OSSWATCH

National Software Survey 2013

A biannual survey of open source software in the UK HE and FE sectors

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http://oss-watch.ac.uk/studies/survey2013

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9%

of institutions outsource IT support for servers

69%

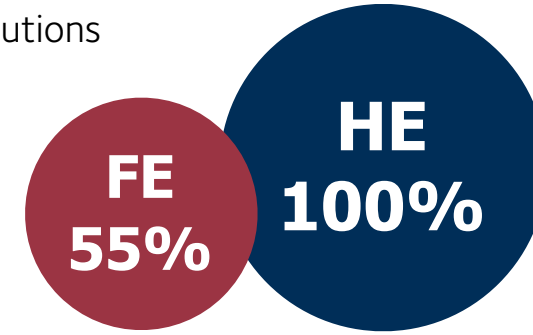
of ICT policies in UK HE and FE mention open source

52%

of FE institutions run all or almost all closed source software on servers, compared to

0%

of HE institutions



of institutions have staff who contribute to open source software

- meeting user expectations
- performance of the software
- total cost of ownership
- interoperability

Top 4 criteria used when selecting software

- interoperability and migration issues
- lack of support
- poor quality
- not what users want

Top 4 Reasons for not choosing an open source option

OSS Watch National Software Survey 2013

Introduction

OSS Watch, supported by Jisc, has conducted the National Software Survey roughly every two years since 2003. The survey studies the status of open and closed source software in both Further Education (FE) and Higher Education (HE) institutions in the UK. OSS Watch is a non-advocacy information service covering free and open source software. We do not necessarily advocate the adoption of free and open source software. We do however advocate the consideration of all viable software solutions - free or constrained, open or closed - as the best means of achieving value for money during procurement.

Throughout this report the term “open source” is used for brevity’s sake to indicate both free software and open source software.

Acknowledgements

We would like to thank Jisc for supporting the work on this study, in particular Matthew Dovey and Tom Mitchell. We would also like to thank the IT directors of the FE and HE institutions, who took the time to respond to the survey and send feedback to us.

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About OSS Watch

OSS Watch is an independent, non-advocacy service. We are experts on free and open source software, but we do not insist on it as the solution to every problem, nor are we tied to any particular solutions or providers.

For more information, visit http://oss-watch.ac.uk/about/

Executive Summary

Looking back over 10 years of surveys, we can see how open source has grown in terms of its impact on ICT in the HE and FE sectors. For example, when we first ran our survey in 2003, the term “open source” was to be found in only 30% of ICT policies - and in some of those it was because open source software was prohibited! In our 2013 survey we now find open source considered as an option in the majority of institutions.

Open source software has also grown as an option for procurement; while only a small number of institutions use mostly open source software, all institutions now report they use a mix of open source and closed source.

However, the picture is not all positive for open source advocates, and we’ve noticed the differences between HE and FE becoming more pronounced.

Open source emerging as the choice for server software in HE

Open source is now well established as the software running on servers in HE institutions; in 2008 around 23% of HE institutions were running “all or almost all proprietary” software on servers; in our recent survey none of our respondents selected that option. While the vast majority still indicated that their servers run “mostly proprietary software with some open source”, their future plans indicate an even larger role for open source: 12% saw themselves running mostly open source in the future, and around 50% envisaged a roughly 50/50 mix of open and closed source software on their servers in the years ahead.

In FE there is a very different pattern; in 2013 over 50% of respondents from FE indicated that all or almost all software deployed on servers was proprietary - representing a *decrease* in the use of open source. Colleges also predicted little change in their open source adoption rate for the future.

Open source on the desktop continues to struggle

While open source has made a big impact on servers in HE, the same cannot be said for the desktop, with almost no change since the 2008 survey on the ratio of open vs. closed source for either HE or FE. Today, around 50% of institutions report that all or almost all of the software deployed on their desktops is closed source - just as they did in 2010 and 2008.

Interestingly, we are seeing an increase in HE of the number of institutions where desktop software is a 50/50 split between open and closed source software - up to 10% in 2013 from none in 2008, with 20% of institutions planning for this ratio in future. Perhaps there are early signs of a change in the fortunes of open source on the desktop? Again, there was no such indication for FE.

Partly we can explain this with the observation that a significant proportion of desktop software is procured for the principal purpose of teaching its use to students. Often closed source software is the current “industry standard” for particular sectors there will be a clear demand from teachers to base their courses on it and require its use. So perhaps we’ll only see significant shifts here if more industries outside education move towards using open source in their standard workflows.

Notable across both HE and FE is the approximately 20% reduction in usage of OpenOffice. It is possible that this is attributable to the instability and fragmentation of this project over the period since the last survey - for example it may be that some users of the OpenOffice fork LibreOffice are not reporting as OpenOffice users.

Interoperability

When it comes to reasons for not adopting open source solutions, interoperability and migration issues came top. However, interoperability only came fourth when listing the key considerations for procurement, and avoiding the likelihood of lock-in was barely mentioned at all.

There are many ways of interpreting this. However, we think it is clear that interoperability is a major issue affecting the ability of institutions to consider open source options. Further work would be required to identify the specific interoperability and migration issues and examine how they might be mitigated - for example, do open source solutions not support appropriate interoperability standards? Or are existing systems locking

institutions in, and keeping alternatives out of consideration?

A tale of two sectors?

While the overall trend has been towards equal consideration of open source when procuring software, there has been a very significant divergence between Further and Higher Education. In many of the measures we see continuous growth for HE in terms of policy, procurement, and contributions back to open source projects.

However, in FE we see that pattern reversed in recent surveys, with less engagement by FE in open source software, and less consideration of open source solutions in procurement.

The one exception is, of course, Moodle. The open source Virtual Learning Environment is more dominant than ever in FE, while in other areas of IT open source alternatives seem to have far less impact. Again further work could identify what lessons might be learned from this interesting disparity.

As we have noted before, a level playing field for open source in procurement of software is a key consideration for getting sustained value from investment in ICT by institutions. The past 10 years of surveys indicate that the FE sector may be missing out, and that urgent intervention may be needed to reverse this trend.

Quotes from respondents

“We hardly use any open source software - the areas in which it seems most popular are in Web development and possibly development of the VLE. We run exclusively on MS Windows in the datacentres and on the desktop, we use MS SQL for all core business database systems. Whilst there is no policy against using open source at the college there would be a high training overhead should we ever need/decide to go that way - this in itself is probably a substantial obstacle in the way of using open source software.”

“The two main suites of software we use are: Adobe creative suites and Microsoft Office suites. Both are industry standard so offering anything open source just isn’t a viable option for us. Also most of our student facing resources are Apple, again open source just isn’t going to do the job.”

“There is no particular drive to move towards open source but it is always considered as one of the options when new products are being sought. We have very little in-house expertise in supporting open source and that tends to have an influence on decisions. Our biggest open source product is our VLE (Moodle).”

Further work

Based on the results of the survey we identified a number of areas for further investigation:

- Examine what - if any - actual interoperability issues are inhibiting open source uptake
- Examine what can be learned from the undoubted success of Moodle in the FE sector
- Compare value for money achieved in software procurement between HE and FE

Study Design

This year's study repeated previous OSS Watch surveys and was aimed at IT directors in FE and HE institutions. The survey was conducted online using SurveyMonkey.

The 2013 OSS Watch National Software Survey closely followed the design of the previous two surveys, conducted in 2008 and 2010, and therefore provides a good insight into the changes in the status of open and closed software from 2008-2013.

In 2010 the study included a "background survey" of self-selected respondents via the OSS Watch mailing lists. However, analysis of the results of that survey indicated that the main survey sample of IT directors was more appropriate for the study, and so the background survey was not undertaken for 2013.

Response rates

The survey was distributed using Jisc's mailing system, reaching heads of IT in both higher education and post-16 education in the UK. The total number of institutions in the UK is 619, and there were 50 respondents, representing a response rate of around 8% of the sectors. This is quite low, and consistent with a general picture of "survey fatigue" in education.

For the purposes of analysis we excluded one response as the respondent was not from the UK HE or FE sectors. 11 respondents only partially completed the survey; we have included however the answers they did provide.

Of the remaining responses, 19 identified themselves as representing FE institutions, 17 were from HE, and 2 were from HE providers in FE. The remainder were a mix of Adult & Community Learning, 6th Form Colleges and specialist adult learning institutions, which for the purpose of our analsysis we have categorised under FE. This gave us a total of 32

respondents from organisations classified as “FE”, and 17 respondents from organisations classified as “HE”.

While the overall response rate is lower than for 2010, an analysis of the results of the questions on organisational responsibilities (see section 1) showed that the populations they are drawn from are comparable.

Comparisons with previous surveys

The 2010 survey report already normalised the results for comparison with the 2008 survey, eliminating questions with very low response rates for example. As the 2013 survey is identical to the 2010 survey the results are therefore readily comparable. The main differences are in the composition of respondents, with 65% of respondents in the 2013 survey being classified as FE, whereas in 2010 the proportion was 50%.

This means that comparisons between surveys sliced by sector are appropriate, but comparisons of *all* responses may not be as there will be a skew towards FE in the 2013 results.

General information about institutions

Q1: Type of institution

Q1. What type is your institution?

There were more responses from FE and related post-16 providers than from HE.

3 of the institutions offer a mix of FE and HE; these were aggregated under FE. A total of 9 Sixth Form colleges and adult learning providers are also included in the FE numbers.

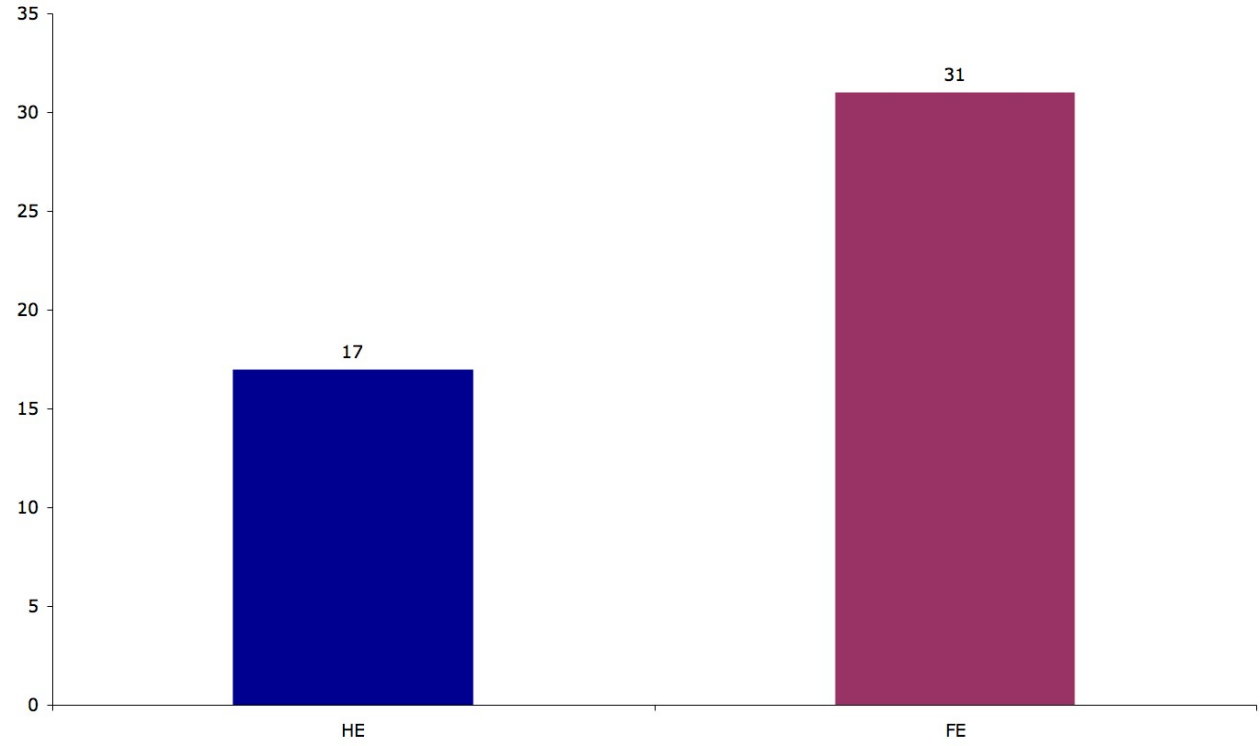


Figure 1. Types of institutions

Q2: Appropriateness of sample

Q2. Do you have any of the following responsibilities in your institution?

To test the appropriateness of the sample to answering the questions in this survey, participants were asked to indicate whether they had responsibility for the areas touched upon by this study.

As shown in Figure 2 the vast majority of the respondents were involved in developing and implementing ICT policies, budgeting and software procurement. Other areas show lower involvement (especially in FE institutions). However personal involvement in the first four categories is most significant in terms of answering the questions in this survey and indicates that the participants are likely to be knowledgeable about the issues probed here.

Note also that the profile of respondents in the 2013 survey is very close to that of the 2010 survey, making it a good basis for comparison.

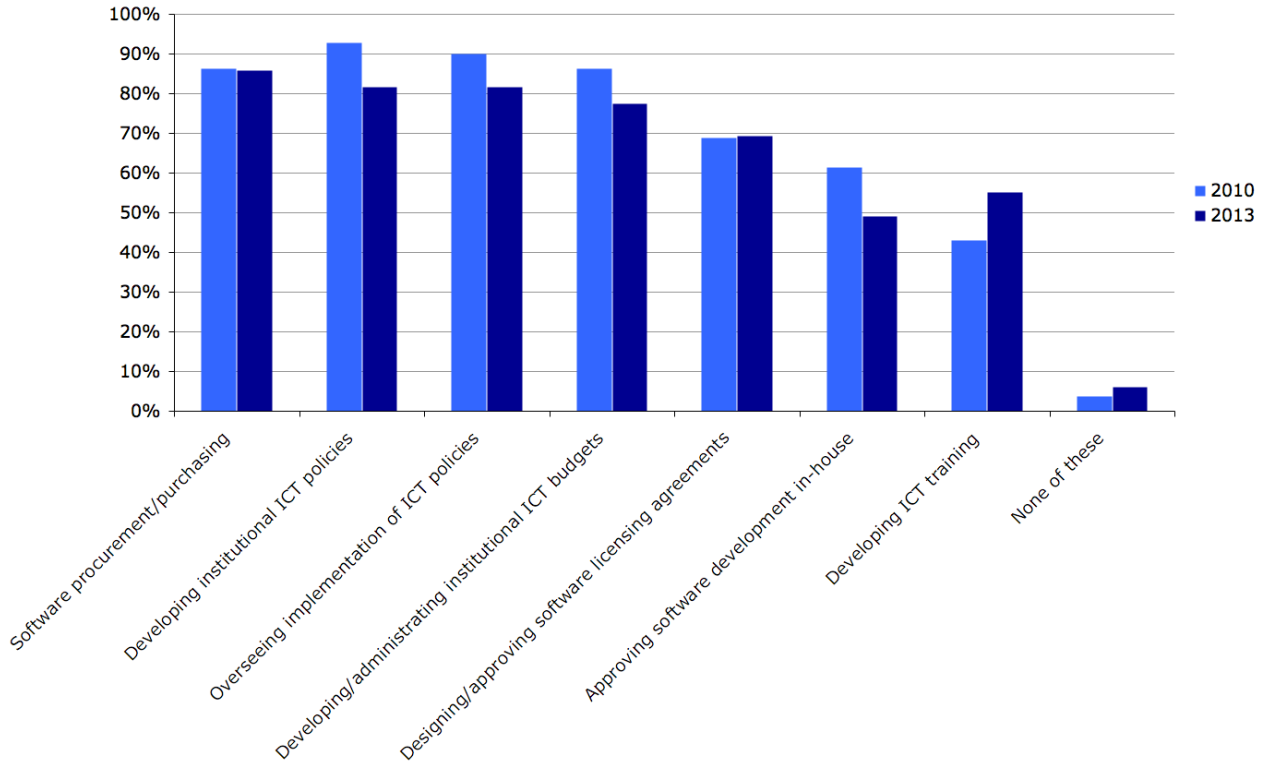


Figure 2. IT directors responsibilities

Q3: Number of ICT Staff

Q3. What is the approximate number of ICT staff at your institution? If your institution's ICT provision is decentralised, please consider services provided centrally by your institution

The estimates of the number of ICT staff provided by the respondents suggest that a typical FE ICT department employs between 5 and 12 staff and that a typical ICT department in HE is larger: anywhere between 30 and 120 employees, with a median of 60. However, consistent with previous surveys the spread of estimates is very large, suggesting a potential need for a more precise measure of numbers of ICT staff than can be provided here.

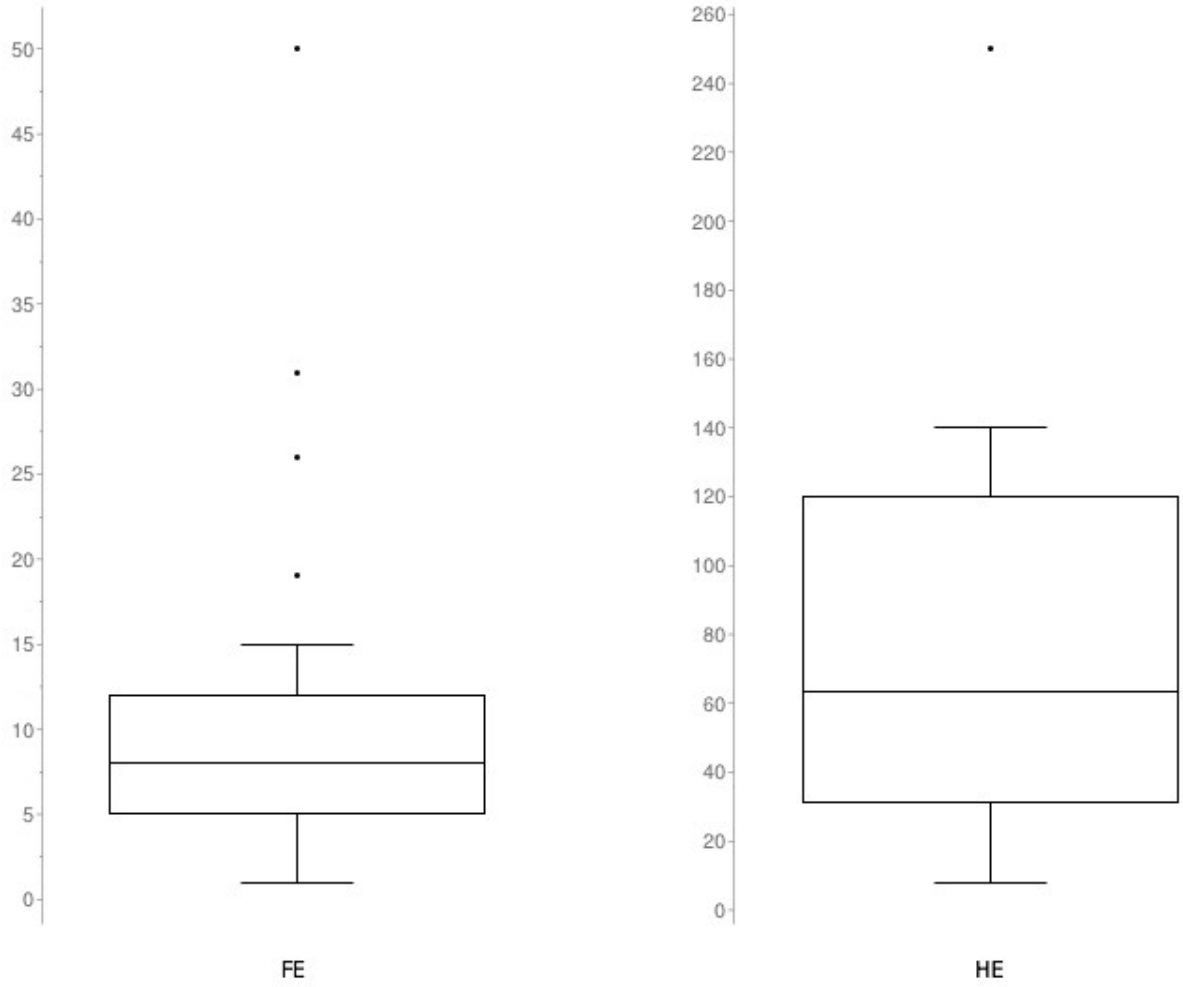


Figure 3. Number of ICT staff in institutions

ICT policy and procurement practice

Q4: Institutional ICT Policies

Q4: What best describes your institution in terms of ICT-related policies?

The responses to Q4 largely repeat the pattern of the corresponding question in the 2010 and 2008 survey (see Figure 4), with most institutions having an official ICT policy (74%), with a minority of institutions having ICT policies spread across other policies (24%). A very small number had no known ICT policy (3%).

