

The Child Study Guideline

The Child Study 50%: Length 1500 words

A study of cognitive development and its relationship to classroom learning

This assignment is designed to elicit from students a report which blends a theory-based approach on the one hand together with practical issues concerning the nature of learners, on the other. The Child Study must satisfy the following conditions:

- i. It should be conducted with a child or adolescent who has not yet left school (i.e. minimally, the child will have attained the age of 5 years);
- ii. Students must have the informed consent of the child's/adolescent's caregiver. (Note: A specially prepared permission form must be completed and attached to the Child Study as an aspect of your Child Study submission.)

Select and administer ONE of the following tasks from the work of Jean Piaget and his Genevan school to investigate the cognitive development of a school aged child:

Task 1: Conservation of Substance

Task 2: The Oscillation of a Pendulum

Task 1: Conservation of Substance (*i.e.* Continuous Quantity - Solids)

The conservation of substance tasks is one of the classic Piagetian tasks, designed to reveal whether a young child is using operational or pre-operational thinking. A brief mention of the task appears in the section II, p.96 of Piaget & Inhelder (1969) *The Psychology of the Child* / 兒童心理學, p.74. The basic requirements of task 1 come from Chapter I (pp.3-21 in particular) of one of Piaget's classic works, *The child's construction of quantities: conservation and atomism* (published in French in 1941 and in English in 1974). Bärbel Inhelder is listed as Piaget's co-author. The task they described and administered for that chapter is most suited to younger children. The key is to determine whether the child's understanding of the amount of substance in a clay ball is dependent on the appearance of the actual objects being compared or on deeper logical structures. Your selection of the task and materials should be appropriate for the child you interview.

Task 2: The Oscillation of a Pendulum

Administer the pendulum task from Inhelder & Piaget (1958) to a school-aged child in order to investigate the child's ability to experiment using the crucial strategy "with all other things equal". The task involving the pendulum is much more suitable for more capable children (generally those in upper primary and secondary school years). A brief introduction to the Pendulum task appears on pages 147-148 of Piaget & Inhelder (1969) *The Psychology of the Child* / 兒童心理學, p.110-111. The source for the original Piagetian task is Chapter 4 (pp.67-79) of Inhelder & Piaget (1958) *The growth of logical thinking from childhood to adolescence*. London:

Routledge & Kegan Paul.

The “Conservation of Substance” task and the “The Oscillation of a Pendulum” task, and the interpretation of the results of the administration of such tasks are outlined in a number of original Piagetian sources and are also discussed at length in the secondary literature. You should always use original Piagetian texts (i.e. ones with Piaget as an author) as the primary sources for your investigation. Secondary literature (books, journal articles, WWW pages and theses) should be used to augment this information.

Note: This topic does not require that you assess the exact level of development implied by your subject's behaviour. While the matter of developmental level is naturally of great interest, the main focus of this topic is **your skills in the investigation** of your subject's understanding.

SPECIAL NOTES

The written interview transcript you derive from your study **must** be supported by an audiotape or videotape recording of the interview session itself. You should hold this tape recording as your record of interview until your graded Child Study is returned to you. You should submit **only the typed protocol** for assessment. Colloquial oral Chinese (exactly used by the interviewer and interviewee) instead of written Chinese should be adopted in the Chinese transcript and the protocol. EMI groups should provide the English translation of the actual colloquial language used. If there is any aspect of your interview transcript which the examiner needs to consider, you will be asked to provide the taped record.

Child Study Format and Presentation

You are **required** to adopt the following structure in planning and executing your Child Study, and the submission of your report:

Title Page

Fill in the EPC 1137 Child Study cover sheet available on the Blackboard and sign the declaration of authorship.

Abstract

Provide an abstract of your study (about 100 words) on a separate page. The abstract should summarize the key aspects of the investigation in the style found in appropriate scholarly journals.

Section 1: Theoretical Background

Write an analytic essay which discusses the theoretical issues surrounding your chosen topic. You should deal with the key terms and their definitions, and you should provide a compact theoretical summary of how these terms function within the theory, and what specific matters are relevant to the Child Study you plan to report.

You should focus directly on the topic you have selected, taking care to avoid a 'grand tour' approach to the theory. This section should be based on a wide reading of the theory. Your writing should reveal an understanding of Piaget's theory. You should demonstrate knowledge of the way the theory is currently believed to influence the field of education.

