Figure 2). These interested parties may include authors/artists, publishers, distributors, librarians, consumers, educators, governmental bodies, general publics, Internet providers, technology companies, and others. Controversies regarding specific information policies and proposals arise because of the differing goals, objectives, perspectives, philosophies, and underlying values of interested parties. Their competing interests also entwine multiple issue areas, such that any given information policy cannot be formulated independently of other policies and related issues. Those in the informa-

tion professions who become involved in information policy issues are often strongly connected to concerns for civil liberties and human rights (Braman, 5).

Information policy development generally involves trying to find a balance between competing interests, while minimizing adverse effects (Rowlands, 14–15). This is certainly not an easy task, as it is not possible to please everyone simultaneously. Policy proposals may be initiated in an attempt of one group to gain greater control over other groups. Maxwell described four competing realms of power in which various stakeholder groups operate: Sovereign, Transformation, Production, and Global. "Sovereign" deals with "social cohesion" and governance. "Transformation" is concerned with "the actions of individuals" including the creation and use of information. "Production" relates to "control [of] information ownership" and dissemination. "Global" involves flow of information between governments and nations. Tensions arise as a result of differing "expectations of *communal responsibility* [versus] *individual entitlement*" (Maxwell). Arguments develop around which realm of power should take precedence for any given information policy issue. Common information policy issues about digital communications predominantly involve struggles for dominance between the transformation and production realms (Maxwell). However, distinctions between stakeholder groups can be hazy. For example, an individual might be both an author/creator and a producer/distributor of information, as well as a user of information to increase knowledge during the creative phase.

Given the complexities and interrelationships between stakeholder interests, debates continue even after a policy had been decided and established. This may lead to reexamination and revisions, sometimes in a continuous cycle. Furthermore, information policy development is in a constant state of flux as technological advances and changes in operational practices generate new issues and conflicts.

## DEFINING INFORMATION

The differing perspectives, values, and objectives of interested parties contribute to differing understandings and interpretations of what is meant by the term *information*. When the term *information* is not defined, or well defined in relation to information policy development, it can greatly affect the resulting policy outcome and policy implementation. Much of the lack of clarity around the concepts and practice of information policy rests on the multiple meanings and interpretations of the term *information* (Braman, 3; Browne, 264–67). The same individual might even apply different meanings depending upon the issue and the context in which it pertains. Information has been characterized as generally falling in between data and knowledge on a continuum of understanding (Shedroff). In this view, data becomes in-

formation when it acquires context and meaning. Definitions of information have furthermore been classified into four groups relative to information policy, as: "a resource," "a commodity," "perception," and "a constitutive force in society" (Browne, 266). A common dichotomy is to characterize information as a product or commodity as opposed to the creative content within a product, container, or medium (Browne, 265–66). This important distinction needs to be addressed and defined when discussing particular information policies. How information is defined will frame information policy discussions and direction. The ambiguity in definitions of information, and the varied interpretations by multiple individuals, also affects the scope of issues and characterization of what may be considered to be included in information policy.

For example, should pornography be considered to be information? Ignoring the difficulty in defining *pornography*, the answer to that question will likely be different for different people. Viewpoints will depend upon primary objectives (e.g., protecting children; protecting freedom of expression). Depending on one's perspective, computer filtering laws might be information policies, social policies, education policies, economic policies, criminal justice policies, or some combination of policy arenas.

The term *information* is also easily confused with other related terms, such as *information technology*, *communication*, or *public relations* (Browne, 265). What constitutes information policy remains imprecise.

## DEFINING POLICY

Delimiting the scope of information policy not only requires attention to definitions of *information*, but also to the *policy* portion of the phrase. The term *policy* can also be influenced by the context in which it is used. It may be defined in at least six ways, as: "theory or model," "an expression of general purpose or desired state of affairs," "a label for a field of activity," "decisions of government," "specific proposals," and "process" (Browne, 268–69). Definitions of policy variously refer to (a) principles, rules, and guidelines, (b) goals or missions, (c) process, (d) decisions, and (e) formal documents. Some examples follow.