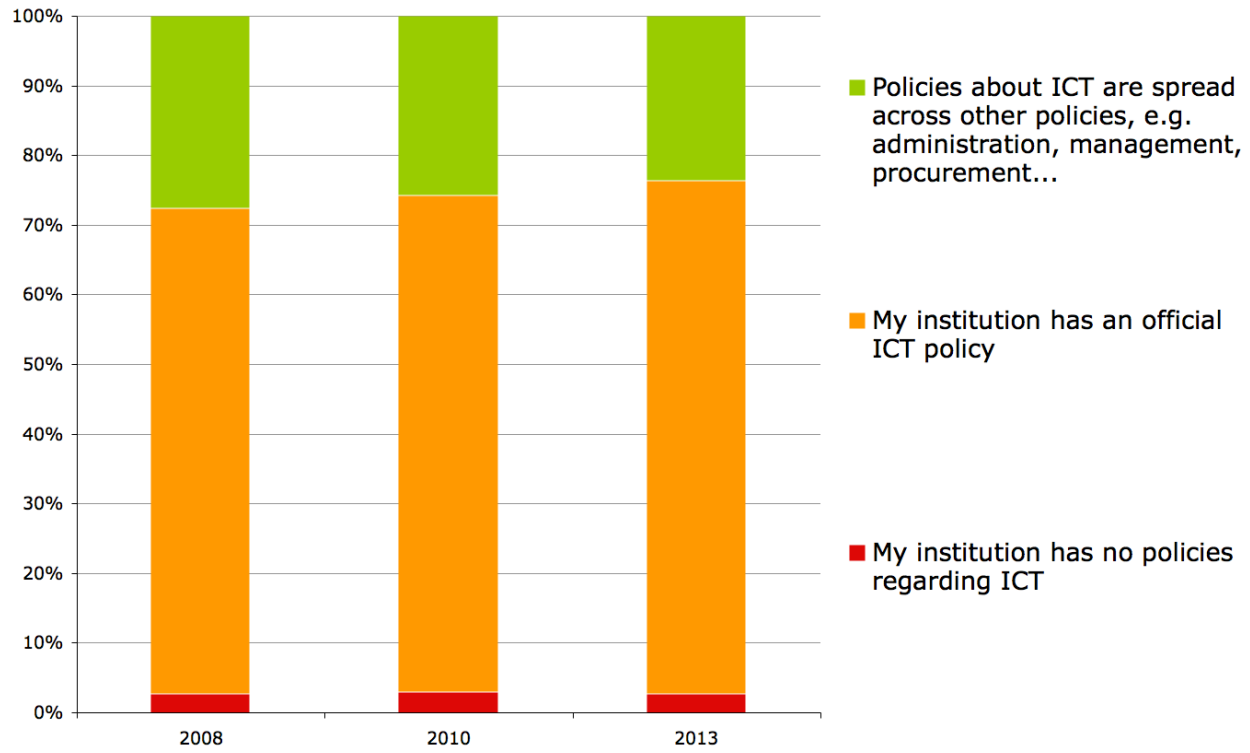


Figure 4a. ICT policies in institutions, 2008-2013

As shown in Figure 4b, there is also little variation between HE and FE.

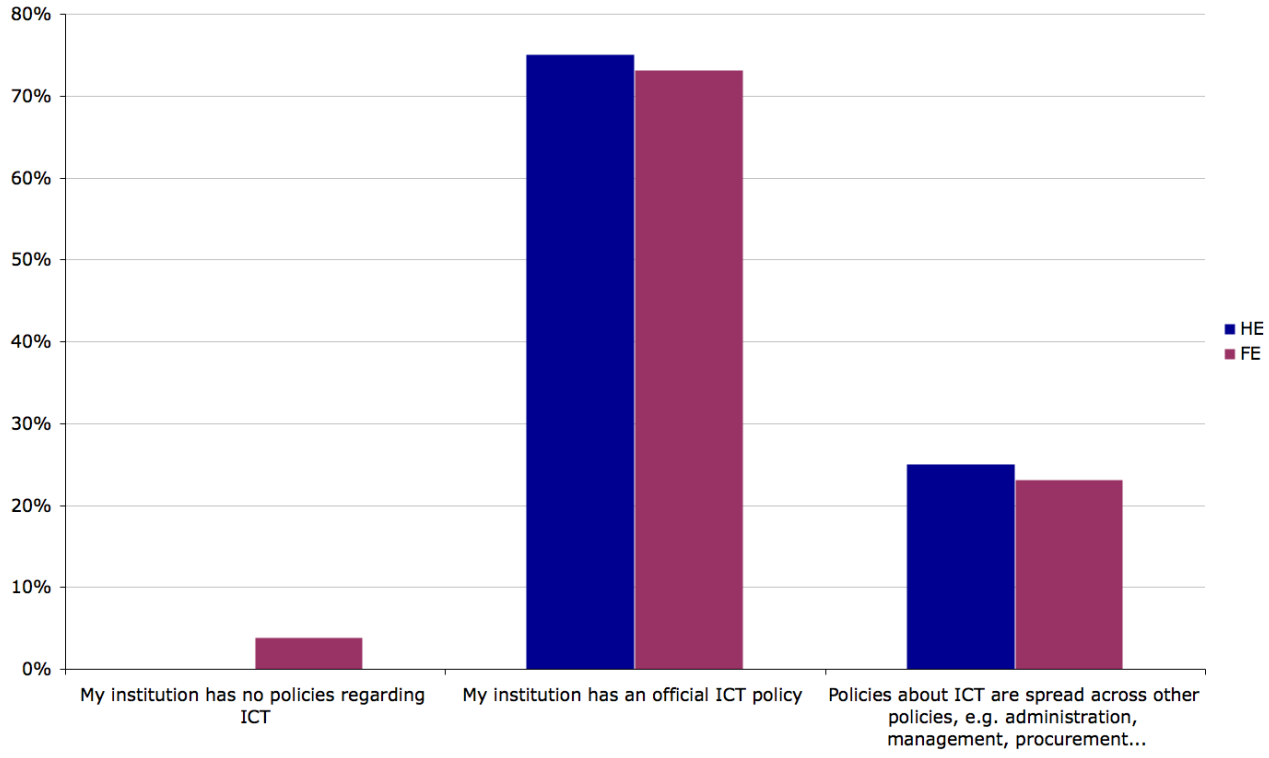


Figure 4b. ICT policies in FE and HE institutions

Q4a: Institutional policies for open and closed source software

Q4a. What best describes your institution's policies about open and closed source software?

Looking at the history of ICT policies from 2003 to 2013 we can see a marked change in the way open source is considered.

Back in 2003, most IT policies in colleges and universities in the UK did not mention open source at all, while today that position is reversed.

We have also seen the demise of policies that prohibit open source, while at the same time policies that state a preference for open source also seem to be on the way out.

There is a dip from 2010-2013, but the overall trend would seem to be for institutions to have ICT policies that explicitly mention open source software as a procurement option.

Figure 4c. Open source in ICT policies in institutions, 2003-2013

When comparing HE and FE, there is a notable difference, with HE institutions twice as likely to have a policy that mentions open source as a procurement option. This is interesting as there was very little difference found between policies in HE and FE in the 2010 survey.

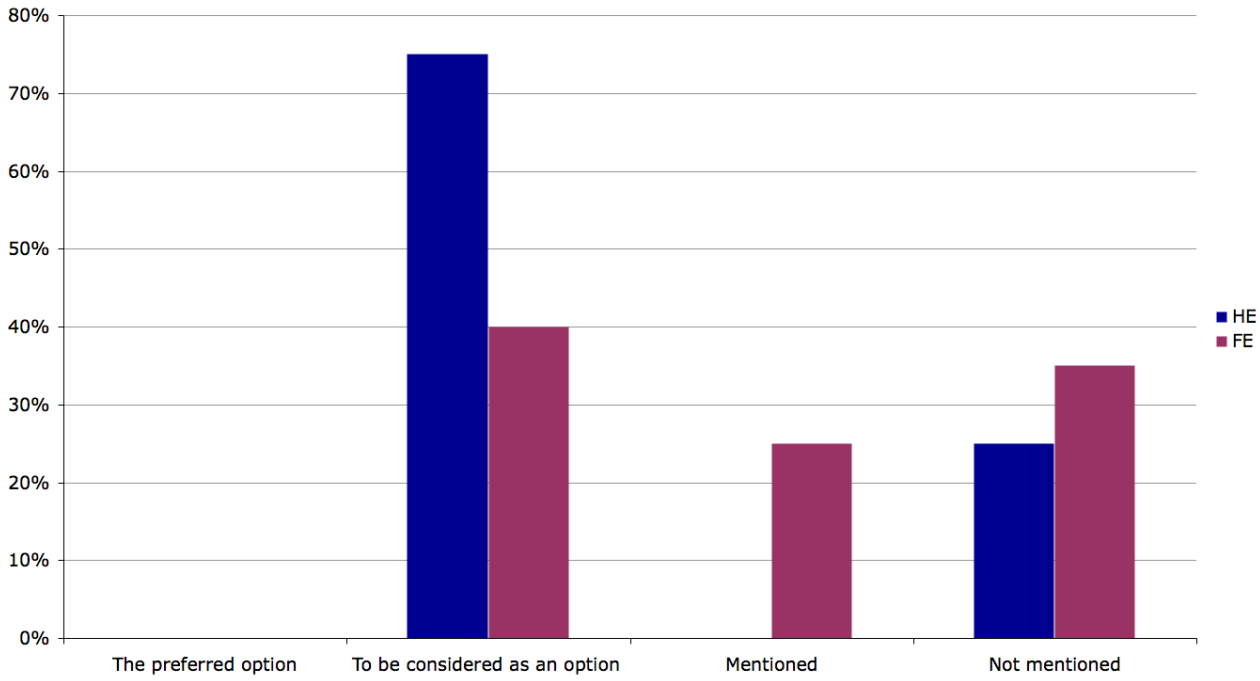


Figure 4d. Open source in ICT policies in institutions, comparing HE and FE

For closed source the pattern of responses is largely unchanged from the 2010 survey, the main difference being the proportion of policies that

mention closed source as an option has dropped (from 70% to 60% in HE, and from 33% to 15% in FE).

However, the overall distribution for closed source is very similar to previous surveys, which suggests that the change in how open source is mentioned in the 2013 survey may be significant, with progress towards equal consideration of open source being made in HE, but not in FE.

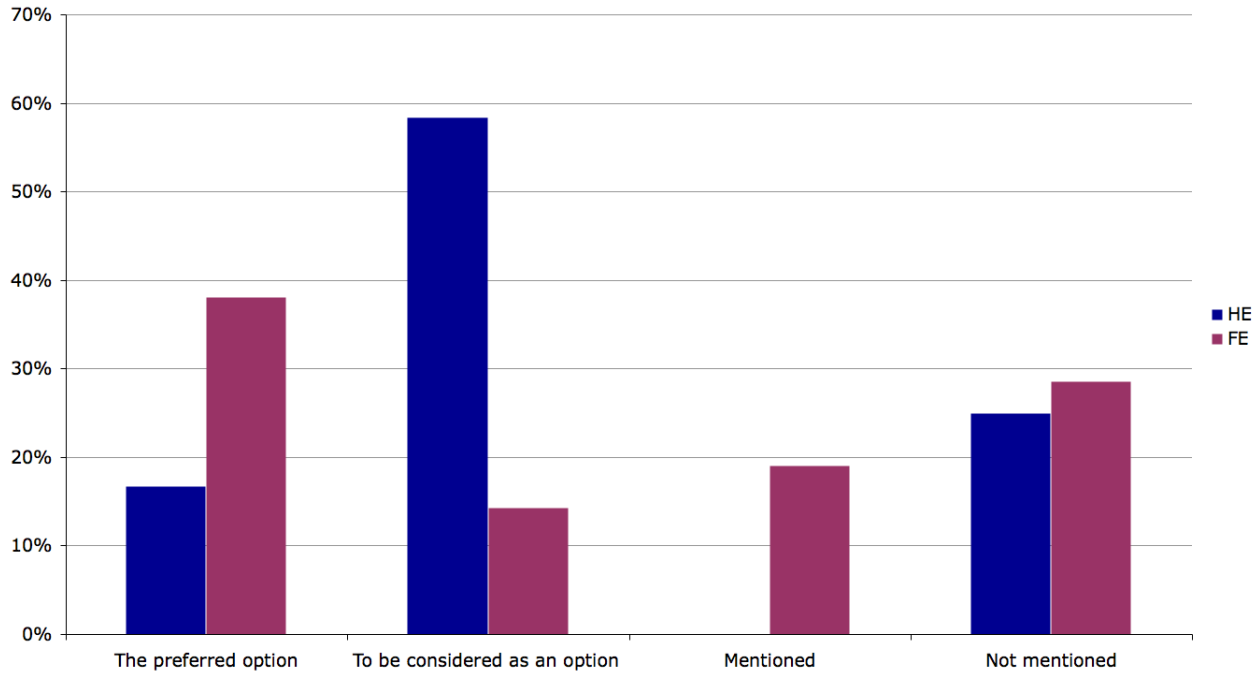


Figure 4e. Mentions of closed source in ICT policies in institutions, comparing HE and FE

Q5: Software considered for procurement/deployment in practice

Q5. In practice, what software is considered for procurement/deployment in your institution?

As with policies, the overall historic trend is towards equal consideration of open and closed source software, with the extremes of “only open source” and “only closed source” absent from the past two surveys.

However, if the ideal situation is assumed to be equal consideration, then the rate of change from 2008 to 2013 is hardly a cause for celebration, only rising from 20% in 2008 to 28% of institutions in 2013. If institutions are to take full advantage of open source in their procurement, more rapid changes to practice will be needed.

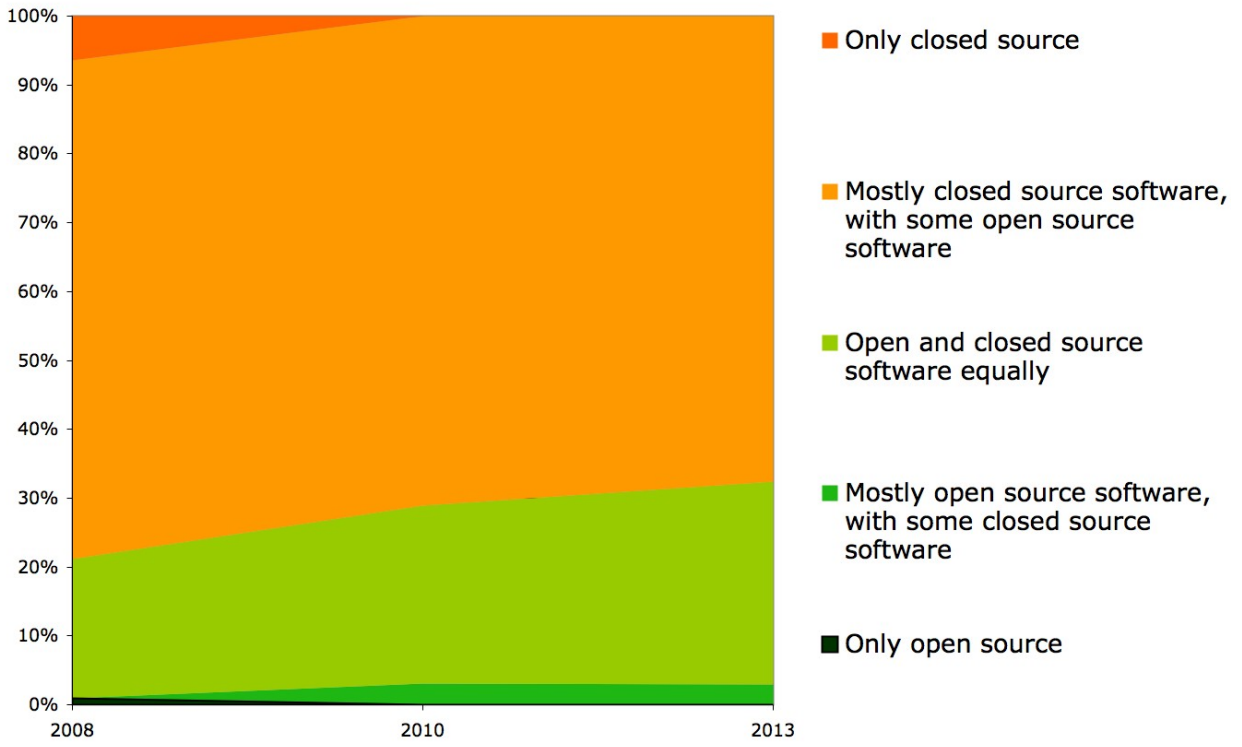


Figure 5a. Software considered for procurement in practice, 2008-2013

Looking at the picture for HE and FE in 2013, what is most notable is that there has been some singificant progress in HE towards equal consideration, from 29% in 2010 to 50% in 2013. However, for FE the overall picture is unchanged since 2010.

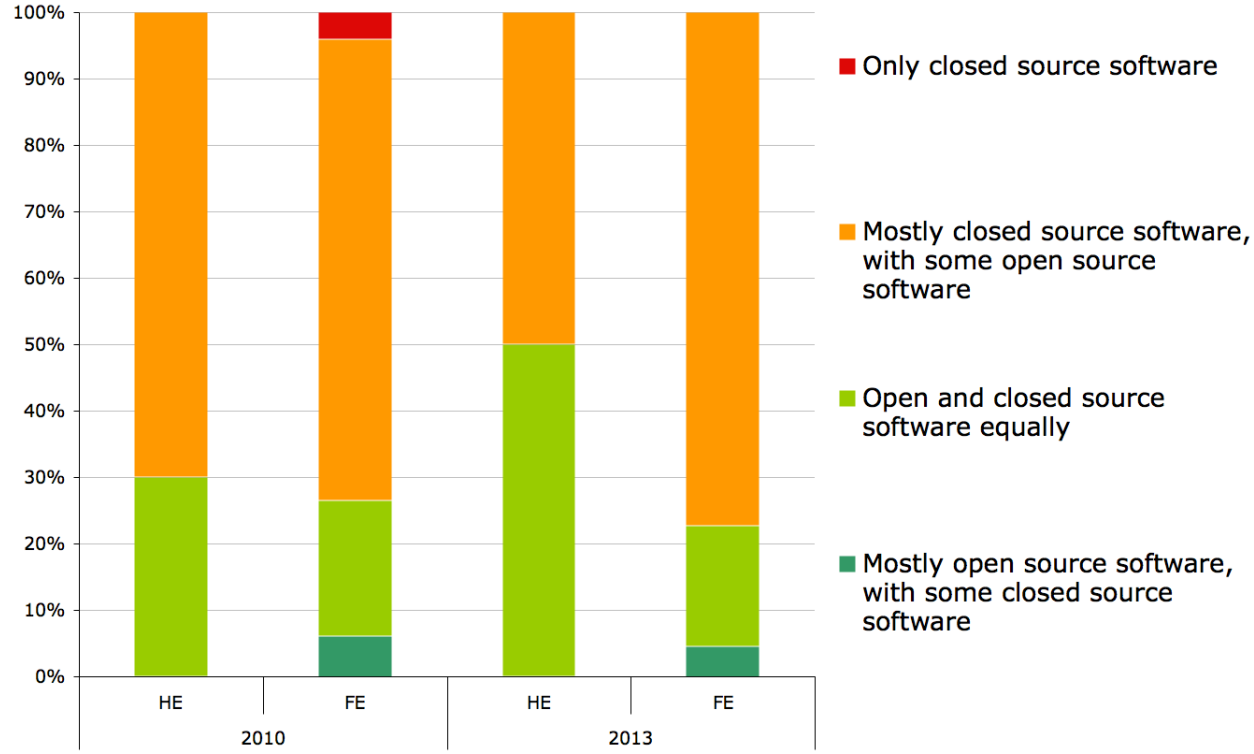


Figure 5b. Software considered for procurement in practice, comparing HE and FE

Taken together, the results paint a picture of steady progress towards equal consideration of open and closed source software in HE, but of little or no change in FE.

Do policy and practice go together?

Looking at the relationship between statements on policy and practice in combination, there is no consistent correlation between the two (Figure 5c). For example, in our 2010 survey institutions that mention open source in policies are the least likely to consider it in practice; whereas in 2013, institutions that mention open source in policies are the *most* likely to consider it in practice.

One interpretation is that policy sets an agenda for the institution that takes time to implement in changes to practice, and so we would perhaps see a correlation if we traced the changes in individual institutions over time.

