Total ICT support from RM Education

10 essential ICT considerations for a successful PSBP project

The Priority School Building Project (PSBP) is a Government funded initiative to repair, refurbish and replace those buildings in English schools which are most in need of attention.

It only covers the basic building construction costs for primary and secondary schools and unlike the BSF programme does not include the provision of servers, PCs, devices and classroom technologies which all have to be funded by the school.

Here are the top 10 factors you need to consider to make the most of your new building and its integration with ICT.

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1 A vision for 'outstanding' teaching and learning

Your vision for your new building and the ICT integrated within it has the ability to make a tangible and positive difference to teaching and learning.

You have the opportunity to embed ICT across your curriculum and provide the right ICT tools to support the evolving pedagogy of your teachers, assessing it for effectiveness in the classroom and providing a strategic implementation of ICT.

To achieve this you need to develop a forward-looking approach to ICT in your school. Once you know where you want to be in a year or two, you can start planning your journey to get there and identify those technologies that you will need your builders to supply and install. Then you can start thinking about what your teachers and learners will use, and how they will use it.

Creating this vision and ICT development plan can be a daunting task if you don't have the understanding of what's possible, or what's new. We suggest making use of agnostic consultants to help you see the full potential of ICT and to suggest and support the right solutions for your school.

This is the first step in an ongoing process; it's a journey towards outstanding ICT and you should work with a partner experienced in improving the impact of ICT in education. They can guide you towards the right technologies and help you manage your transition to your new, or improved building. Identifying and engaging with the right ICT partner early in the process will help support your vision and improve outcomes.

2 Infrastructure: the foundation of success

The DfE states that "The Contractor and the School should work together to deliver a best practice resource efficient procurement and operation of ICT, seeking innovative approaches to reduce energy consumption of servers, server rooms, and other equipment, and sustainable disposal of equipment, saving costs and reducing resource consumption."

In reality this means that you need to work with your builder to design the optimal solution for your needs, but they hold the budget to provide the 'passive' infrastructure such as data cabling and switching and will also move your legacy equipment into your new school. This means that there are lots of questions that you will need to answer, and lots of detail you will need to provide to your builders.

- What are your future requirements?
- Will the builder-supplied infrastructure components meet your current and future needs?
- If no, what configuration design will you require for the active infrastructure?
- What is your transition plan to minimise risk and disruption?

If you get the structure of your ICT wrong at this point, with incorrectly positioned wireless for example, the rest of your project could be jeopardised as a result, so seeking advice on the best possible solutions and flexible configurations at this point is critical.

3 Understand your costs

Having liaised with your builder on the infrastructure that they will provide as part of your project, it's then over to you to work out how best to fill in the gaps between the solutions your current equipment can provide and any new technology you may need to procure, in a rolling, costed plan.

To understand what you could achieve with your current ICT provision, start by listing out all the resources at your disposal and you'll start to build a picture of where you are now. Then review this list and identify any that are underutilised. Can you use these assets differently to help deliver solutions to your current challenges? Also take a look at the resources that you are currently keeping running, but that you don't actually need (like an old server which could be replaced by a cloud based service).

Once you have identified all of the equipment that you will use or repurpose, you can start to look at the tools and devices you'll need to make your vision a reality. Bear in mind that you might not get all of these in year one – it's a longer term vision – and set realistic goals that will be acceptable to your learners, teachers, governors, and business manager. Finding an ICT partner that can help you benchmark your ideal solutions and show how they work in the real world can be useful. RM Education can help here.

4 How big will your cloud be?

Moving to the cloud usually means moving away from a CAPEX model with physical assets that depreciate, to an OPEX model which is revenue based with ongoing running costs.

Cloud services could be a cheaper option for schools that face funding cuts, yet still have to invest in technology to improve learning standards, and there are range of tools you can use, such as:

Google Apps for Education are a suite of tools that can help reduce your physical needs including:

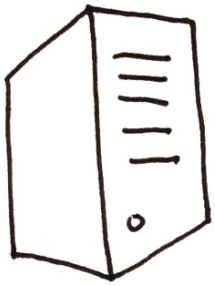
- Google Classroom is a learning management system for schools that aims to simplify creating, distributing and grading assignments in a paperless way.
- Google Drive for Education offers unlimited data storage so you don't have to worry about available space or allocating more to staff or students.

