



 Pathways

A Guide to Using Questionnaires

Written by Susila Davis



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About the author

Susila is currently studying for a doctorate in education at the University of Oxford. Her focus is on practitioner engagement with school improvement and *Pathways*. Her other research areas involve youth programmes and alternative education provision. Susila was also a research and data analyst for several years at the Specialist Schools and Academies Trust.



Who is this guide for?

Headteachers, senior leaders and middle leaders contributing to an audit.

Acknowledgements

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Introduction

This is a brief guide to using *Pathways* questionnaires in your school or partnership.

You might also find the advice in this guide useful for a variety of purposes beyond using the *Pathways* questionnaires, for example, where you are asking colleagues, governors or pupils their opinions and views on a particular topic, or indeed if they are completing something such as a self-evaluation form or using an audit tool.

Why carry out questionnaires?

Questionnaires can be a valuable tool when carrying out an audit in your school. They can give insight into strengths, weaknesses, issues and successes in your school through the views of staff, parents and potentially pupils, too. They can help to obtain a broad overview of a particular situation or provide more detailed feedback on something specific.

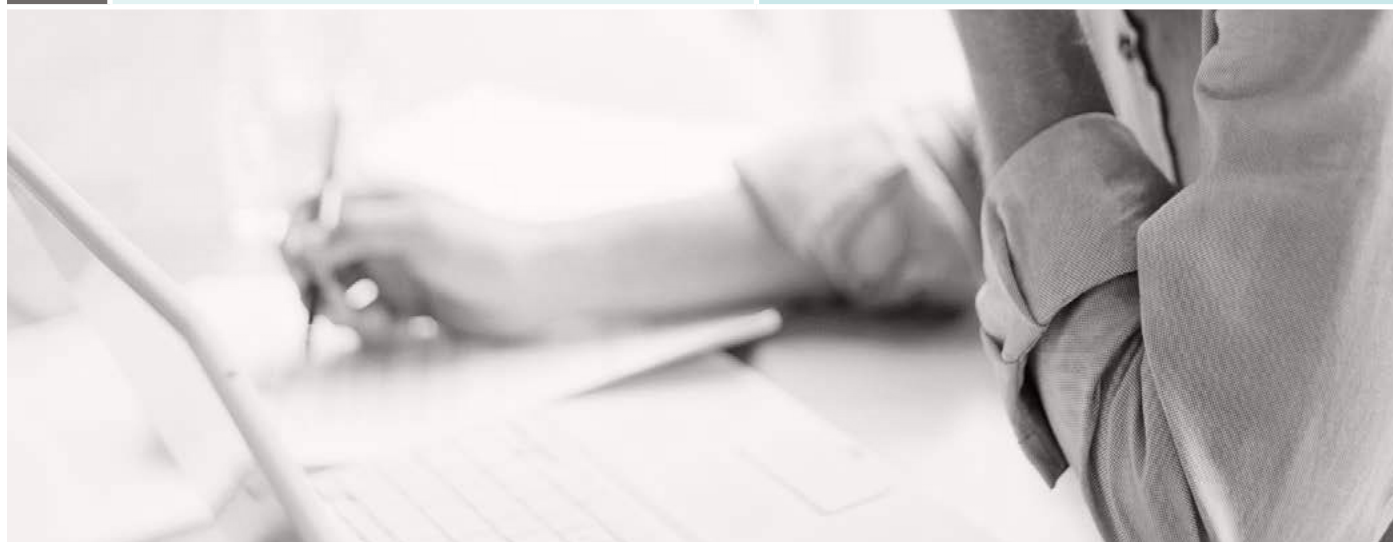
The questionnaires provided as part of *Pathways* have been written and reviewed by experts in the field. They are provided in Word document format to allow you to edit and personalise them for your school's audit.

