Abstract:

In 2002 FADIS, an image repository designed for the Fine Arts Department at the University of Toronto in 2001 was moved into the main University of Toronto Library system, making it available to faculty and students in the university community. Today, the multi-media repository has more than 100,000 digital images, videos and webcasts with participating institutions across the Canada. This article examines the development of FADIS and how it evolved into a collaborative model with participating institutions across Canada. Based on a grass-roots philosophy that acknowledges the need for post-secondary institutions to collaborate and share limited resources, FADIS has quickly grown into the preferred resource for digital content at post-secondary institutions.

Introduction

Until recently the ubiquitous carrousel projector was to those teaching in the visual arts the equivalent of the blackboard-and-chalk binomial of the traditional teaching styles. Educators in today's university classroom, however, are more likely to carry an iPod, clicker and a USB drive in their pockets than a carrousel tray or a dusty piece of chalk, as campuses across the continent implement new and complex electronic instructional and communication technologies in their classrooms.

An array of proprietary solutions confronts users today. The problem with such solutions, however, is that, besides the serious costs they entail, most universities already have the specialized collections they need in their own communities. Over a period of many years, these collections have been carefully selected, pruned and augmented to address the teaching needs of specific courses and programming directives. The larger
proprietary systems do not easily replace these specialized collections, which has resulted in institutions finding alternative ways of addressing pedagogical needs, often creating their own digital repository. At the University of Toronto it was agreed that replicating efforts across the tri-campus and eventually amongst institutions on a national scale served no one's needs. It was costly, inefficient and restrictive. Recognizing that teachers need visual and multi-media collections for instruction, FADIS was designed to meet these needs and share the costs. Consequently, FADIS has become the preferred solution for not only those at University of Toronto but at participating institutions.

What is FADIS?

The acronym FADIS stands for the Federated Academic Digital Image Repository (a name that has changed to reflect changing content from the original name Fine Arts Digital Image System). FADIS is an image repository with over 100,000 digital images and 50,000 hits per 24-hour period at peak times in the academic term. It includes some 500 videos, lectures and talks on webcasts and audio files. FADIS can serve JPEG files, MP3 streams, Flash, QuickTime and MPEG4 file formats.

FADIS is a grassroots image management system and teaching resource that is reaching beyond the traditional boundaries of the visual arts into many other disciplines. Originally designed in 2001, FADIS was conceived to address the needs of the arts and architecture faculties at the turn of the millennium. In 2002 FADIS became a centralized resource housed at Information Technology Services, University of Toronto Libraries. Today, it is breaking new ground, reaching beyond the traditional areas of the visual arts and offering support to other disciplines in the humanities and social sciences.

Collaboration on a Need-By-Need Basis

Several post-secondary institutions, such as Queens University, University of Windsor, McMaster University, Ryerson University, University of Guelph, Brock University, University of Ottawa, Bishop University (Quebec), University of Lethbridge, Dalhousie University and others, have joined the FADIS collective. A memorandum of understanding is signed between the University of Toronto Library and the participating institution that states the terms of use and outlines the purpose of FADIS.

Instead of a fee, participants ensure that content is contributed to the project, enhancing the collection with their own materials which means that each participating institution must have an administrator inputting material into the FADIS collection. This collaboration, user-derived content, permits institutions to maximize limited resources, ensure faculty have the images and content they need for teaching and, at the same time, it advocates the special collections that have been contributed to FADIS.
Why is FADIS unique?

- FADIS was conceived as a digital continuum of analogue pedagogy, which means, that for those making the transition from using slides to digital images, it is easy, quick and painless to use.
- It no longer just includes digital images - FADIS is able to work with a range of digital and audio formats.
- The basic impetus behind FADIS is to design a workable solution from which all can benefit from available resources and address the growing needs of post-secondary institutions today in order to reduce redundancy and repetition.
- Philosophically, FADIS is founded on egalitarian principles which seek to unite all interested parties, in order to eliminate redundancy, duplicated efforts and, more importantly, advance pedagogical teaching.

What does FADIS offer?

Adopting terminology from analogue collections, FADIS offers faculty a light table where search results can be arranged, selected and stored in virtual carousels. These virtual carousels are linked to a course page created by instructors. Institutions that do not use other courseware programs use these features in FADIS or combine it with other resources. Lecture carousels of digital images can be instantly downloaded into PowerPoint files (faculty have the option of selecting color background, with or without data and the font size) or use the projection tool offered in FADIS to display the material in the classroom using the different FADIS modes of single or multiple image projection. The time once spent creating back-up PowerPoint files has been completely eliminated. Basic information catalogued with each image (name of creator, title and year) are downloaded with each image, one large image per PowerPoint slide.

Different levels of access control the quality and use of the material in FADIS. For example, students cannot create a coursepage but can create virtual carousels for presentations in class. No PPT can be created by students, this helps in the control of in appropriate use of the images, but they can print colour PDF copies for study purposes.

FADIS has the added feature of private Portfolios to which Faculty can upload their own digital files and not share these with other users. This is of interest to those who are concerned about ethical or privacy issues when using FADIS for medical images. The Portfolios provide faculty with additional storage space and, if necessary, extra copyright protection. Portfolio images are not available to the FADIS community only to their owner. The private Portfolios and the new social tagging available are two of the latest features added to the FADIS project, recognizing that not all faculty are comfortable sharing their collections.
Administrators cataloguing and uploading material to FADIS can apply institutional restrictions as well. For example, certain archival collections could be viewed on campus but not shared between institutions. FADIS offers the ability to restrict material by institution, although this is generally discouraged as it contravenes the basic terms of use.