Office 365 allows you to extend learning out of the classroom with anytime, anywhere access to your favourite application tools – Microsoft Word, Excel, PowerPoint, and OneNote.

You'll also need to consider whether your current Internet service will provide sufficient bandwidth to support your vision for ICT. If you plan to have a media-rich curriculum, will your service be fast enough? Will your users have sufficient e-safety training and protection? If all your lessons are to be hosted and delivered online then you might want to consider a dual-route so that you have a backup if the main internet connection fails.

These cloud-based solutions allow you to work from anywhere so data is accessible on any device, but you need to carefully plan and implement the structure behind it – this takes experience and you would be advised to get expert help with this.

5 Will your servers be up to it?



Once you have determined how much of your school resources will be hosted in the cloud, you'll have a better idea of the capacity and capability of the servers you'll need within the school.

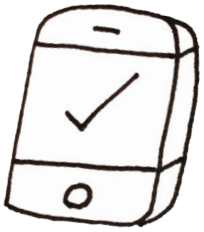
If you're not planning a cloud-based approach, then your in-school server requirements will be significantly higher. With more media-rich lessons and an ever-growing number of devices you'll need to ensure that your servers are fit for the future, looking to add additional storage and backup functionality where needed. You'll also need to factor in the cost to purchase any additional servers, plus the ongoing costs of power, warranty and support for these devices.

In a hybrid environment you might choose to keep your backups running locally, but move your pupil's work into the cloud, perhaps in Google Drive for Education which offers secure, unlimited storage for individual files up to 5TB in size!

Moving even further into the cloud, you can employ single sign-on solutions such as RM Unify which offers free access to cloud based resources instead of loading them locally. This has the potential to reduce boot up times and image sizes to improve rebuild speeds and user logon speeds on PCs and laptops thus extending the lifespan of your existing hardware and potentially save money.

If you're thinking about moving to the cloud it's worth making this part of your ICT development plan and working with Google Apps for Education in the year prior to your move. Hosting your solutions online helps to minimise any vulnerabilities during your move and reduces the storage requirement in new building. It can also reduce your data recovery times and simplify your disaster recovery plans should the worst happen.

6 Teacher and student devices: legacy or new?



In the PSBP, schools will be responsible for providing the hardware, either new or existing (legacy).

However integrating your legacy equipment with the updated infrastructure in your new building can be challenging, but this can be overcome if you plan ahead knowing how your devices will need to support teaching and learning to fit into your ICT development plan.

Here are a few questions you could consider…

- Do you have the space for a suite of fixed PCs, or would the room be better used as a multifunctional space with mobile devices instead?
- Could you repurpose any existing devices and use them as a 'thin-client' terminal to deliver a full desktop, including access to SIMS, with all the processing power and data storage delivered by your local server?
- Is your best solution a fully mixed, or hybrid estate with a range of all of these solutions?
- Will you encourage, or be forced due to budget constraints, into a 'bring your own device' (BYOD) scheme where students and teachers can use their own devices from home? This can be a cheap way to obtain new devices and improve your pupil:device ratio, but how will you manage their access and keep them safe? Could you operate this scheme just in the 6th form, or in KS3/4 only? How will your teachers cope with a classroom of students using seven different types of devices? How do you make them all the same from a pupil's perspective?

Some of the answers to these questions will depend on the condition and suitability of your legacy technology to meet your future needs, and on your budget. Each of these solutions comes with its own benefits and challenges, and you should consider the pros and cons carefully before you choose, ideally using the experiences and expertise of others as a guide. RM Education has a number of Services Architects who will happily share their experiences of implementing these and other schemes with you at the hundreds of schools which they support, and will gladly visit your school to discuss how you could effectively shape your ICT plans.

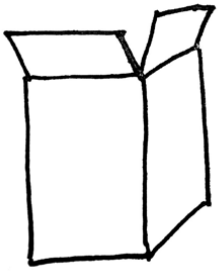
7 What will whole-class teaching look like?

