

# Conclusion

Amanda Clossen

Not every institution uses Canvas, or even Springshare products. The LMS transition at Penn State is only a single example out of many. The issues we faced in implementing our own integration are more complicated than those some other institutions may face, while being much simpler than others.

Comparisons often fall short when approaching institutional decisions regarding course identifiers, risk management procedures, FERPA interpretations, and LMS role assignment. But these are all issues that will likely require consideration in the process of integrating library resources of choice into an institution's LMS. There is no way to create a comprehensive checklist of situations to prepare for; however, we will leave you with ten lessons that we learned in our large-scale implementation:

1. Explore the projected impact of your integration before you begin. Some integrations are very time- and labor-intensive, and the effort may be better directed elsewhere.
2. Work to place a library representative on the institutional LMS committee if one exists. Being part of the decision-making concerning the LMS leads to much smoother sailing when the time comes to request LTI creation or implementation.
3. Create a diverse LMS implementation team. In addition to librarians and IT representatives, try to include the biggest users of the LMS: instructional designers, faculty, and students. Even if they can't be full team members, involve them as stakeholders and seek out their perspectives whenever possible.
4. Create a local test instance of the LMS if possible, as integration in an institutional beta testing environment can take time. Canvas, Sakai, and Moodle are all open source and can be launched without further cost.
5. Become familiar with your institution's risk management practices. Risk management approval

- can take a very long time and the process can be confusing—it is important to start it long before you plan to launch your product.
6. Discuss FERPA concerns with the registrar's office as soon as you begin to consider a librarian role within the course itself. Administrators may not always be familiar with librarians in courses, and the discussion on student data confidentiality may take time to negotiate.
7. If your integration involves guides, establish rules for consistency in design and content so that students know what to expect when they see a guide.
8. Emphasize outreach within the library itself. In many cases, librarians do not use the LMS themselves and require as much education on LMS integrations as a faculty member. Many integrations require effort on their part, so it is important to get their buy-in as soon as possible.
9. Communicate with your vendor. Providing data on the functionality of your LTI instance often means the vendor can address challenges that arise that much more easily. It also leaves the vendor more receptive to your concerns.
10. Prepare to talk about your integrations very often, repeating yourself many, many times to the same audience.

We consider LTI integration at Penn State to be an iterative process. Implementation is ongoing. With each semester's new translation table, we develop new methods to make the process more efficient and precise. As the LMS grows and changes in functionality, we will strive to meet students where they are by listening to the voices of our stakeholders. Through this process we, the authors of this report, are eager to see the innovations of other libraries as we all work together to find a place for the library within the learning management system.