

The Nominal Group Technique – a practical guide for facilitators

Project team:
Tünde Varga-Atkins
Nick Bunyan
Ray Fewtrell
Jaye McIsaac
University of Liverpool

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Contact: Tünde Varga-Atkins, eLearning Unit, University of Liverpool, tva@liv.ac.uk

Contents

The purpose of the guide	3
Guide structure	
Introduction	4
What is the technique?	4
Benefits of using the Nominal Group Technique	4
In what context is the Nominal Group technique useful?	
Our context: a session on student input into curriculum review	
Practical considerations and resources	
Setting the question	
Stages of the Nominal Group Technique	
Introduction by facilitator (10 mins)	
Stage I- Individual responses (10 + 15 mins)	
Stage 2 - Clarification and consolidation of responses (30 mins)	
Stage 3 - Ranking responses (10-15 mins)	
If you have more than one group	
Analysis and reporting	
What is reported?	10
Process of analysis and reporting	10
Notes on our adaptation of the Nominal Group Technique	
And finally	
References	
Further literature on the Nominal Group Technique	

The purpose of this guide

This guide is one of the outcomes of the ELESIG Small Grants Scheme project entitled: "Using the nominal group technique with clickers to research student experiences of e-learning". It aims to provide information on a research or evaluation method called the 'Nominal Group Technique', which will enable facilitators of student feedback to decide whether it is an appropriate method for them to use as well as give guidance for those planning to facilitate such a session. It is worth noting that this is a practical guide written for people to try the method in the context of evaluating learner experiences with learning (whether it is for the purposes of curriculum review, module evaluations or research on a particular teaching approach). This guide is complemented by a more detailed account on the project's team experiences with the method, its benefits and challenges; this is the Project Report which also includes potential uses of technology to make the process more efficient (see reference Varga-Atkins et al 2011). However, this practical guide does not presume the availability of technology for running the session (so there is no need for clickers or personal response systems in this case).

Please note that this practical guide presents one variant of the technique, acknowledging that there are a number of variants in the way the different stages of the Nominal Group session can be conducted (see the list in Further Literature section). This is not to say that this guide should be seen as a definitive model, as there are a number of interpretations and modifications that various researchers have used to adopt their technique to suit their context. Another way we have diverged from presenting the original technique, as developed by Delbecq in 1975, is with regards to the use of language. We have given our own labels and names to the stages of the process, which better fits our current (linguistic and social) contexts.

And finally, we would like to recommend that you either experience the technique firsthand as a participant, or better still, be trained as a facilitator, before facilitating a nominal group session for the first time.

Guide structure

The practical guide is structured to include:

- **Introduction** a brief introduction as to the method, its benefits and challenges and its applicability in different contexts.
- **Practical considerations** the resources needed for running a session.
- The stages of the Nominal Group Technique.
- Advice on analysis and reporting session outcomes.

Introduction

What is the technique?

The Nominal Group technique is a structured face-to-face group session with the purpose of achieving group consensus and action planning on a chosen topic. It was originally developed by Delbecq et al (1975). It is linked to the Delphi technique (also developed by Delbecq et al 1975), except that the latter is conducted at a distance with participants using questionnaires.

The term, 'nominal group', means that the session is only nominally, 'in name', a group, whilst it is relying on *individual* input in a group environment; the interactions between individuals during the sessions are actively discouraged (O'Neil and Jackson 1983).

The stages of the nominal group session are as follows:

- **Introduction** facilitator introduces the purpose of the session, the rules and structure.
- **Stage I: individual responses** responses are collected on the chosen topic in a silent generation phase.
- Stage 2: clarification and consolidation responses are read out and clarified one by one by participants, then similar/same items are merged under one response.
- **Stage 3: ranking responses** participants rank their top five responses individually in order of importance.
- Ranking results are calculated and shared with the group.
- Closure and thanks.

Benefits of using the Nominal Group Technique

The benefits and challenges of the Nominal Group Technique include:

Benefits for group dynamics and participants:

- Gives an equal voice to each participant by encouraging individual input; especially useful for engaging quiet and shy group members.
- Reduces personality effects, which is especially useful if the consulted group
 has members with different power structures or 'entrenched' positions on a
 given topic (Delbecq 1975, O'Neil and Jackson 1983).