However, the ability to customize content for FADIS to address current research in teaching is one of highlights of FADIS, especially when institutions strive for excellence and advanced research. New material is constantly required for FADIS.

Who can use FADIS?

FADIS uses login authentication; at the University of Toronto students and faculty use their UTOR ID logins; similar set-ups have been arranged for participating institutions. FADIS is a research and teaching resource not available to the general public nor may it be used for publication or commercial purposes.

Users agree to abide by copyright instructions before gaining access to FADIS. Each record meticulously records who retains copyright and the source of the image. A separate field records special copyright terms of use as needed for special collections. We believe that FADIS abides by Canadian copyright laws for teaching and research, and no reproductions, publication or commercial use may be made of any of the digital files or resources offered in FADIS. Our view is shared by the increasing number of participants who have signed the memorandum of understanding and their legal consultants who have reviewed the terms.

Image Standards

The FADIS digital image collection follows rigorous digital standards, creating large TIFF files for the archival collection (scanning at 600 dpi) and then creating jpeg copies (1800 x 1800 pixels) for digital projection in the classrooms. The image size used in the classroom for projection is too small for publication or commercial use.

Cataloguing is done according to the standards set by the VRA Core and the Getty Institute in the ULAN, TGN and ATT guidelines. As archival material has been added, however, archival cataloguing needs have been included, such as fields for document condition, dimensions, and title notes field.

How does FADIS work behind the scenes?

The architect of FADIS is the current programmer, Gordon Belray, who manages the day-to-day maintenance and continues to add the new features and changes requested by faculty and the administrators working at the institutional sites. Each participating site has an administrator who
has access to two levels in FADIS and is responsible for ensuring that the quality of the material added to FADIS complies with the current guidelines set out in the FADIS cataloguing manual. Quality checks are made by the administrators who release the records to users after a check of the data.

Each image is catalogued in FADIS. FADIS permits the duplication of records, so a work record for a large collection of images can be created, duplicated and changed to reflect features in each image attached. Authority records are created for agents (as per ULAN by Getty), country and geographical location (as per TGN, Getty), worktypes (as per AAT, Getty), collections and repositories.

The working group, which consists of the administrators at each participating site, communicates daily on a discussion listserv, and representatives meet monthly. Information about collection development, technological needs and daily occurrences is shared, explored, and resolved in these settings. Members in distant places participate in our monthly meetings via webcasting. A manual prepared and maintained by members serves as a guide for the administrators when cataloguing and preparing the digital content.

Most importantly, the digital environment in which FADIS operates has created a collaborative space in which our administrators feel empowered to contribute, share and support each other's efforts in making FADIS a viable, long-term teaching option for their respective communities. We learn from each other. There is no overall hierarchy within our group, so everyone is encouraged to partake in the tasks we face. What we do have is the constant input of technical knowledge by the programmer and the benefit of a historical memory from those who have been in the project since it commenced in 2001. This, combined with a growing number of librarians, cataloguers and visual resource specialists from different areas has resulted in a well-informed working group. The one aspect which permits such a working group to succeed is the recognition that we need to continually adjust, be flexible, and adapt to changing pedagogical needs.

**Collections and Changing Boundaries**

Increasingly, archival and special collections have been added to the FADIS repository. This has led to a continual expansion and modifications of the FADIS image record. The VRA Core schema did not fully address archival collection needs. Recent additions from the archival collection of architectural photographs in the Ryerson University (Toronto) in the *Canadian Architect* Magazine Image Collection (http://www.ryerson.ca/library/collections/special/ca/index.html) have necessitated fields usually used in archival collections, title notes field, original document condition, original document dimensions, in addition to the same information on the object or site being catalogued. The
University of Toronto Malcove Collection at the University of Toronto Art Centre raised the issue of public access, as this collection of works and images is the property of the University of Toronto. This led to the introduction of marking catalogued records for public display and a discussion of presenting a public version of FADIS.

**Benefits of Using FADIS**

As a shared resource, FADIS serves to showcase institutional collections. Instructors can draw upon local collections digitized in FADIS for the lectures and then send their students out to view the actual objects in their communities. In all respects, this heightens the student’s learning experience and showcases institutional collections to other communities. By providing a centralized, easy to use and attractive, mobile platform, FADIS appeals to both faculty and students. Administrators located at each institute take the responsibility of cataloguing the material and preserving the collection for long-term use.

The addition of a wide range of collections in FADIS has led to the breakdown of traditional visual arts subject matter and is broadening the scope and usability of FADIS in the community. Faculty using FADIS are not just in the humanities but also the social sciences, and we are currently examining its use in the sciences. We recognize that FADIS can play a much larger role in the community, if we can find ways of continuing to explore the inclusion of material from diverse sources.

For further information on FADIS you may contact the author of this article, Harriet Sonne de Torrens, Visual Resource Librarian at the University of Toronto Mississauga, harriet.sonne@utoronto.ca, 905-569-4610 or Gordon Belray, gordon.belray@utoronto.ca, Information Architect or local administrators as listed on the FADIS homepage http://fadis.library.utoronto.ca.