

▶ getting up to speed

■■■■ on developing your own strategy

Discussion sheet

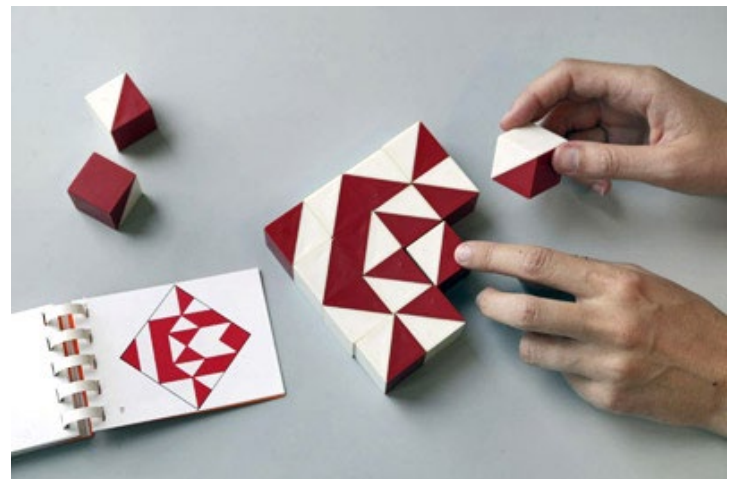
That sounds like a plan

A technology plan or strategy is another term for being intentional. This module is to help anyone in early childhood education and care—whether in the room with the children or in the office—become intentional about technology. It aims to prompt thinking, identify resources and suggest ways to start planning. Beginning with nine essentials educators already know about technology planning, this discussion sheet, a checklist and videos share learning from the sector.

Getting intentional

Planning technology use enables educators and leaders to be intentional. To think about and choose technology that supports educational outcomes for children and the business side of early education. Planning takes into account the existing level of knowledge and tools. It tracks them against what is needed to achieve a particular outcome. It is a way to avoid under-utilised and expensive purchases, an unintended online presence or to get back on track when things stall or don't work out at first. Having a technology plan puts technology at the service of early education and care.

There is no single right way to do it. A technology plan does not need to be a separate document. It can be one element in a business or strategic plan or part of a professional development strategy. It can be incorporated into your Quality Improvement Plan.



developing your own strategy

Discussion sheet

Nine essentials early childhood educators already know about technology planning

The skills, resources and approaches that early education and care services already possess are a good place to begin technology planning.

- ▶ A framework—the values that underpin an education and care practice are the beginnings of a technology plan. Borrow from existing frameworks to articulate a philosophy or policy—the *Early Years Learning Framework*, the *National Quality Standard*, your organisation's strategic or business plan and the *ECA Code of Ethics* are good places to start.
- ▶ Integration—consider technology resources in the same way that you manage and resource any other aspect of educational practice: professional development, pedagogy and curriculum, staffing, training, occupational health and safety to name a few.
- ▶ Intentionality—be deliberate, be specific, choose. Avoid arriving at an unintended destination or putting resources and energy into unproductive outcomes.
- ▶ Scaffold learning—what approaches have worked to increase capacity in other areas of your education and business practice? Use these to build a technology plan. For instance, what has had the most impact on increasing quality? What steps helped build knowledge and skills in mandated areas such as safe food handling, fire safety, audit and accounting?
- ▶ Observation—use educator skills to observe how the technology and tools are used and the impact on educator and child interactions or outcomes for family and business operations.
- ▶ Critical reflection—use educator skills of critical reflection to review and adjust, to identify what is missing and what is needed.
- ▶ Experiment—trial equipment, try more than one option and more than one context. Try again or try something else if it doesn't work the first time.
- ▶ Stay flexible—future developments require flexibility now. Before investing in expensive equipment, maximise options by choosing tools carefully. Servers, software and hardware are continually being overtaken by developments in web-based apps and multiple use tools. Mobile and Bring Your Own Device (BYOD) options are making dedicated computer stations a thing of the past. Cloud computing can reduce some costs dramatically and increase access at multiple locations and from multiple devices. Consider cloud-based apps such as iCloud, Dropbox, Google Apps and others.
- ▶ Keep it live—the best plans are a process and set of attitudes, not merely a document, that constantly inform action. Put it in writing to remind yourself and others but make sure it's a living document not something dusted off annually.

developing your own strategy

Discussion sheet

While there is no single formula for technology planning in early childhood services there are many common elements. These are usually underpinned by clear guidance on responsibilities and limits for individuals and organisations involved in the early childhood service, including families and, in an age-appropriate way, children. Planning considerations include:

- ▶ guidelines about roles and responsibilities between an organisation, an individual educator and parents
- ▶ clear guidance on technology use include expectations of managers, educators, staff and parents concerning technology and online behaviour. Specifying details of who can comment on behalf of an organisation, policies on personal and corporate social media use are some examples
- ▶ most importantly, planning for technology needs to provide for data security, individual privacy and the protection of children as well as general legal requirements such as copyright or defamation laws.

There are endless options for documenting and implementing technology plans. Here are three ways to approach it, plus an example and video links. More information on getting started and social media use are in previous modules of this Digital Business Kit series. Check the resources section at the end of this discussion sheet for more information.

Three approaches to technology planning

A technology plan can begin with what a team or individual already does and include strategies to improve or it can begin with data and explore new combinations and possibilities.