Benefits for the facilitator:

- The results are immediately available at the end of the session.
- Cost-effectiveness there is no need for transcription and analysis.

Benefits for the stakeholders to whom findings are reported:

- Nominal group sessions are said to generate more ideas in terms of volume than other face-to-face group approaches, e.g. focus groups (Delbecq 1975; O'Neil and Jackson 1983)
- Results immediately offer action planning in the form of a prioritised list.
- Results can easily be compared with one another if sessions are run with different kinds of stakeholder groups (in volume or with different kinds of groups e.g. with students, staff and other subject experts).
- Combines qualitative and quantitative methods, so can be attractive to stakeholders who quantitative results.

Please see the Project Report for more detail on benefits.

In what context is the Nominal Group technique useful?

The table below summarises in what context(s) the Nominal Group Technique is useful to use.

Context	NGT is more useful for:	NGT is less useful for:
Research	Evaluation and decision-making	Researching general learner
purpose		experiences
Topic focus	When you have one single topic to	When you have more topics or
	explore	a complex topic to explore
Likely research	"What changes would you make to	"What are your experiences
questions	your programme/curriculum?"	with your programme so far?"
	"What would help you improve the	"What are your experiences
	quality of feedback on this course?"	with the quality of feedback on
		this course?"
Participants	Participants with different power	If power relations are not an
	relations within the same group; when	issue in the group.
	consulting various stakeholders groups	
	within same research (e.g. from	
	students through to experts).	

Table I The usefulness of the Nominal Group Technique under different research and evaluation contexts

Our context: a session on student input into curriculum review

The example session in this guide is conducted on finding out from students 'What changes would you make to the curriculum?' Although this is the example we give here, it is easy to see the transferability of the method to similar curriculum planning, design, or evaluation contexts, or indeed any other context requiring action planning or decision-making with regards to researching or evaluating learning experiences.

Practical considerations and resources

When you plan a session, you will need to consider:

- The likely timing and duration of the session: time availability may restrict the breadth of activity. For instance, whilst a 'normal' Nominal Group session can last up to 2-2.5 hours, in reality, you may only have participants' time for 1-1.5 hours.
- Whether you need ethical permission and informed consent for the study.
- Whether to audio record the session, or not.
- The participant numbers, and so, the number of groups required. E.g. if you have 24 participants, and as the ideal group size is 8-10, you may want to form three sub-groups.
- The number of facilitators required is the same as the number of groups.
- It is also helpful to set up the timelines for reporting back to participants and stakeholders.

Resources needed for conducting the session:

- One or more participant groups (ideal group size 8-10).
- Appropriate venue that accommodates all groups, if relevant.
- One or two well-written, focused questions.
- At least one facilitator per group.
- Participant consent forms (if relevant).
- Participant sheet to collect email addresses (for sending draft report to).
- Large post-it notes (stage I) 3 per student.
- Pens for each student.
- Board/Flipchart to display responses (+ bluetack to pin up).
- Board pens (stage 2).
- Individual voting sheets.
- Voting calculation sheet, calculator.
- Final voting sheet (stage 3).
- Audio recorder for the session (optional).

Setting the question

Setting the question (or questions) is crucial for the success of the session (Delbecq 1975): the question needs to be well focused and easily understandable by participants.

In this guide, the stages of the technique will be introduced through a particular example, asking students (or any other groups involved in curriculum development (e.g. academic programme teams, employers of the graduates in the field etc.) to answer the question "What changes would you make to the curriculum?" As mentioned above, the technique can be used in other contexts and disciplines as well. Examples include any context which needs decision-making and action planning (see the Project Report for more details).

You can explore up to two questions in one session, e.g. "What are the strengths of the current curriculum?" and "What changes would you make to your curriculum?"