Advantages and drawbacks of using questionnaires

It is important to be aware of the advantages and drawbacks of using questionnaires before sending a questionnaire out as part of your audit.¹

	Advantages	Drawbacks
Anonymity	Questionnaires provide the opportunity for respondents to be more anonymous with their answers compared to an interview or discussion. ➔ If possible, do give respondents the opportunity to complete and return questionnaires anonymously. Sometimes, it might be advisable to leave the room while questionnaires are completed or allow people to take away the questionnaires. ➔ Make sure to store the responses safely and securely, in hardcopy or electronically. ➔ Issuing questionnaires assumes a level of literacy among your respondents (depending on the format of your questionnaire). ➔ For younger children or people with varying levels of literacy, you may want to consider alternatives to your standard questionnaire. ➔ In order to ensure a fairer representation among your population, you might require your questions to be translated or arrange for them to be communicated in different ways (e.g. for visually impaired respondents).	In using questionnaires that allow for anonymity, you may lose some detail such as respondent information and some respondents may not complete the questionnaire or tool in full. ➔ For some responses, it may be helpful to match types or groups of response by respondent or subject area, etc. ➔ Weigh up how important full anonymity is versus some or less anonymity. Could you, for example, try to ensure that respondents fill in at least their subject or year group by introducing the rationale behind the questionnaire in the group? Or could you fill in the subject or year group on the questionnaire and distribute it to those particular groups separately? Do you think your response rates or the 'openness' of some of the responses might be affected by reducing anonymity in this way?

	Advantages	Drawbacks
Response rate	Questionnaires may allow you to reach more potential respondents in a shorter space of time than interviews or other means. ➔ Depending on the type of questionnaire, responses may be collected quickly in larger groups or samples using a standardised template (e.g. for questions with scales such as <i>1 – Strongly agree</i> to <i>5 – Strongly disagree</i>), therefore requiring everyone to follow and interpret the same scales. ➔ The return rate may also be comparatively larger than interviews as, technically, respondents may be able to complete the questionnaires in their own time and follow a set ‘template’.	Carrying out questionnaires may generally give you an idea of the ‘what’ (i.e. descriptions) rather than the ‘why’ or the ‘how’ (explanations to an extent). ➔ You may choose, for example, to administer a questionnaire and then follow it up with an interview or chat with groups of respondents/teachers or individually. This may give you a better opportunity to ask why certain options were chosen or the steps taken by respondents in answering a particular question. ➔ If these aspects are important to you and you try to add them to your questionnaire, this may result in a long, rather unwieldy set of questions that, even if respondents choose to answer them, may be too difficult to analyse and interpret.
Analysis	Analysis of results can be more straightforward than an interview transcription or conversation. ➔ It is important to consider even before administering your questionnaire how the results will be collated, analysed, interpreted and used, and crucially by whom. If, for example, your questionnaire contains mainly responses that require numbers and/or marking a scale such as <i>1 – Strongly agree</i>, <i>2 – Agree ... 5 – Strongly disagree</i>, etc., would you want to present counts and proportions, and/or more advanced statistics such as standard deviations, confidence intervals?	Questionnaires may seem simple, but different people may interpret questions in different ways. The <i>1 – Strongly agree</i> to <i>5 – Strongly disagree</i> scale can be attached to varying levels of individual ‘agreement’ or ‘disagreement’. ➔ How an individual then chooses to respond to the question in the end can also be quite different and open to interpretation. For example, you may ask: <i>I have used [a particular resource]:</i> 1 – Often 2 – Sometimes 3 – Occasionally 4 – Not at all Those who answer <i>1 – Often</i> may interpret ‘often’ in different ways. It may in some instances be possible to define ‘often’ or ‘sometimes’ with quantities or descriptors such as ‘7 days a week’, ‘3 days a week’ etc. How you actually analyse the results later and make connections between particular questions is another matter for consideration.



Part 1: Preparing the questionnaire

Before carrying out a questionnaire (both within and outside *Pathways*) be clear about:

1. the information you want to gather
2. how you want to gather the information
3. how the information will be analysed and used afterwards.

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Managing and implementing the National Curriculum 2014

Step 1: Audit

Staff Questionnaire

Preparing for the new National Curriculum

The findings from this questionnaire will help the Senior Leadership Team to ensure that everyone in the school is well prepared and properly supported for the introduction of the new National Curriculum (NC) in September 2014.

There are 3 sections to this questionnaire with 23 questions in total.