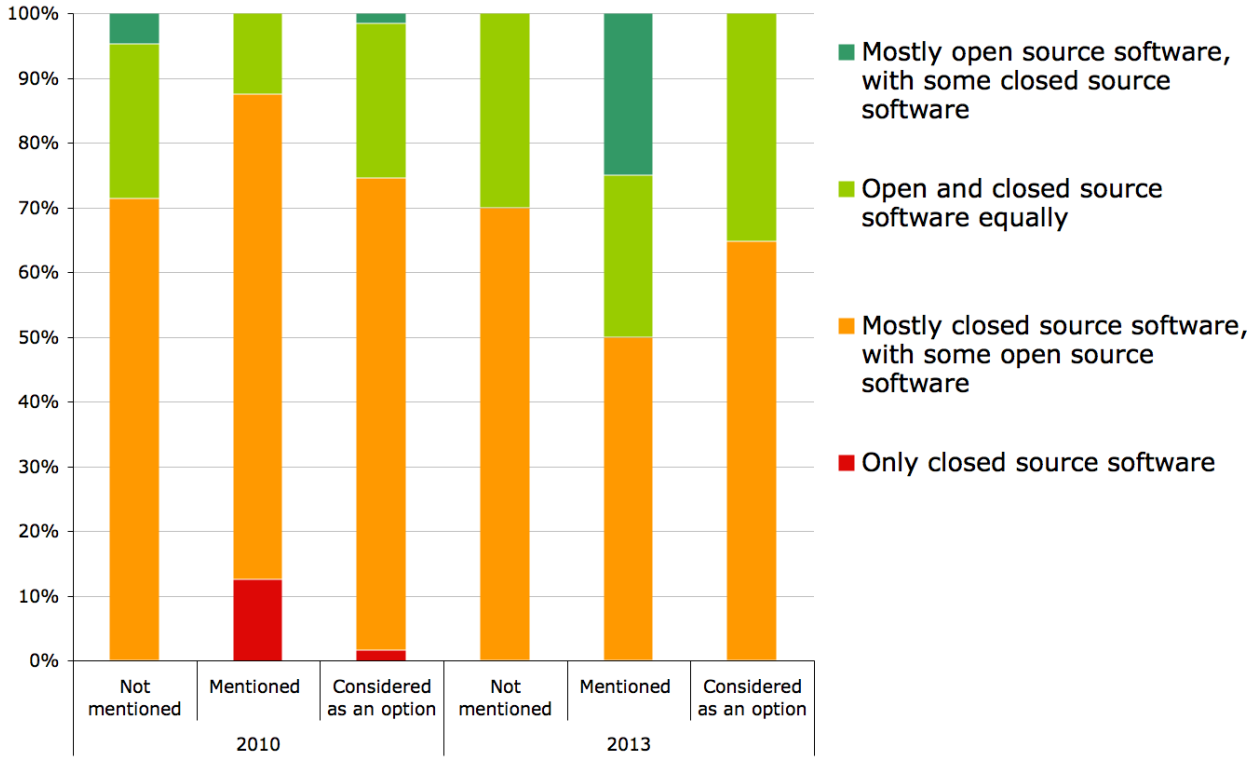


Figure 5c. Software considered for procurement in policy and in practice, 2010-2013

Contributing to open source software

Q6-7: Policies on staff contributions to software projects

Q6/7. What is your institution's policy regarding staff contributing to open/closed source software projects?

The responses on policies covering staff contribution to software projects largely follow the picture from previous surveys; most of the staff who contribute to both open and closed source software projects do so either in a casual manner, in their own time, assuming personal responsibility, or because the working practice encourages it (without regulating it).

Looking at the past 5 years, there is a notable decrease in the number of institutions with policies or contracts explicitly allowing staff to contribute to open source software (Figure 6a).

Perhaps of more concern is that the number of institutions where contributing to open source is part of working practice appears to have declined slightly rather than increased.

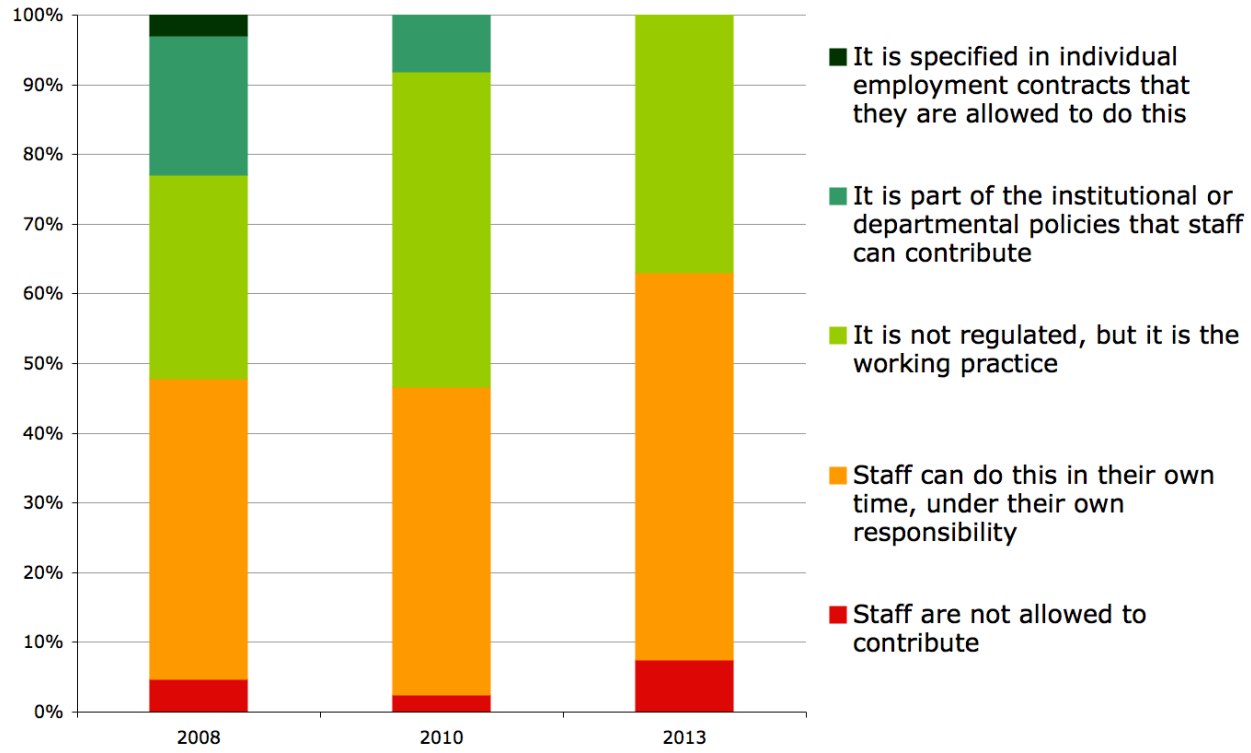


Figure 6a: Policies on staff contributions to open source, 2008-2013

As the patterns for HE and FE were different for procurement policy, one possibility was this was due to differences between the sectors. However,

when the same data is broken down by sector (Figure 6b) it can be seen that there has been similar levels of retrenchment in both HE and FE.

In previous surveys the main difference between HE and FE was that contributing to open source is more likely to be part of working practice in HE than in FE. However, in 2013 we find the gap narrowing, with the number of institutions with a working practice of contributing to open source in decline in HE, and a small increase in FE. The proportion of institutions where staff contribute in their own time has also converged between HE and FE (56%).

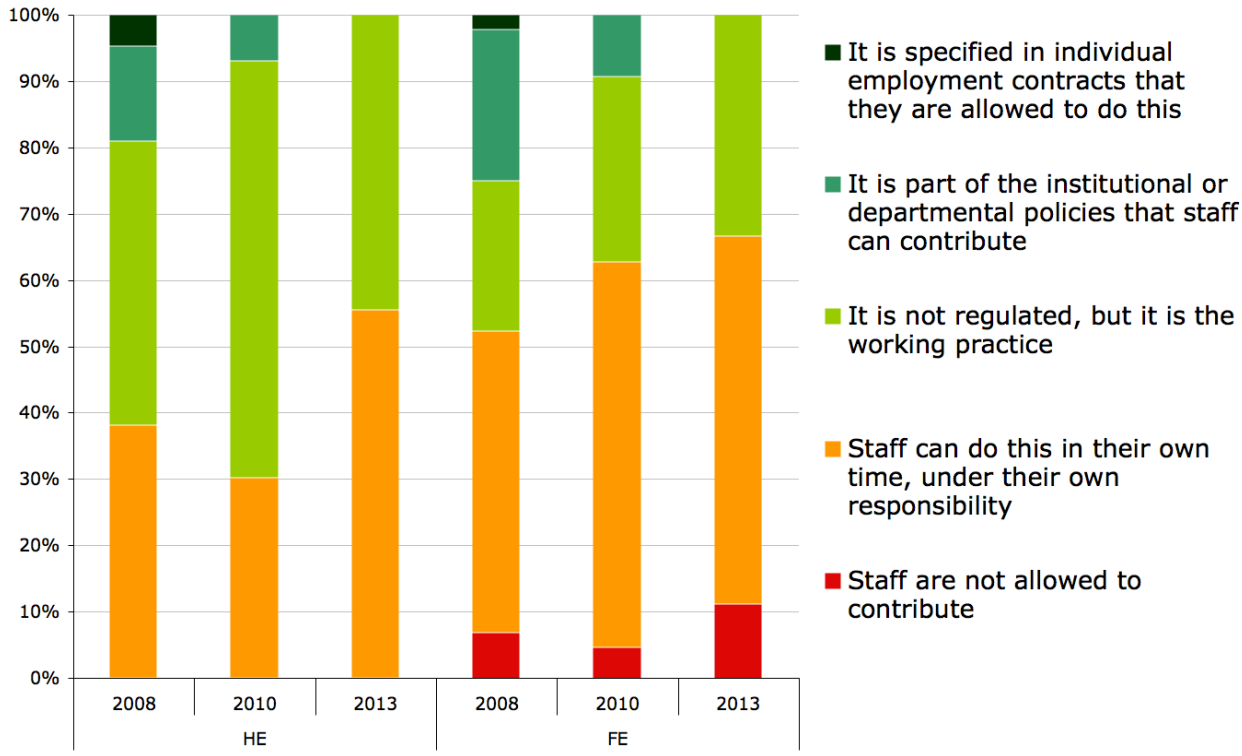


Figure 6b: Policies on staff contributions to open source, 2008-2013

When it comes to comparing open and closed source software, the figures are largely similar, the main difference being a larger proportion of institutions do not allow contributions to closed source software.

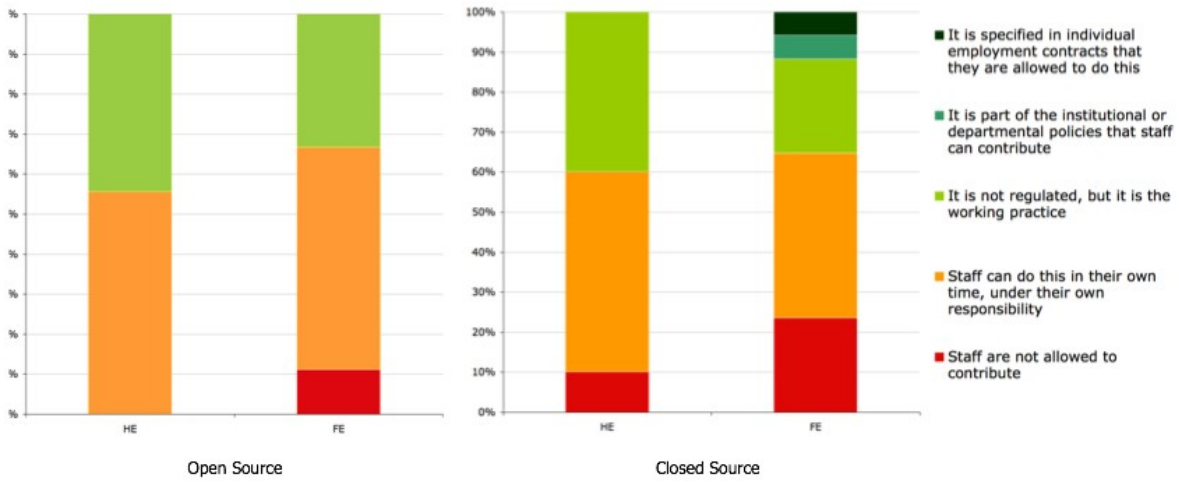


Figure 7: Policies on staff contributions to open source and closed source software, comparing HE and FE

Q8: Staff contributions to software projects in practice

Q8. In practice, how often do ICT staff contribute to software projects? Contributions to software projects include being an active member of a mailing list, submitting patches, writing documentation or code, etc.

We find that in HE there is a marked difference between contributions to open source and closed source software, with staff being far more likely to contribute to open source software. However, in FE there was little difference between frequency of contributions to closed source and open source.

(The 2010 survey found that, while staff in HE were more likely to contribute to software projects, the overall pattern across HE and FE was the same between closed and open source.)

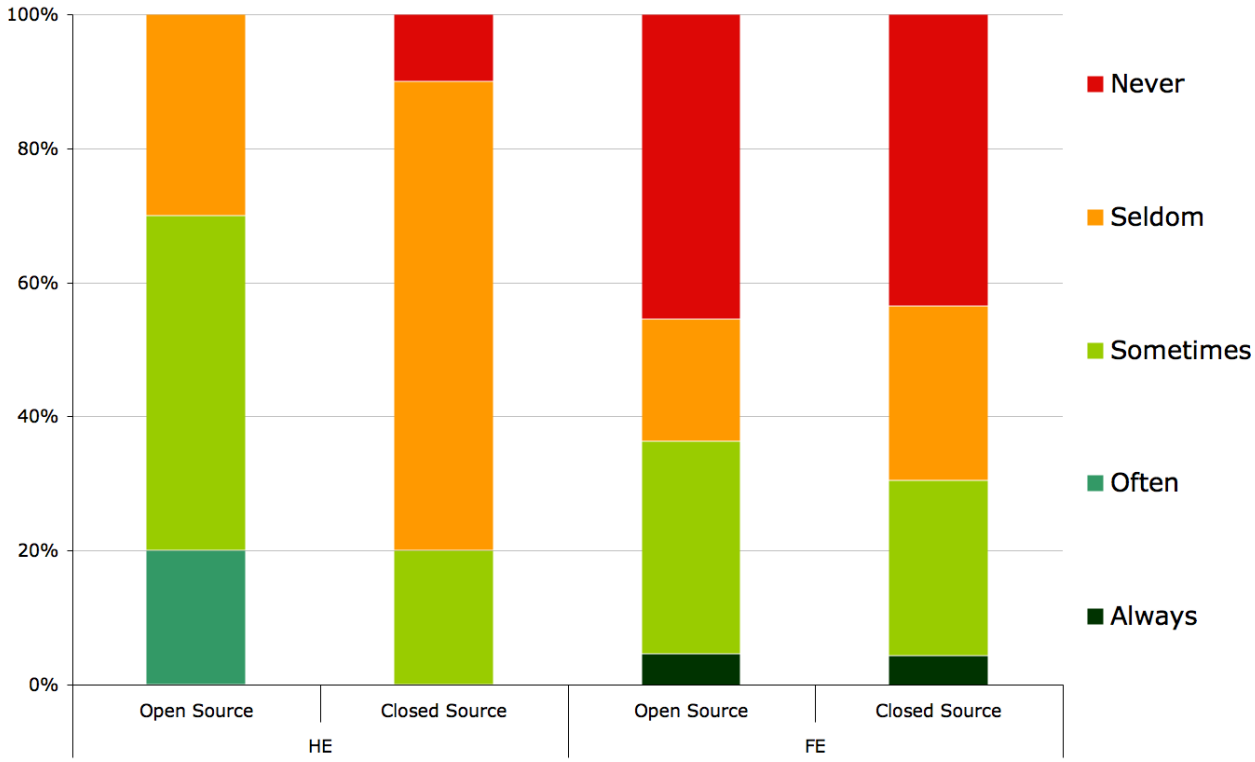


Figure 8a: Staff contributions to open and closed source software, comparing HE and FE

Looking at the past five years, contributions to open source have declined overall, with more respondents in 2013 reporting that staff never contribute to open source software.

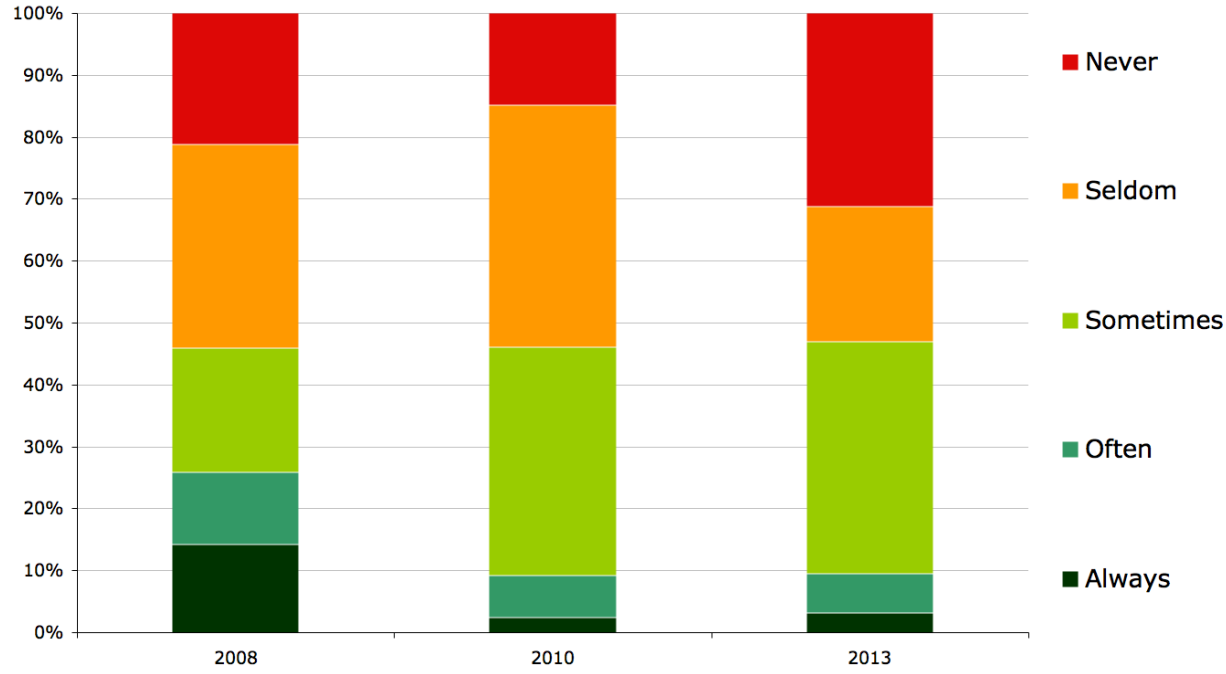


Figure 8b: Staff contributions to open source software, 2008-2013

However this doesn’t tell the whole story. When we look at the trends for HE and FE separately (Figure 8c) then we can clearly see different patterns in HE and FE. In HE institutions, there has been a steady increase in staff contributions overall, whereas in FE there has been a sharp decline in contributions.

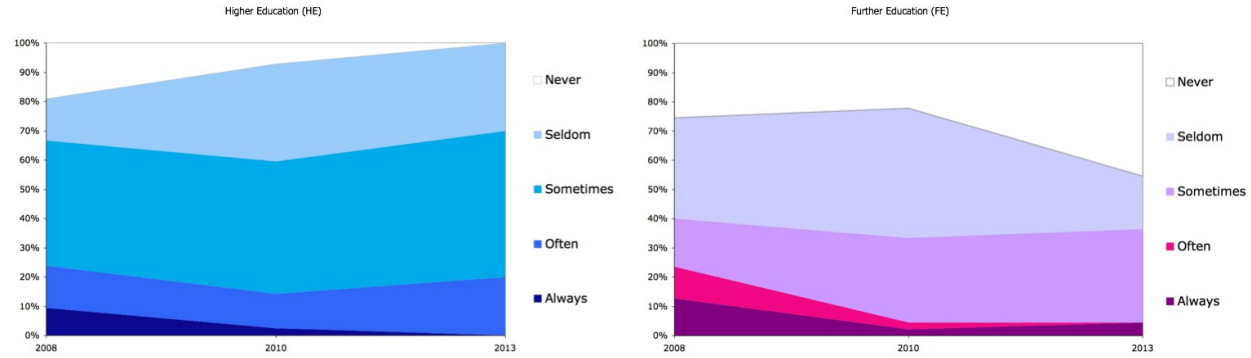


Figure 8c: Staff contributions to open source software, 2008-2013, comparing HE and FE

Software running on servers

Q9 & 10: Software support for servers

Q9/10. What best describes the support for open/closed source software running on your institution’s servers?