Stages of the Nominal Group Technique

Introduction by facilitator (10 mins)¹

The facilitator explains the context of the session (e.g. reasons for curriculum review and why participants are asked for feedback) and lets participants know what will happen to the feedback (who it is reported to etc.), including asking for consent from participants (and if relevant, asks permission for the session to be audio-recorded). The facilitator then explains the Nominal Group Technique process. It is very important that participants are clear about the stages of the process and the reasons for using this technique, and not others (e.g. "We are using this technique because it has been shown to allow everyone to equally contribute to feedback.") This introductory part could also introduce to participants various aspects of the curriculum that they may comment on (e.g. content, delivery methods, assessment).

Resources (pens, etc.) are handed out to students.

Stage I- Individual responses (10 + 15 = 25 mins)

Participants are then asked to write up to 3 responses, one each on a different post-it note, in response to the question: "What changes would you make to the curriculum?" (With a focus on what helps your learning, not necessarily what you like to do.) Please emphasise to participants that this is a silent period and that you are interested in their individual responses, not what the group may think on this question.

Other instructions: one item per post-it note (so that we can group them later); and it is okay to write less than 3 notes.



Figure I, Stage I – individual responses to the question: 'What changes would you make to your curriculum?' using post-it notes

Participants are then asked to read out their first response to the question, taking turns until everyone has read their first response. The facilitator puts up and numbers each response (1,2,3...). Then the first participant reads their second response and so on, until all responses are put on the board for everyone to see (see Figure 1) (students may or may not be asked to elicit responses at this stage).

¹ Timings are only approximate and will depend on the decisions made by the facilitator.

If there are two questions, participants are asked to complete two times 3 post-it notes and the same 'reading out, numbering and putting up' responses stage is repeated for sharing responses to question 2.

Stage 2 - Clarification and consolidation of responses (30 mins)

The facilitator asks the students to look at all the numbered responses for the question and identify those that are the same by editing the responses on the board. Items that overlap can be combined or duplicates deleted. If merging one or more items, a new numbered item can be created that best conveys the intentions of all the merged responses. For instance, if participants decide that responses 7 and 13 are about the same thing, they can recreate a response text and number it a previously unallocated number (e.g. number 27, see Figure 2). It is important that the facilitator does not evaluate the items at this stage.



Figure 2, Stage 2 – consolidation of items: e.g. a new item is created on 'getting individual constructive feedback' under the item number 27.

The result is a list of numbered responses (which may not now be sequential as some responses were merged with others).

Stage 3 - Ranking responses (10-15 mins)

Participants are given a ranking sheet to rank the **FIVE** responses/items most important to them for the question. It is important that they reflect their personal feelings and beliefs, rather than thinking about how other participants would vote. The most important response gets 5 votes, the second most important 4 votes, then 3, 2 and 1 respectively.



Figure 3, Stage 3 – Ranking Responses: each participant gets a voting sheet to identify their top five most important responses

The voting sheets are collected from each participant and a final order of response rank for the question is calculated by the facilitator. Ranked results are shared with participants.



Figure 4 Stage 3 – The ranked results in order of importance (in the left column, the top five represented with pink Roman numerals I, II, III, IV and V, followed by down-and-across with the rest of responses)

Some adaptations of the Nominal Group Technique follow this stage with an open discussion on the issues raised.

Participants are then thanked for their engagement, and reporting details, timelines are communicated again, especially if participants are asked to agree draft report before it is circulated to the commissioners of the research.

If you have more than one group

If there are participants taking part in more than one groups, then the above process is carried out to the ranking results stage (stages I-3). Then once each group arrived at their own ranked lists, stages 2 and 3 are repeated for all the groups. When each sub-group has arrives at their 5 top ranked responses, the groups come together, consolidate the items into one list, then *all* students rank the top five responses in order of importance.

Analysis and reporting

What is reported?

Applications of the Nominal Group Technique may vary as to what is reported to the stakeholder group who commissioned the research. Some may report only the top five responses. Others report the overall ranked list. In particular, Davis et al (1998) calls attention for the danger of reporting only the top five responses. Our preference is also to report all identified items in order of ranking.

Process of analysis and reporting

Analysis:

- The ranked list and post-it notes are collated electronically in the form of a Word document.
- Consult facilitator session notes or audio recording (if relevant) to explain aspects of the discussion that need further clarification.