Section 1 should be no more than 500 words in length, and it **must** follow the conventions (A.P.A. referencing style, *etc.*), set down in the HKIED Student Handbook 2010/11, Appendix ix. pp. 280-289.

Section 2: Data Collection

This section (Section 2: Data Collection) must reveal a clear link with Section 1 (Theoretical Background). In other words, the data you collect should be a direct function of the argument you advanced in your analytic essay on the topic you selected.

In a report of about 200 words you should record both the equipment and the procedures by which you collected the data for your child study. In your description you should provide details of the equipment and the investigative procedures you were intending to adopt. Your data collection section should summarize very clearly the key points of the investigative procedures based explicitly on the work of Piaget and his colleagues. You should include at least ONE labelled diagram of the arrangement of the task materials in use to reveal some relevant aspect of your investigation. You are also required to include in this section, one photograph of an important phase of your investigation in which the task materials, the child and the relationship between them are clearly portrayed. Take care to ensure that the child's identity is not revealed. Your report should provide that level of detail sufficient for an independent but informed person to be able to replicate your investigation. Moreover, given that the data collection section reports the steps that you had intended to take in the administration of the tasks, an informed reader should be able to detect in Section 3 any variations or omissions that you actually made.

A note on Piagetian method:

Although you are asked to become familiar with Piaget's investigative method specifically in order to complete the requirements of this Child Study assignment, you should find that it has direct application for use in pre-school, primary and secondary classrooms. While you will find many criticisms of Piaget's method of critical exploration of children's understanding, many undergraduate teacher-education students who have approached using it with open minds show a far greater understanding of its possibilities than many of Piaget's most vocal and famous critics.

In particular Piaget's method does not accept evidence at face value; at every point, the question is something like, 'What is going on in the child's mind?'; 'How much of this does the child really understand?' So in the record of the interview (Section 3, below), the examiner of your Child Study essay will be looking for

evidence, such as the following, to determine how satisfactorily you conducted your investigation.

Some important features are:

- Questioning is supported by appropriate use of concrete objects to provide real-world evidence;
- The interviewer confirms the extent to which the child really understands the problem/question/answer;
- The interviewer searches for reasons and explanations for the child's correct or incorrect answers;
- The child is encouraged to demonstrate understanding by verbal response, by gestures, by demonstrating with the materials;
- The child's names/descriptions for objects are used where technical terms (e.g. rectangle, volume) might cause confusion;
- The child is given every reasonable opportunity to solve the problem or to show understanding;
- The interviewer gives appropriate counter-suggestions to check the strength of the child's knowledge, *etc.*

Given that Piaget required a year of daily practice before interviewers were set to the task of data collection, you are not expected to become an expert overnight. The Bond (1994) paper is designed to inform you about some of the less obvious and less well reported aspects of Piaget's method.

Section 3: Results

Section 3 constitutes a record of your data in some suitable form. It should indicate noteworthy events of the actual investigation and provide a suitable (edited) record of all important aspects of your subject's behaviour. You are strongly advised to use Piaget's system which provides a *protocol* of the edited transcript from the complete investigatory session (both dialogue and actions) involving the child as subject and yourself as interviewer. (About 300 words)

Section 4: Interpretation of Results and Conclusion

Section 4 requires you to use the **theoretical perspective** you have adopted in Section 1 to make some well-formulated assessment of the specific performance you have observed. Specifically, the Piagetian **theoretical perspective** should provide the operational criteria by which your observations will be examined and interpreted. Specifically, accept the theory *on its own terms* and use its criteria to interpret the child's problem solving behaviour. Conclude your interpretation of results by relating it to the broader situation of the child's development, such as their learning capacity at school. (About 500 words)

References

This section should contain complete references for each source actually cited in your Child Study. You are required to use the A.P.A. System (set down in the HKIED Student Handbook 2010/11, Appendix ix. pp. 280-289).

(There is no specified word limit for this section.)

Permission form:

A specially prepared permission form must be completed and attached to the Child Study as an aspect of your Child Study submission. This form can be downloaded from the Assignment section of the Blackboard.

Self evaluation form:

You should complete the self evaluation form available from the Assignment section of the Blackboard, and attach it to your Child Study.

You are strongly advised to keep a back-up copy of your Child Study.