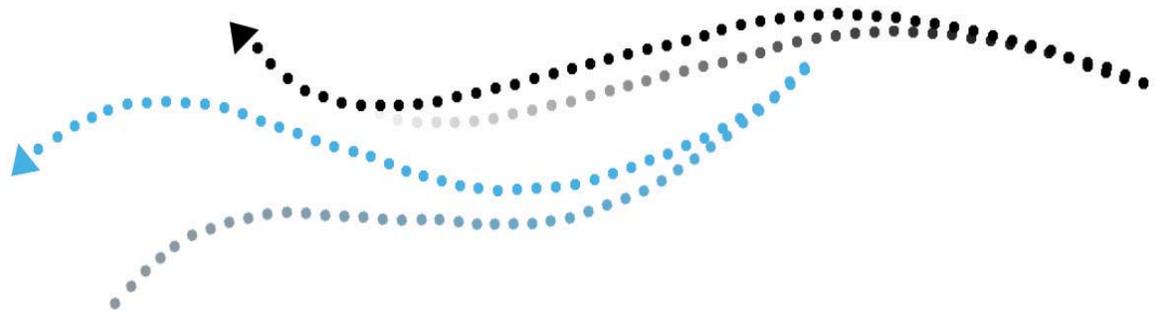




All-in-One vs. Best-of-Breed?



When you're in the market for network and management solutions, there are many options to consider. Some vendors provide a single, integrated system or an all-in-one solution, designed to meet all or a majority of a customer's needs. Others specialize in a specific niche and provide a single product, or best-of-breed solution, that integrates with other products.

The discussion below outlines these two different approaches used by vendors. It's intended to inform you of the advantages and disadvantages inherent to both methods, regardless of the industry. The discussion is then focused specifically on education, so that you are aware of the challenges unique to schools prior to making a very important purchasing decision.

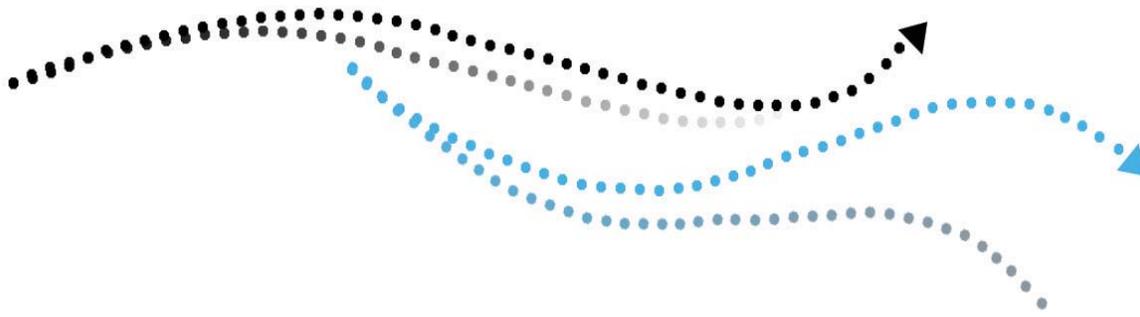
All-in-One or Single Provider

Many vendors provide multiple applications to support an all-in-one solution. At first glance, this approach may appear very beneficial since a wide range of needs are satisfied with one vendor. For example, a single vendor may offer the following applications, combined in a variety of ways:

- Web or Content Filtering
- Mobile Filtering
- Spam and Virus Security
- Email Management and Security including Spam and Virus Protection
- Content Management including Learning Management and Social Networking Tools
- Mobile Device Management
- Power Management
- Advanced Reporting
- Web Security
- Backup & Recovery

Vendors following the all-in-one approach share the following challenges within their organizations:

- Resources are dedicated to specific product lines, so within a single organization there are multiple, competitive product lines.
- Product teams often compete for additional resources.
- Strategic focus within the organization is divided with the most successful product lines gaining critical attention.



Purchasing an all-in-one solution from a single supplier simplifies the solution since there will be a single vendor relationship. It is often easier to implement and cheaper to own. However, these perceived advantages may also prove to be a disadvantage if the solution is limited in depth of functionality within each application. Also, as a “one-size-fits-all” approach, these solutions aren’t generally market specific.