Reporting:

- A draft report is prepared with the ranked list and responses, and if relevant, will include response clarifications.
- The draft report is circulated to participants for their agreement (ideally within a week of the session).
- Participant feedback on the draft report is then incorporated into the final report.
- The final report is circulated to the stakeholders who commissioned the session.

Notes on our adaptation of the Nominal Group Technique

Literature identifies a number of challenges to the technique (e.g. Chapple and Murphy 1996). In this guide we have described our adaptation of the 'original' technique to attempt to minimise these challenges. For instance, we shortened the session as our participants are usually students who volunteer their time and this means that only up to 1-1.5 hours is available for such sessions.

Also, one of the main characteristics of the technique is its discouragement of discussion of the individual responses that participants make in order to reduce bias. In our experience, power relations within the group is not a dominant issue with student groups, so we have allowed for more group discussion to emerge within the sessions to clarify suggestions made by participants. For instance, if students recommended 'providing more timely' feedback as one of the suggestions; in Stage I and in Stage 2, the consolidation stage we have allowed for some group clarification on this (e.g. what exactly students mean by timely feedback and what their current experiences are that do allow/not allow for this). For more detail on these potential variations, please consult the final Project Report (Varga-Atkins et al 2011).

And finally...

We hope that this guide has given you a taster of the technique and enough guidance to be able to try it out. Overleaf is a list of further literature on the technique itself.

References

Chapple, M., & **Murphy**, R. (1996). The Nominal Group Technique: extending the evaluation of students' teaching and learning experiences. Assessment & Evaluation in Higher Education, 21(2), 147-160. http://dx.doi.org/10.1080/0260293960210204

Davis, D., **Rhodes**, R., & **Baker**, A. (1998). Curriculum revision: Reaching faculty consensus through the nominal group technique - ProQuest. *Journal of Nursing Education*, 37(7), 326-328.

Delbecq, A. (1975). Group techniques for program planning: a guide to nominal group and Delphi processes. Glenview III.: Scott Foresman.

O'Neil, M. J., & **Jackson**, L. (1983). Nominal Group Technique: A process for initiating curriculum development in higher education. *Studies in Higher Education*, 8, 129-138. http://dx.doi.org/10.1080/03075078312331378994

Varga-Atkins, T. with contributions from Bunyan, N; McIsaac, J and Fewtrell, R. (2011) Using the nominal group technique with clickers to research student experiences of elearning. Project Report written for the ELESIG Small Grants Scheme. Liverpool: University of Liverpool. Available from slideshare.net at http://slidesha.re/sc8gwT

Further literature on the Nominal Group Technique

Abdullah, M. M. B., & **Islam**, R. (2011). Nominal Group Technique and its Applications in Managing Quality in Higher Education. Pak. *J. Commer. Soc. Sci*, 5(1), 81–99

Crenshaw, K., Shewchuk, R. M., Qu, H., Staton, L. J., Bigby, J. A., Houston, T. K., Allison, J., et al. (2011). What Should We Include in a Cultural Competence Curriculum? An Emerging Formative Evaluation Process to Foster Curriculum Development. *Academic Medicine*, 86(3), 333-341. http://dx.doi.org/10.1097/ACM.0b013e3182087314

Dobbie, A., **Rhodes**, M., **Tysinger**, J. W., & **Freeman**, J. (2004). Using a modified nominal group technique as a curriculum evaluation tool. *Family Medicine*, Kansas City, 36, 402–406.

Lomax, P., & **McLeman**, P. (1984). The uses and abuses of nominal group technique in polytechnic course evaluation. *Studies in Higher Education*, 9(2), 183-190. http://dx.doi.org/10.1080/03075078412331378834

McCourt, C. (2001). Evaluation of a problem-based curriculum in midwifery. *Midwifery*, 17(4), 323-331. http://dx.doi.org/10.1054/midw.2001.0276

Williams, P., White, N., Klem, R., Wilson, S., & Bartholomew, P. (2006). Clinical education and training: Using the nominal group technique in research with radiographers to identify factors affecting quality and capacity. *Radiography*, 12(3), 215–224.

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Contact: Tünde Varga-Atkins,
eLearning Unit,
University of Liverpool,
tva@liv.ac.uk