

Examiner comments

Theory of knowledge presentation exemplar 1

Real life situation: The Stanford Prison Experiment

Knowledge question: Is experimentation a good method of investigation in the human sciences?

This presentation is given by a group of three students.

START (0'00"). The first member of the group spends nearly three minutes giving a general description of the chosen real-life situation including the aims and methods of the experiment carried out by Dr Phil Zimbardo at Stanford University in 1971. This is followed by a clear statement of the knowledge question (2'55"). The articulation between the real-life situation and the knowledge question is good—the prison experiment is a limited event that did indeed take place, and it has characteristics that enable it to function as a good example for the exploration of the knowledge question. The knowledge question itself is well formulated: it is general but precise, and uses the language of TOK.

The second member of the group (3'00") expands the knowledge question by introducing a number of concepts that are related to the idea of an experiment and other processes associated with scientific method. He strives to establish a difference between what he calls the "internal" and the "external" (3'55"). He experiences some difficulties in articulating the point that (private, personal) mental states of other people are not directly accessible and may be misunderstood when converted into (public, shared) language. In attempting to show the importance of this distinction, he introduces a different real-life situation—the Milgram experiment on obedience to authority (4'17").

The third group member commences his contribution (5'53") by re-stating the chief intention of employing experiments in the human sciences, namely to bring a systematic method of investigation to the task. This reiteration and amplification of a previously made point is good presentation technique. He then proceeds to list and explain a number of problems that arise in the human sciences when experiments are carried out. There is the observer effect (5'52") concerned with participants under study being aware of their status as subjects, and there is the danger of investigators asking loaded questions (6'40"), leading to biased data. There are ethical issues (7'01")—illustrated first by a review of the Milgram experiment—arising from the generation of participant stress and invasion of privacy. The point is also made that social pressure can make it difficult to withdraw from an experiment, even if the original agreement to participate was voluntary. There are the problems of looking for patterns in the human sciences (8'25"), and worries about inductive conclusions drawn from limited samples.

The student then talks about "the butterfly effect" (8'50"), but there appears to be some confusion about this concept, an impression reinforced by the unsatisfactory way it is illustrated with a hypothetical scenario of "slapping". The difficulties of identifying and controlling variables (9'47") are mentioned, and a comparison made with natural sciences (enzyme action, photosynthesis). Finally some comments are offered on measurements (10'49"), but the point is hard to follow.

The first group member then returns (11'33") and starts by making some general observations on the nature of the human sciences (11'40"), specifically on trends, induction and generalization. He makes a comparison with natural sciences, and makes a brief error with the scenario of lime water and oxygen (12'26")—should have been carbon dioxide. [NB This is the sort of mistake that often can go unnoticed in a live performance, especially as it is incidental to the thrust of the presentation. However, in the context of a recording, such things can gain prominence. This is part of the difficulty of exemplifying a task intended for the local classroom with a recording made available to everyone.] He then (unfortunately) returns to the unhelpful slapping example. Methods of data collection (13'00"), to do with the use of questionnaires and the honesty of responses to them, are also mentioned. [NB It is at this stage that the students appear to be trading their real-life situation for a more general and abstract overview of the human sciences. This is a common problem in TOK presentations, where the situation is little more than an excuse for the presentation, but then the narrative arc is restored.]

The student flags a decisive return to the Stanford Prison Experiment (13'23") and applies elements of the previous analysis to it. He expands upon his earlier comment on Zimbardo's ambiguous role (13'37") in the investigation and the intrusion of emotion into the investigator's thinking. He shows how the control of variables in the experiment (14'17")—sample sizes, knowledge of background of participants—could not have been total. He puts the point about a moral dimension (14'41") into the context of the inmates, and highlights the danger of an assumption of universality (15'14") stemming from the outcomes of the experiment.

Having identified the problems, he then turns to possible solutions (15'35") to the more general problems. Perhaps investigators could "habituate" those under investigation (15'40") to their presence by embedding themselves in the situation or culture. There could be a "double blind experiment" (16'20") with a hidden camera. This seems to stem from a misunderstanding of the term. The student rounds up by talking about the importance of "experiments in the modern world" (16'30"), refers to Milgram and obedience once again, and suggests that experiments in the human sciences have made significant contributions to knowledge—detecting trends (17'20") in psychology and economics—but examples are not offered.

Finally, the presentation returns to the knowledge question (17'32"). The group's answer is yes, on balance, experimentation is a good method of investigation in the human sciences. END (18'20").

This presentation fully meets the "typical characteristics" description given at level 4 of the presentation assessment instrument:

The presentation is focused on a knowledge question that is *connected* to a *specified* real-life situation. The knowledge question is *explored* in the context of the real-life situation, using *clear* arguments, with *acknowledgment* of *different* perspectives. The outcomes of the analysis are shown to be *significant to the real-life situation*.

The "possible characteristics" at level 4 of "organized", "pertinent", and "coherent" also seem apposite. While not utilizing the full 30 minutes, 18–19 minutes is a reasonable duration for a presentation involving three students (although 15 minutes would probably not be

enough to facilitate the depth of analysis that is sought in a presentation at this level of achievement).

There are some aspects of the level 5 description that are also met: the knowledge question is well-formulated, and it might be argued that the presentation effectively explores it. However, different perspectives on the knowledge question are confined to the conclusion, in which at least one alternative method for investigation is suggested. While the Milgram experiment is cited several times, there is very limited transference of the outcomes of the analysis to other real-life situations. The “possible characteristics” of “sophisticated” and “compelling” seem too strong. On balance, it seems that level 5 has not quite been achieved. Overall, this presentation is awarded a score of 8/10.