Please circle (or make bold) the key stage in which you have taught the NC most recently:

Key Stage 1 Key Stage 2

Section 1: Planning

Q1. Please tick (or make bold) subjects, if any, you find more difficult to plan for than others:

English	☐	Foreign Language	☐
Mathematics	☐	Geography	☐
Science	☐	History	☐
Art and Design	☐	Music	☐
ICT/Computing	☐	Physical Education	☐
Design and Technology	☐		

Q2. Are there any particular reasons for this that should be taken into account with preparations for the new National Curriculum?

Q3. How would you rate your schemes of work in terms of their ability to help you with your:

a) Medium-term (half termly) planning?
Circle (or make bold) a number (1 is very unhelpful, 5 very helpful).
1 2 3 4 5

b) Short-term (weekly) planning?
Circle (or make bold) a number (1 is very unhelpful, 5 very helpful).
1 2 3 4 5

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Q4. Do any subjects stand out in this respect?

Q5. In what ways, if any, could these schemes of work be made more helpful?

Q6. How well do you know what is being planned and taught in the year groups above and below your year group?
Circle (or make bold) a number (1 is not at all, 5 very well).
1 2 3 4 5

Q7. How do you get this information? How could the system be improved?

Q8. What specific support for planning the new NC would you like before September 2014?

Section 2: Teaching and learning

Q9. In which subjects, if any, do you feel your subject knowledge has been more strongly tested than others in the classroom? What are the aspects you have found challenging?

Subject	Agree knowledge has been tested	Challenging aspects of the subject
English		
Mathematics		
Science		
Art and Design		
ICT/Computing		
Design and Technology		

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With the first two points it might be useful to consider whether the questionnaire that you plan to use is able to collect this information in its current form. What information and level of detail are you trying to gain from questionnaire responses? Does the tool need amending or adding to for your specific purposes?

Another point to consider is, how do you plan to administer the questionnaire? Do you plan to distribute it amongst a group of staff and ask them to complete it by a set day/time, would you want to be present while they complete them or would you like to complete the questionnaire with them while discussing their responses with you face-to-face? Will you distribute the

questionnaire on paper or by email? The answers to these questions will depend on how important anonymity is to your questionnaire (see page 2 of this guide for more guidance on anonymity).

With the third point, you might want to start thinking early on about how responses from the questionnaire will be collated, what you or others plan to do with the responses (tally them up in an Excel spreadsheet if responses are mainly tick box options or scales, or study the sentences and key words and group them somehow if responses are mostly sentences and paragraphs).

Do you have a target group of respondents?

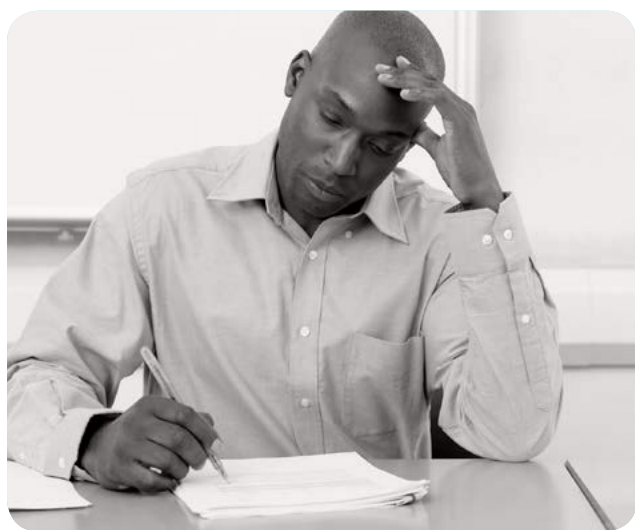
Be clear about who will potentially be completing your questionnaire. Are you trying to elicit responses from a particular year group, subject or position (teachers, assistant headteachers, parents, members of the governing body etc.)? How widely do you want to distribute the questionnaire (within/outside school)? How will respondents be selected and on what basis?

Choosing a random sample

Ideally, you might try to administer the questionnaire to everyone in the 'population', for example, all students in Year 5 or all teachers of mathematics (whichever group is of interest) rather than a sample. If sampling is necessary, try to opt for as random a sample as you can.

