



## Structuring effective technical support

This guide will help you make decisions about how to support digital technologies. It is focussed on technical support and is intended for use predominantly by school leaders.

Effective technical support is provided through creating:

- A centralised approach to logging and tracking issues
- Access to appropriate levels of expertise to resolve issues effectively

While medium and large schools will find it easier to structure their support in the ways suggested in this document we believe that small schools will also find the ideas and strategies useful.

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Once you have read this guide you are welcome to contact the Connected Learning Advisory to get more personal assistance. We aim to provide consistent, unbiased advice and are free of charge to all state and state-integrated New Zealand schools and kura. Our advisors can help with all aspects outlined in this guide as well as provide peer review of the decisions you reach before you take your next steps.

For more information visit [www.connectedlearning.org.nz](http://www.connectedlearning.org.nz)

Check out our resources at [resources.connectedlearning.org.nz](http://resources.connectedlearning.org.nz)

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## Provide three types of support



Typically, a combination of three types of support are required for teachers and students to make effective use of digital technologies for learning:

### 1 - Pedagogical support

- Helping staff with reflective practice around why, when and how to utilise technology to support their teaching and students' learning

### 2 - Digital skills support

- Helping staff and students learn how to select and operate technology
- Helping staff and students to work towards becoming more [digitally fluent](#)

### 3 - Technical support

- Development and deployment of new ICT solutions
- Proactive maintenance of existing ICT solutions
- Resolving technical problems
- Providing strategic guidance around ICT

Providers of each type of support might be school employees, contractors, volunteers or companies. Support is usually delivered by a combination of providers with specialist expertise in providing either technical, pedagogical or digital skills support. Often there is some overlap between the types of support that a provider might be able to offer. Expecting a single provider (be that a company or individual person) to support everything, though, is unrealistic and schools should seek to develop a broad base of support.

## Reflective questions

	Poor	Ok	Good
Pedagogical Support	~ 😞	+ 😐	😊
Digital Skills Support	~ 😞	+ 😐	😊
Technical Support	~ 😞	+ 😐	😊

Q1- How would you rate each type of support provision in your school?

Q2 - Is there an appropriate level of each support type?

Q3 - Is there an appropriate balance of each support type?

## Timeliness



The timeliness with which support is required will vary. Resolving technical issues or providing assistance to work out how to use particular apps might require very immediate support whereas providing strategic advice or support with planning to use digital technologies for a particular learning objective is not as time sensitive but is likely to be just as important.

## Create a support desk



Schools need to establish clear and effective systems to address technical problems, requests for support or suggestions for improvements. Such requests could be about technical, pedagogical or skills requirements. You should ensure support requests are recorded, prioritised and then resolved in the most appropriate way and timeframe.

For most schools this is best done through a support desk system that is managed by a staff member. The role of the support desk is to ensure all issues are logged, prioritised and then allocated to the most appropriate resource to resolve as outlined in the three tier support system below.

For schools with fewer than four or so rooms it might not be practical to have a separate support desk role. Instead, provide access for teachers directly to external helpdesks and keep records of support requests.

While there has been a tendency to use the eLearning Leader in this support desk role, their time is better spent working with teachers and students to support learning rather than technology. Instead, we recommend that schools work towards the support desk function being delivered by a member of the support staff team. The eLearning leader can still maintain an overview of the technical issues at play and assist with prioritising them without actually providing the front-line technical support themselves.

## Ideas for a centralised support request logging system



The centralisation of support requests is essential because it ensures a systematic approach to support and means that the appropriate level of response is allocated to each issue. This allows many issues to be addressed speedily and cost-effectively because the school is not waiting for external support nor paying a high hourly rate for issues that can be addressed more cheaply. It also provides a valuable log of all support requests registered which helps identify common system weaknesses that can then be addressed. This support desk approach places responsibility on staff and students to report issues appropriately.

Requests for support made should be logged into a centralised electronic support system and managed from there. The centralised support system could be a simple shared spreadsheet

