The University of North Texas began substantially increasing its online course offerings in the late 1990’s. Students, faculty, and librarians realized that access to online resources would be crucial to the success of these courses. An initiative to manage the rapidly growing content was needed to address the use of audio/visual materials online in courses.

When the Media Library developed anthropology course “ANTH 2100: World Cultures Through Film”-转变, from in class to face to face classroom to an online environment, it served as a context for developing a plan to provide distance education students online access to media. Through the interest of the course director and support of the UNT Media Library, the course created an in-house online management and delivery system for video on demand.

### Background

- Located in Denton, TX, the University of North Texas is one of Texas’ largest universities and the largest provider of online credit courses among Texas public universities.
- 2006-2008 enrollment: 34,000
- 2006-2008: 60 new digital titles added
- 2008 semester.

### Technical Specifications

**From Spring 2005 to Spring 2006**, streaming media digitization and hosting was handled by campus IT. In Fall 2006, the Libraries took responsibility for streaming media digitization and hosting. The following are technical specifications used by the Libraries:

- Media is streamed from a designated Real Networks Media Server v. 11.1.7 with 9 GB of available memory.
- Sorenson Squeeze v. 4.5 is used to compress and encode media into Real Media (.rm) files. Files are encoded for Multiple Bit Rate streaming capabilities at 100kbps and 300kbps, with a 480x330 frame size.
- UNT Library’s Video On Demand system manages streaming content and access. This system was developed in-house by the Library’s IT department. Access is authenticated by the university LDAP.

### Online Viewers Per Film

**Timeline**

- **Fall 1992—Spring 2000**
  - Course taught face to face
- **Fall 2000—Spring 2003**
  - Course taught 100% online
- **Fall 2005**
  - Course taught 100% online
- **Spring 2006—Fall 2006**
  - Course taught 100% online
- **Spring 2007**
  - Course taught 100% online

### Viewing preferences in an average semester:

- 68% watched all films online
- 28% watched most films online
- 8% watched all films in the library

### Geographic location of online viewers

<table>
<thead>
<tr>
<th>Location</th>
<th>06/07 digital stats</th>
<th>07/08 digital stats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas (excluding Denton)</td>
<td>76%</td>
<td>88%</td>
</tr>
<tr>
<td>United States (excluding TX)</td>
<td>26%</td>
<td>45%</td>
</tr>
<tr>
<td>International</td>
<td>28%</td>
<td>28%</td>
</tr>
</tbody>
</table>

### Digital Rights Licensing

- In order to stream content media, an additional digital rights license was negotiated with the rights holder. License were obtained from 6 different distributors for the 16 ANTH 2100 titles.

### Challenges in digital rights licensing:

1. Identifying and contacting the current rights holders.
2. Working with distributors who had no existing digital rights licensing model.
3. Negotiating acceptable terms and conditions for access.

### The Future

The student enrollment of ANTH 2100 continues to grow. The success of streaming video in the ANTH 2100 course laid the groundwork for expanding UNT libraries’ digital media collection to include online materials for all UNT faculty, staff and students.

### Ongoing Challenges

- User expectations
- Technical support
- Digital rights licensing
- Funding

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