Random sampling is based on the following criteria:

- Each member of the population has an equal chance of being selected (e.g. if you are choosing 50 students out of a year group to complete your questionnaire).
- The chances of one person being selected are independent of the chances of any other person.



Determine the size of the sample

How many responses can you realistically analyse?

Can you handle the data analysis if you obtain responses from a large group of respondents? If, for example, you have a few questions that require sentence or paragraph-type responses, how would you manage the data entry (if the questionnaire is completed on paper)? How would you go about coding or grouping the more 'free text' results (even if they are in electronic form) if you obtain a large response?

Ensure your sample is representative

If you select a certain sample for your questionnaire, how 'representative' is the sample compared to the whole population? For example, are you selecting only individuals with whom you are familiar, or a particular demographic to complete the questionnaire? By what criteria are you judging 'representativeness'? For example, in trying to survey opinions on learning styles in mathematics, would you want to include a mix of pupils with low, middle and high attainment in the subject? Or is the purpose more to survey pupils with higher levels of attainment? What assumptions do you think are being applied in choosing a particular sample? Or, returning to the maths example, if a sample has not been chosen, and only students with higher levels of attainment in mathematics have responded to your questionnaire, have students with a mix of attainment levels been given an equal chance of responding?

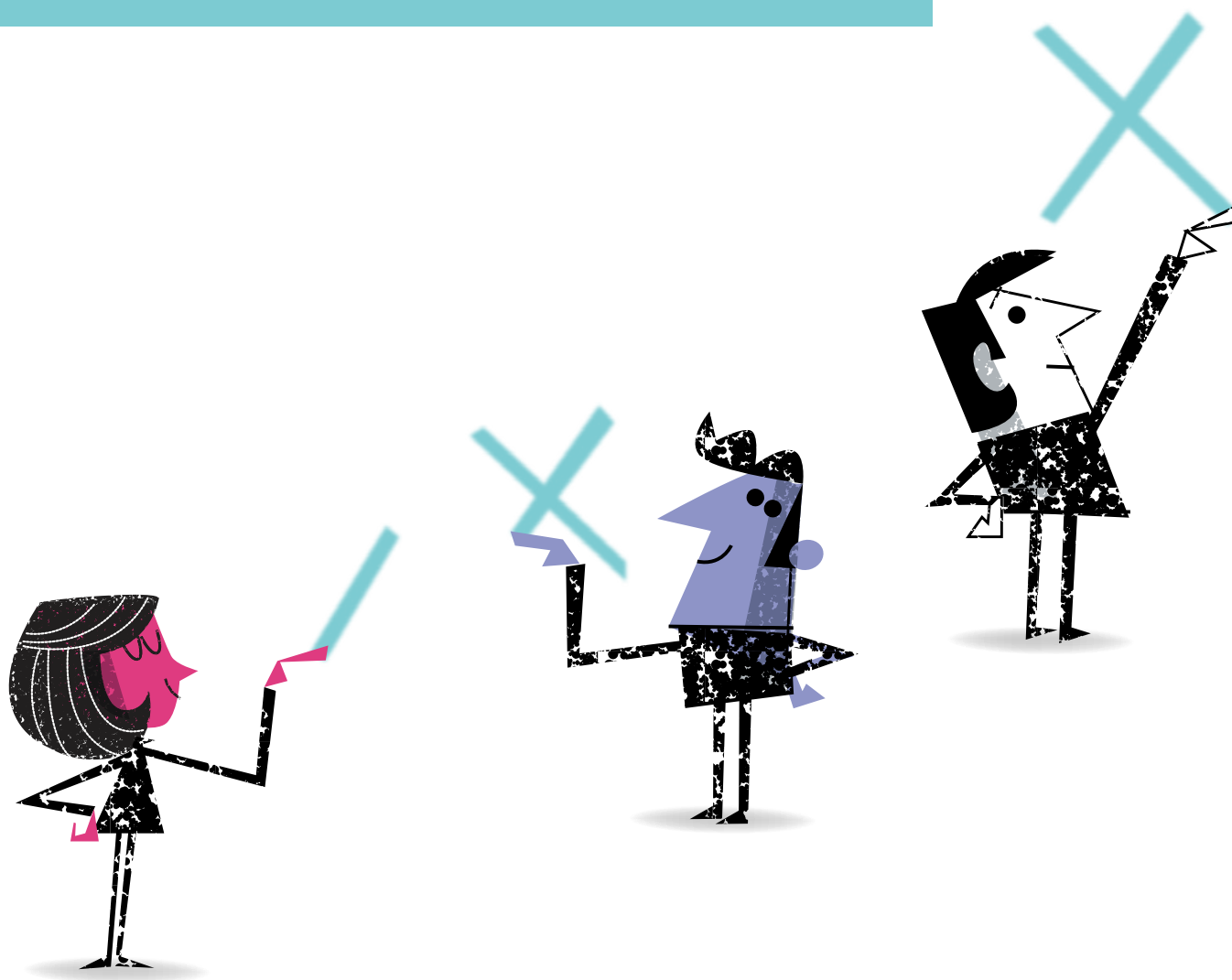
Does the administration and/or format of the questionnaire need some adjustment for your sample? These are all questions to consider when administering a questionnaire.