> A policy is a principle to guide decisions and achieve rational outcomes. A policy is a statement of intent. ("Policy")

> A policy is a guiding principle used to set direction in an organization. It can be a course of action to guide and influence decisions. ("What is the Difference")

> A set of policies are principles, rules, and guidelines formulated or adopted by an organization to reach its long-term goals and typically published in a booklet or other form that is widely accessible. ("What are Policies and Procedures")
>
> In "management. . .[it is] the set of basic principles and associated guidelines, formulated and enforced by the governing body of an organization, to direct and limit its actions in pursuit of long-term goals." ("What is policy? Definition and Meaning")
>
> In "politics. . .[it is] the declared objectives that a government or party seeks to achieve and preserve in the interest of national community." ("What is policy? Definition and Meaning")
>
> Policy is a "course or general plan of action (to be) adopted by government, party, person, etc." (Turner, 844)
>
> We can provisionally define a policy as a set of decisions which are oriented towards a long-term purpose or to a particular problem. ("Definition of Policy")
>
> A policy is [a] guide for action.. . .[P]olicies. . .[o]utline rules, [p]rovide principles that guide action, [s]et roles and responsibilities, [r]eflect values and beliefs, [and s]tate an intention to do something. ("Section 4: What is Policy?")
>
> Good policy. . .states matters of principle,. . .is focused on action, stating what is to be done and by whom, [and] . . .is an authoritative statement, made by a person or body with power to do so. ("What is Policy?")

Policy may be best thought of in a broad sense when applying it to a field of information policy, given that common issues frequently affect how governments function as well as the operations of the marketplace (Maxwell). Rowlands (22) asserts that policy is best viewed from a theoretical standpoint as a process rather than an outcome, as this approach facilitates study. In practical application, it may make sense to think of policy as the result of a process of discussion, compromise, and decision-making. The result is what guides policy implementation and related decision-making. Policy implementation involves procedures, that is, "the specific methods employed to express policies in action in day-to-day operations of the organization" ("What are Policies and Procedures?"). In examining the potential scope of information policy, it may help to think of policy as a choice among options that reflects the principles, intent, and values of an organization (or business, or government body). Policies are often represented by legislation, regulations, court decisions, directives, and written statements, but can

also be encompassed by social norms or customs and unwritten agreements (Rowlands, 20).

Policies are frequently developed to address a problem, conflict, or concern, and seek to avoid negative effects of people's actions and/or promote positive benefits. However, a positive benefit for one stakeholder group may have a negative effect for another stakeholder group. Which group should be given preference? That is where the process and decision-making aspects of policy becomes important. Who should decide? That will likely depend on the level at which the policy is being developed, the intended purpose of the policy, and which groups may be affected by the policy. A government policy might be decided by a legislature or a court, whereas a company policy may be decided by a chief executive. Public input may drive discussions in the former case, and may or may not in the latter case.

By combining concepts of policy in general with the realm of information science, a new working definition of information policy may be constructed. *Information policy* is the result of a process of developing rules, regulations, or guidelines affecting the information cycle, encompassing issues related to the creation, production, distribution, access, and use of information.

## CONSIDERATIONS FOR ACADEMIC LIBRARIANSHIP

The various issue areas, points of view, and policy formulations that make up information policy affect the practice of librarianship. Academic librarians are involved in some manner in every step of the information cycle. Therefore, their work is affected by the myriad of associated policies and ever-changing issues. Academic librarians need to make choices based upon their awareness and understandings of information policies.

Academic institutions are factories for information creation and expression by faculty, staff, students, and campus visitors. Librarians are taking on larger roles in facilitating information creation and exchange. This includes being guardians of freedom of speech and expression. Librarians need to consider programming that respects a variety of viewpoints and provides equal opportunities for participation. Conversely, librarians may become involved in establishing and enforcing policies for respectful use of social media and classroom discussion boards. Research support and consultation services are also growth areas for librarian involvement. These derive from greater needs to meet newer policy requirements for data management plans, data sharing and discovery, and data curation and preservation.

Debates about scholarly communication and open access publication models span issues primarily related to creation and production. These issues often pit authors against publishers. Authors (such as faculty and students) want their works to be read. This suggests that an open access publication

model would be beneficial to both authors and users. Authors also want their works to appear in prestigious journals (often for tenure purposes). These tend to be produced by profit-motivated commercial publishers, often at high subscription costs to libraries. Conversely, publishers often add value in the form of database organization and provision of search functions that aid librarians and users. Academic librarians need to weigh how they may influence publication decisions and availability of content for their community of users. As such, they may become involved in educating authors about their rights of ownership and copyright retention. They may provide advice for interpreting and negotiating author agreements with publishers. Librarians also make decisions about whether to (a) promote publication in open access journals to faculty and students, (b) provide programs to promote self-publishing such as in digital repositories, (c) subscribe or not to various journals, or (d) provide a suitable mix of such services.

