



## Lower Key Stage 2 – Developing Communication – Theme Guide


Children use online communication tools such as email and blogs to support collaborative learning, safely and respectfully. They begin to investigate the technology used in digital communication networks. They use simple sound editing software to record and manipulate sound clips.


### Learning objectives for the term

To understand that we need to use electronic communication technologies appropriately to keep ourselves and others safe. 

To understand digital communications devices connect using a network, enabling us to send messages and share materials. 

To understand that the system we use when we send emails has similarities to the one used for physical letters.

To understand the internet is a network providing communication tools, which we must use safely, responsibly and respectfully. 

To use an online environment safely and appropriately to collaborate. 


To understand that sound can be recorded and manipulated to communicate meaning and/or atmosphere.


To understand we can use sound-editing software to capture, import and manipulate sounds. . *Explore how sounds can be faded in and out.*


To understand how we can use software to organise/modify sounds.


### On-going Learning Objectives

To use appropriate file-name conventions and understandable folder structure to save, organise and retrieve their work.

To take an active role in using electronic communication safely and responsibly. 

To be aware that many online games include chat facilities and use these safely. 

To understand we need to seek consent to capture/use sounds. 

To understand essential eSafety rules and to know what to do in the event of an incident or concern at home or school. 

### Vocabulary – see Glossary for definitions (for terms in blue)

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|-------------------------------------|--|
| <i>Email,<br/>server,<br/>blog,</i> | <i>online discussion forum,<br/>common file types and extensions (examples of which are<br/>provided in the glossary.)</i> |
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### Possible resources for this theme (further resources are suggested with the explanatory notes below. Note that these are examples and not formal recommendations.)

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|---|---|
| <b>Email</b> (see advice below) <ul style="list-style-type: none"> <li>Office365</li> <li>Gmail (as part of G-Suite for Education)</li> </ul> <b>Sound Editing Software</b> <ul style="list-style-type: none"> <li>Audacity</li> <li>Garageband (iPad app)</li> </ul> | <b>Blogging Platform</b> (always read the terms/conditions and privacy policy. Seek parental permission where required.) <ul style="list-style-type: none"> <li>Google Sites (as part of G-Suite for Education)</li> <li>J2 bloggy (as a part of J2E)</li> <li>2Blog (as part of Purple Mash)</li> <li>Google Sites (when used as part of G Suite for Education)</li> <li>Check if your school website – Usually Blogs can be add on service provided.</li> <li>School learning platform</li> </ul> |
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Please note that with any online platform it is essential that you review the privacy policy and terms and conditions of the service. The school is responsible for the protection of data it holds and compliance with current data protection legislation. Always assess both the data protection and safety of the service you are considering using, and ensure any necessary permissions are in place before using with pupils.


Primary Computing Scheme online materials that are referenced in this guide can be accessed from:

<http://www.hertsforlearning.co.uk/user/login>


You will need to be logged into your school account and have a current subscription to the Primary Computing Scheme to gain access. The materials can be accessed from the *My Resources* link at the top/right of the screen, once you are logged in.

### Key learning objectives

(some objectives might be used for more than one lesson)

To understand that we need to use electronic communication technologies appropriately to keep ourselves and others safe. 

- Discuss the different methods of communication we use in school and at home, with an emphasis on electronic communication tools. (Children may have looked at the history of messaging in the KS1 theme *Messages and Virtual Worlds*.)
- Be prepared for children to admit to using social networking and messaging tools for which they are under age. Discuss with your SLT / eSafety lead how you should respond to this, in line with school policies.
- Discuss the advantages and disadvantages of different methods of electronic communication, depending on the situation in which the tool is used.
- Compare different methods of electronic communication, thinking about the language and style we use for different types of tool and different recipients. E.g. we are unlikely to Instant Message (IM) a formal communication using 'textspeak' / SMS language.
- Talk about how it is harder to convey a message through text alone, without tone of voice and facial expression, and so it is easier for someone to misunderstand our real meaning when communicating in this way.
- Think about how the same words can have different meanings depending on the way we say them or the context they are used in.
- With this in mind, children can create some rules or guidelines for using electronic communication methods safely and appropriately.
- To help children learn about making good passwords, use the accompanying PowerPoint slides [*Passwords Activity, Making a Strong Password*] which can be downloaded from the online area.
- The online game-based activity, "Interland" from Google® has a game on making strong passwords: <https://beinternetawesome.withgoogle.com>

To understand that digital communications devices connect using a network which enables us to send messages and share materials. 