Best-of-Breed or Niche Vendor

In the best-of-breed approach a vendor builds a single product. Niche vendors dedicate all of their resources to a specific application, so this method suits itself well to specialization within an industry. Since the vendor either succeeds or fails based on a single product, the application often offers a rich set of features and is quickly responsive to the needs of the market.

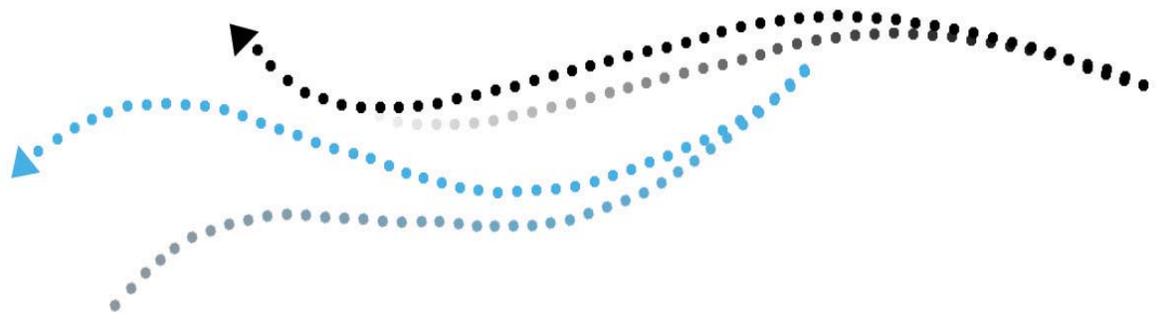
Often, niche vendors partner to provide fully integrated, feature-rich solutions across multiple applications for a highly-specialized market. Niche products are often more expensive, so purchasing multiple best-of-breed products may add to your costs. However, this added expense must be measured against the gain in market-specific features.

Creating your total solution by purchasing individual applications from best-of-breed vendors is more complicated and comes with these challenges:

- Increase in complexity when integrating applications—This may not be an issue if niche vendors partner so that solutions are integrated.
- Support issues between vendors—Who is responsible for a problem? This is less of an issue if the niche solutions are purchased from partnering vendors.
- Greater total cost of ownership—If the niche solution reduces demands on end-users and is much more effective, the improvements in outcomes may significantly outweigh the added expense.

Filtering in Education—The Challenges

We’ve discussed the advantages and disadvantages of both approaches across any industry. Now the discussion will focus specifically on filtering in education, a mission critical application for PK-12. Using the Internet effectively in schools requires web filtering built specifically for learning environments. Creating a filtering solution that can meet the diverse and unique challenges of teaching with the Internet requires a complete immersion in the education market.

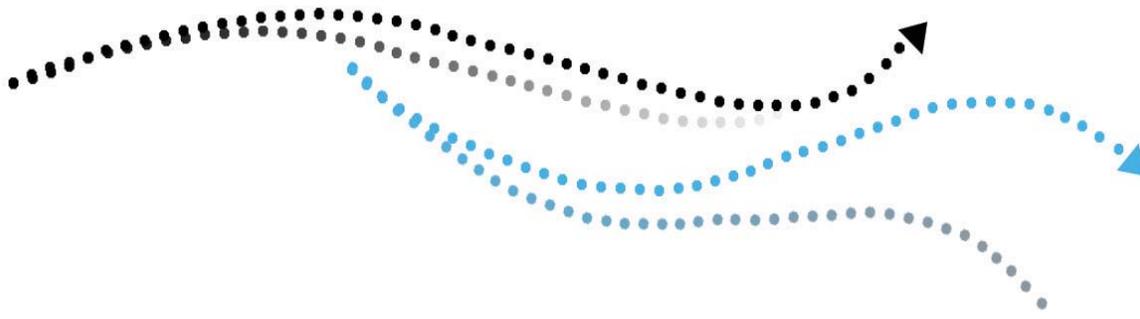


For a filter to be effective for instruction it must be flexible and support the interactions needed for learning. It must be able to block inappropriate content, yet have the flexibility to allow sites with instructional value. It must provide access to sites that are educational, even if they are not allowed because they are part of a larger group that is being blocked.

