

Chapter 7.13

The Centralisation Dilemma in Educational IT

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ABSTRACT

The trend with organisational adoption of virtual learning environments (VLE) seems to be cyclical. Initially, a decentralised approach was adopted, wherein each department implemented different learning environments or mixtures of technology, often developed in-house. The last five years have seen an increased centralisation of learning environment implementation, with most universities adopting a single VLE. However, in more recent times the proliferation of free, easy-to-use third party tools that fulfil a range of functions has seen a desire amongst some educators to return to a more decentralised model of technology provision, by supporting Personal Learning Environments (PLE). This paper examines the issues surrounding both a centralised and decentralised model. These include pedagogic, support, financial, reliability, data and technical issues. The conclusion is that although the fully individualised PLE may not be possible or desirable in higher education, maintaining separate, often inferior versions of commonly available software is not a sustainable position.

INTRODUCTION

The proliferation of free online services, many of them part of the social media, Web 2.0 culture has led many educators to suggest that decentralised, loosely coupled learning environments would be superior to the centralised, integrated VLEs currently deployed in most higher education institutions. For example, Weller (2007 para 8):

If a service can be disintermediated then it will be. In this case the central VLE system is disintermediated as academics use a variety of freely available tools. On balance then, I think this shift to loosely coupled, freely available third party systems will happen.

And similarly Leslie (2005), argues for the use of social media back in 2005 (para 2):

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I've been really disappointed with the vision of learning... too many talks on eportfolios that see them solely as a way to create a resume, or just another way to squish students into an artificial assessment framework, too many talks on more and better ways to generate reams of metadata and remove the humans from that sticky operation of sharing and reusing learning resources.

...We need software that is obvious in the value it offers its end users so we aren't forcing them to do things they don't want to already do. We need software that recognizes users not just as the 'operators' of software, but also as having identities that are important, identities that are the basis for rich connections and enabling possibilities. We need software that notices and records these connections and interactions in order to add even more value to those users and to other people trying to do similar things.

CENTRALISATION AND VLEs

VLEs can be interpreted as an attempt to bring order to a previously chaotic situation with regards to educational technology. And this is itself a reflection on the growing significance of educational technology within higher education. With the advent of the internet, and the interest in elearning at the end of the 1990s, there was an initial *ad hoc* phase whereby individual educators, and then departments adopted their own solutions. Initially these were bespoke Web sites, and later commercial offerings were adopted, which combined a number of basic tools, such as navigation, text forums, roles, etc. These were the early VLEs.

By 2004 the shift to centralisation was well under way. As elearning had moved into the mainstream, so universities felt a need to centralise their elearning systems. This entailed a rationalisation of existing systems into a single, centrally hosted and supported environment. The OECD looked at e-learning in tertiary education

in thirteen countries in 2004 (OECD, 2005) and found that all institutions had a VLE of some description, but only 37 percent of respondents had a single institution wide VLE, while the remainder had a mixture of systems. However, 90 percent expected to have an institution-wide system in next five years.

The arguments for a centralised VLE can be summarised as:

1. Uniformity of student experience
2. Centralised support
3. Quality assurance
4. Efficiency
5. Robustness
6. Integration of different tools
7. Staff development
8. Platform for expanding elearning offering

In essence, the VLE saw learning technology move from being individual offerings in the hands of educators, to enterprise systems under the control of central IT services. A'Herran (2000) suggests that there are four perspectives from which a VLE is analysed (para 12):

- **Administrators:** Scalability, value for money and integration with existing systems are important for these users
- **Technicians:** Robustness, user base, technical support and ease of maintenance will be significant.
- **Course developers or teachers:** Customisability, flexibility and the integration of legacy materials will be paramount.
- **Learners:** Consistency, accessibility and quality of design will be the main concerns.

Thus the decision-making process for selecting and deploying a VLE needed to take into account these various stakeholders. A proliferation of decision-making methods were proposed as all higher education establishments went through a similar process of deciding upon a main VLE (e.g.

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