- Investigate how networks carry out simple tasks, for example using the school Wi-Fi network to save a document from a laptop. Discuss how a mobile phone uses the mobile phone network to send an SMS text message, or phoning using a landline. Children should understand that in order for a message to be sent from one device to another, the devices must be connected in some way (the message does not just magically get from the sender to the recipient.)
- Usually the devices will be connected by the internet, otherwise we would only be able to send a message within our local network.
- For wifi, think about, for example, how we can save a document on a laptop to the school server, when the laptop is not connected to the server by any physical cables. This process could be role-played in the school hall to help children visualise the process.
- If possible (perhaps with the help of the technician) show on the board/screen how a device (e.g. a school tablet / iPad) can detect the wifi networks available in school but will prompt for a password if you try and connect to one. Talk about the need to password protect a Wi-Fi network as we would lock our front doors.

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To understand that the system we use when we send emails has similarities to the one used for physical letters.

- When we send an email, how does it get from the sender to the recipient? A letter is taken from the local post box to the sorting office, where it is sorted by postcode and then house number so that it can be delivered. An email is sent from the device, via the internet to mail servers which sort it, using embedded information to direct it to the correct address.
- See the accompanying Microsoft®Powerpoint slide with builds, to show how one type of email service works, and how this has parallels with the postal service. [*How an email system works.*]

To understand the internet is a network providing communication tools, which we must use safely, responsibly and respectfully. 

- Discuss the differences between the internet and the World Wide Web. (The internet is a global network through which a number of different services can operate. The World Wide Web is one of these, but it also includes email, video conferencing and more. The World Wide Web is effectively a vast collection of documents linked together via hyperlinks.)
- See the accompanying Powerpoint file [*What can we do on the Internet*] available in the downloads area.
- With a focus on communication and contact, discuss the advantages and disadvantages of electronic communication. (E.g. the fact that it is easier to send/receive messages and make contact with strangers in this way.) You may have covered this in the first objective above.
- Discuss what to if we receive a message from someone that worries or concerns us, and the importance of only communicating online with people we know and trust in the real world. Remind children how easy it is to lie online and/or pretend to be someone else, which is why we should be wary when communicating online.
- Use a school-based email to send messages and attachments to other pupils, using language and style appropriate for the purpose and audience. For actual emailing with LKS2 children:
  - Only ever use a school based email system, such as Microsoft® Office365™ or Gmail (as part of G-Suite for Education if you have this deployed in your school.)
  - Consider creating accounts for small groups of children, for which adults hold the passwords. This enables groups to email within lessons only.
  - Where possible, ask whoever manages the school email to create a specific email domain for pupils and limit pupil accounts to only be able to email within this domain.
  - Make sure parents know what you are doing and understand why, and have the opportunity to ask questions if needed, and the option to opt out if they really want. Encourage them to help with supporting the appropriate use of email, as it is a key skill.
  - Make sure that your school ICT Policy reflects your use of pupil email and the steps you take to protect children.
  - Set up a special email account for which an adult holds the password, to which pupils can forward any emails to if it causes them concern. A member of staff can monitor this inbox but it should not be your own email address.
  - If you want to email as a whole class, set up a specific whole-class address for which only adult(s) hold the password and use this, rather than any individual's address.
  - Be sure to have the backing of your SLT / Headteacher.
- If you have access to 2Simple Purple Mash, the 2Email tool can be used here.

To use an online environment safely and appropriately to collaborate. 

- Collaboration may include:
  - contributing to a school and/or class blog if one is available:
  - writing an individual blog and posting comments on others' blogs, if a safe educational blogging platform is available.
  - engaging in a class discussion using a safe online discussion platform, if one is available.
- What are blogs and why/how do people use them? Discuss how blogs differ from other online sharing sites.
- Explore some blogs. See the accompanying sheet [*Links to blogs to explore.*]
- Discuss the sort of content you might put into a blog and what sort of information / content would not be appropriate. Focus on the mass audience which most blogs are open to, and that anyone can see and comment on a blog. If including photos, for example, talk about why it is better not share photos of yourself, but how you could include photos of work you've created etc. that do not identify you or give away personal information.
- If you have a school or class blog, children could write posts for this using a word processor, for an adult to copy/paste into the blog.