Trialling your questionnaire

If you have made changes to a questionnaire to suit your school's specific needs or you are unsure of what sort of response you might receive from issuing a particular questionnaire, you might consider trialling it with a small group of individuals. Your colleagues or a small 'test' sample might give you open and constructive feedback before releasing your questionnaire to your full sample. You can use the opportunity to gauge first impressions, types of response to particular questions and how you might go about analysing the results.

NEXT STEPS

- You are now ready to carry out your questionnaire!
- When you have administered your questionnaire you might be interested in examining the results! Please read Part 2 of the guide for advice on how you might want to analyse the questionnaire results and plan what to do next.



Part 2: Analysing the results

Even before carrying out a survey or administering a particular tool, it is generally a good idea to roughly consider the task of analysing the results. For example, who is able to do this? What are the plans for summarising the numbered and worded responses? Would you need responses to be grouped in particular ways?

There are three main stages to analysing data:²

➔ **Stage 1: Preparing and storing the data**

➔ **Stage 2: Displaying and describing the data**

➔ **Stage 3: Analysing and interpreting the data**

Stage 1: Preparing and storing the data

➔ One of the most important considerations here is where and how your data will be stored, and who will have access. Depending on the type of questionnaire used, you will have to think about where the data is going to sit, who will see it and in what form, particularly if respondents are identifiable from their answers. Do consider carefully respondents' anonymity (especially if this has been promised in your questionnaire) and restrict access to the data accordingly. It is best to password-protect your data (e.g. in spreadsheets or databases) and follow rules and guidance around data protection and Freedom of Information.

➔ If your questionnaire is being administered on paper and you need a way of summarising the data, you will probably need to enter the data electronically into a spreadsheet or grid of some description. If you are using software such as SurveyMonkey, the facility to tally the results, calculate counts and percentages and display the results will probably be done automatically. Depending on how you plan to use the data, you will probably still need to extract the results to make further comparisons or explore the data in more detail at some point.



- You may need to prepare a grid or spreadsheet to store entries from your questionnaire or tool. You could set up a template in Excel so responses can be input into relevant sections and calculations carried out.
- When you are setting up your grid, it may be necessary to give each of your respondents a unique reference (e.g. a number such as 101, 102, etc.). This is particularly useful if you end up with multiple responses per person and you want to group the responses by person or at least have a way of counting up the individuals who responded rather than the number of responses.

Also, you may want to match up responses from different individuals, e.g. parents and their children; teachers and their class's pupils. If you have a way of linking a parent's response to his or her son or daughter, you could give each 'family' its own number which can be matched up later on. This is provided the questionnaires are not completely anonymous of course.

Using number identifiers also helps to protect anonymity of respondents. Instead of using names, you can use numbers to refer to particular sets of answers, particularly if you have to discuss results with others.

- An example grid is provided below.

This could be a questionnaire asking about attitudes to reading, for example. The grid below could be set up to store data filled out by pupils.

