EDITORIAL

Dissemination of Knowledge and Information: Rethinking the Model

On a flight to Hawaii this past summer, after attending the 30th annual meeting of the International Academy of Nursing Editors (INANE) in San Francisco, I read John Howkins' book *The Creative Economy,* published a decade ago (Howkins, 2002).

The message of this book is how to rethink an economy when the product is ideas and intellectual property, rather than tangible goods, and how best to safeguard one's ideas from exploitation. It made me think about my role as an editor and how editors treat ideas and then disseminate them. Recall that I had just attended the INANE annual meeting, whose theme this year was the use of social media (i.e., Facebook, blogs, Twitter) to disseminate ideas. (For all intents and purposes, social media are currently being used by publishers and editors to market journals rather than to disseminate content.) The issue, of course, is that people are obtaining information in new and different ways, and, in order to adapt to the times, editors and publishers of scholarly journals will have to change their models for disseminating information and safeguarding ideas. The challenge confronting editors and publishers of nursing journals is how to develop new models for disseminating information that consumers will use. What will these new models look like? Where to begin rethinking models for the dissemination of nursing information?

It has been said that the best decisions are those that use information already at hand to shape the present and carve out the future. A good way to start is to consider what we know about how information is currently being disseminated and how people go about accessing information, in general and as it relates to nursing.

What Do We Know?

We know that our world has been dramatically altered by the advent of information technology. Few of us can imagine a world without the personal computer, the Internet, and the array of software options that have enabled so many to become marketers, publishers, and filmmakers. Facebook, Twitter, Skype, and YouTube have transformed how we inter-

act with and relate to each other. They have forever changed how individuals acquire information, and from whom.

We know that information technology has forced industries that produce creative content — namely the music and film industries and book and magazine publishing — to reconsider all aspects of their respective fields of endeavour. These industries have been hard at work developing new models for producing and financing content. It began with the music industry a decade and a half ago, when illegal downloading from the Internet, counterfeiting, and piracy almost brought the industry to its knees. Meanwhile the television and film industries have had to find new ways of creating and distributing their products. And libraries and bookstores have had to reinvent themselves given the boom in Internet companies such as Amazon and the advent of online publishing, self-publishing, and e-books.

We know that academic publishers and editors are under pressure to rethink their publishing and business models. The sheer volume of information requires that it be made available in pre-digested form and be customized to the reader's needs (see *Zite Personalized Magazine*). The demand for evidence-based research requires that information be published and disseminated in a most timely manner.

We know that consumers expect to have information accessible 24/7. Libraries have gone virtual.

We know that consumers of information are no longer content with traditional ways of publishing. They want enhanced products. They want information presented in multimedia forms. They want to interact with those who produce the information. Some publishers, eager to take full advantage of online capabilities, are experimenting with prototypes for the future journal article. The design team at Elsevier, one of the world's largest publishers of academic journals, has been working in concert with the scientific community to develop several prototypes. The "article of the future" could feature a non-linear structure, integrated multimedia, interactivity, and enhanced graphical navigational capabilities (see www.articleofthefuture.com).

We know that consumers expect information to be available free of charge. The open-access movement took hold and gained momentum when publishers raised their subscription rates to exorbitant levels. Profits were seen by many as verging on the obscene (Monblot, 2011). Few consumers of information believe they should have to pay for content, particularly content that has been developed with public monies, as is the case with knowledge generated by the scientific community. Thus the traditional way of financing journals is no longer economically sustainable or viable and publishers are being forced to rethink not only their publishing model but their business model as well.

We know that we are living in an age when knowledge is not produced or controlled by an elite few. Blogging, Google, the Internet, and self-publishing have democratized the production of information and have made knowledge accessible to all. Everyone is a stakeholder in the knowledge creation-dissemination-uptake enterprise, and therefore everyone must become involved in creating the future. Everyone — to varying degrees — creates, disseminates, and consumes information. We are a world of writers, producers, and directors. Consider how many individuals take part in blogging or in producing YouTube broadcasts; anyone can become an eyewitness with the click of an iPhone or an iPad, and with a press of a Send button can participate in disseminating information that may well "go viral," change attitudes, and even begin uprisings, as happened in Egypt this past year!

