

Developmental Science Program Doctoral Candidacy Examination (DCE)

The doctoral candidacy examination is an exam in a graduate student's major field of study. Its purpose is to assess whether students' knowledge of their area of specialization is sufficient to warrant invitation to pursue research for the doctoral dissertation.

Two Components of the DCE

The examination for admission to doctoral candidacy at Notre Dame has both a written and an oral component. In the Developmental Science program the **written** component of the candidacy examination (informally known as the "prelim paper") takes the form of a manuscript that comprehensively reviews significant scholarly literature in the candidate's field of study.

The **oral** component of the doctoral candidacy examination is the defense of the dissertation proposal. Successful completion of the DCE prelim paper is required for formal advancement to doctoral candidacy.

Goal of the DCE Paper

The primary goals of the written portion of the DCE in the Developmental Science program are to demonstrate students' in-depth knowledge of a significant portion of the psychological literature and to produce a manuscript worthy of submission to a major psychology review journal (e.g., *Psychological Bulletin*, *Psychological Review*, *Developmental Review*, *Human Development*) and similar periodicals devoted to review, analysis and critique of developmental theory and research.

The DCE paper is intended to assess the student's ability to critically examine a significant developmental question in light of the extant literature. As such the paper is an "ecologically valid" indicator of proficiency as a developmental scientist and member of an academic discipline. Students should approach the task as an opportunity to contribute to the literature.

The DCE Process: Getting Started

Deciding upon a topic and forming a doctoral candidacy examination (DCE) committee are the first steps in the DCE process.

Forming the DCE Committee. The DCE committee is chaired by the student's advisor, and will include two additional members of the regular faculty, at least one of whom is a member of the Developmental Science program. The DCE committee has three functions: (1) at the discretion of the student, it can be involved in the initial formulation and development of the topic, in addition to the advisor; (2) it will consider the prospectus and either approve the topic or suggest revisions; and (3) it reads and scores the final submitted version of the DCE paper.

When students ask faculty members to be on their committee, they should inform them of the

likely timeline for the process including, most importantly, when faculty members' initial written review and final score will be due.

Before agreeing to serve on a committee, faculty members should be sure that they will be able to complete their written review and submit their final score according to the specified timeline. If not, (e.g., the faculty member will be unavailable during the specific period of time in which the review would likely be due), then the faculty member should not agree to serve on the committee.

Topic Selection. The initial topic of the preliminary examination paper, and the kind of review to undertake, is typically discussed in consultation with one's advisor. The first consideration is, of course, that the student finds a topic of compelling interest. This makes the research and writing process enjoyable and rewarding, particularly if the finished product is one that will guide the student's work for dissertation research and beyond.

Keep in mind that not all interesting topics are sufficiently developed to warrant a literature review. Moreover, the literature review undertaken for the DCE paper should be broader than the question(s) selected for dissertation research. The topic selected for the DCE paper should allow a critical examination of theory, methodology, and findings of an important literature that has drawn sustained interest of developmental scientists, and shows promise of further theoretical or methodological innovation. Of course, a line of promising innovation could be undertaken as a dissertation topic.

Type of Review. It is now common to differentiate various types of literature review, such as *systematic*, *semi-systematic* (or *narrative*), and *integrative* (or *critical*) reviews. A more traditional distinction is between narrative reviews and meta-analysis (which is sometimes subsumed under systematic reviews).

Although any type of review is suitable for the purposes of a DCE paper, integrative (narrative) reviews are probably more common. An important consideration with respect to type of review is a pragmatic one: the scope of the review should be substantive, demonstrating breadth and depth of understanding of a significant literature, but sufficiently circumscribed so that a student can submit the DCE paper within 10 weeks of prospectus approval.

Prospectus. After initial discussion with one's advisor the student will then draft a prospectus that will be shared with the DCE committee for consideration (see below on forming the DCE committee).

The prospectus will often be in the range of 5-10 pages, excluding references, (standard 12-point font, APA style), but should not exceed 10 pages. The prospectus will make the case for why the topic under consideration is of sufficient theoretical, methodological, and/or empirical interest to warrant a substantive review; and otherwise outline the general organizational structure of the paper, the literature it will review, and what it hopes to accomplish. Bear in mind that the breadth and depth of the DCE prelim paper will speak to the qualifications of the student for doctoral candidacy. The prospectus should also include a separate proposed reading list in order to aid faculty in assessing the appropriateness of scope and whether important resources are included.

Students are strongly urged to communicate with their potential committee members well in advance of the first week in August to formalize their committee. It is strongly recommended that the examination topic and prospectus be approved by the first week of August to allow suitable time to complete the written preliminary examination within the allotted time frame of the fall semester.

Approving the Prospectus

The student's prospectus for the DCE prelim paper will require approval by the DCE committee. The student and advisor, as chair of the committee, will circulate the prospectus to committee members and request feedback **within 5 calendar days**. Committee members will use email to communicate approval or disapproval and to provide comments.