1. Start with quality

The *National Quality Standard* (NQS) provides a strong framework for integrating technology planning. The concepts of quality and continuous improvement embodied in the NQS overlap with technology planning. Several quality areas of the NQS have direct links, particularly Quality Area 7 on leadership and service management, as well as Quality Area 4, Element 4.2 concerning educator, coordinator and staff member collaboration, practices and skill development. Quality Improvement Plans (QIPs) can provide a formal way to integrate technology into the day-to-day activities of early childhood education and care services. QIPs have the advantage of using existing frameworks and emphasise progress towards high achievement.

The Australian Children's Education and Care Quality Authority (ACECQA) has more information and an online template for Quality Improvement Planning at: www.acecqa.gov.au/quality-improvement-plan_1.

2. Start with simple

Another planning approach begins with simple generic steps and tools and applies them to existing tasks and resources to come up with better ways of integrating technology into practice. This can include Strengths versus Weaknesses analysis, Plan Act Review cycles or Triple A: Audit Act Assess.

- ▶ Audit and plan—do a quick audit of what you have and what is missing; what you plan to change and when. To devise next steps include people, skills, tools and equipment (or software and hardware), existing policies, frameworks and plans.
- ▶ Act and support—commit to action and commence with new technology, training and the changes you wish to see. Make sure supports are in place so that it works.

developing your own strategy

Discussion sheet



Example of a Plan Act Review cycle

- ▶ Assess and adjust—build in points to measure and reflect on what worked, what didn't work so well and what this means for the next phase. Adjust strategies to fit. Begin the cycle again.

[Click here for a video on first steps with technology planning.](#)



3. Start with data

A third approach looks for patterns, new connections and opportunities in large sets of data using powerful analytical technology. It is sometimes described as 'big data'—a general term for any collection of data or several data sets that are large and unstructured and cannot be easily handled using conventional data management tools. There is a world-wide trend to using big data in planning. It is already having an impact in larger businesses and is likely to be a shaping force in small and medium sized enterprises in Australia, including early childhood services.

This trend will change the environment for operating an early education and care service. Recommendations made in the [Productivity Commission's Childcare and Early Childhood Learning Draft Report](#) included better use of data collections to guide research and policy. Increasing globalised investment and business practices are drawing attention and funding to new sectors such as early childhood. Along with greater technological capacity this brings expertise and perspectives from other sectors. It also changes expectations and, with that, the landscape in which governments set policy parameters.

What you need to know about early childhood and big data

- ▶ Big data doesn't need to be very big to be useful. Simply examining patterns and linking different kinds of information within an early childhood setting can reveal rich data for the business and education sides of an early childhood service.
- ▶ Big data applies technological tools to existing information sets to identify patterns in the data. Early childhood managers, leaders and educators apply their skills and knowledge to analyse and put the patterns of data to use.

developing your own strategy

Discussion sheet

- ▶ Big data needs the right tools and expertise—outsourced if not available on site.
- ▶ Big data can help early childhood services explore new possibilities, identify organisations to connect with, people and skills that will be essential to future operations.

[Click here to see a video of one early education service discussing data strategies.](#)



Examining big data for the early childhood sector can yield rich results including:

- ▶ gaining a better understanding of when and how families connect with educators about their child's learning and care. An example is comparing responses to posters on the wall, printed notes, PowerPoint loop, email newsletter, twitter and text messages
- ▶ identifying patterns of high volume tasks and high demand times in the educator's day
- ▶ borrowing from other professional practices that use online and smart tools for rosters, automated reminders, updates on key events and appointments or to send urgent information
- ▶ having multiple sources to inform and follow in detail a single child's learning and development or to follow a group or several groups of young children over time and in different age cohorts. Also being able to examine patterns for supports, processes and improvements in education and care or professional development and business operations.

Some enterprises including some early childhood services and schools are already applying the big data approach. It can transform how a sector or individual operates. It will soon shape skills and tools that are considered core competencies.

[Click here for a video on technology planning.](#)



Tips to get started

- ▶ Tap into your existing community: ask others who are already doing good work online to learn how they got started, what works, what doesn't.
- ▶ Ask basic questions: 'Pool your ignorance'—identify what you don't know and what you need to know.
- ▶ Invite experienced individuals from your network to talk or share a case study with your team or your professional body.
- ▶ Swap your expertise with others. Use professional development opportunities, planning sessions, staff meetings or training days to discuss and learn more.
- ▶ Not for profits may be able to tap into pro bono services: online consultants and digital strategists as well as volunteers or interns with digital expertise who may want to contribute to the community.

[For a profile on planning approaches by one early childhood education and care service](#)

[click here](#)

developing your own strategy

Discussion sheet

Sources, resources and more on planning and data

- ▶ For many more resources, blogs and tips on planning and the business of technology see the Department of Communications site: www.digitalbusiness.gov.au.
- ▶ For an example of policy guidance for staff and educators see the Department of Education (NSW) guidelines at: www.det.nsw.edu.au/policies/technology/communication/techguide.pdf.
- ▶ For an educator perspective on using technology in early childhood see: <http://edtechreview.in/news/news/trends-insights/insights/377-using-technology-in-early-childhood>.
- ▶ For a business perspective and explanation of 'big data' view an animation at: www.intel.com/content/www/us/en/big-data/big-data-101-animation.html or read Big is the Next Big Thing at: www.cmswire.com/cms/customer-experience/big-is-the-next-big-thing-6-it-trends-driving-digital-business-024103.php.



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