Support for open source software is less likely to be part of the job description of all ICT staff than support for closed source software. However, there is a large difference between HE and FE; open source software is much more likely to be supported without being part of staff job descriptions in FE than HE (36% vs 18%).

Overall, outsourced support for software on servers is also more common in FE, for both closed source and open source software.

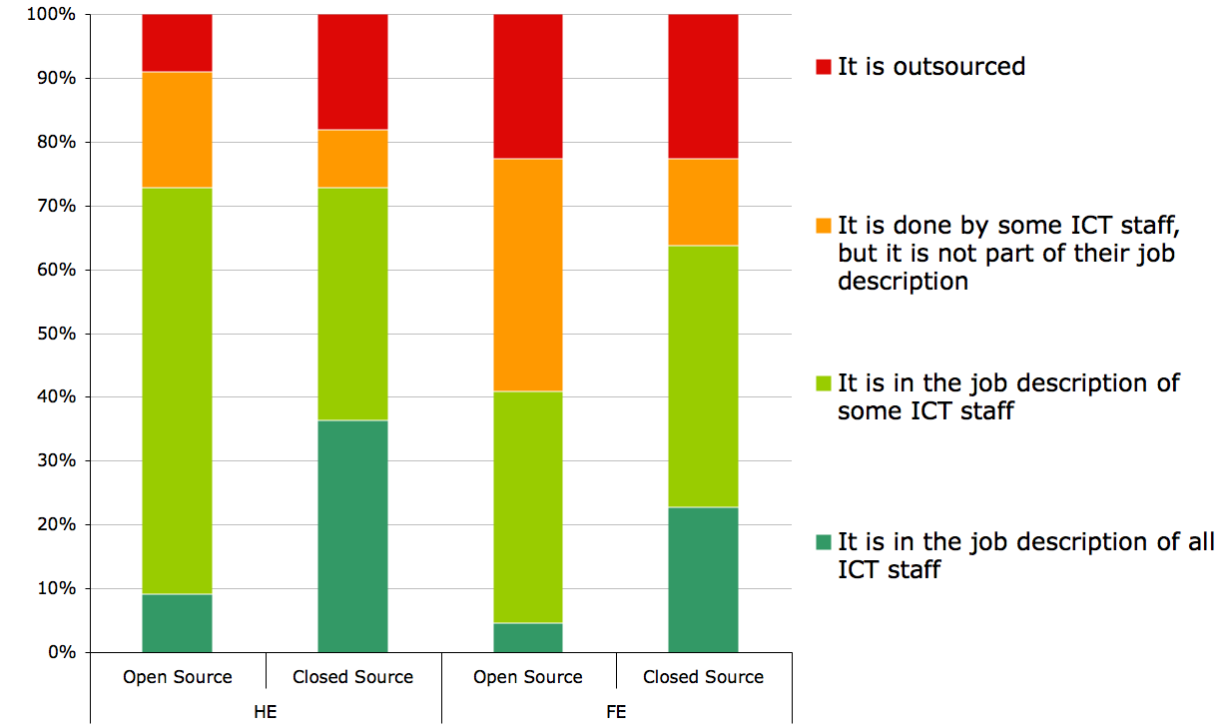


Figure 9a. Support for software on servers, comparing HE and FE

If we look at the trend from 2008-2013 just for support for open source software (Figure 9b), there is a more pronounced growth in outsourcing in FE, and a general shift towards less formalized support. By contrast, for HE the overall pattern is less clear.

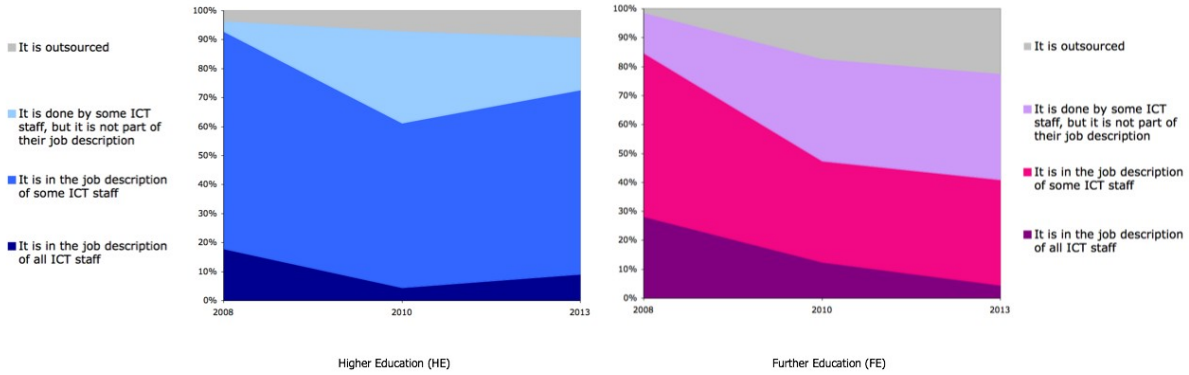


Figure 9b. Support for open source software on servers, comparing HE and FE 2008-2013

Q11: Ratio of open and closed source software deployed on servers

Q11. What is the approximate ratio of open and closed source software deployed on your servers? (in the past; currently; planned for the future)

There is a very clear cut difference between HE and FE sectors in responses

to this question; FE institutions are predicting little change in the proportion of open source software on servers, and some institutions report a decline in the proportion of open source from the past.

However, the response from HE institutions indicates a strong movement from proprietary to open source software on servers, with half of the respondents predicting half-and-half open and closed source software in the future, and 13% predicting that most of the software running on servers to be open source in future.

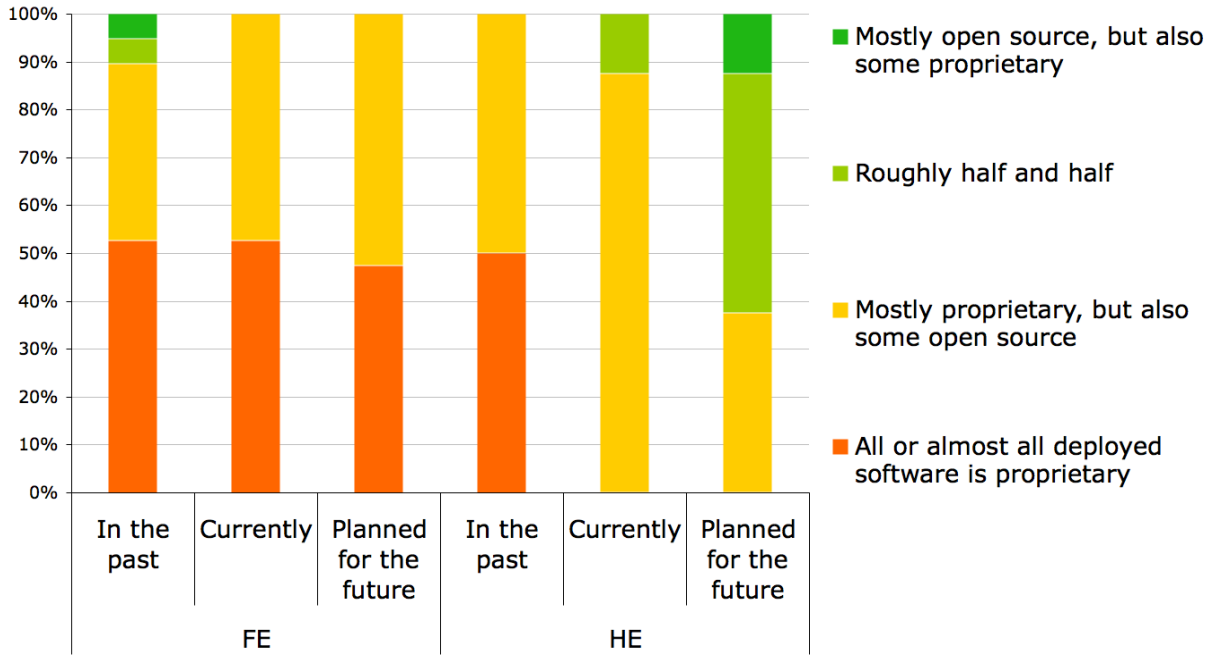


Figure 11a. Ratio of open and closed source software deployed on servers, comparing HE and FE

If we go back to the 2010 survey for HE, we can compare the future estimate then with the current state in 2013 (Figure 11b). While more respondents in 2010 predicted they would have “roughly half and half” open and closed source software than is reported in 2013, it is interesting that no HE institutions in 2013 reported they used all or almost all proprietary software.

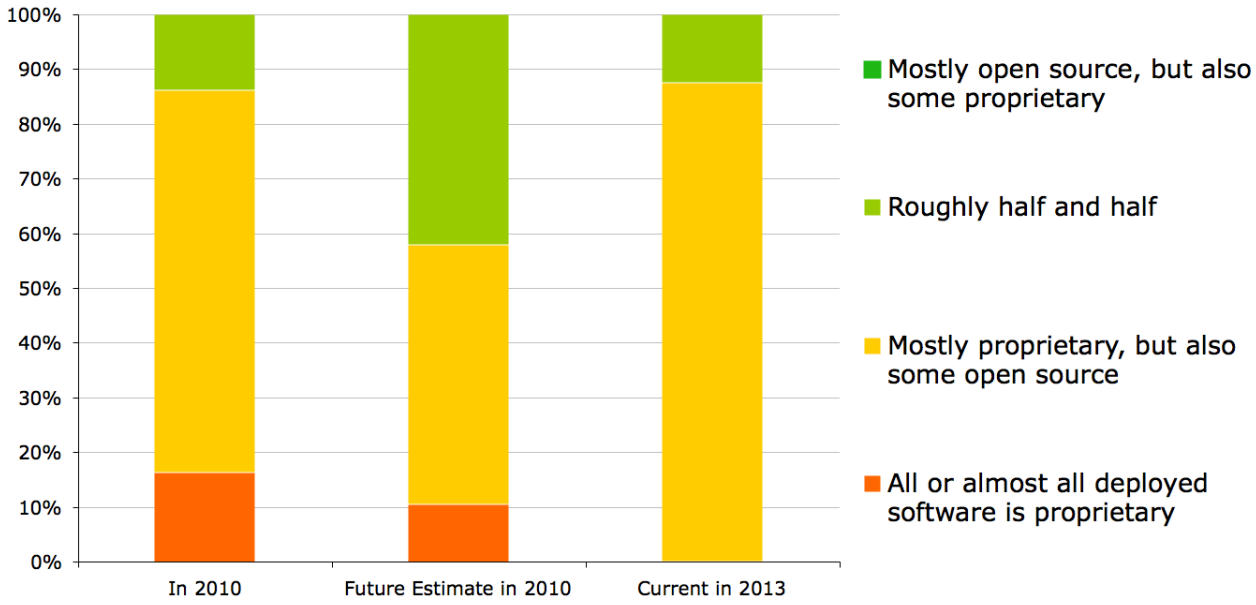


Figure 11b. Aspirations versus reality: server software in HE 2010-2013

For FE, however, the picture is very different (Figure 11c). Whereas institutions in 2010 were predicting they would use slightly more open source software in the future, the reality is that more institutions reported they used all or almost all closed source software.

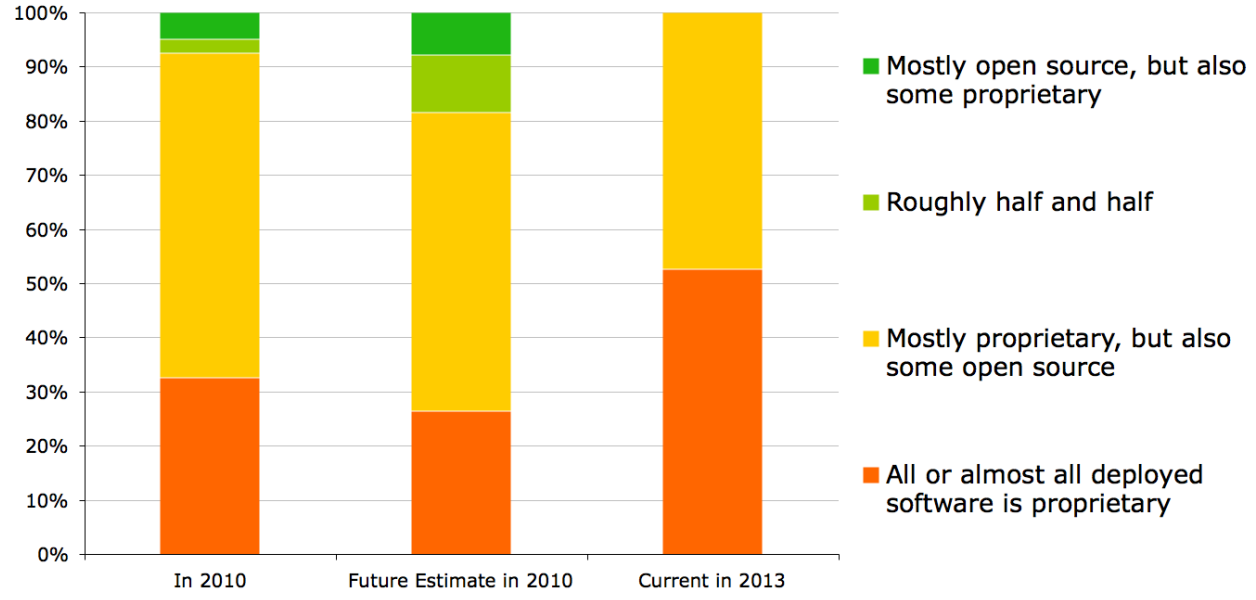


Figure 11c. Aspirations versus reality: server software in FE 2010-2013

Looking back over the past five years, there is a trend in HE towards a mix of open and closed source, with a decline in the number of institutions reporting that all or almost all software on their servers is closed source. This contrasts strongly with FE, where the trend is unclear, potentially indicating the use of closed source server software is increasing.

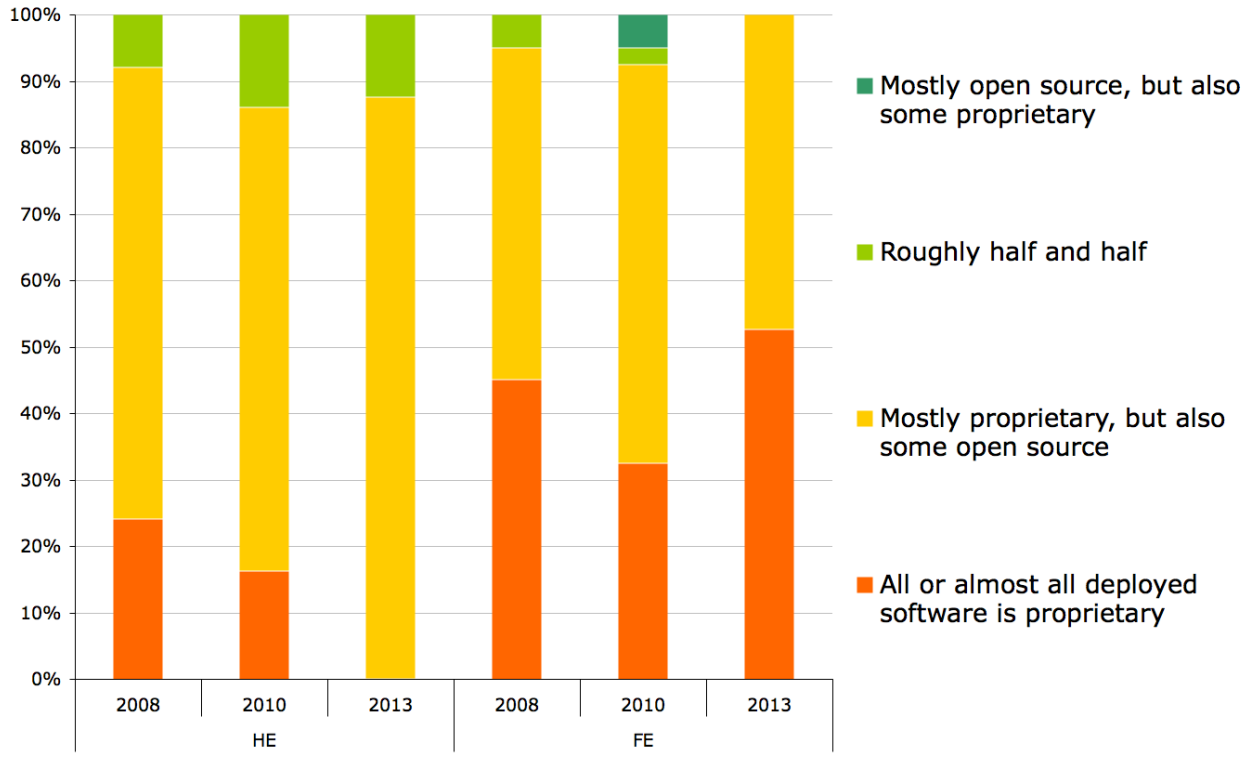


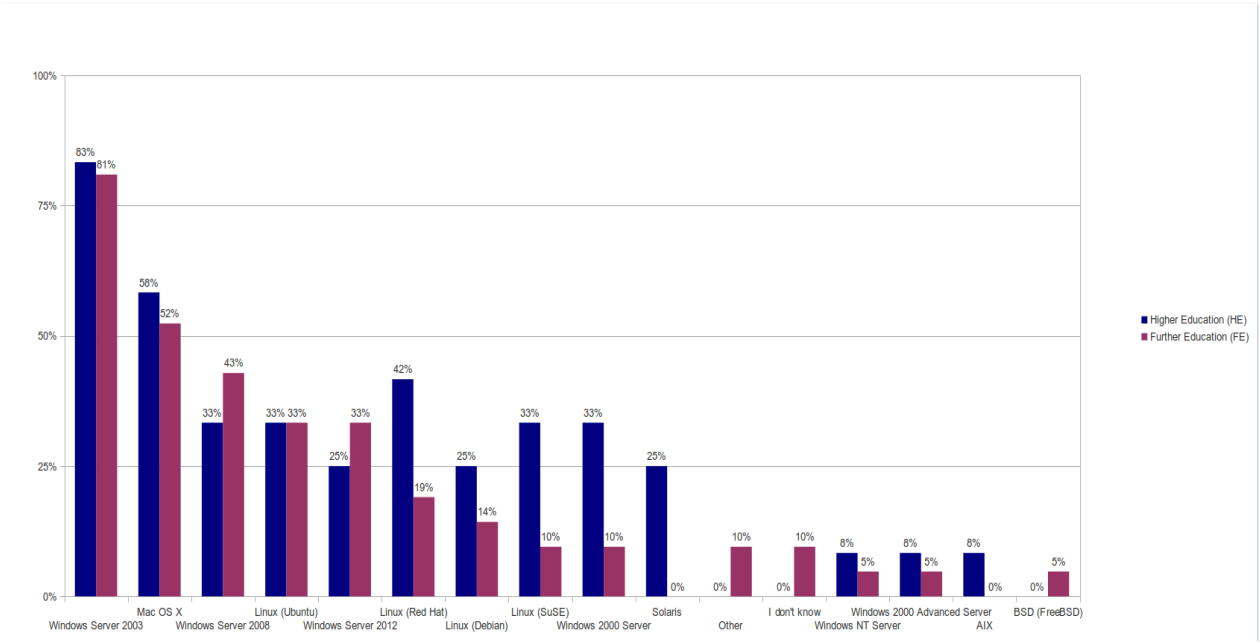
Figure 11d. Server software in FE and HE, 2008-2013

Q12-19 Software running on servers

Q12: Server operating systems

Q12. Which of the following operating systems are used on your institution's servers?

