

The Open Source Congress

Core administrative systems in higher education are at a crossroads. Three primary factors are at play: (1) the state of the vendor options; (2) the price of maintaining these systems; and (3) the maturation of open source as an alternative.

At present, core administrative software systems are dominated by a handful of vendors. The options for vended core administrative systems for higher education were never particularly rich, but with the acquisition of PeopleSoft by Oracle and SunGard by a group of private equity investment firms, the development of vended solutions for higher education will likely slow even further for the near term. And yet, core administrative systems continue to require further development and refinement to meet the needs of higher education, and the cost to maintain them remains high. This, therefore, appears to create stimulus for open source core administrative systems functionality to evolve.

What makes this option possible is maturation of open source as a viable software development approach. Early successful applications, such as Apache and Linux, have achieved a stage of maturity that suggests this can be a solid solution for developing, maintaining, and evolving mission-critical systems. But if we're not careful, the evolution of open source as a new approach to developing core college and university systems will quickly devolve back to where we started: institution-specific custom systems. The only way to avoid this easy trap is to go into this venture with a different mindset, and if we do that successfully, maintain-

ing this new mindset will be just as vital as maintaining the software itself.

The following factors will be key to successfully developing broadly applicable open source core administrative systems:

- How collaborative we in the higher education community are in planning these systems
- Whether we broadly consider our shared functional needs
- How creative we are in planning for systems that combine the best of what we currently have with the functionality we could really use
- The degree of interoperability between the various systems that are likely to be developed

The critical element for the success of this new mindset is to think broadly and collaboratively. If each institution goes into open source thinking only to solve its own administrative systems needs, then that's the only problem that will be solved. If, however, institutions go about this in a well-considered and deliberate way, and pursue approaches to administrative systems solutions that will fit broadly with shared needs in these areas, higher education can truly revolutionize its core administrative systems. At the same time, by taking this broader approach, higher education as a community can establish its future for administrative systems and reduce or eliminate its future dependence on outside entities for these kinds of systems.

The argument could be made that one of the most important and significant achievements for establishing practical open source administrative software for

higher education can, and should, take place before the first piece of code is written. For lack of a better term, I'll call this joining together of the higher education community to jointly envision a broad set of administrative systems objectives an "Open Source Congress."

Establishing an Open Source Congress

An Open Source Congress would be a voluntary, collaborative effort by interested higher education institutions to lend their expertise—both technical and functional—to begin the high-level design and planning for what will become the next-generation, open source, administrative systems. The Congress would define and agree upon the fundamental characteristics that future systems initiatives should voluntarily follow.

The basic characteristics of what defines such things as a person, a department, or a course and how these applications would interconnect could be outlined for adoption by anyone who begins an open source administrative system development effort. This outline could examine questions such as whether it would be possible to build a system that is flexible and scalable enough to work equally effectively for a small college as a large university, and whether this same system could be designed in a way that would enable multiple smaller institutions to pool their resources and use a single system. Once these parameters are established, new open source initiatives could then run at their own pace and to their own means but could do so knowing that at a later time they could connect to complementary applications developed by other institutions.

In another potential outcome, higher education could develop an organized needs statement that would serve as a template for the vendors of packaged enterprise resource planning (ERP) systems to develop applications and functions that are more consistent with what colleges and universities truly require. This could bring tangible benefits from vendors long before open source systems are ready for campus deployment.



For the Congress to succeed, it would need to be composed of both functional business owners (registrar, treasurer, human resource leaders, etc.) and technical administrative systems experts. The following two questions will be core to early discussions:

- What information is universal?
- Can we agree on how to define that information?

These questions would be determined and defined through a broader set of discussions:

- What should be considered to be core administrative systems functions in a higher education setting?
- Outside of traditional core ERP functionality (human resources, financials, student), are there other functionalities that should be considered core to a higher education ERP system, for example, development or housing?

- In what order would functionality best be developed?
- Is there a common set of external applications with which these applications should be able to share information, such as payroll vendors or the Common Application?

Undoubtedly, getting agreement on these issues would be a large undertaking. But perhaps the climate is right to begin thinking about and discussing these topics collaboratively. All of us in higher education are being challenged to do more with less. Depending on vendors to come up with what we need has been less successful than we'd hoped. Perhaps the time is right for true cooperation on designing the next generation of administrative systems for higher education.

Benefiting from Open Source

The Quali Project is the first significant open source administrative systems initiative. Quali is a financials application being developed by several schools and organizations: Indiana University, Michigan State University, the University of Arizona, San Joaquin Delta College, Cornell University, the University of Hawaii, NACUBO, and the R-Smart Group. Its initial functionality will include accounting, billing, e-commerce, budget planning, and other campus functions. This project should be recognized for its vision and innovation. Its goal is to meet the financials systems needs of the member institutions. Imagine, however, the even greater benefits this project would achieve by first engaging in a larger discussion of shared financials needs across higher education and by designing the project with the goal of addressing the broadest-possible set of requirements. Quali should not be faulted in any way for not doing this. I simply use the project as an illustration. If we in higher education first discussed our needs to find our similarities and our differences, couldn't we then design a system that addresses what makes us alike but that also allows us to build what makes us unique?

The Andrew W. Mellon Foundation has been a champion for open source initiatives in higher education. In the September 24, 2004, information technology

supplement to *The Chronicle for Higher Education*, Ira Fuchs of Mellon suggested that a separate organization, what he called Educore, should be established to govern open source initiatives. This organization, modeled on the Bellcore of old, would set standards to which open source developers would voluntarily adhere as they undertake new development endeavors.

This effort, along with others like it, speaks well to the technical characteristics of future open source systems but not necessarily to the needs and goals of the intended functional users of these systems. This is the additional, vital element the Open Source Congress would add. The Congress would give voice to both technical *and* functional entities to provide the most comprehensive view of shared needs and options.

Conclusion

The question central to this discussion is, Can both functional and technical leaders from a heterogeneous higher education environment be brought together to find common ground and define the central platforms on which college and university administrative systems will run in the future? If not, the alternatives are (1) open source administrative software will be defined solely by those schools that create the first significant pieces of code, and (2) multiple systems with little or no commonality or interoperability will be created. If either of these occurs, the opportunity to truly revolutionize future administrative systems will quickly be diluted.

Is the time right for higher education institutions to bring together functional and technical administrative leaders to discuss the next generation of open source administrative systems? Can we work as a community to define our objectives and to set goals for where we want our administrative systems to be in the coming years? Perhaps the time for us to think and plan collectively is now.

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