Lesson Element

Neville Moray Procedure

Instructions and answers for teachers

These instructions should accompany the OCR resource ‘Neville Moray Procedure’ activity which supports OCR AS and A Level Psychology.

The Activity:
The aim of this lesson element is to provide an activity that will allow students to replicate parts of Moray’s first two experiments.

Students should be able to:
• Explain and predict the results of Moray’s first experiment into dichotic listening.
• Identify how the use of a person’s name can direct their attention.

This activity offers an opportunity for English skills development.

Associated materials:
‘Neville Moray Procedure’ Lesson Element learner activity sheet.
Suggestions for delivery

Experiment 1
The activity is designed for learners in groups of three. It can either be conducted with a single group at the front of the class as a demonstration, or with multiple groups around the classroom (although this can get noisy!)

Instructions are provided for learners however the teacher should help to ensure that all group members are clear on what to do. After giving learners time to read instructions, the teacher should clarify points if necessary.

Two members of the group are researchers. One is a participant. Each researcher will speak into the either the participant’s left or right ear simultaneously. The participant has to shadow (repeat what is being said) from what they hear in their right ear.

Afterwards, participants have to recognise words from a list they heard in either ear. Using the scoring sheet, it should be clear to participants that they primarily recognise words from the shadowed passage (right ear).

This is a good opportunity to invite discussion into why this is, and to draw a conclusion from the first experiment.

Experiment 2
Again learners get into groups of three (two researchers and one participant).

In this experiment there are two conditions (Condition A and Condition B). Learners should be unaware that there are two conditions.

It is recommended that the teacher assigns the conditions by splitting the classroom in half and making the left side condition A and the right side condition B. Appropriate handouts should be given to each condition.

Condition A
Participants are instructed that they will be asked to change the ear that they are shadowing.

The researchers should begin the dichotic listening task by reading different passages out loud into the participants left and right ears. Half way through the task, the researcher speaking into the left ear should instruct the participant to change ear.

The only result recorded is whether the participant followed the instruction to change ear or not.
**Condition B**

Participants are instructed that they will be asked to change the ear that they are shadowing.

The researchers should begin the dichotic listening task by reading different passages out loud into the participants left and right ears. Half way through the task, the researcher speaking into the left ear should instruct the participant by name to change ear.

The only result recorded is whether the participant followed the instruction to change ear or not.

**Conclusion**

Afterwards the teacher should collate the results from all of the groups in the classroom. A table like the following could be drawn on the board.

<table>
<thead>
<tr>
<th>Group</th>
<th>Condition A Instructions without name</th>
<th>Group</th>
<th>Condition B Instructions with name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

The results should show that participants in condition B are more likely to follow instructions than condition A. This is a good opportunity to invite discussion and a starting point to begin examining the method in the Moray study.

**Introduction to the task**

**Summary and background**

Moray’s study investigated whether a person’s attention can be diverted through the use of hearing their own name, even when concentrating on another task (the cocktail party effect). Participants completed three experiments in relation to this.

In the first experiment participants listened to both a piece of prose and a word list. Attention was focused on one message by asking participants to shadow (repeat what is being said out loud) on the piece of prose.

In the second experiment, participants listened to two different pieces of prose simultaneously. Once again they were asked to shadow one of the messages. The rejected (non shadowed) message may have included instructions for the participant. In some of the conditions, participants were either instructed by name to change ear or stop.
In the third experiment, participants listened to two different pieces of prose (in each ear) which had digits randomly inserted into them. Participants once again shadowed one of the messages. Participants had to recall information from the shadowed message OR to recall as many of the digits they heard in total.

The main finding in Moray’s study was that it is only hearing your own name that is important enough to focus your attention, when even you are focused on something else.

**Learner misconceptions**

It should be made clear that even though learners are replicating parts of Moray’s experiments in the activity, the actual experiments in the study are more complex.

Learners should also be clear on the difference between the shadowed message and the rejected message and emphasis should be placed on how Moray made the participant reject one message but focus on another.

**Resource preparation**

Teachers should bear in mind how many groups there will be in the lesson and have all hand outs printed out for the lesson.

The original article for this study can be difficult for learners to understand; alternatives such as PowerPoint presentations and textbooks may be more helpful to learners. Possible learner questions can include:

Q: How similar were Moray’s tasks to the ones we’ve done in this activity?

A: Moray conducted three different experiments while we’ve only conducted two. In Moray’s study, he used headphones that had different audio outputs while we’ve used people.

Q: Why did Moray conduct three experiments?

A: Experiment 1 was to establish that people find it very difficult to focus on a message they are not paying attention to. Experiment 3 found that even when told to concentrate on both messages they still find it difficult recall information in the non-shadowed message. Experiment 2 found it is only a participant’s name that is strong enough to make a participant focus on the non-shadowed message and break the attentional barrier.

Remember, as with all of the core studies, learners should know the background, method, results and conclusions of the Moray study.

Comparisons should be made with Simons and Chabris’ visual inattention study and Moray’s study should also be related to the key theme of attention and the area of cognitive psychology.
Finally, strengths and limitations of the research method and data should be discussed, as should validity, ethics, reliability, sampling bias and ethnocentrism.

These elements of the Moray study should be covered in further lessons.