Short Communications

Anatomizing the Library: Virtual Anatomy Table Services in an Academic Library

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Abstract

A growing number of academic, medical, and health sciences libraries are adopting 3D virtual anatomy tables (also known as virtual dissection tables) to support active learning initiatives within their anatomy educational communities. This article explores the implementation and management practices of virtual anatomy table (VAT) services offered by an academic library within a large public land-grant university system. The authors will share details surrounding their library's virtual anatomy table acquisition process and the development of VAT services for anatomy learners and instructors on their campus. This article will also discuss their VAT operational challenges arising from the COVID-19 pandemic and highlight plans for VAT services at their library.

Keywords: Virtual anatomy table, Virtual dissection table, Anatomy learning tools, Anatomy education, 3D virtual anatomy tools, Academic libraries
Background

The University of Tennessee, Knoxville Libraries (UT Libraries) provides academic, instructional, and research support to the flagship campus of the University of Tennessee system (The University of Tennessee, Knoxville, n.d.). UT Libraries' desire to acquire a 3D virtual anatomy table centered around the opportunity to offer a unique technological tool to supplement anatomy learning initiatives on their campus. In 2018, UT Libraries purchased a virtual anatomy table (VAT) through a technology-focused grant from the Gladys Brooks Foundation (a supporter of nonprofit libraries, educational institutions, hospitals, and clinics). UT Libraries selected an Anatomage Table which resides in a classroom within the main campus library, John C. Hodges Library (Anatomage, Inc., n.d.). UT Libraries had not previously owned a VAT, which necessitated the creation of new workflows surrounding the oversight and management of their new Anatomage Table. At the time, the Health Sciences Librarian and a Public Services Librarian (who later transitioned into a Health Sciences Librarian position) were selected to oversee the launch and management of VAT services for UT Libraries. As the Health Sciences Librarian team, we were eager to collaborate with our campus anatomy instructors to ensure the successful implementation of VAT services for our anatomy students and other interested users.

Virtual Anatomy Table Service Development

Prior to receiving the Anatomage Table, we reached out to anatomy instructors and others from various academic departments with anatomy-related courses on our campus to see how their departments might want to incorporate the VAT into their courses. Additionally, we traveled to the University of Tennessee Health Science Center Library in Memphis, TN, in February 2018, where our library colleagues graciously provided us with training on their Anatomage Table.

Next, we worked with Anatomage to arrange online training sessions for library staff, anatomy instructors, and other interested stakeholders before our VAT's acquisition so that these parties could learn more about the VAT's functionality before planning their anatomy learning activities. We also invited anatomy instructors, library staff, and others interested in potentially using the VAT to join us for in-person training with Anatomage, which took place shortly after our VAT's receipt in April 2018.

Our VAT's soft launch began in the fall semester of 2018, which allowed interested instructors to schedule and use the VAT for classes, labs, and group projects. Two graduate-level courses that initially integrated the VAT into their course activities included one Audiology and Speech Pathology course that focused on neuroanatomy and a Nursing course that served as an anatomy refresher for experienced nursing students. Instructors from both courses visited the library frequently to prepare VAT
coursework, and their students visited the library during or after class to complete VAT-related coursework.

Our next step involved recruiting and training Graduate Student Library Assistants (GSLAs) to help manage VAT individual and group appointments and assist with VAT instructional sessions and demonstrations. Our first GSLA was also a part-time anatomy lab instructor recommended for the position by anatomy instructors with the Anthropology department on our campus. As an anatomy instructor, our first GSLA was instrumental in helping us to communicate with instructors interested in integrating VAT activities into their courses. Subsequent GSLAs have been primarily affiliated with Anthropology, but some have also come from other departments, such as Social Work and Information Sciences. These GSLAs have become instrumental in providing expanded VAT lab hours, training, and demonstrations for students, faculty, staff, and others throughout each semester.

Our GSLAs have been foundational in designing and updating our Virtual Anatomy Table online guide to familiarize new VAT users with our policies, lab hours, training materials, and online reservation system (The University of Tennessee Libraries, Knoxville, 2022). The main page of our VAT guide features a description of our Anatomage Table, our Anatomage Table Basics video tutorial, and open lab hours for reservations and walk-in users during the current semester. This guide also provides users with direct access to our Springshare LibCal© reservation system, tutorials, additional anatomy resources, and ethical considerations surrounding the appropriate use of cadaver images (Springshare, 2020).

Our reservation system allows UT Knoxville students, faculty, and staff to reserve times to use the VAT during our open lab hours, which vary daily according to staff and classroom availability. Reservations can be made in 30-minute increments, and users can reserve up to two slots per day for a maximum of one hour per day (per group or individual). We require that all reservations be made at least 24 hours in advance to ensure VAT availability during the requested times. We currently allow up to 4 users per 30-minute lab appointment to maintain social distancing during the COVID-19 pandemic. Walk-ins are also welcome during open lab hours. Those walk-in users are also entered into the reservation system in a different category so that walk-in usage is tracked for assessment purposes. Figure 1 provides an overview of VAT usage from Fall 2019 through Fall 2021, including reservation appointments and walk-in usage. Data is excluded for the periods when VAT services were closed due to the COVID-19 pandemic.
Our team also offers VAT demonstrations for visitors, library stakeholders, and groups touring the Libraries during various events. We also frequently share our VAT experiences with other libraries interested in launching their own VAT services for their learning communities.

Impact of COVID-19

With the arrival of COVID-19 in March 2020, UT Libraries closed its physical locations in conjunction with other building closures on our campus. We consulted with our library administration regarding the reopening of VAT services, and it was decided to keep the VAT closed through the Summer 2021 semester. The extended closure of our VAT centered around two primary concerns. First, our VAT has a large touchscreen that does not tolerate alcohol-based cleansers, so we were concerned about adequately cleaning the VAT's screen between uses to avoid any potential spread of illness. Second, we were unsure how best to implement social distancing and masking procedures to keep our VAT users safe during group activities. Once we worked through those issues through the course of the pandemic, we reopened our VAT services during the Fall 2021 semester for appointments, walk-ins, and classroom instruction sessions. We reduced the number of simultaneous users at our VAT appointments from 8 to 4 users to allow increased social distancing during use. We also encourage mask-wearing for VAT users and staff to help keep our users safe while visiting the VAT lab.

Future Plans

We hope to expand our current VAT services for classroom instruction, group and individual appointments, and walk-in users. To reach this goal, we plan to collaborate with the marketing team for UT Libraries to create and share additional promotional materials advertising our VAT services to increase usage of our VAT among other
anatomy resources on our campus. We also intend to launch internal user- and student-focused assessments, and we would like to establish partnerships with other VAT-owning libraries to develop cross-institutional assessment opportunities.

References


The University of Tennessee, Knoxville. (n.d.). About: We are Tennessee's university. https://www.utk.edu/aboutut/


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