- If you have a safe, educational blogging platform available to you, children could have their own blogs, perhaps linked to another curriculum area or topic. Using this, they could read and comment on each other's blogs.
- When adding photos to a blog, discuss appropriate use including protecting your own personal information and identity, that of your friends and other people, and respecting ownership and copyright. Extend this discussion to the use of any online communication platform.
- You could run an "unplugged blog" activity where children write a blog post on paper, related to another area of learning, and these are displayed on the wall of the class. Children can then use sticky note paper to comment on each other's posts, sticking these beneath each post.
- Online discussion platforms that are suitable for school use are harder to find, when taking into consideration both eSafety and data protection. If one is not available you could discuss with pupils where they might be used. It is most likely that children might have encountered 'forums' around computer games they play. Talk about how to use one safely, which could include:
  - Never 'leaving the discussion' to go into a private online chat with someone you do not know and trust in the real world.
  - Not giving away any personal information.
  - Not responding to trolls and/or offensive messages.
  - Not opening message attachments or following links which you are not 100% sure about.
  - Telling a trusted adult about anything which worries or concerns you, and asking a trusted adult if you are not sure about something.

To understand that sound can be recorded and manipulated to communicate meaning and/or atmosphere.

- Listen to sound recordings which have been changed in some way (reversed, speeded up, repeated, changed in pitch etc.)
- As an introduction to sound manipulation and editing, as a class you could import some sounds into a sound editing program, for example Audacity®, and apply different effects to each sound. How does the effect change the way we perceive the sound, or its mood or atmosphere. For example, take a 'dry' recording (i.e. one with no effects at all) of yourself saying something such as, "Where am I? Play this to the class and ask them where it might have been recorded. Then apply an effect such as reverb or delay/echo and ask the same question. With the effect applied it may sound like the recording was made in a different place, such as in a cave or cathedral.
- Allow children to explore the effects available in a sound editing program, for example Audacity® or the Garageband® iPad® app. This app has a range of affects you could apply to a simple recording, such as *Monster*, *Chipmunk* and *Robot*.
- See the accompanying sheet [*Audacity® 2.1.2 Quick Start Guide*.]
- If you use a pitch-change effect you can sound like a cartoon character (if you raise the pitch,) or a scary giant (if you lower it.)

To understand that sound-editing software can be used to capture, import and manipulate sounds.

*Explore how sounds can be faded in and out.*


- Capture and/or import sounds into sound editing software and use the software to:
  - Layer
  - Order
  - Copy/cut/paste
- Some children may be ready to explore fading in / out and how this can make a recording sound more professional, rather than suddenly starting and stopping sounds.
- Add simple effects (as above). See the accompanying sheet [*Audacity® 2.1.2 Quick Start Guide*.]
- See the accompanying sheet [*Links to sources of free sounds and music*.]


To understand how we can use software to organise and modify sounds.


- Further developing children's understand and use of sound editing software. Children could use sound effects or create their own, to add atmosphere to a poem or piece of writing they have done in English and which they have recorded using the software.
- They should first use the writing as a script, showing where the sound effects will appear, in order to be most effective.
- Similarly, the children could choose a piece of music to go behind the recording of the poem or creative writing which is appropriate to the mood of the writing.
- Be sure to follow the copyright guidance in the accompanying sheet [*Links to sources of free sounds and music*.]


### On-going Learning Objectives

*To use appropriate file-name conventions and understandable folder structure to save, organise and retrieve their work.*

*To take an active role in using electronic communication safely and responsibly, including thinking before you post, keeping personal information/ passwords private; and protecting and respecting each other.* 

*To be aware that many online games include chat facilities; to use these with care, protect their identity and only talk to those they know from home or school.* 

*To understand we need to seek consent before capturing and/or using sounds created by others.* 

*To understand essential eSafety rules and to know what to do in the event of an incident or concern at home or school* 

### Suggested independent task – any open-ended activity (2-3 sessions) enabling the children to demonstrate their computing capability around the knowledge and understanding provided in the term

- Create a sound project for a given audience/purpose.
- Share their work via email, blog or other digital communication tool, if a safe platform is available.
- Evaluate their completed task.

Other considerations:

Does the task provide for children to work at different levels?

Is there support available for children to select if they wish?

Are there opportunities for the children to review and develop their work?

Is there an opportunity for the children to evaluate the finished task?

Here the children independently create a piece of work in a similar way to that described above, using appropriate music and/or sound effects to add mood and atmosphere to a recorded piece of writing. The task should include who the recording is aimed at and what it is for, so the children can use suitable effects and music for these. The finished recording should be exported to MP3 so that it can be shared more easily.

If the children have access to a safe online space or email system, as described above, then they can share their MP3 in this way. If using a safe, private blog, their evaluation could form part of the blog post, and their peers could listen to the recording and comment on its effectiveness for the given purpose and audience.

See the sample independent task in the assessment section, for this learning theme.