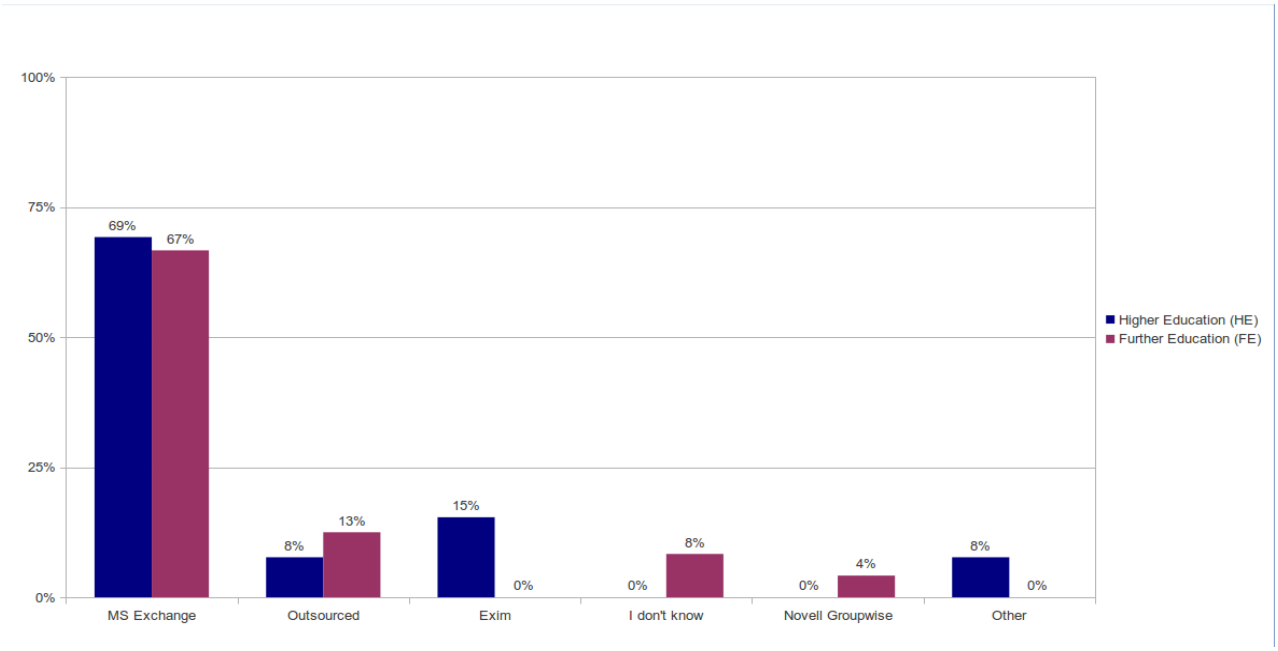
Windows 2003 and Mac OSX remain the most popular server operating systems, with Windows Server 2008 and 2012 gaining a lot of usage since the 2010 survey, each now being deployed in around a third of insitutions. Linux (Ubuntu) and Linux (Debian) have grown in FE since 2010, from 25% to 33% and 10% to 14%, respectively. Linux (Debian) has also grown in HE to 25%, up from 14% in 2010.



Q13: Mail servers

Q13. Which of the following mail servers are used at your institution?

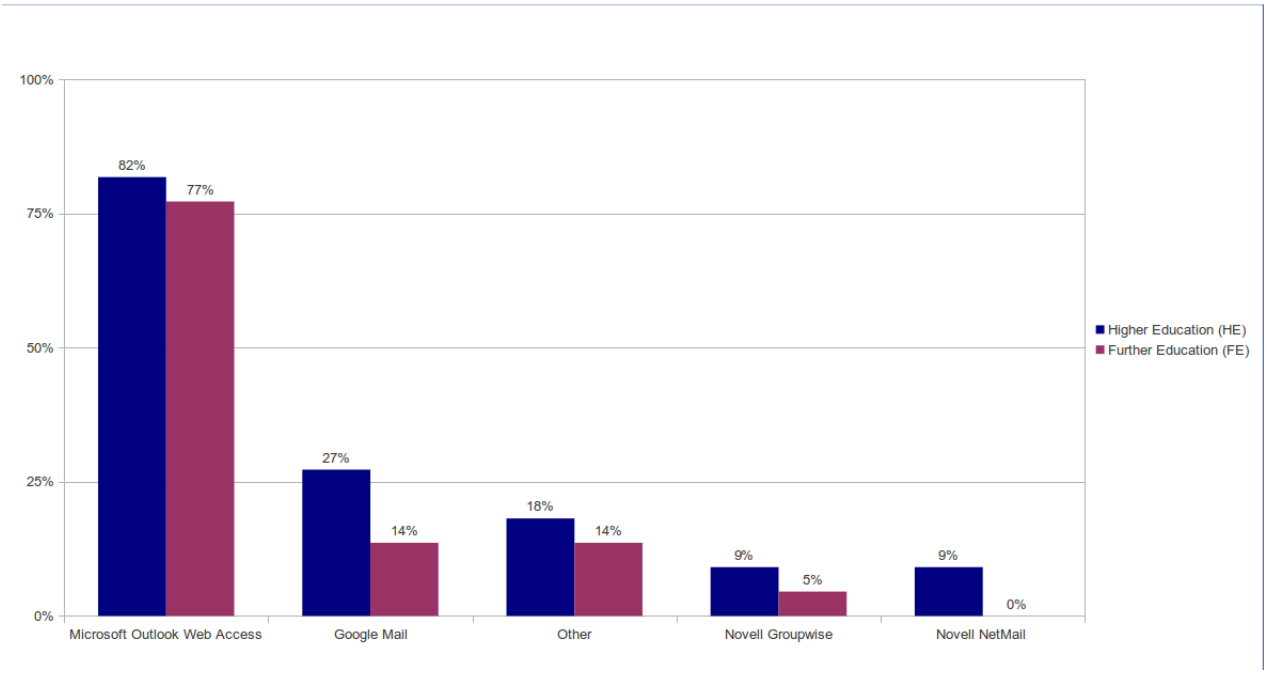
As in 2008 and 2010, MS Exchange is still the most popular mail server by a large margin. Novell Groupwise has dropped from 18% to 4% of HE institutions since 2010, and from 7% to 0% of FE. The open source Exim server has also dropped from 25% to 15% in HE. Outsourced solutions have seen an increase in FE from 0% to 13%, while decreasing in HE from 14% to 8%.



Q14: Webmail systems

Q14. Which of the following webmail systems are used in your institution?

Microsoft Outlook Web Access remains the leading solution in both HE and FE. Usage of Novell Groupwise Webmail has dropped in line with the drop in server usage in FE to 5% (18% in 2010). Usage of Google Mail has increased to 14% in FE (5% in 2010) and 27% in HE (16% in 2010).

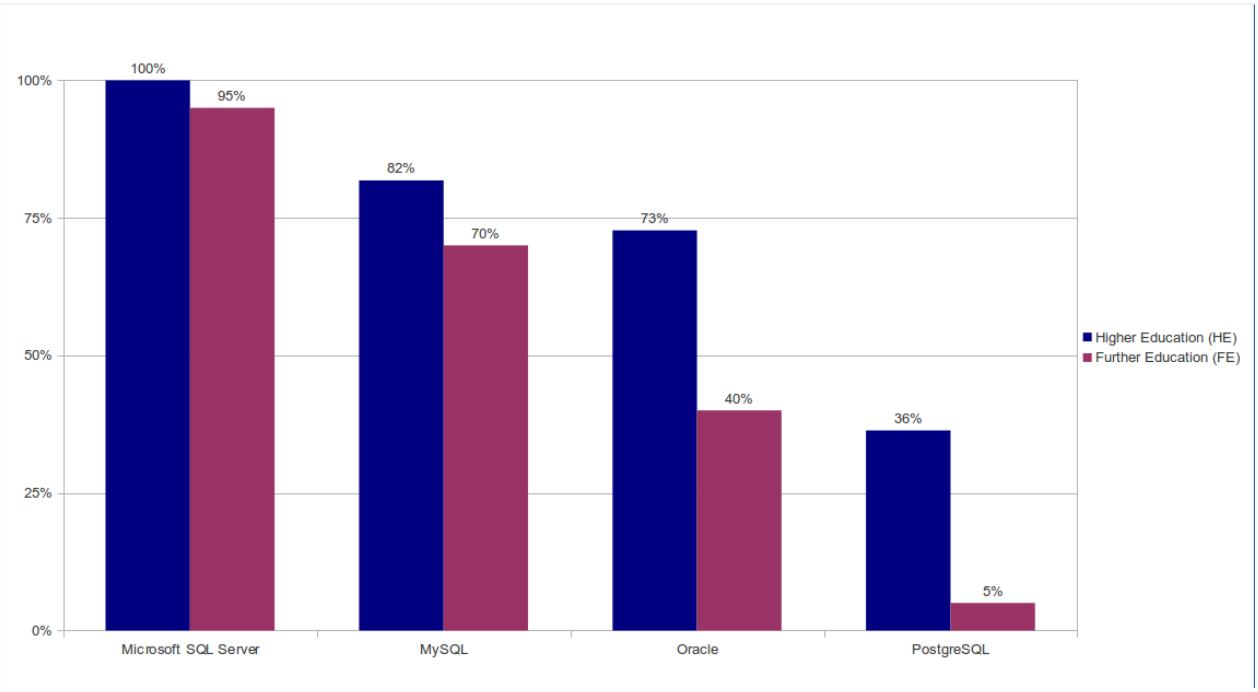


Q15 Database servers

Q15. Which of the following database servers are used in your institution?

Microsoft SQL Server remains the most widely deployed database server, being found in almost all institutions. MySQL's deployment remains stable at its 2010 levels, in 70% of FE and 82% of HE institutions. Oracle has decreased in FE to 40% (66% in 2010) while increasing in HE to 73% (60% in 2010). PostgreSQL has increased slightly in FE to 5% (3% in 2010), and significantly in HE to 36% (9% in 2010).

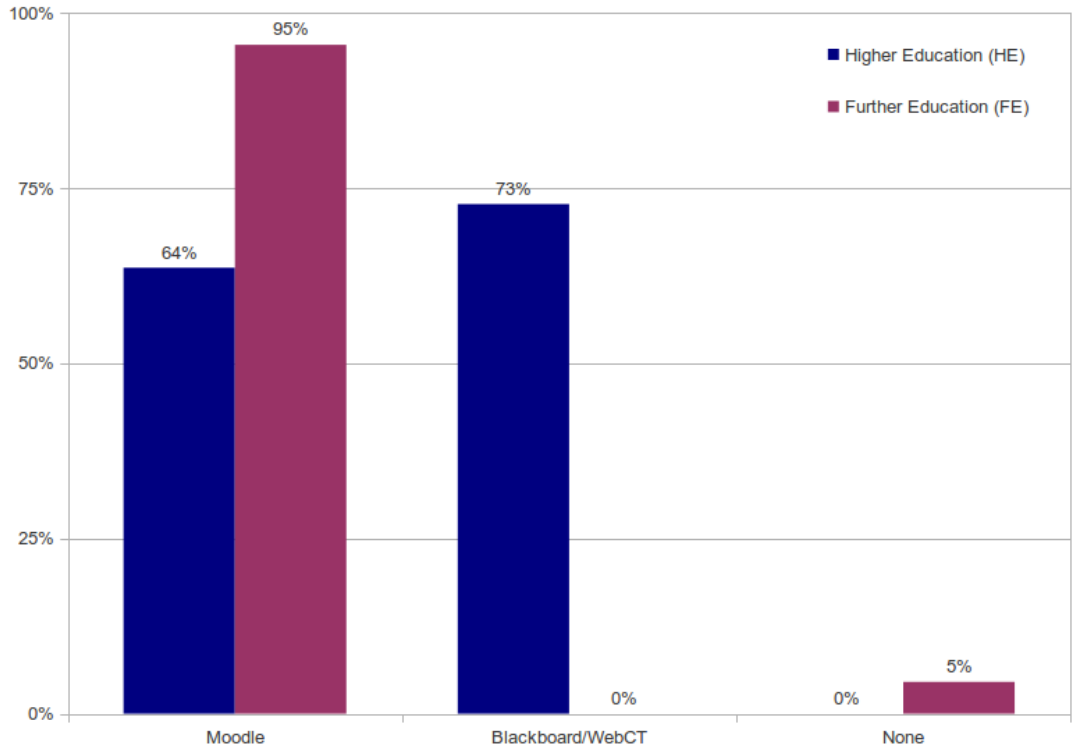
Q15. Which of the following database servers are used in your institution?



Q16: Virtual Learning Environments (VLEs)

Q16. Which of the following Virtual Learning Environments (VLEs) are used in your institution?

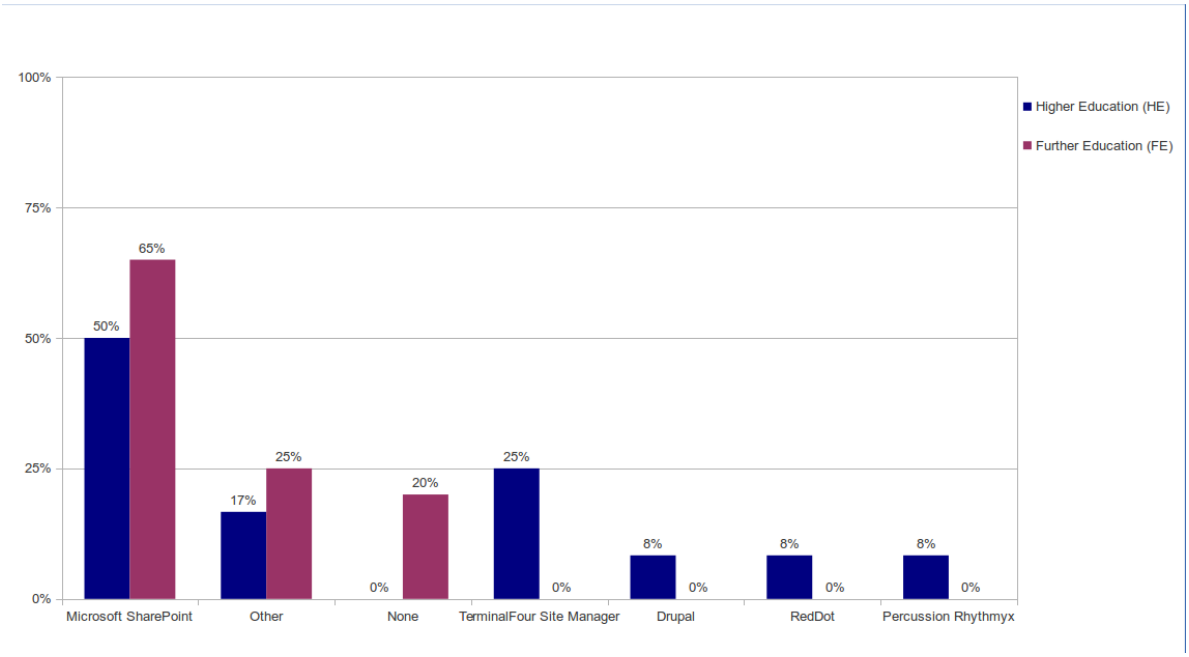
Open source solutions continue to be widely adopted in the VLE market. Moodle continues to be the most popular VLE, increasing to 95% of FE insitutions (83% in 2010) and 65% of HE (59% in 2010). Blackboard/WebCT has increased slightly in HE to 73% (59% in 2010), while reducing from 20% to 0% of FE institions. Only 5% of FE insitutions used no VLE.



Q17 Content Management Systems (CMSs)

Q17. Which of the following Content Management Systems (CMSs) are used in your institution?

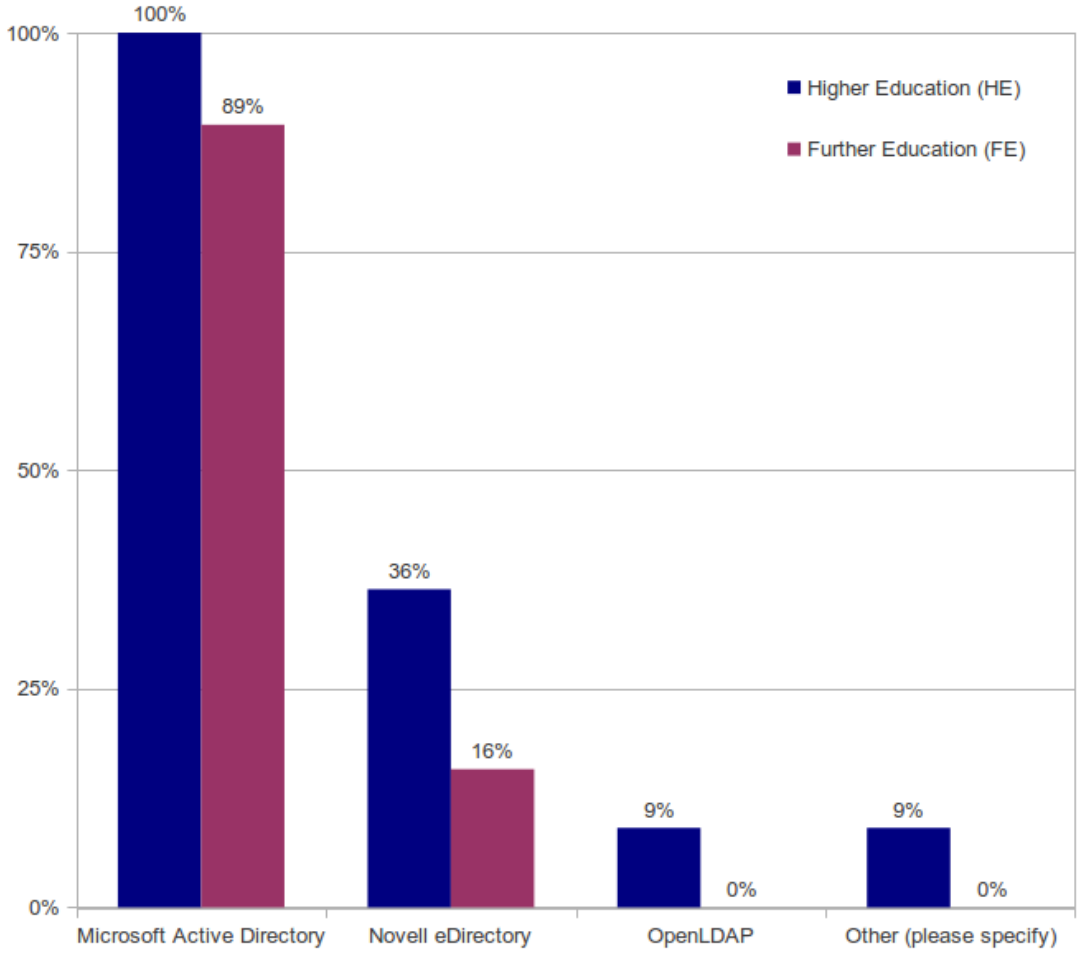
The percentage of institutions using no CMS has decreased dramatically from 43% to 20% in FE, and from 11% to 0% in HE. Usage of Sharepoint has increased to 50% of HE (36% in 2010) and 65% of FE (43% in 2010). There was a much narrower range of responses compared to 2010.



Q18 Directory Service Systems

Q18. Which of the following Directory Service systems are used in your institution?

Microsoft Active Directory remains the most widely used Directory Service, deployed in almost all institutions, while Novell eDirectory retains a fairly stable share of the market. OpenLDAP usage has almost completely diminished, to 0% in FE (8% in 2010) and 9% in HE (21% in 2010).



Q19 Other server software

Q19. Which software, if any, does your institution use in the following areas? Please only consider centrally-supported services rather than applications deployed for purely local use (e.g. department, research group or individuals).

In this question respondents were asked to indicate any software (or multiple software solutions) they may use in a number of areas. No prompts were provided and the answers were free-text. The resulting quantitative data was obtained by sorting the free-text responses into categories according to content. Where multiple software solutions were indicated, each was counted as a response in its own right.

- **Calendar/diary services:** Microsoft Exchange remains the most popular solution, although a few insitutions used Google Calendar.
- **Wikis:** Of the insitutions to report using a wiki, Blackboard, Campus Pack and MS Sharepoint were the most popular solutions, with Atlassian Confluence, Moodle, Joomla and IBM Connections also being used.

- **Blogs:** Wordpress was the most popular solution, used in 44% of institutions. 17% of insitutions used Sharepoint for blogging, while other solutions included Moodle, Blackboard and Blogger.
- **Project Management software:** All instutitions who reported using project management software used Microsoft Project.
- **Social Networking software:** Facebook was the most widely used social network, used by 33% of institutions, while Twitter was used in 24%, both seeing an increase in usage since 2010.
- **Groupware:** Microsoft products (SharePoint and Exchange) remain the most popular solutions.
- **Digital repositories:** Responses included a range of systems including Sharepoint, DSpace, Planet EStream, ePrints and Equella.

Q20: Criteria when procuring software for servers

Q20. Rank the top 5 criteria that your institution considers important when procuring software for your servers, from most to least important. Please number 5 of the boxes, 1 being the highest priority

For higher education, the most important criteria when procuring server software are meeting user expectations, and total cost of ownership, with a weighted score of 37 and 29 respectively. These two factors are consistently ranked higher than the next 8 criteria, which form the next significant cluster, ranging from a weighted score of 18 points (interoperability) to 7 points (upgrade costs).