	<p>or a more comprehensive specialist solution. Selecting a cloud-based support system is recommended to keep running costs low and to easily allow access from any device and when away from school. While using a paper-based job-logging book or a whiteboard might be acceptable to report issues, transferring them to an electronic system is recommended as this allows for easier access, discovering trends and historical tracking.</p>
<p><b>Communication is key</b></p> 	<p>Ensure there are clear protocols around accessing a technician or support staff member. Everybody should log their requests with the support desk so that a systematic approach is taken and jobs are completed based on priority rather than 'the squeaky wheel getting all the oil'.</p> <p>Once a request has been made it is essential that expectations of how and when the request will be handled are clearly communicated and that updates on the status of the request are provided. It is also essential that the person who made the request, and any others affected, are made aware that the issue has been dealt with and are given the opportunity to provide feedback on their satisfaction with the solution.</p>
<p><b>Provide three tiers of technical response</b></p>  <p>The three-tier technical support model ensures the right level of support is provided at appropriate costs.</p>	<p>This model applies to all schools, regardless of size, but in a small school the level 1 support might more commonly be done by the teacher and the level 2 support may only be needed on an on-call basis rather than on a regular basis.</p> <p><b>Level 1 - Addressing basic problems</b> Most technical problems that are reported are not complicated and there is a high degree of commonality of referrals. Level 1 support should be provided by low cost resources such as:</p> <p><b>Support staff member</b> - A support staff member with entry-level technical skills will be able to provide basic assistance for most issues. This is commonly the same person that manages the support desk. It is not recommended that level 1 support is provided by a teacher or eLearning leader as their focus should be on teaching and learning, not on technical support.</p> <p><b>Students</b> - Students can be trained to provide some technical support. This is typically done by them becoming part of a recognised team of 'techsperts' or 'Tech Angels'. It can provide a way for students to gain some authentic learning experiences that develop their interpersonal and technical skills. You will need to ensure that students' academic learning and other priorities are unaffected by any commitments towards providing technical support.</p>

Addressing basic problems

Addressing intermediate issues

Addressing complex issues

**Vendor warranties and helpdesks** - Equipment and software can be covered by warranties that include access to helpdesks and technicians, often at no cost. We recommend that schools make the most of such support.

[Ministry's ICT Helpdesk](#) and [post-SNUP Helpdesk](#) - funded to provide remote support for schools.

**Specialist technical support provider.** Small schools might use the helpdesk of a specialist technical support provider to provide remote level 1 technical support. Medium and large schools should develop in-house expertise for level 1 problems.

### **Level 2 - Addressing intermediate issues**

This tends to involve working at the technical maintenance and management level. A school should seek to establish or contract local level 2 expertise at tradesperson hourly rates. This expertise could be accessed in collaboration with other local schools and community enterprises. It generally makes sense for large schools to employ level 2 expertise but is more cost-effective for smaller schools to contract it in on a regular visit cycle or as needed.

### **Level 3 - Addressing complex, highly technical or strategic matters.**

At level 3, specialist engineering expertise tends to be required and the hourly rate will be correspondingly high so a school needs to limit their need to contract this. Small schools may never require paid level 3 support. A very large school may be able to afford to employ expertise at level 3 but the majority of schools should seek to use a trusted technical support provider. Schools can reduce costs by looking to share this expertise with other schools and by accessing strategic advice from the Connected Learning Advisory.

### **Moving towards the three tier technical support model**



To move towards this model a school could:

1. Review the existing technical support processes in terms of their effectiveness and costs:
  - Consult with all stakeholders to gain their views on the effectiveness of the support they receive.
  - Consider the existing technical support time spent working at each of the three levels by external support contractors. Determine the associated costs by reviewing invoices.

- Consider the existing technical support time spent working at each of the three levels by school staff providing technical support. Make an estimate of costs associated with this time spent.
- Estimate the time and costs spent overall on technical support work at each of the three levels

2. Consider employing or identifying an existing support staff member who can take on the support desk role. Use the estimate of time required for support at level 1 to determine how much time is required.
3. Identify students who can be given responsibility for assisting with technical support
4. Use the estimate of time required for support at levels 2 and 3 to determine how much time is required. Consider how you will establish or contract level 2 and 3 support.

## Reduce the need for technical support



You should aim to reduce the need for anybody to need technical support in the first place.

This could be done by:

- creating a stable, robust, reliable, easy to use technical environment that is centred around supporting learning
- reducing the amount of high-maintenance technology in the school for example by:
  - [moving services to the cloud](#) rather than providing them at your school
  - reviewing the time (therefore cost) required to support old technologies
  - reducing the range and technical complexity of technologies in use
  - standardising how technologies are configured
- automating time-intensive tasks
- thinking strategically about support requirements as part of any technology procurement decision-making
- providing a set of FAQs, documents or videos that cover the most common support requests
- developing a culture of self-help and cooperation to help each other

Schools should avoid:

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- ❑ new technologies that are not yet mainstream as they typically take considerable time (therefore cost) to support
  - ❑ short-term support solutions that are unable to be sustained in the long term
  - ❑ vendor lock-in and proprietary solutions that can't easily be supported by others in future
  - ❑ solutions that require on-site rather than remote support
  - ❑ solutions that do not have a plan to become cloud-based
  - ❑ over-reliance on individuals' knowledge of a particular technology or configuration
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This guide has been produced in response to a number of specific queries from schools. It should not be read as a recommendation or endorsement of any specific product. The Connected Learning Advisory is a Ministry of Education supported service that provides schools with technology information relevant to their queries and does not recommend one product over another.



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