Respondent unique ID (for pupils)	Pupil-parent identifier	1. What is your opinion on ... (1 – Strongly agree to 5 – Strongly disagree)	2. How would you rate ... (1 – Poor to 5 – Excellent)	3. How often do you ... (5 days a week to 1 day a week)
10001	200	5	1	3
10002	300	3	5	2
10003	300	1	2	3

Then, if you gave a similar questionnaire to the parents of the same pupils, you would be in a position to compare responses between parents and their children. You may have a pupil-parent or matching identifier to pair up parents with their children, and indeed siblings if the questionnaire goes out to multiple age groups. As an example we have responses from parents below:

Respondent unique ID (for parents)	Pupil-parent identifier	1. What is your opinion on ... (1 – Strongly agree to 5 – Strongly disagree)	2. How would you rate ... (1 – Poor to 5 – Excellent)	3. How often do you ... (5 days a week to 1 day a week)
20001	200	1	1	5
20002	300	2	3	2
20003	500	3	3	5

Here respondent 10001 is marked as a child of respondent 20001 who may be the parent or primary care-giver. Respondents 10002 and 10003 may be siblings and have parent 20002.

Stage 2: Describing and displaying the data

Think about how you want to present the data

→ Here, and hopefully quite early on, you will consider how to describe the data you have collected. Sometimes you might not know exactly how you want to present your data until you see it but having a rough idea in the beginning helps. Once you have your data in a spreadsheet (or maybe even before), you might consider:

- Do you want to present simple counts and proportions, or percentages of responses?
- Do you need to group responses by a particular criterion, e.g. boys and girls, age groups, classes, attainment level?
- Would you look towards comparing responses to one question and how those same respondents answered another question?
- For example, comparing students who responded to a question about how often they read books at home with how much access they have to books, library resources, borrowing from friends, etc.

knowing the ranges and how the numbers were distributed may give further insight into the types of response.

Account for missing data

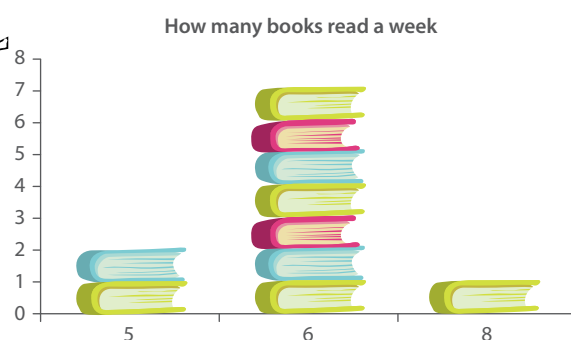
→ There are other considerations too. As with most questionnaires, you will probably come across missing data where one respondent has answered question 1 but skipped question 2. You might want to check if respondents across the board seem to be skipping some questions in particular. Again, knowing the averages of particular questions may help, but knowing how many respondents skipped the question might be useful to compare how many individual or unique responses you actually ended up with for that question. If there are two groups for example, with each group made up of ten respondents; in one group, say two people answered '10' while eight others left the question blank, if you did not count the 'missing' answers the average would be 10. In the other, ten people may have answered '1', in which case the average would also be 10 but with all respondents filling in an answer. You could question the comparatively high level of missing data in the first group; might there be particular reasons for this?

Consider distribution of data

→ Besides summary counts and proportions, you might also consider looking at distributions of data. So for example, the 'shape' of responses.

To the right, an example is shown where the average number of books that respondents said they read per week comes to 6, but look at the difference in distribution among the two groups. In the first chart, the number ranges from 2 to 10 whereas on the second chart, the number of books ranges from 5 to 8. So firstly, you might ask about the difference in minimum and maximum numbers of books read among the two groups. Secondly, you might notice the overall shape of the distributions. The one on the top is slightly skewed to the right. Are there differences in the composition of respondents in each group?

These are just a couple of questions (and quite an extreme example perhaps!) but these are the sorts of things you might need to consider. In the groups illustrated, knowing the average is 6 is helpful but



Consider more complex analysis of statistics

→ Besides counts and percentages, you might want to present standard deviations (to give an indication of the variation in your data, or how it is 'dispersed'). If you have responses from two or more different groups, you could do a 'chi-square' test to see if the differences are significant, or you might choose to present confidence intervals for your averages, etc. It is also worth considering how you will present these results and explain them to different types of audience.