Note: scores are weighted so that highest-priority selections are given 5 points, the lowest 1 point. In the figures, this weighted total is used to rank the results, however individual responses are shown in the bars

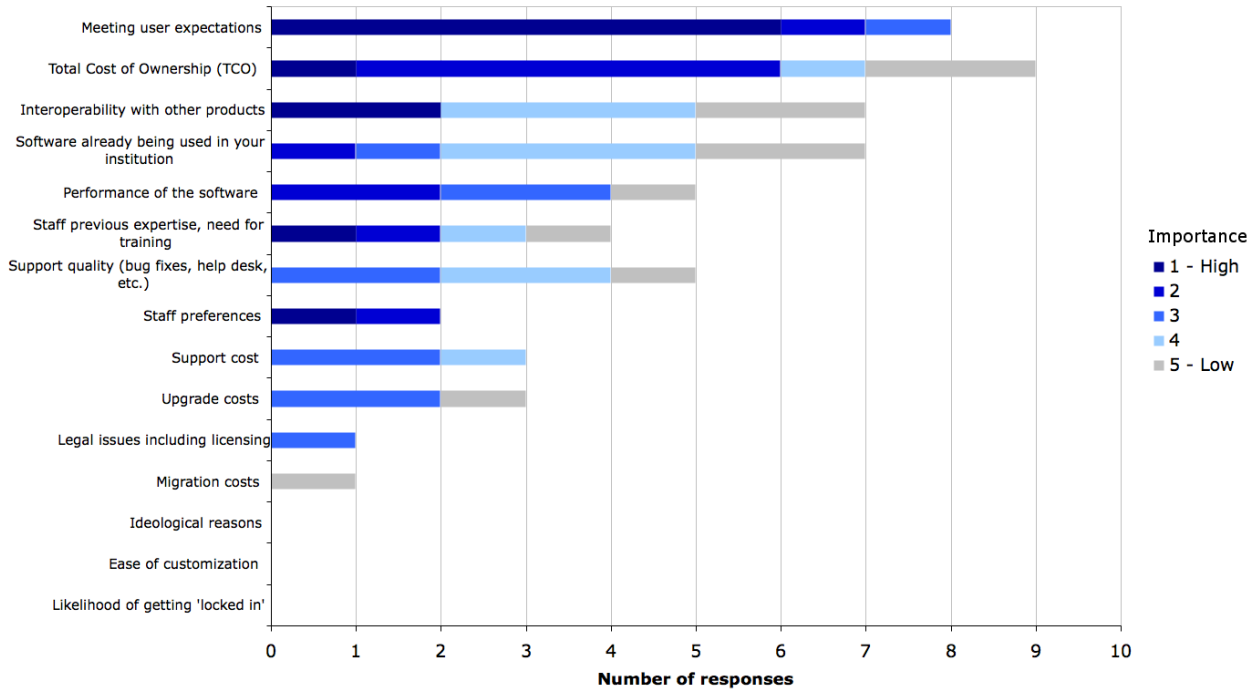


Figure 20a. Key factors in server software procurement in HE

When we look at FE, however, our survey found that performance of the software was the most highly ranked criterion (with 60 weighted points), followed by meeting user expectations (44 points) and total cost of ownership (36 points). In the next group are interoperability (32), support quality (29), support cost (27), sotware already in use (27) and staff previous experience (21).

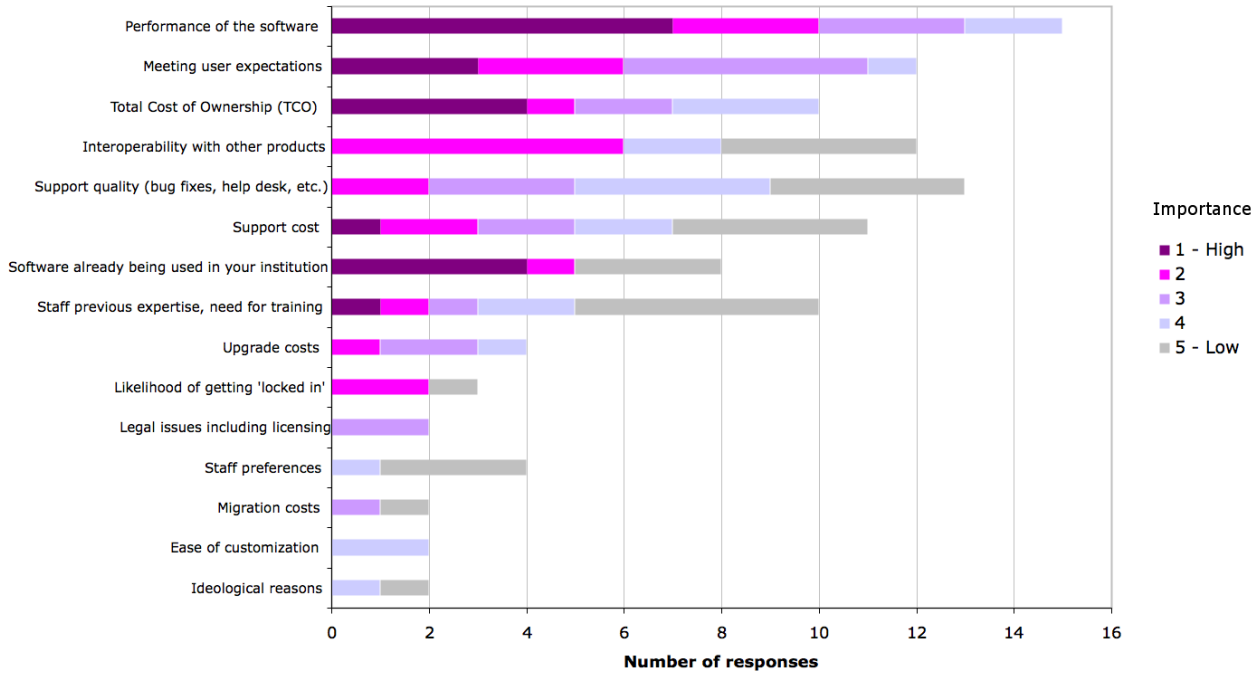


Figure 20b. Key factors in server software procurement in FE

Putting together both HE and FE, the top criteria are meeting user expectations, performance of the software, total cost of ownership, and interoperability. This is consistent with both the 2010 and 2008 surveys.

Again, lock-in and migration costs are not ranked as a concern by respondents, while interoperability is in the top four; in previous surveys we have interpreted this as indicating that insitutions will often see achieving interoperability as the same thing as buying from the same vendor, and do not have a strong culture of planning software exit strategies.

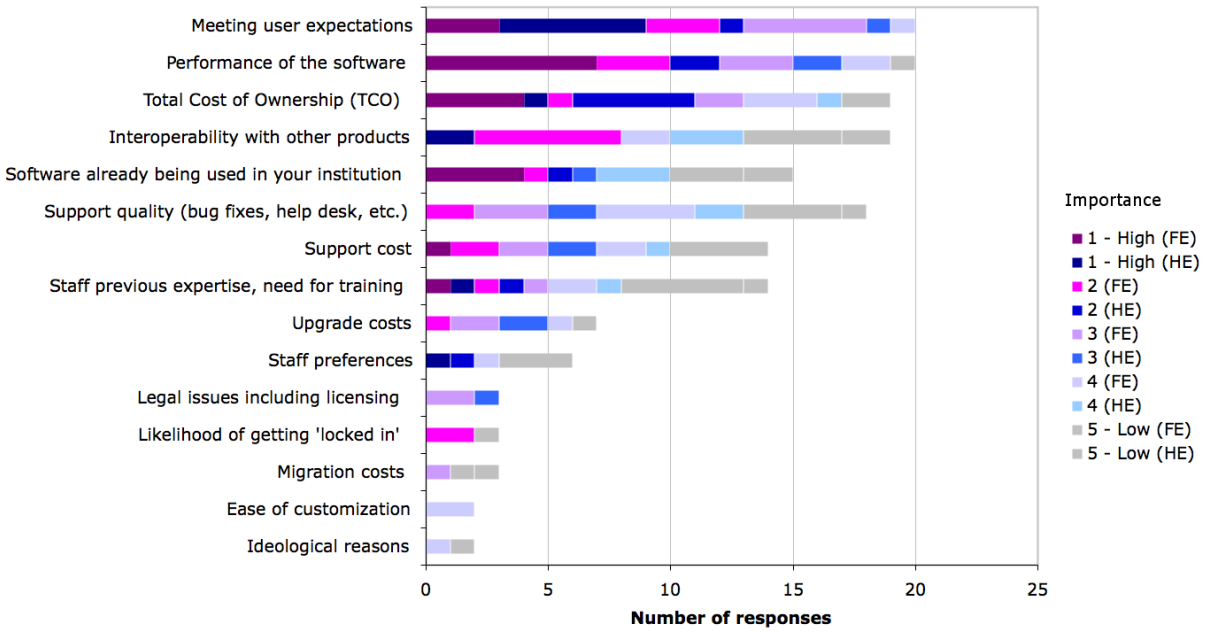


Figure 20c. Key factors in server software procurement in both HE and FE

Q21: Software considered for procurement/replacement on servers

Q21. Which new server software systems are currently being considered for procurement at your institution? Please also include old systems being considered for replacement. This could be, for example, because your institution does not have some systems, but would like to procure them, or because your current systems do not meet your needs.

Overall levels of replacement and procurement are slightly lower than in 2010, with only a few categories showing even very modest increases.

The largest drops in planned procurement and replacement are for mail servers in FE (down from 31% to 9%), VLEs in HE (down from 43% to 12%), content management in HE (down from 49% to 29%), directory services in FE (down from 20% to 0%) and digital repositores in HE (down from 26% to 12%).

The only increases are in VLEs in FE (up from 11% to 19%), content management in FE (up from 20% to 25%), and blog software in both FE and HE (up to 6% and 12% from 3% and 9% respectively).

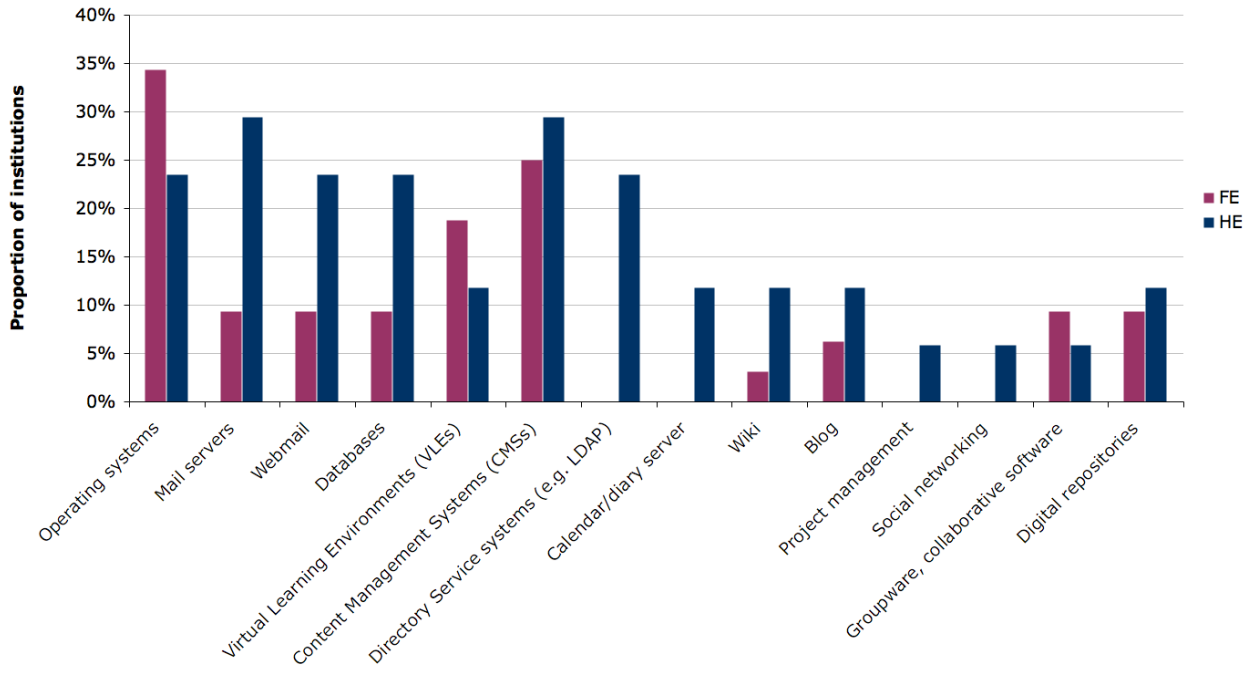


Figure 21. Server software being considered for procurement in both HE and FE

Q22: Reasons to decide against using open source software on servers

Q22. If your institution decides against using an open source software system on its servers, what are the top 5 most likely reasons? Please rank the following reasons from most to least likely.

Note: scores are weighted so that highest-priority selections are given 5 points, the lowest 1 point. In the figures, this weighted total is used to rank the results, however individual responses are shown in the bars

The most important reasons for deciding against using open source for server software in HE are interoperability and migration problems, followed by not being what users want. (Note in Q20 both interoperability and meeting user expectations are highly placed as selection criteria.)

Perhaps more importantly, lack of support has dropped from being the number one ranked reason in the 2010 survey, to fifth place in 2013.

The interoperability and migration issue is a difficult one, and we suspect this is may have its roots in lock-in to existing systems rather than interoperability problems with open source solutions.

Lack of expertise is reported as less important in 2013 than in our 2010 survey, although the perception of open source software as being of poor quality is ranked similarly.

The most surprising addition to the top five reasons is “there is no open source solution for our needs”. Given that there are open source options for almost all kinds of software in use in education, this is hard to take at face value. Perhaps this obscures a different reason, such as open source options not being considered during procurement (i.e., a post-hoc rationalisation).

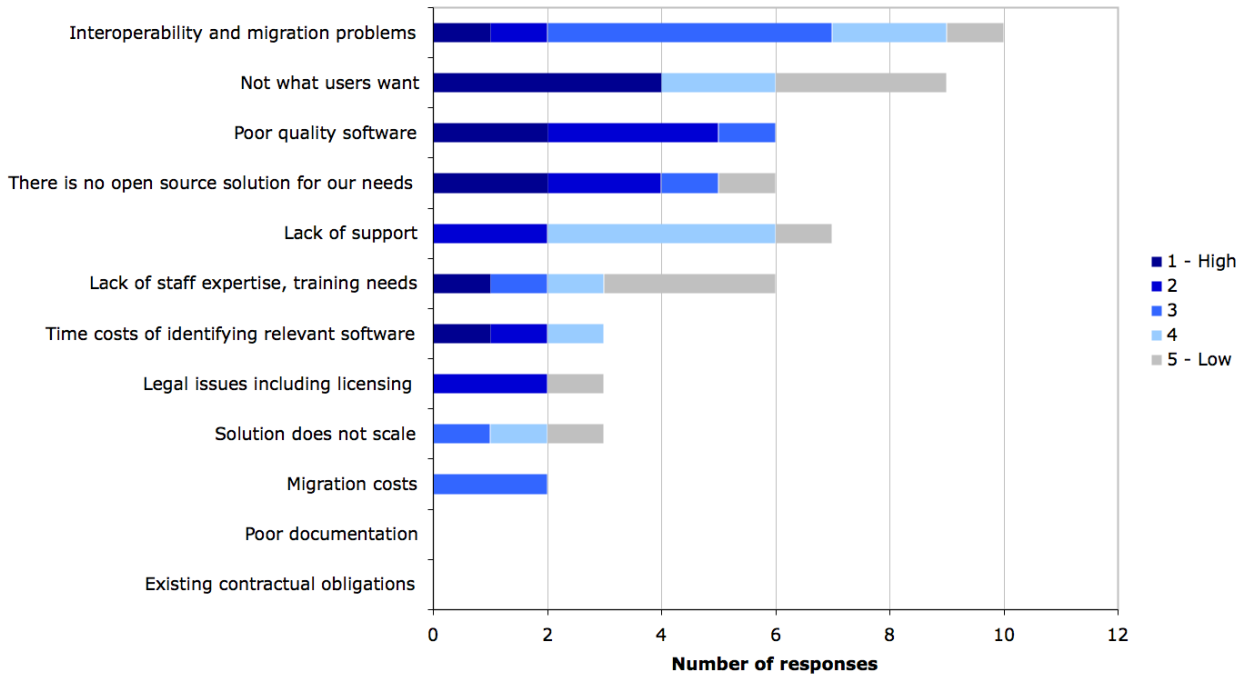


Figure 22a. Reasons to decide against using open source software on servers: HE

Interoperability and migration issues were important for FE respondents also, but were just eclipsed by lack of support. Lack of staff expertise is also in the top three reasons for FE.

Another interesting point is legal and licensing issues receiving a higher than expected rating in FE.

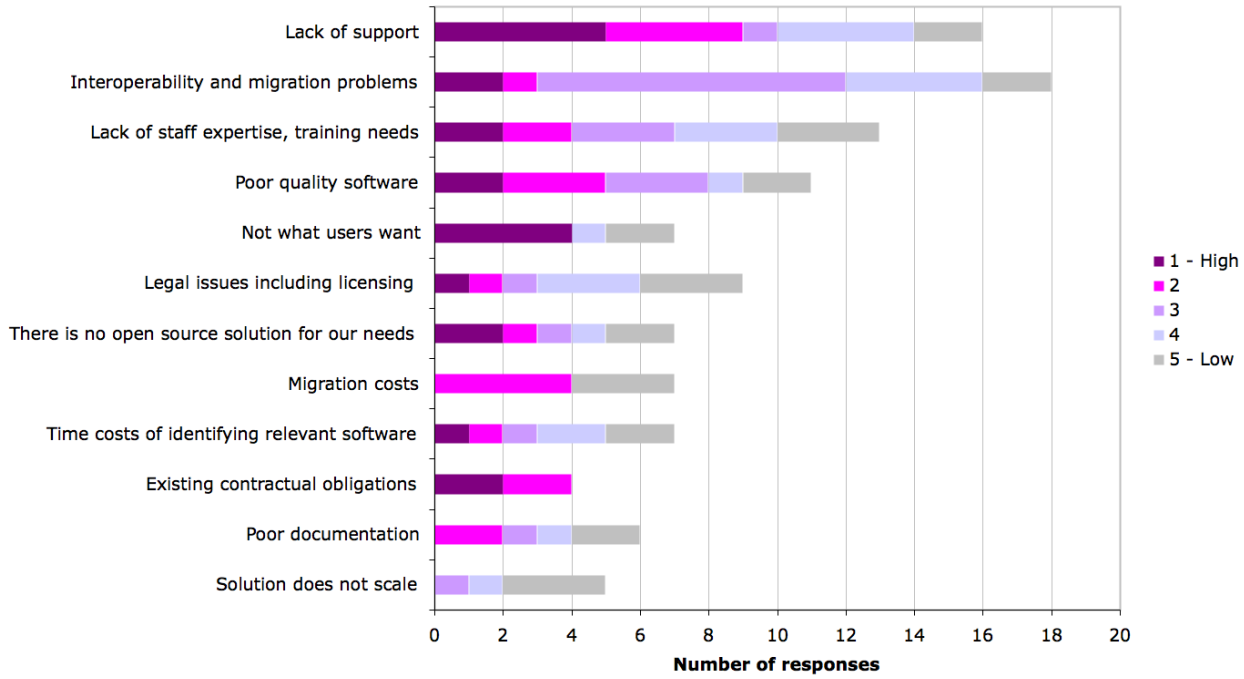


Figure 22b. Reasons to decide against using open source software on servers: FE

Combining the results for both FE and HE, interoperability and migration is the top issue by a significant margin (80 weighted points), followed by lack of support (71 points), poor quality (60 points), not what users want (51 points), lack of staff expertise (49 points) and “no open source solution meets our needs” (43 points). All other considerations ranked less than 30 points.