Committee members can make three kinds of recommendations: (1) approve the topic as currently proposed, (2) approve the topic with suggestions for the student to consider; or (3) disapprove the topic until suitable revisions are made to the prospectus. All faculty feedback on the prospectus is provided in writing and is remitted to the chair of the committee via email. The Chair will ensure that the Graduate Administrative Coordinator is copied, so that they are aware the process has been initiated.

In the event that any member of committee does not approve the prospectus the student will revise-and-resubmit accordingly, **within 5 calendar days** upon receipt of the committee reviews. In the cover letter back to the committee the student will outline the changes that were made to the prospectus and how faculty comments were addressed.

The committee will again be required to approve or disapprove the revised **prospectus within 5 calendar days** upon receipt of the revision. The student's advisor, as chair of the DCE committee, is charged with keeping track of the prospectus revision process, including reminding faculty of their obligation to review the prospectus within 5 academic days and following up with them if their decision is not submitted in a timely fashion. Decisions and feedback will again be communicated over email.

If the prospectus is approved, the student and advisor will keep track of email communications, noting the date of approval. The Graduate Administrative Coordinator will again be copied.

Should the prospectus fail a second time, the student must start anew with developing a topic and drafting a new prospectus.

Timeline and Writing the Paper

Timeline. When the prospectus has been approved, the student is allotted 10 calendar weeks from approval date to submit a completed version of the paper. Students must submit the DCE prospectus for approval typically by **August 1** to ensure that the entire process is completed in one semester. Note that the timeline has been arranged so that the process can be completed by the end of the fall semester in December. Although faculty ordinarily will be reading the student's submissions during academic breaks (e.g., before classes resume in August and over

fall break and Thanksgiving), they are not expected to read student work over the winter break. For the purposes of the prelim, winter break starts the day after fall grades are due, and ends on the first class day in January. For ease of visualization, a flow chart illustrating the process is available in a separate document.

The chair of the DCE committee (typically the student's advisor) and the student will determine the subsequent due dates given procedure outlined and will apprise the committee via email as to when to expect the submitted documents. The Graduate Administrative Coordinator will be copied.

Writing the Paper. The scope of the DCE prelim paper is normally established upon review and approval of the prospectus. The paper is a competency-based project, and is evaluated in keeping with disciplinary practices for evaluating scientific manuscripts submitted for publication.

Independence. Students will write the DCE prelim prospectus and paper on their own, without written or editorial input from the committee except from reviewer's comments, editorial suggestions, and minor corrections to the submitted documents. Clarifying discussion with the advisor and other committee members is permitted. It is expected that students will talk a good deal with their advisor about the scope and direction of the paper during the prospectus phases and after receiving reviews of the paper. Students may also ask their advisor and committee members for clarification of comments following review. However, students are expected to write their own documents without editorial assistance from faculty, who do not read or comment on the student's first draft or revised paper prior to submission to the committee.

A credible and convincing review that warrants approval of doctoral candidacy is one that comprehensively reviews an important line of research in developmental science. Typically, a review will

- trace the historical development of the approved topic,
- critically appraise competing theoretical perspectives and the empirical record, which includes both classic and contemporary studies;
- critically evaluate important methodological issues, such as research design, quantitative strategies, and sampling
- and provide an integrative synthesis in the discussion section, which typically includes suggestions for future research

The paper must conform to current APA publication style throughout (including title page, abstract, formatting, etc.). There is no official minimum length for the review, although the scope of the review should be discussed with the DCE committee. The scope will be such that the project can be reasonably completed within the allotted time.

Faculty Review

When students have completed their comprehensive review paper, they submit it to their committee members for review. The chair of the student's DCE committee (typically the student's advisor) will remind committee members of the due date for their reviews, which is two calendar weeks upon receipt of the manuscript. The student will be copied on this correspondence.

Faculty committee members each review and evaluate the paper independently. Each writes a formal review of the work as if evaluating it as a manuscript submitted to a major psychology journal. However, unlike journal reviews, committee members do *not* provide a formal recommendation regarding acceptability of the manuscript, as normally would be done at this stage in the editorial review process for a journal.

Reviews are shared directly with the student and copied to each member of the committee. The due date for the revision will be 4 academic weeks from the date all committee member reviews are provided. This specific due date will be provided via email from the advisor and student to the committee and the Graduate Administrative Coordinator. Faculty members will make every attempt to submit their reviews by the due date, but will notify the student and other members of the committee if extenuating circumstances prevent them from doing so. **See below for consequences when faculty miss review deadlines.**

Students' revision. Students then revise the manuscript in response to committee members' feedback, and submit the revised product for final review by each committee member within 4 academic weeks of receiving the last of the three initial reviews.