Since the filtering needs for education are so unique, niche solutions built specifically for learning environments offer many advantages. If the niche solution is more expensive, this may outweigh the added costs. When niche vendors in education integrate their applications, the combined solution delivers even more specialized functionality while also minimizing complexity. For example, filtering built for learning can also be combined with mobile device management (MDM) that specializes in iOS devices for education. These two solutions coupled together give IT staff the exact network security and device management needed for schools. And, teachers get a filtering solution that empowers them with access privileges so they can make content decisions while working within the Acceptable Use Policies maintained by IT.

Before considering a complete solution from an all-in-one vendor, is the filtering designed for learning? Many complete solutions approach filtering as a “one-size-fits-all” situation. However, as outlined above, using the Internet in schools is a unique application. An all-in-one delivers the same solution used across many industries. Therefore, this approach is limited and can’t accommodate the varied needs of IT staff and teachers.

Also, even if the all-in-one vendor focuses on education, can they deliver a full feature set if their solution includes many applications? Do they have the resources to develop their filter with all of the features needed to support learning since they are building many other applications, too? For example, an all-in-one solution for education may include a filter and an MDM, but are they flush with all of the features available in two partnering, best-of-breed solutions? Filtering and device management are very specialized applications unto themselves. Can a single provider deliver the same functionality for these complicated applications equivalent to the integration of two niche vendors? And, what happens if an all-in-one solution falls short? Using a single solution provider creates a dependence which can lead to tremendous upheaval in the entire network infrastructure if the relationship ends.

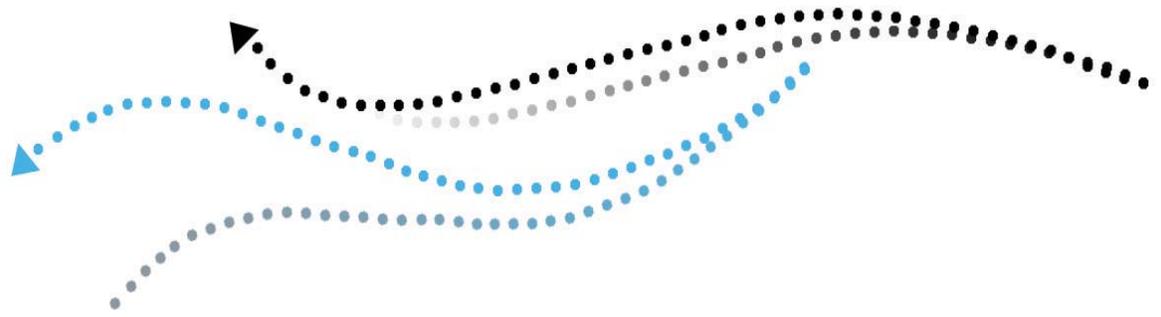


Advantages and Disadvantages

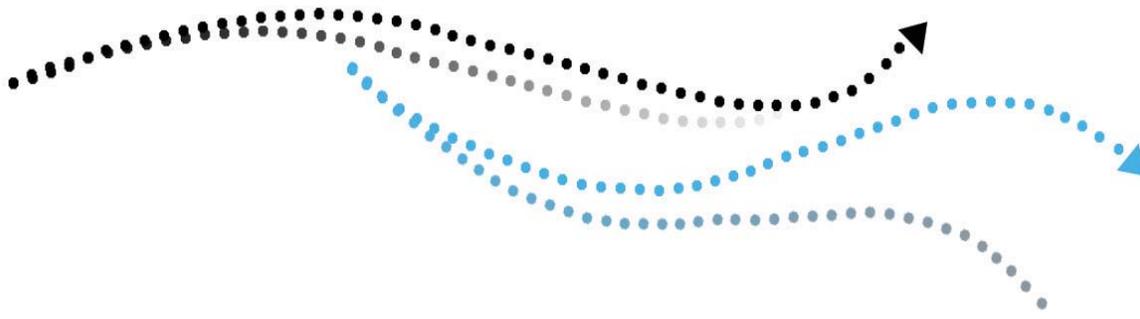
For your convenience we've compiled this list of advantages and disadvantages for each approach to help you in making your final determination.