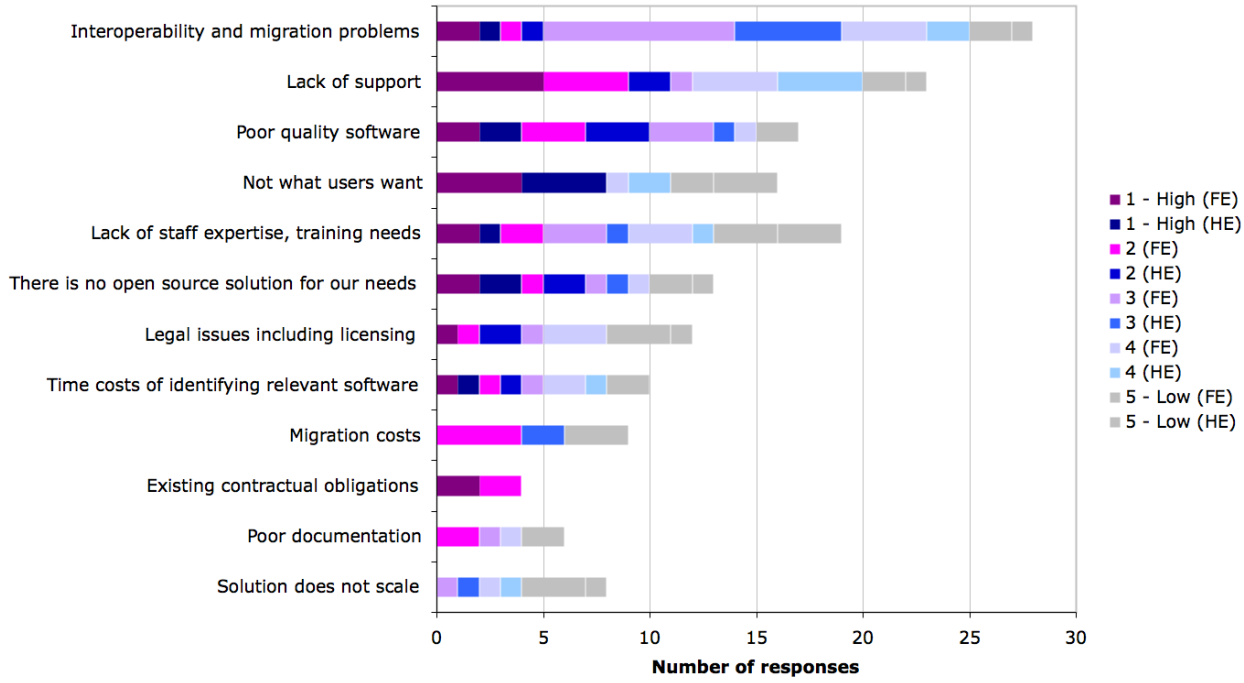


Figure 22c. Reasons to decide against using open source on servers in both HE & FE

Software running on Desktops

Q23/24: Support for software running on desktops

Q23/24. What best describes the support for open/closed source software running on your institution's desktops?

Support for open source software on desktop computers is even more likely to be non-formal than support for server software (see Q9), especially in HE.

Outsourcing of support also continued to rise slightly, from 8.9% in 2010 to 10% in 2013 for open source software, and from 5.1% to 10% for closed source software.

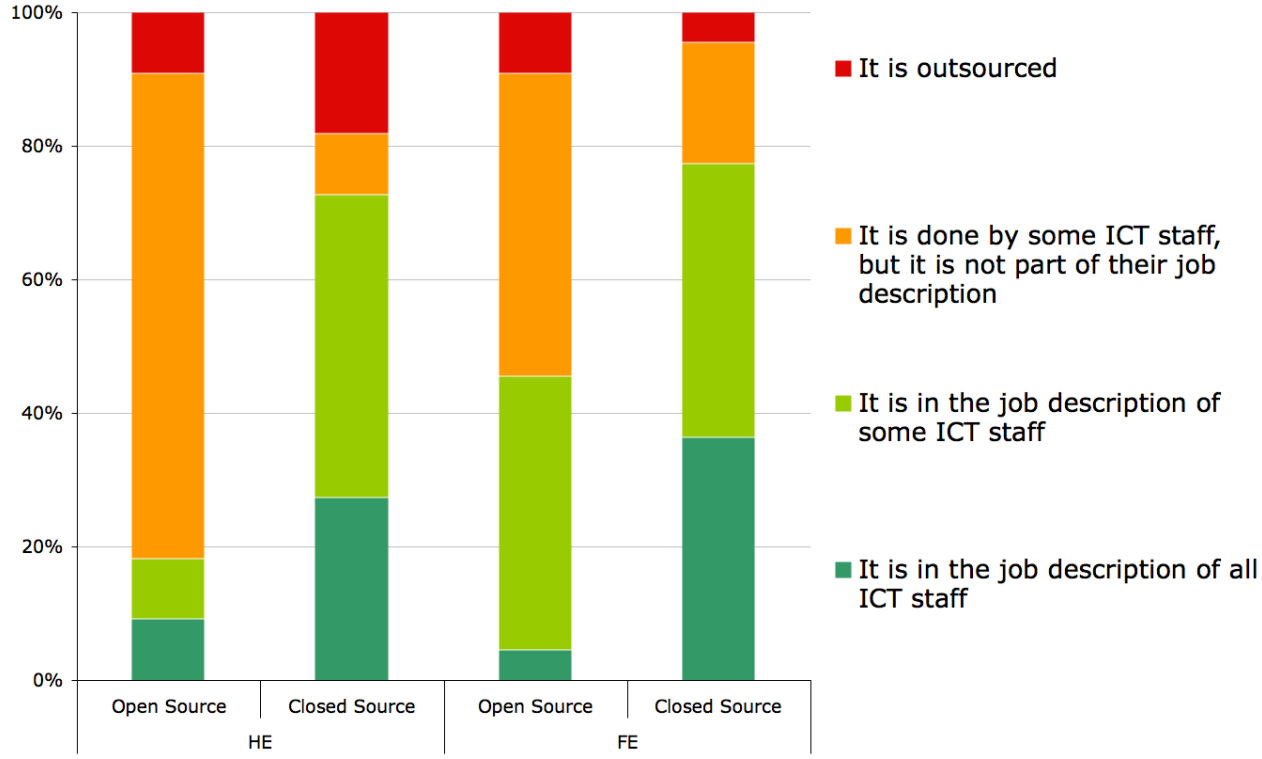


Figure 23a. Support for open and closed source software on desktops in both HE and FE

The most notable change has been support for open source on the desktop in HE. In 2010, support for open source desktop software in HE was carried out by staff outside of their job decription for 29.3% of institutions; in 2013 this has dramatically increased to 72% (figure 23b).

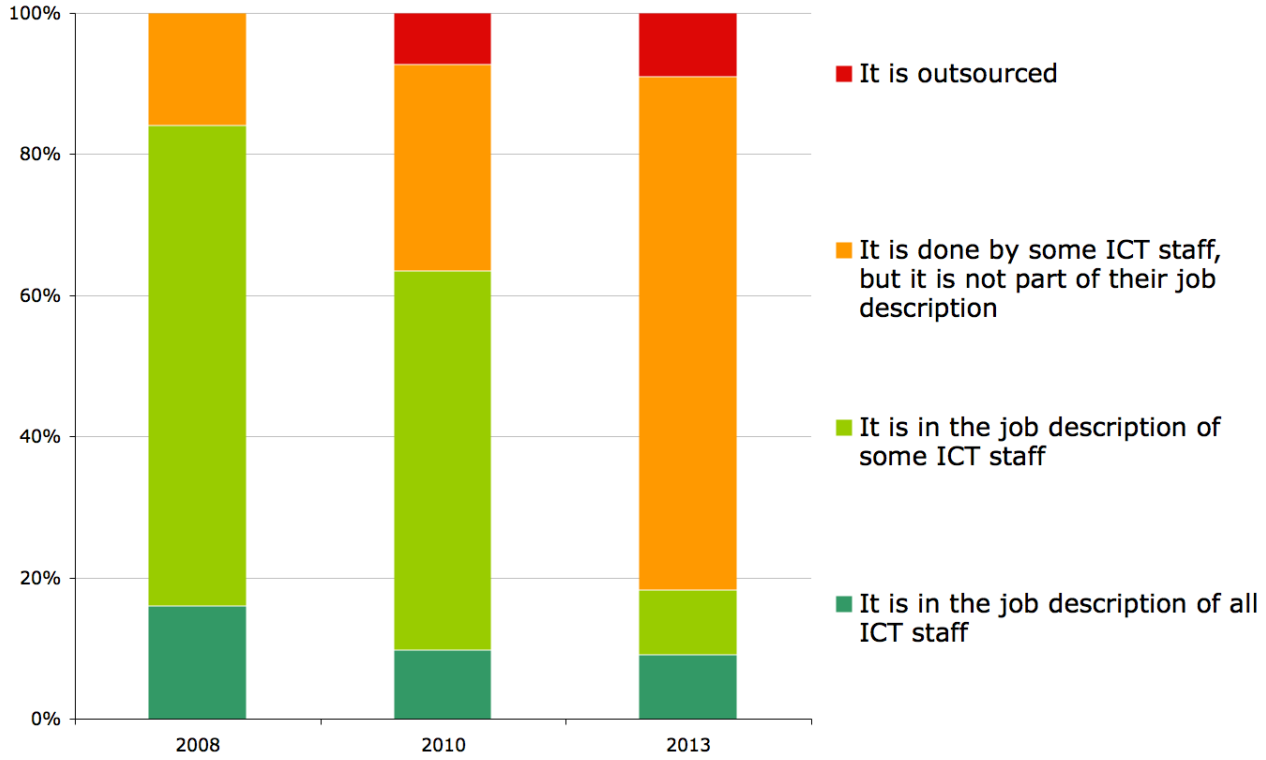


Figure 23b. Support for open source software on desktops in HE, 2008-2013

Q25: Ratio of open and closed source software deployed on desktops

Q25. What is the approximate ratio of open and closed source software deployed on your institution's desktop computers? "Software" refers to both operating systems and applications.

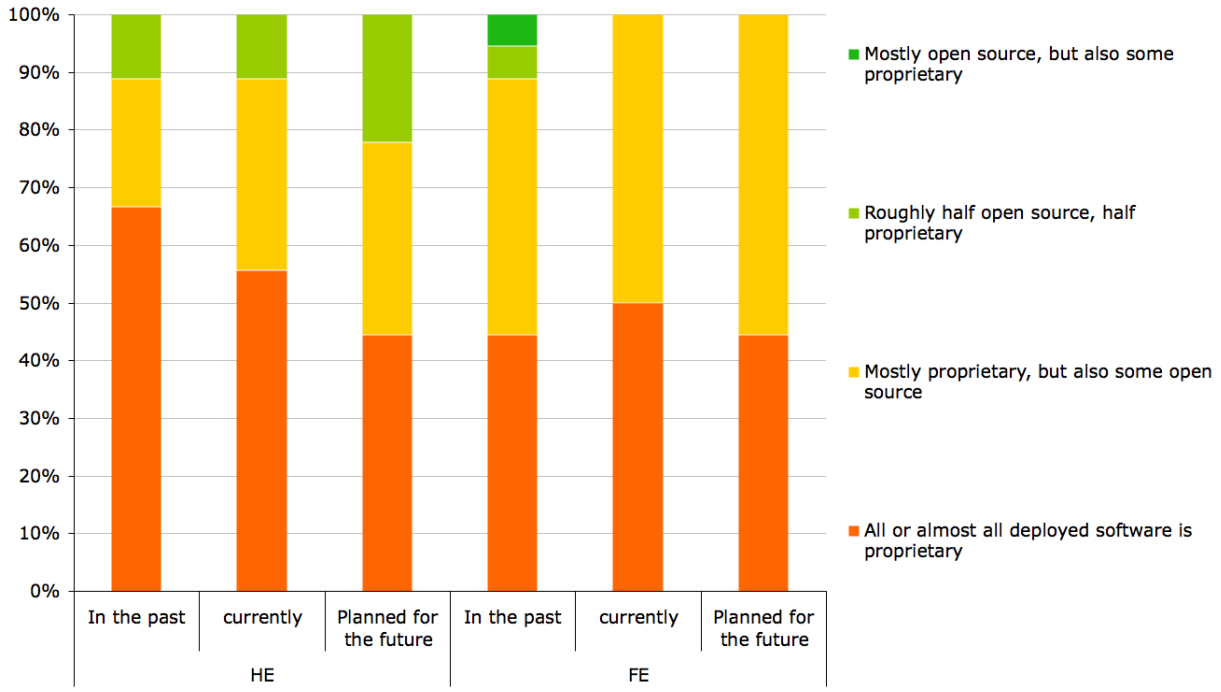


Figure 25a. Ratio of open and closed source software deployed on desktops

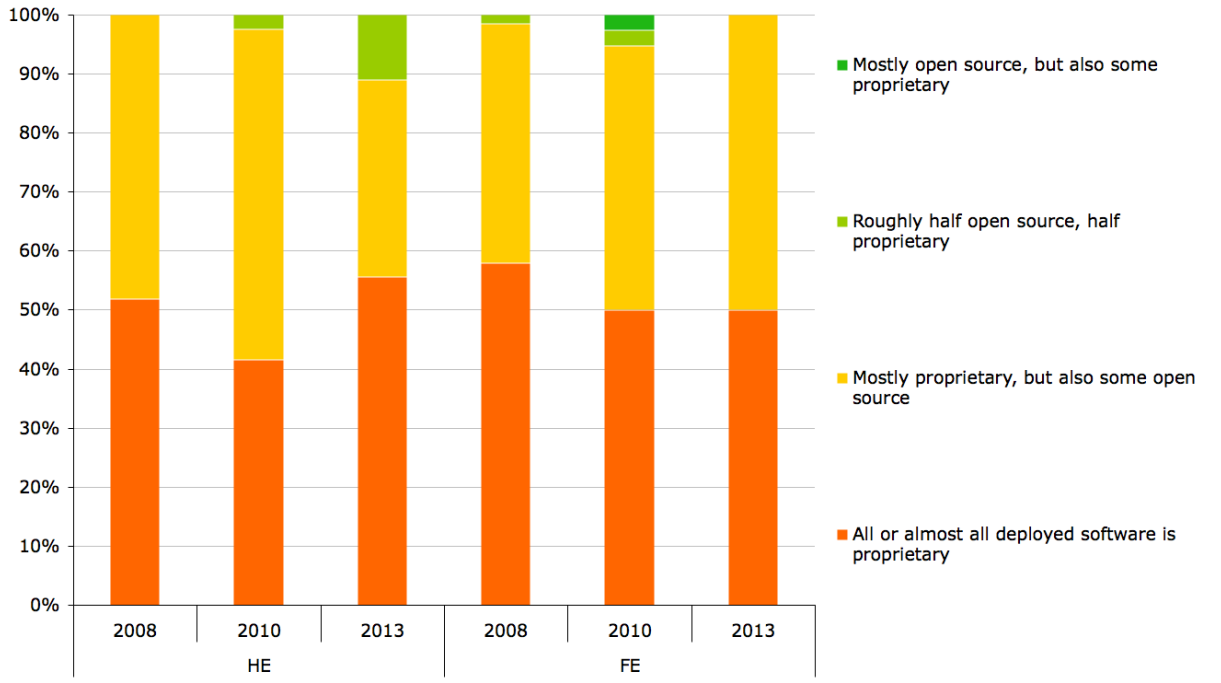


Figure 25b. Ratio of open and closed source software deployed on desktops, 2008-2013

Q26: Desktop Operating Systems

Q26: Which of the following operating systems are used on your institution's desktop computers?

Windows 7 and Mac OSX are currently the most popular desktop operating systems across both FE and HE sectors. Mac OSX has continued its upward trend from previous years. Windows XP usage has decreased, but still has a significant install base despite approaching end-of-life. Windows 8 has seen minimal adoption. Linux (Ubuntu) usage has decreased in HE to 18% (32% in 2010, 10% in 2008), and in FE to 14% (16% in 2010, 8% in 2008). Linux (SUSE) has increased in HE to 27% (15% in 2010) and in FE to 5% (3% in 2010). Overall, HE institutions are the most likely to be running an open source operating system on their desktops.

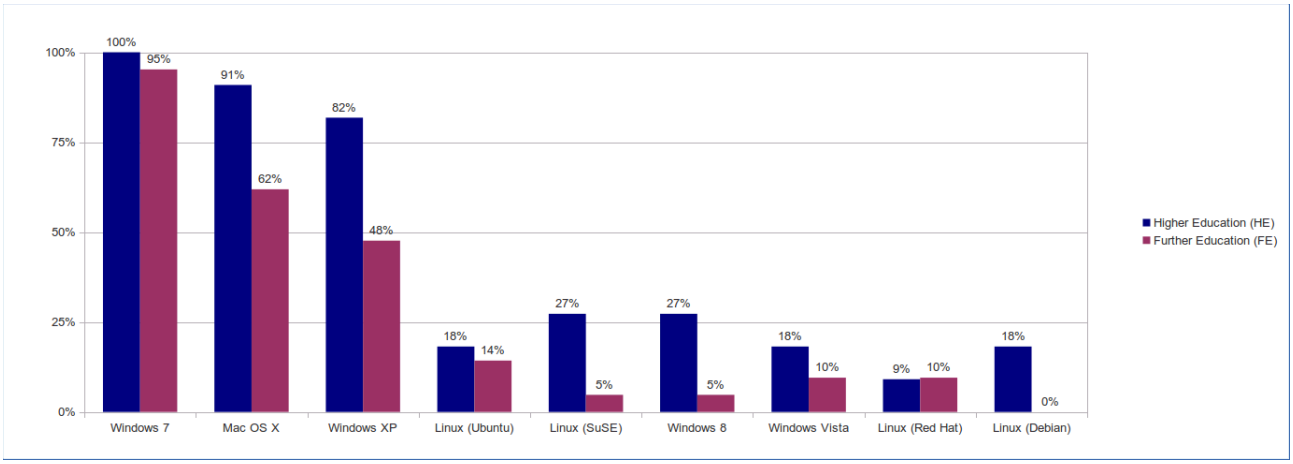


Figure 26. Operating systems on desktop computers (Q26)

Q27: Desktop Application Software

Q27: Which of the following software applications are used on your institution's desktop computers?

In the most common categories of desktop applications - office suites, internet browsing and email, Microsoft products are most popular, continuing the trend from 2010. The Google Chrome and Mozilla Firefox web browsers are also very popular, both being installed in the majority of institutions. Notably, Google Chrome installations have nearly doubled since 2010 to 82% in HE and 73% in FE. The use of Safari has continued to grow in HE to 82% (66% in 2010) while falling slightly in FE to 41% (47% in 2010). Meanwhile, the open source Mozilla Firefox has decreased slightly to 73% in HE (85% in 2010) and to 50% in FE (58% in 2010). The use of Matlab in HE has contined to grown (from 42% to 64%). The popularity of OpenOffice has decreased, with installations in HE falling from 37% to 18%, and in FE falling from 34% to 14%. As with operating systems, HE institutions are more likely to run open source applications on their desktops than FE institutions.

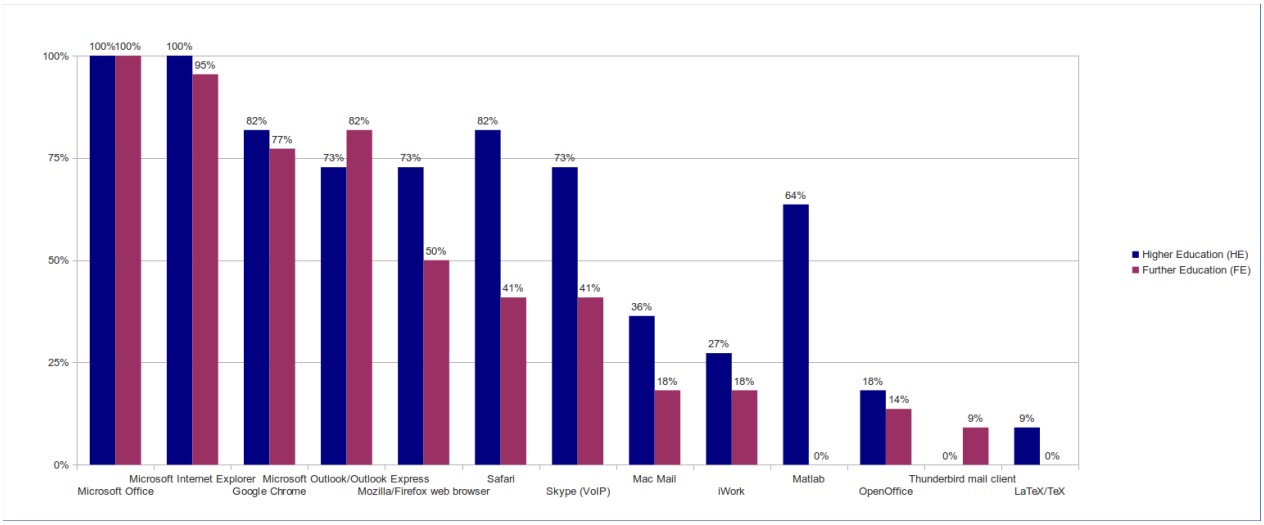


Figure 27. Software applications on desktop computers (Q27)

Q28: Criteria when procuring software for desktop computers

Q28. Rank the top 5 criteria that your institution considers important when procuring software for your desktop computers, from most to least important. Please number 5 of the boxes, 1 being the highest priority

The most important criteria for choosing software for desktops in HE closely mirrors those for server software (see Q20), with Total Cost of Ownership (TCO), meeting user expectations, and interoperbility with other projects the top three criteria. Staff preferences however counted higher than for server software, ranked joint fourth with performance with 17 weighted points.