With the final submission of their paper, students shall include a cover letter, with a point-by-point discussion of how each reviewer comment was addressed or considered. For comments that did not result in revision, students should provide a rationale for not doing so. Students may consult with committee members during the revision stage, but further written feedback and editorial assistance is not permitted, to ensure that the revisions reflect students' independent scholarship.

Final scoring by committee members. In the final stage of the process, each committee member will rate the final document using the following scale:

- 6 Excellent performance: highest pass
- 5 Good performance: high pass
- 4 Average performance: pass
- 3.5 Cut-off: minimal pass
- 3 Below expectation: high fail
- 2 Much below expectation: fail
- 1 Very poor performance: low fail

Committee members each send their scores within 2 academic weeks to the Graduate Administrative Coordinator but NOT to the other committee members, to maintain the independence of the scores. When all scores have been received, the Graduate Administrative Coordinator averages them across the three raters and sends the results to the chair of the DCE committee (typically the student's advisor) who subsequently informs the student and committee members whether the student has passed the exam.

Approximately 2 academic days before the faculty scores are due, the Graduate Administrative Coordinator will send a reminder to all faculty committee members who have not yet submitted their score (copying the DCE committee chair).

If a faculty member has not submitted a score by the second day after the due date, the Graduate Academic Coordinator will send another reminder, (copying the DCE committee chair). If it is the DCE Committee chair who is delinquent in submitting a score, the Graduate Academic Coordinator will copy the entire committee.

However, faculty members should make every attempt to submit their scores by the due date and should notify committee members, the student, and the Graduate Administrative Coordinator as soon as possible if there are extenuating circumstances that prevent them from doing so.

Meeting Deadlines

Student Failure to Meet Deadlines. Here are the target deadlines associated with the written portion of the exam:

Submission of the prospectus for DCE committee approval	Target deadline is August 1 st
Submission of the DCE paper	10 calendar weeks after approval of the prospectus
Submission of DCE paper revision	4 academic weeks after receipt of manuscript review
Passing the exam	If the process is initiated without the need to repeat the prospectus step, students will be notified before winter break commences. If approval of the prospectus required more than one round of revision, students will be notified in late January.

During the DCE prelim process the DCE committee chairperson (the student's advisor) will remind the student and committee of submission deadlines for each step in the process. The number of "days late" (DL) accumulated across the various deadlines will be factored into the final summative evaluation of the DCE paper. Points will be deducted from the final average score according to the following rubric:

N of Days Late	Points Deducted
1-3 days late	½ point deducted

4-7 days late	1 point deducted
8-14 days late	2 points deducted
15-21 days late	3 points deducted
> 21 days late	This constitutes failure of the exam regardless of reviewers' scores

The calculation of “days late” for students will be adjusted by the number of “days late” that faculty accrue in hitting their deadlines (see below). Note that the reason for applying the above rubric --- rather than the usual practice of simply considering students who miss a major milestone deadline to be on probation until they complete the requirement ---is that the written portion of the doctoral preliminary examination is a *timed exam*. Hence the usual practice would confer an unfair advantage on students who took longer to write and/or review the paper than students who met the deadlines.

Faculty Failure to Meet Deadlines There are three critical faculty deadlines associated with the written-portion of the exam:

Approval of the prospectus	5 calendar days
Approval of prospectus revision (if revision was required)	5 calendar days (if revision was required)
Provision of the written review of the initial submission	2 calendar weeks after receiving submission
Providing a final score after considering manuscript revision	2 academic weeks after receiving final revision

The total number of faculty “days late,” considered simultaneously across the three faculty committee members, shall be totaled and subtracted from the number of “days late” past the December (or January) final deadline to determine the net number of “days late” to apply as a late penalty to students’ scores.

In order not to interfere unduly with students’ timely completion of the written portion of the exam, any of the following shall cause removal of a faculty member from a DCE committee, with a replacement to be selected (with the selected faculty member’s agreement) by the research advisor, in consultation with the third committee member and the Director of the Developmental Science program:

1	Being more than 5 academic days late for responding to the submission of the prospectus or its revision
2	Being more than 10 ADLs for submitting a written review of the initial paper submission;
3	Being more than 10 ADLs for submitting a score for the final paper submission.

The director of the Developmental Science program will notify the Department Chair of the removal of a faculty member from a DCE committee with an explanation of the reason for removal.

In the Event of Exam Failure

If a passing score is not achieved, the committee shall recommend whether the student should be allowed to redo the paper. If the recommendation is negative, the issue shall be considered and voted upon by the entire Developmental Science program faculty at their next regular meeting or a meeting called for this purpose.

If the initial or final recommendation is to allow the student to redo the paper, the student must start the process over with the same or a different topic. A new set of deadlines shall be determined by the student's committee in consultation with the program head, but the periods allotted for each stage of the process shall be no longer than the standard set.

Students retaking the written portion of the DCE will not be in good standing until the paper has been passed. University regulations require that students have a maximum of two opportunities to pass the candidacy examination. Not passing the review paper requirement the first time constitutes one of those opportunities.