Best-of-Breed or Niche Vendor	All-in-One or Single Provider
<p style="text-align: center;">Advantages:</p> <ul style="list-style-type: none"> • Specialized Solutions—Solutions by niche vendors can be built based on the needs of a specific market. Industry-specific knowledge enables the vendor to be innovative and develop features that master the challenges of using the Internet in that niche. <p><i>In education, applications, such as filtering and MDM, are designed to deliver a richer set of features than an all-in-one solution to overcome the specific challenges of using the Internet in schools.</i></p>	<p style="text-align: center;">Disadvantages:</p> <ul style="list-style-type: none"> • Lack of Specialization— Although offering a complete suite of solutions is convenient, each may lack depth and the rich functionality needed to support a niche market. • For those all-in-ones designed specifically for education, the vendor is focusing on many applications simultaneously and may not have the resources to fully develop a specific application. <p><i>In education, solutions may not include all of the features needed to maximize learning. Lack of focus and resources can impede innovations specific to schools.</i></p>
<ul style="list-style-type: none"> • Niche Vendors Partner—Niche vendors can partner to provide fully integrated solutions that unite full-featured applications specific to a market. <p><i>In education, filtering and MDM niche vendors can integrate their applications to deliver a solution designed specifically for schools.</i></p>	<ul style="list-style-type: none"> • All-in-One developers may operate independently and miss out on joint opportunities.
<ul style="list-style-type: none"> • Flexibility—Ability to quickly respond to the needs of a market by rolling-out new releases, without affecting other systems. Each solution is independent of the others, so upgrading is less evasive. 	<ul style="list-style-type: none"> • Decrease in Agility—Single vendors may offer solutions with less depth of functionality. Also, less attention may be given to each component. Therefore, the solution may not be as responsive to the needs of the market.

All-in-One vs. Best-of-Breed?



<ul style="list-style-type: none"> • Independence—Not locked to a single vendor so it may be easier to change applications. 	<ul style="list-style-type: none"> • Dependence—Using a single vendor for a total solution may create tremendous upheaval if the relationship ends.
<ul style="list-style-type: none"> • Better Performance—Customer experience may be better because of robust functionality built for a specific market. <p><i>In education, this maximizes the potential of software delivering features which support Internet-enriched learning.</i></p>	<ul style="list-style-type: none"> • Reduced Performance—Greater potential for gaps in functionality. <p><i>In education, learning may be limited if the solution frustrates IT and teachers.</i></p>
<ul style="list-style-type: none"> • Better Support & Service—Vendors that specialize on a function, such as filtering, are more knowledgeable and better at troubleshooting. 	<ul style="list-style-type: none"> • Dependency on a single vendor for support across multiple applications can lead to frustration if it's lacking.



All-in-One vs. Best-of-Breed?

Best-of-Breed or Niche Vendor	All-in-One or Single Provider
Disadvantages:	Advantages:
<p>Cost—Potential for greater total cost of ownership when maintaining separate solutions.</p> <p><i>In education, if the solution reduces demands on the IT staff, while also enabling educators to easily use the Internet for instruction, the improvements in outcomes may outweigh the potentially-added expense.</i></p>	<p>Cost—Most likely a reduced total cost of ownership, but at the risk of also compromising performance and user effectiveness.</p>
<p>Complexity—Can add complexity to the application and additional burdens for integration. Niche solutions offer more depth in functionality. However, if the application is well-designed, it will still be easy to use. Integration can be simplified when niche vendors partner.</p> <p><i>In education, if niche vendors partner, the combined solution can be fully-integrated and supported by very knowledgeable PK-12 technologists.</i></p>	<p>Simple to implement—Simplicity is a benefit because there is a single point of contact. This could also be a disadvantage since each application within the solution may not be easy to use.</p>
<p>Multiple Vendors—This can also be an advantage if vendors partner to deliver fully integrated and supported applications.</p> <p><i>In education, filtering and MDM niche vendors can integrate their applications to deliver a solution designed specifically for schools.</i></p>	<p>Single Vendor—This can also be a disadvantage if the vendor isn't responsive or even aware of the needs of education.</p>

