# LEARNING SCIENCES PROGRAM Department of Educational and Counselling Psychology

## COMPREHENSIVE EXAMINATION GUIDELINES

September 12, 2015

## **Objectives**

The Ph.D. Comprehensive Examination is one of the requirements for a doctoral degree in the Learning Sciences program. The overall objective of the Comprehensive examination is to ensure that Ph.D. candidates have sufficient knowledge in their area(s) of study and that they are able to:

- select relevant and current literature(s) to inform their doctoral research
- conduct critical literature reviews
- select relevant and current methodological approaches and describe those approaches
- conduct critical reviews of the various methodologies in their field
- use appropriate academic language to communicate their knowledge and understanding of the empirical literature

The Ph.D. Comprehensive Examination consists of a written and an oral component. These two components serve an important function to certify that students have the ability to (a) critically review the theoretical and empirical literature, (b) recognize gaps in current knowledge, theoretical frameworks, and methods, (c) provide the justification and context for their dissertation research, and (d) write coherently and concisely, using appropriate academic language and conventions to synthesize the reviewed literature and express their ideas.

In addition to this certification function, the examination serves as preparation for the dissertation, preparing doctoral students for their dissertation work by (a) facilitating their development of a solid conceptual base for dissertation research, and (b) ensuring that students' knowledge is sufficiently broad and conceptually structured to provide a foundation for their proposed research and future scholarly activities.

The Ph.D. Comprehensive Examination, therefore, has three specific objectives that assess the breadth and depth of conceptualization of a candidate's knowledge in his or her field(s) of study.

- 1. Assess a candidate's ability to situate the problem(s) being studied in the dissertation research within the larger intellectual and research contexts in the field;
- 2. Assess a candidate's ability to critically evaluate research, review the research literature, and identify gaps or unsolved problems in the field;
- 3. Assess a candidate's ability to effectively communicate and articulate knowledge and research approaches in the field of study through writing and oral discussion.

The comprehensive examination does not explicitly include assessment of knowledge and skill in research design and statistical data analysis.

## **Comprehensive Examination Committee**

Composition. The Comprehensive Examination Committee is comprised of two or three faculty members from the Learning Sciences program, one of whom is the candidate's Ph.D. research supervisor. The same Committee may subsequently serve as the whole or part of the dissertation committee, although this is not a requirement.

Formation. The Committee is formed as follows: The student and supervisor together identify potential committee members. Once agreement is reached, the supervisor invites potential members to serve on the Comprehensive Examination Committee. Once potential members accept the invitation, the supervisor completes the Comprehensive Examination Registration form, informs the Program Director, and files the form with the Program Coordinator.

Articulating comprehensive question. The student will have had opportunities in the doctoral seminar to work towards articulating a coherent, focused and comprehensive question for the examination. Concurrent consultation with the supervisor will help the student to further sharpen the focus of the question. Once the supervisor approves the question, the student forwards the question to committee members for their input and approval. This can be done via email. Following committee members' approval, the student completes the Comprehensive Registration Form, obtains required signatures, and deposits the hard copy of the form with the Program Coordinator to place the form in the student's file.

*Registration*. The student must formally register for the Comprehensive Examination before starting the exam.

#### **Assessment Tasks: Content and Format**

As a general principle, the examination process is intended to enable valid and authentic assessment and contribute to a student's preparation for the dissertation research. The supervisor is responsible for ensuring that the student has read and understands the procedures outlined in this document.

There are two parts to the examination assessment:

## Part 1: The Comprehensive Paper

The Comprehensive Paper shall consist of a critical review of the research and scholarly literature in Learning Sciences pertaining to his or her dissertation research. The goal of the Comprehensive Paper is to situate the candidate's research problem within the context of both the theoretical and empirical literature. The paper shall: (a) demonstrate breadth and depth of knowledge and conceptualization of the area of focus, (b) present a critical evaluation of the research and identify gaps or unsolved problems in that area, (c) situate a research approach and problem within its larger intellectual and research context and, (d) demonstrate skill in effective academic writing.

The Comprehensive Paper shall not exceed 50 pages (double spaced, excluding bibliography).

## Part 2: Oral Discussion of the Paper

Following the submission of the Comprehensive Paper, committee members will appraise the Paper and provide feedback to the supervisor who consolidates comments and provides feedback to the student in a single document. The Oral Discussion, which follows, offers the student the opportunity to discuss the ideas presented in the Comprehensive Paper in a natural, interactive context, and to respond to questions and issues raised by committee members. In the case where the written paper has fully addressed all of the members' concerns, the committee may choose to use the time allocated for the Oral Discussion to advance thinking about the dissertation proposal.