Consider coding open-ended responses

→ Open-ended questions: how might you deal with these? If you have a small number of questionnaires, you might be able to read each one and interpret the results individually. With a larger number, you may want to 'code' your responses. This again would depend on the purpose of the questionnaire and what the responses are about. Also, how would grouping the data help you to interpret the results? For example, say we asked parents to describe the experiences of getting their child to read at home and we received these responses:

Respondent 1: *My daughter loves to read. She does it without prompting.*

Respondent 2: *Getting my daughter to read is a struggle.*

If your aim is to see if responses were positively or negatively disposed towards reading at home, you might code Respondent 1's answer as 'positive' and Respondent 2's as 'negative'. Again, this is a rather simplistic example and the categories are not very varied, but it illustrates the meaning of coding.

Consider asking someone to help with coding responses so you can compare the groups you have allocated. (Of course, this depends on the confidentiality of the data.) This may help to avoid possible biases or assumptions being applied to the data and help to generate discussion on the types of response.

Generating discussion and further questioning are probably some of the most important goals in carrying out a questionnaire of any description.



Stage 3: Analysing and interpreting the data

Compare statistics and make connections

→ After getting some summary statistics and various graphs, this is the point at which you might compare the different statistics, and perhaps particular groups of data, and try to make connections between response types.

Participant checking

→ It is important to consider the audience(s) for your results. You may choose to present summaries of the data to your respondents (in an anonymous way and protecting confidentiality). You could then discuss the results together in an attempt to interpret the responses and draw some tentative conclusions. Presenting (summarised and anonymised) results back to your respondents is called 'participant checking' and is a good way to try and increase the rigour of your research. You may also choose to present your results to the teachers in your school, and perhaps at an overview level to your Senior Management Team and governors. You would probably need to present the same results in a completely different way to your pupils. Again, this depends entirely on the purpose of your questionnaire or tool.

Consider the implications of the results and next steps

→ You may want to link responses to a particular questionnaire with other questionnaires issued in the future, or compare responses with results from a variety of different tools and instruments in order to arrive at a more complete 'picture' of what might be happening. For example, you might be asked to research Year 5 and their attainment in English. You might look at your pupils' attainment in English (and their characteristics) and hypothesise that reading at home might be an issue for some pupils. You might then administer a questionnaire about reading habits to your Year 5 class, and then perhaps explore their attainment in other subjects to try and gauge if any particular groups stand out. Again, this is just an example; there are usually more factors to consider, such as the quality of teaching and the home environment.

Endnotes

- 1 Munn, P. and Drever, E. (1996) *Using Questionnaires in Small-Scale Research: A Teacher's Guide*. The Scottish Council for Research in Education
- 2 Munn, P. and Drever, E. (1996) *Using Questionnaires in Small-Scale Research: A Teacher's Guide*. The Scottish Council for Research in Education
- 3 Munn, P. and Drever, E. (1996) *Using Questionnaires in Small-Scale Research: A Teacher's Guide*. The Scottish Council for Research in Education

“Beware of being convinced that you have the truth. All research is fallible and at best you have a glimpse of the way things are. Most research leaves you feeling that you need to know more and can raise new areas that need investigation. We do not say this to put you off the whole business of doing research. On the contrary, we hope that research will be an enjoyable, interesting and stimulating activity that will whet your appetite for more. Its ultimate justification is that it leads to school improvement and professional development.”

Pamela Munn and Eric Drever

TOP TIPS

If you get lost, keep going back to why the questionnaire was administered in the first place.

What sort of questions were you trying to answer using the questionnaire/tool?

What are some of the broader implications of using a questionnaire of this kind? How will it be useful?

How much detail do you need to see in the data?

What kinds of interpretations can you draw from the data?

Who are the main types of audience for the results?

Does each type of audience need the data displayed differently?

How will the results be communicated?

What are the next steps after the data has been analysed, displayed and communicated?