We know that books, journals, and face-to-face conferences will become obsolete; people will share information directly through networking, teleconferencing or the use of various electronic devices.

Closer to "home," we know something about nursing and nurses' sources of information.

We know that the public, the nursing profession, and all major stakeholders involved in the delivery of health care, from clinicians to administrators to policy-makers, expect decisions to be based on the best available evidence; best practice guidelines are based on evidence.

We know that there has been exponential growth in the number of nursing journals available worldwide, from just two at the turn of the 20th century to ten by the late 1960s, along with phenomenal growth in their variety, presentation, and range of target audiences, so that today we have no fewer than 759 nursing titles from which to choose, 650 of which are produced in English. Yet only 4% of nurses read scholarly journals and 95% of nursing materials are published in journals.

We know that frontline nurses, when asked where they get their information, rank both nursing and medical journals at the bottom of their list of sources. The primary sources of information for these nurses are experience, formal training, conferences, and senior colleagues. Frontline nurses do use journals to obtain the latest research evidence, but the literature they consult tends to be secondary sources and pre-digested summaries rather than original studies (Estabrooks, 1999).

We know that the majority of nurses and the public at large want to access the latest information as soon as it is produced, in a form that they can understand, without having to spend too much of their time or having to alter their thinking processes.

Finally, *we know* that information is the latest, hottest, and most important commodity in this age of rapid change, when we all have to be knowledge workers — creating, managing, using, and exchanging

knowledge — in order to survive and thrive. We are all stakeholders: clinicians, educators, administrators, researchers, patients, clients, families, communities, and the global world. Thus every stakeholder, each in our own way and in our own familiar universe, needs to participate in the creation of our own personal model of information dissemination, exchange, and uptake, and thereby contribute to the development of different prototypes designed to serve many different purposes.

Where to Begin?

There are many ways to start thinking about how to create new models. Howkins (2002) suggests a process of dreaming and analyzing as a means to develop new ways of thinking. His process, RIDER — **R**eview, **I**ncubate, **D**ream, **E**xcitement, **R**eality check — can be applied to the dissemination of information.

Review entails taking stock of what one knows, as I have just done, albeit in a cursory way. Each stakeholder asks: How are knowledge and information currently being disseminated, exchanged, and used? By whom? How effective are different forms of exchange? What are the challenges to be taken up now and in the foreseeable future?

Incubate entails letting the information sink in, reflecting on what it means, and giving it time to percolate. This could take minutes, hours, days, weeks, or months.

Dream. Once the information has been digested and the challenges understood, the next step is to imagine what the knowledge dissemination-exchange-uptake enterprise will look like. The dream could be developing different forms to disseminate the same information to different stakeholders; or establishing clearinghouses to permit evaluation of quality, checking of facts, and ranking of the information in terms of its validity; or a virtual classroom where only approved information that addresses the specific questions of stakeholders is available.

Excitement is generated when we let our minds and emotions take over, such as by asking "what if" questions about the dream. *What if* the same information were to be disseminated in different forms to suit the needs of different stakeholders — what would that look like? What different forms would be needed for each group (for example, interactive journals for researchers, pocket versions and podcasts for clinicians, Webnar for administrators)? What knowledge, skills, and expertise would be needed to develop each different source?

Reality check. The last phase in Howkins' creative process is determining what is realistic and what is "pie in the sky." What would it take to make the dream reality? How long would it take? Is the technology available now or would a platform have to be developed? How much

would this cost? Would the benefits outweigh the costs? Would the information ultimately be used? How does one measure "impact"?

We live in exciting times. Sir Francis Bacon, who lived in the mid-1500s, is credited with the saying "knowledge is power." Throughout history, power rested in the hands of the elite: those who were educated and had access to knowledge — or knew how to create it. The rules have changed and so have the roles. Now, everyone has power, providing that they understand knowledge and the choices that are theirs to make.

Alvin Toffler, the 1970s futurist and author of the bestselling book *Future Shock,* has advised that the most effective way to control the future is to make the right choices today. The choices we make today about fashioning nursing's future knowledge enterprises will be with us for decades to come and will alter the profession. Let us be wise, bold, and creative as we move forward.

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