## Normal Timetable for the Comprehensive Exam

- The Comprehensive Examination is normally done in Year 3 of the Ph.D. program. This corresponds with the 4<sup>th</sup> term of the Advanced Research Seminar (EDPE 707). This Examination must be completed before the defense of the dissertation proposal.1
- The student prepares the initial question during the 3rd term of the seminar, in collaboration with peers, doctoral research seminar instructors, and the research
- The final question is submitted to the Comprehensive Examination Committee for their input and approval.
- Once committee members approve the question(s), the supervisor ensures that the Comprehensive Exam Registration form is signed by all committee members and is given to the Program Coordinator.
- The student registers for the Comprehensive Examination (EDPE-708) through MINERVA.
- The student has three months to complete the paper. Students whose first language is not English, are given an additional week to complete the task.
- During the period that the Paper is being written, drafts of the paper can be discussed and critiqued in the Seminar group.
- Six to eight weeks after registering for the Examination, the student may submit an annotated outline or draft of the Paper for formative feedback from the Committee.
- Once the Paper is completed, the student submits it to the Program Coordinator. This will normally be the end of the winter term or in exceptional cases, another designated deadline three (3) months after the commencement of the task.
- The Program Coordinator distributes the Paper to the committee members.
- Committee members provide feedback to the Supervisor in a timely manner (normally two weeks).
- The Supervisor summarizes the feedback from committee members and highlights

<sup>&</sup>lt;sup>1</sup> This does not mean that students cannot engage in research and publication within a supervisor's research agenda, even if manuscripts generated for this work comprise pieces of the dissertation.

issues that the student is expected to elaborate in order to complement what has been done in writing. This written summary of formative feedback shall be sent to the student and the committee within one month following the submission of the Paper.

- An Oral Discussion is scheduled no later than 2 months from the date the student submitted the Paper to the Program Coordinator.
- In case of illness, a medical leave may be taken and the process will then restart within the time frame provided by Graduate Faculty. A letter from the student and a written medical certificate must be submitted to Graduate Faculty, to the Program Director and to the supervisor.

#### **Evaluation Criteria**

## Comprehensive Paper and Oral Discussion:

- 1. Selection of the literature
- 2. Grounding in theory pertinent to the area of research
- 3. Critical review of pertinent research including methodology, analysis, comparison, and, synthesis, leading to identifying gaps and limitations
- 4. Linking the reviewed research to a general research problem to the broader structure of the field
- 5. Effectiveness of written and oral communication
- 6. Ability to address questions and concerns, referring to pertinent literature

#### **Procedures for Assessment**

- Each committee member prepares an individual written evaluation of the Comprehensive Paper and sends this to the supervisor.
- The supervisor summarizes and integrates the evaluations and circulates the summary to committee members for approval. No final assessment is made at this time. The summary report is considered formative feedback and, where necessary, should include suggestions that the student might address to complement what has been expressed in writing.
- The summary is sent to the student to allow preparation for the Oral Discussion.
- The Oral Discussion concludes with a final summative decision made by the Comprehensive Examination Committee, based on quality and completion in relation to the above criteria: Pass, Conditional Pass, Fail. Each of these is further detailed below
- Successful completion of each part is required for a Pass.
- The committee discusses the strengths and weaknesses of the paper and Oral Discussion and determines whether the combined activities indicate that the student has met expectation, there are still outstanding issues that the student needs to address, that the student has failed to meet expectations. The Committee decides whether this should be done in the presence of the student or in camera.
- In the case of a Pass, the Comprehensive Examination Completion form is signed by all present and is submitted to the Program Coordinator by the Supervisor.
- If the Committee identifies aspects that require further elaboration, the Supervisor, on behalf of the Committee, provides a written notification to the student, specifying what is further required of the student. In this case, the student is given no more than

three months to prepare a supplemental paper, addressing points raised during the Oral Discussion session.

#### **Explanation of Assessments**

**Pass**. Indicates the student has met the quality and completion criteria. The Comprehensive Examination Committee signs the appropriate form. The supervisor gives this form to the Program Coordinator who enters the Pass grade onto the transcript.

Conditional Pass. Indicates that committee members have identified insufficient elaboration of an aspect or aspects of the process. The assessment, reasons for the decision, and specifications for revisions is outlined by the committee and provided to the student orally at the meeting and followed up in a written notification. There must be sufficient detail to allow understanding of the decision and of the task to be completed. An INTERNAL MEMO ONLY will be sent to the Program Director, and to the Program Coordinator who will enter an HH in the transcript. The student shall be given no more than three months to address comments and make specified revisions to the original Paper submission. The committee will then reevaluate the revised Comprehensive Paper, and may require a second Oral Discussion if necessary. Evaluation criteria remain the same.

**Failure**. Indicates the student has been unable to satisfy criteria in one or more of the contexts (e.g., review and synthesis of literature, interpretation of empirical research and theory, presentation and writing). A failure in any one part constitutes failure on the Examination. A corresponding grade is entered in the transcript. In such a case, the student can invoke his or her right, extended by The Office of Graduate and Postdoctoral Studies, to retake the exam once. In the case of a failure, the same procedure described above is to be followed, beginning with the formation of a committee. The student will be informed orally and in writing of the time frame, dates, nature of exam, and committee membership. The second taking of the Comprehensive examination must be completed within one year of the date of the notification of the failure to the student.

STUDENTS AND SUPERVISORS ARE STRONGLY ADVISED TO CONSULT THE GPSO COMPREHENSIVE EXAMINATION GUIDELINES, SPECIFICALLY SECTION 10.4 OF THE GRADUALTE COURSE CALENDAR:

http://coursecalendar.mcgill.ca/gps200809/wwhelp/wwhimpl/js/html/wwhelp.htm