Actions of librarians are constrained by legal considerations such as copyright protections and licensing agreements. This affects the ability of librarians, acting as distribution intermediaries, to broadly share information content. Licensing contracts, which may be required to purchase a particular information product, most often limit who can be allowed to access certain materials. Sometimes licensing conditions limit distribution even to members of particular academic departments. Restrictions also affect the ability of libraries to lend to each other via interlibrary loan mechanisms. In the case of e-books, lending between libraries is generally not allowed at all by vendors. For journal articles, additional fees may apply. Identifying what materials can be reproduced and distributed to students under Fair Use exemptions to copyright has become more ambiguous as many materials have moved to electronic formats. To the extent that interpretation and implementation of policies occurs at the local level, librarians may have some discretionary choice in their application. For example, if a librarian can determine that the intended purpose of use is for education or research, they might provide a single copy of an article from a proprietary database in accordance with exceptions to copyright afforded by Fair Use policies. Faculty may seek advice from librarians on what materials they can legally distribute and use in classrooms and online course management systems. Some libraries have landed in court over questions of what content is allowed to be placed on e-reserve for student use. Librarians need to be aware of the changing policy landscape with regard to lending of materials. Librarians with collection development responsibilities especially need to understand legalities of licensing agreements and contracts in order to best negotiate acceptable terms with vendors.

The complex nature of providing access to licensed electronic materials has led to greater specialization of librarian skills in information technologies. Licenses typically require use of proxy servers or similar means of controlling electronic access from both within and outside the library. Borrowing and

user policies must be developed to inform individuals of what activities are allowed or prohibited. Use privileges often vary between institutional members, alumni, and community users as a result of licensing stipulations.

A common area of conflict within academic library practice involves contradictory purposes related to the access and use steps in the information cycle. Privacy rights can be in direct conflict with a desire to provide information access. Privacy laws and policies place limits on free flow of information. The interplay of privacy rights, government secrets, and freedom of information is especially relevant to electronic government information and research databases, including that which passes through academic libraries.

Librarians play a key role, in collaboration with academic faculty, in educating students about proper use of creative works. For example, librarians may provide instruction in proper citation methods to avoid charges of plagiarism. They may teach users how to search for, identify, and verify digital artwork that are in the public domain or have appropriate Creative Commons licensing for reuse. These activities require a thorough understanding of academic integrity policies, ownership and copyright protections, and intellectual property laws and policies.

The ever-changing information policies in a rapidly advancing technological age shape the practice of academic librarians in many ways. Recognition of information policy as its own field of study may help to focus more attention toward training students and conducting research on the complexities and implications of information policy development and implementation. Regardless of whether an individual agrees or not with a given information policy, it needs to be followed until changed. Desired changes should be promoted through legal and democratic means. The alternative is anarchy.

## CONCLUSIONS

Information policy permeates and underpins the Library and Information Sciences, including its specializations. It also overlaps many other disciplines. The interdisciplinary nature and complexities of information policy contribute to the difficulty in defining the boundaries of this emerging field. A lack of clarity is also the result of multiple definitions and interpretations of the component terms: *information* and *policy*. These various meanings arise from the array of values, philosophies, perspectives, and objectives of stakeholder groups. Information policy may be framed in terms of the issues that arise in relation to the primary steps in the information cycle: creation, production, distribution, access, and use. Recent technological advances and new methods and formats of electronic publication and communication have created many new issues. Conflicts typically arise in the intersections between the steps of the information cycle, as various interested parties tend to associate with particular steps. However, there are also overlapping interests.

Issues that arise at one step can affect other steps, especially those further along the chain. Economics underlies issues of information policy and can be driving forces. Stakeholder groups operate from competing realms of power, each trying to tip the scales to their advantage and gain control. Tensions commonly arise between those who promote communal responsibility versus those who expect individual entitlement. An aim of information policy should be to find a balance between competing interests while attempting to minimize adverse effects. Because it is not possible to please everyone simultaneously, policy issues tend to go through continuous iteration and revision. Policy development involves social and political processes.

An understanding of information policy is necessary to the practice of librarianship. It affects the conduct and decisions of librarians and information professionals (as well as information users and creators). Engagement in information policy discussions and policy development can lead to change. Change is inherent within information policy, and, therefore, the boundaries of what constitutes information policy remains in flux. Relating policy issues to steps in the information cycle can help define the boundaries of information policy as a field of study even as information technologies and communication processes evolve.

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