Note: scores are weighted so that highest-priority selections are given 5 points, the lowest 1 point. In the figures, this weighted total is used to rank the results, however individual responses are shown in the bars

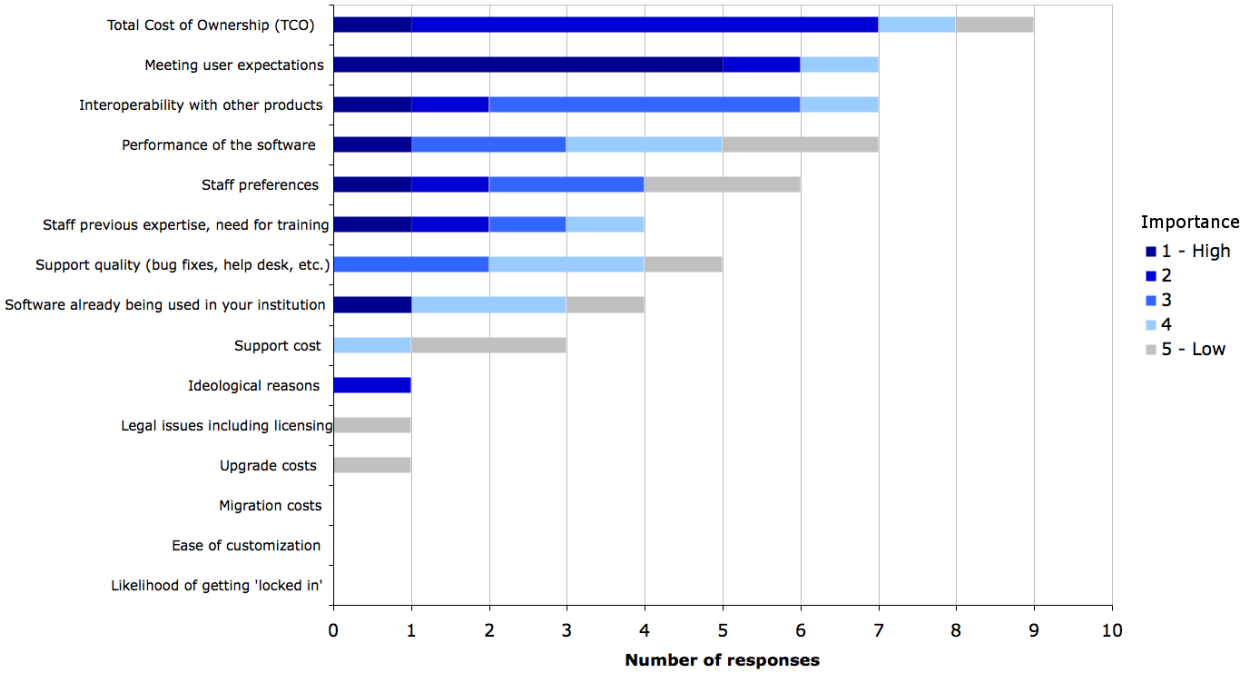


Figure 28a. Criteria when procuring software for desktop computers in HE

For FE, again there is a lot of commonality with the results for server software, with performance, TCO, user expectations, and interopability the top four criteria.

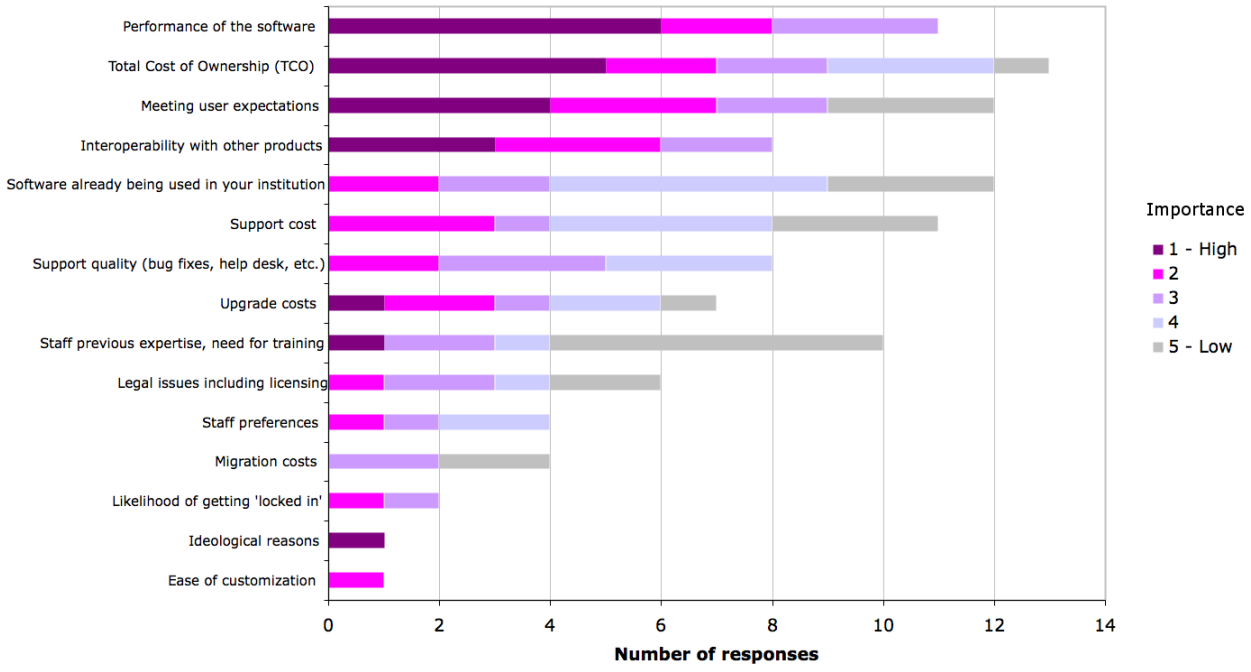


Figure 28b. Criteria when procuring software for desktop computers in FE

Combining the results for FE and HE, the top criteria are TCO (78 weighted points), meeting user expections (72 weighted points), performance (64) and interoperability (56). The next group are software already in use in the institution (37), support quality (34), staff experience (33) support costs

(30), and staff preferences (28).

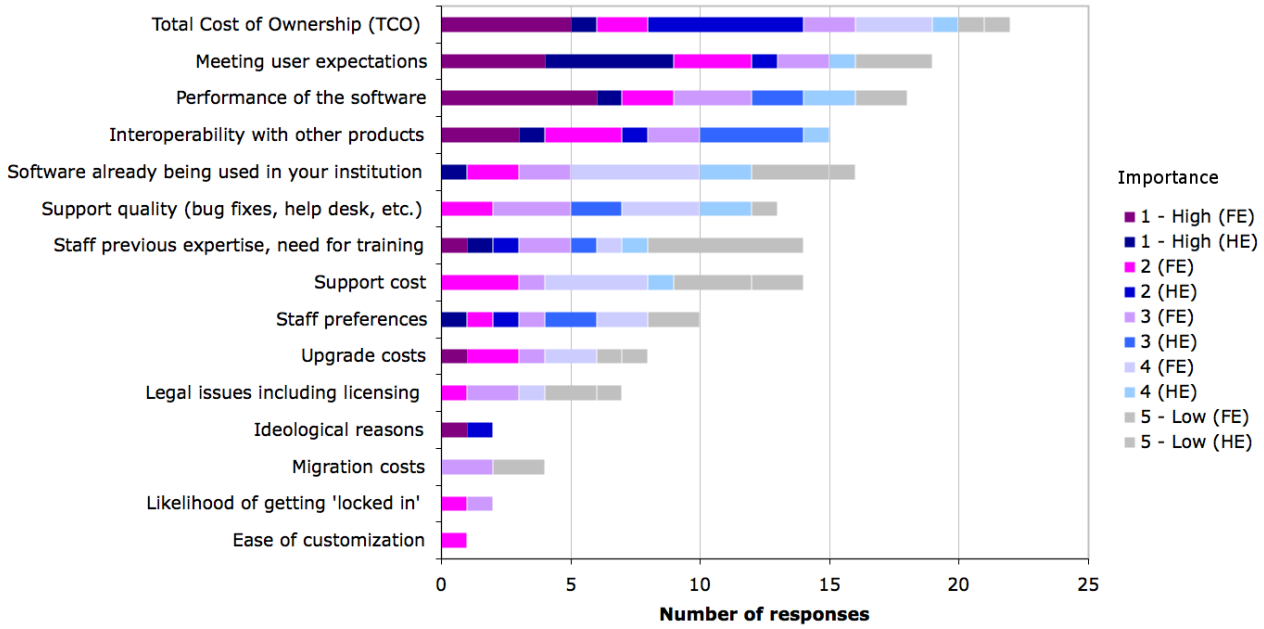


Figure 28c. Criteria when procuring software for desktop computers in both FE and HE

Q29: Desktop software systems currently being considered for procurement/replacement

Q29. Which new desktop software systems are currently being considered for procurement at your institution? Please also include old systems being considered for replacement. This could be, for example, because your institution does not have some systems, but would like to procure them, or because your current systems do not meet your needs.

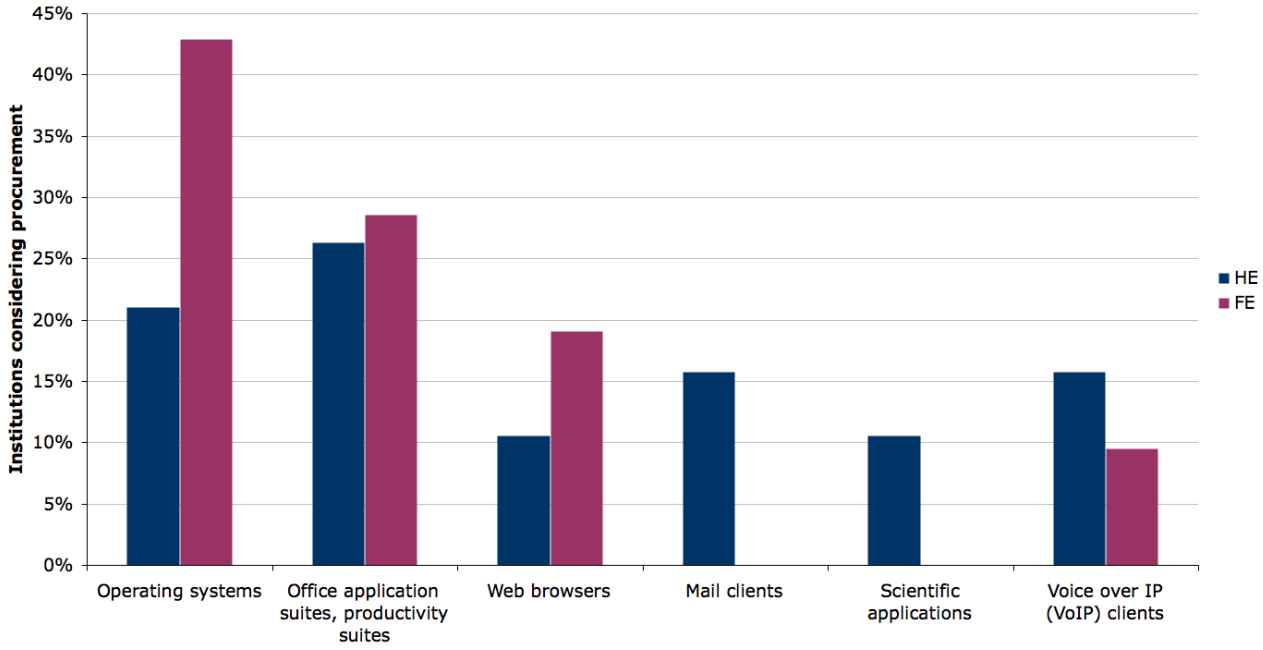


Figure 29. Desktop software being considered for replacement in HE and FE

Q30: Reasons to decide against using open source software on desktops

Q30. If your institution decides against using an open source software system in its desktop computers, what are the top 5 most likely reasons? Please rank the following reasons from most to least likely. Please number 5 of the boxes, 1 being the most likely reason

In HE, the main reason cited for deciding against open source software on desktops is that it is “not what users want” (32 weighted points), followed by lack of support (27), no open source software meeting the requirements (25), lack of staff expertise and training needs (23), interoperability issues (23), and poor software quality (18).

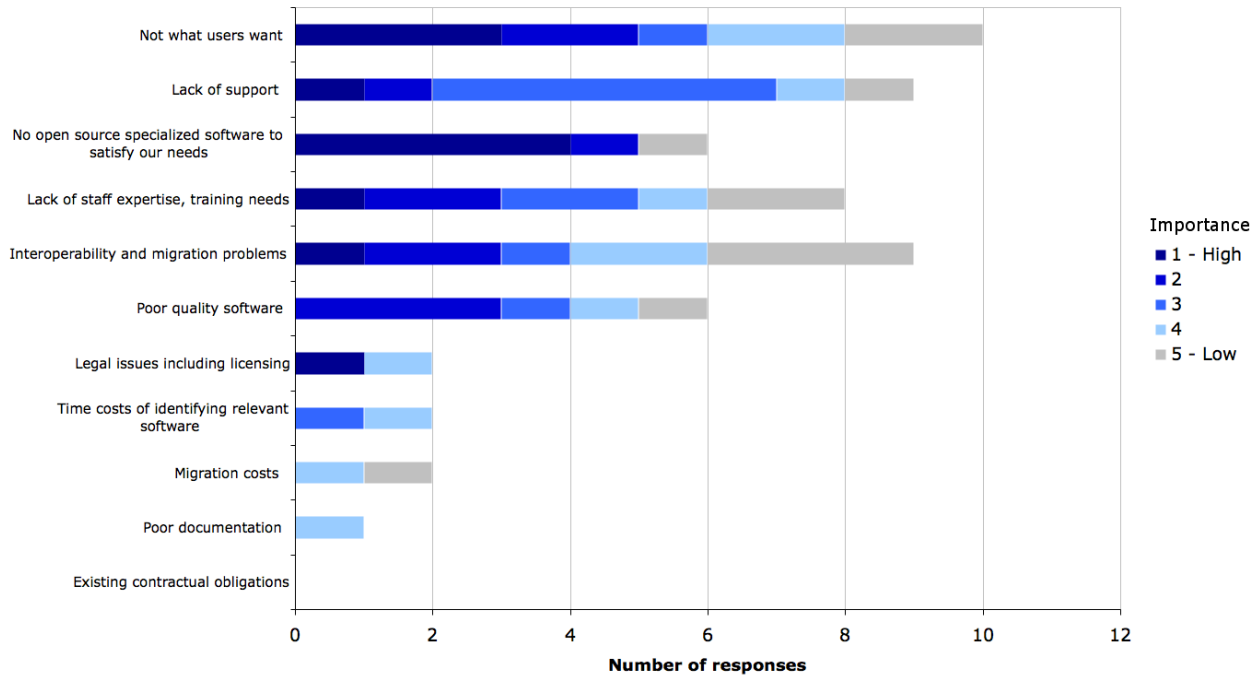


Figure 30a. Reasons for deciding against using open source software on desktops in HE

The main reasons cited in FE were the same as for HE, but with interoperability the top reason (58 weighted points)

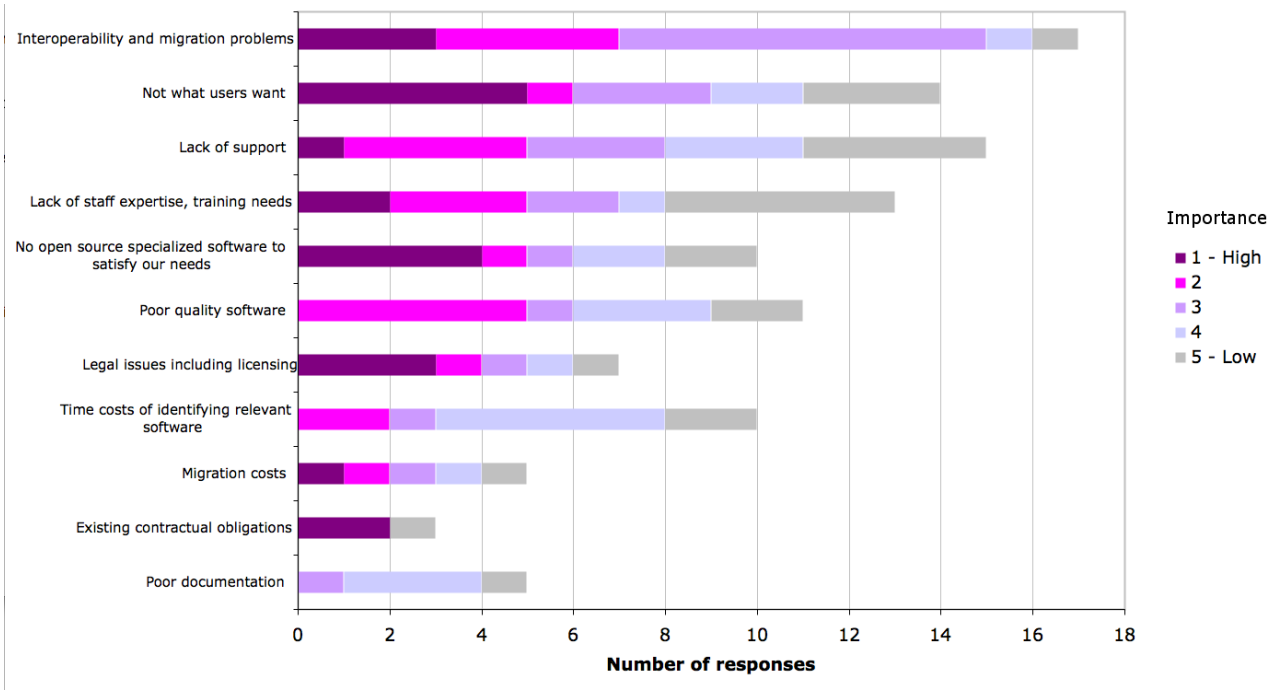


Figure 30b. Reasons for deciding against using open source software on desktops in FE

Unsurprisingly, when we combine the results for both FE and HE, interoperability and migration problems comes top (81) followed by not what users want (77) and lack of support (67).

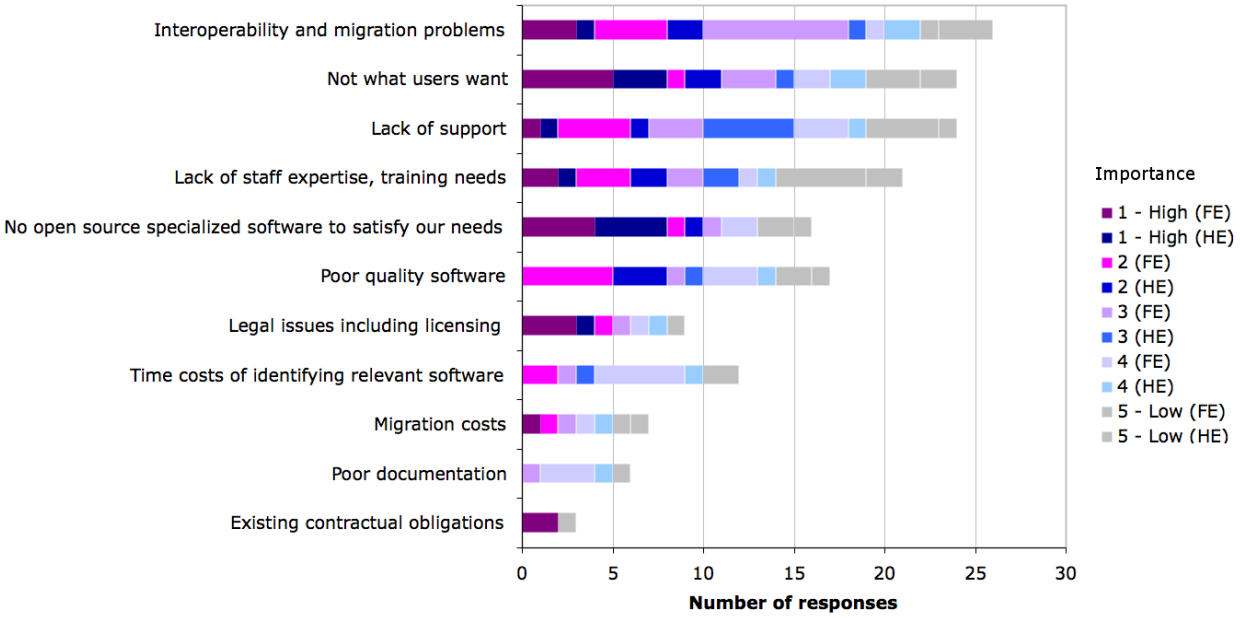


Figure 30c. Reasons for deciding against using open source software on desktops in HE and FE