

ASP vs. On-Site Gradebooks

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Some gradebook systems are hosted off-site by an ASP (Application Service Provider), while others are installed on your own servers on-site. As more districts switch to web-based gradebooks so parents can check grades online, they must decide to either open up their own servers to the Internet or use an ASP. ASP's became a practical solution for sensitive data only after the advancement of the Internet and SSL in the late 1990's. Since most school districts have already invested in on-site solutions long before then, they are not as familiar with ASP's, and consequently many RFP's are inadvertently worded for on-site hosting without fully understanding the differences and advantages of each approach. This article explains both approaches to help your school district select the best solution for your needs.

For **on-site** solutions, your district purchases the gradebook software and your own servers. The vendor usually does the initial installation and integration with your Student Information System (SIS), but your tech staff are responsible for much of the ongoing maintenance, so it is more of a hands-on do-it-yourself approach.

For **ASP** solutions (a.k.a. "hosted" solutions) your district does not buy the gradebook software, but rather pays a fee to use the service. The ASP does the initial setup and integration with your SIS, as well as the ongoing maintenance on their own servers, so it's more of a full-service approach. Because ASP's serve all their districts from the same data center, they can offer more staff and resources than what individual districts have, typically including:

- Redundant routing equipment & network providers
- Redundant backup generators & Uninterruptible Power Supply (UPS)
- Redundant air conditioning & filtering
- Biometric scanners, keycards, and surveillance cameras
- More staff on duty 24 × 7 × 365

Which is more secure?

All web-based gradebooks are accessible from the Internet, so they all face the same security threats from hackers regardless of where they are hosted. Both ASP's and on-site solutions use password-protection, encryption, and firewalls to block hackers. Both backup your data regularly. Both ASP's and school districts do background checks on their employees. Since ASP's have more resources, they may have an advantage, but your district staff may be able to do just as well for an on-site solution.

Which is faster?

The geographical location of the servers makes no difference for how fast pages load for a web-based gradebook. ASP's have ample bandwidth; for on-site solutions make sure your district has adequate bandwidth to serve pages quickly (this may affect your cost too).

Which is more reliable?

How often does your district email go down? That's probably an indicator of how often an on-site gradebook would go down. ASP's generally have more redundant components to keep the servers online. Also, regardless of where the gradebook is hosted, ask each vendor how often their gradebook has crashed in the past year, and how often it is offline for scheduled maintenance.

Which is cheaper?

ASP's have little up-front costs, so the first-year costs are much more expensive to purchase and install an on-site solution. For ongoing costs, ASP's have higher service fees, but you need to compare that against your internal costs for the additional tech staff required to maintain an on-site solution. Both solutions require at least some time from your tech staff, but on-site solutions require more, so estimate how many full-time equivalent (FTE) tech staff would be required for each solution, multiplied by their loaded salaries (pay plus benefits, resources, etc.). Since your tech staff are "already paid for" now, this may not affect your first-year costs, but it may affect your IT staff budget for future years. Use a table like this to analyze the total cost of ownership:

Total Cost of Ownership

ASP	1st Year	2nd Year	3rd Year	Net
Service fee	\$ _____	\$ _____	\$ _____	
Setup fee	\$ _____			
Support fee	\$ _____	\$ _____	\$ _____	
Training	\$ _____	\$ _____	\$ _____	
Tech staff FTE	_____	_____	_____	
× loaded salary =	\$ _____	\$ _____	\$ _____	
Total	\$ _____	\$ _____	\$ _____	\$ _____
On-Site	1st Year	2nd Year	3rd Year	Net
Purchase cost	\$ _____			
Setup fee	\$ _____			
Hardware cost	\$ _____			
Upgrade cost		\$ _____	\$ _____	
Support fee	\$ _____	\$ _____	\$ _____	
Training	\$ _____	\$ _____	\$ _____	
Bandwidth cost	\$ _____	\$ _____	\$ _____	
Tech staff FTE	_____	_____	_____	
× loaded salary =	\$ _____	\$ _____	\$ _____	
Total	\$ _____	\$ _____	\$ _____	\$ _____

Which is better?

Tech staff sometimes advocate an on-site solution because it gives them a greater feeling of control, and it's a more interesting project with greater job security to host their own than to let someone else do it. Also, they may cite security as a concern, since they have a certain trust for each other, but they don't know how well they can trust the staff of an ASP. But other tech staff may prefer an ASP if they are already stretched too thin to host their own solution.

Administrators and school boards often favor an ASP solution because of the lower total cost of ownership, and the lower acquisition cost means they do not need a bond to fund a large up-front investment. Also they feel ASP's are less of a financial risk because they can cancel any year with minimal loss. That in turn gives ASP's strong incentive to provide good customer service to keep your business.

But some may feel a need to justify the money they've already invested in their IT infrastructure, so they may be reluctant to outsource to an ASP. Since they consider the IT salaries "already paid for", they might compare just the external costs instead of the long-term total cost of ownership.

If your RFP is open to both types of solutions, that will give you more choices to compare gradebook features and other qualities.

Comparison Summary

	ASP	On-Site
Acquisition cost	<i>Low</i>	<i>High</i>
Hardware cost	<i>None</i>	<i>Servers + bandwidth</i>
Annual service fees	<i>High</i>	<i>Low</i>
Tech staff required	<i>Low</i>	<i>High</i>
Security	<i>Same</i>	<i>Same</i>
Speed	<i>Same</i>	<i>Same</i>
Reliability	<i>Higher</i>	<i>Lower</i>