If you've got a number of whiteboards in your classrooms, take a moment to consider what they are used for? Are they simply a projection surface to show a PowerPoint presentation or a fully-interactive whole-class teaching tool?

Today, the front-of-class solution doesn't just stop at a whiteboard and projector, in fact a fully interactive television can often be cheaper to buy and install. One other consideration is that of natural light; your builder will be tasked with maximising the use of sunlight and daylight which can then cause problems with seeing the image from projectors.

A TV offers a more sharply defined image than a projector and is not dependent upon natural light levels for visibility. Paired with a tablet device, which the teacher or a student can use to control the TV from any position in the classroom, you have opened up the opportunities for a more interactive learning experience, at a lower cost.

8 Making the move



Your building contractor will be responsible for the majority of your technical equipment decant and will move and install your TVs, whiteboards, cabling and telephone lines, but that's where their responsibilities stop.

They will move and install the infrastructure for your server cabinets, but the installation of your server devices is down to the school. Does your onsite team have the expertise to get you back up and running quickly?

The week of the move is only one piece of the jigsaw. It's important that you analyse the potential risks of the move, and the opportunities for issues when you try to piece the jigsaw back together again. RM Education has a decade of experience in the successful delivery of new schools through the Building Schools for the Future (BSF) programme and can help you understand these challenges. We've learned so many lessons, both good and bad, about the best ways to transition to a new or updated building as part of this programme, and we'd be happy to share the pitfalls and possibilities with you.

9 Support – It's not what you know...

When you move to your new or updated building, will this be like a fresh start for your ICT? If you are using this as an ideal opportunity to update your ICT Development Plan (and it is an ideal opportunity to do this) then you need to get everyone on side with your vision for excellence in the future.

Your building, infrastructure and resource requirements will be different and as you move, or over the next year or so, they may change from a basic level of complexity to a significantly more complex beast. Your school ICT will be less of a push-bike and more like a Formula 1 car. Are your pit crew up to it?

- Will your ICT team be able to provide you with sufficient support to deliver a hassle-free transition, and an effective support service moving forward?
- Who will configure all of the new kit, and make sure that the legacy devices are working properly in the way that you want them to, especially if you have changed their function or use?
- Your contractors will provide training on the technical aspects of your new technologies, but can your ICT team provide the pedagogical advice and inspiration to help your teachers make the most of your new facilities?

RM Education has a team of Educational Consultants who can help you maximise your assets for longevity and usability so that you get the best possible return on each asset. Book a fully customised day of training and CPD for your staff based on your exact requirements, and you will be confident that the usage of your new facilities is at its best from the start, so that your teachers and learners really see the benefits in every lesson.

10 Before you start.... stop and think

To ensure you really make the most of this opportunity to make a difference to teaching and learning in your school, it's really critical that you take a moment to step back and look at the bigger picture.

Sometimes it can be difficult to distance yourself and see the bigger picture, and that's where a partner like RM Education can really help. Our team of experienced Services Architects whose role is to help schools understand and enhance their ICT journey. During an on-site review with your senior leadership team they will explore your aspirations for outstanding ICT, your existing concerns and limitations, and your inclination towards change and risk.

During your free ICT review we will cover:

- a review of your current ICT systems, devices, performance and resilience,
- how ICT currently enhances, or limits teaching and learning,
- aligning your ICT support with your ICT Development Plan,
- case study reviews and discussion of suitable technologies,
- recent innovations in Educational technology,
- actions and next steps.

Additionally RM are also able to offer:

- a technical audit to inform you of your baseline position, and any recommendations,
- a guideline transition timeline and budget outline to give you a costed view of the ICT requirements, in line with your ICT Development Plan,
- a two-hour strategic ICT visioning taster session with an Education Consultant to help you understand how your school can use ICT effectively, which devices and ecosystems would suit your pedagogy, and how to make them work for you.

Let's work Together.

To book your free ICT review, please email **flex@rm.com** or visit **www.rm.com/psbp** to download a soft copy of this guide.

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