CORE M.Ed. Comprehensive Exam Study Guides

Use these guides to prepare for taking the M.Ed. Comprehensive Exam for any of the Following Courses:

- Philosophy of Education (EDFD 501)
- History of American Education (EDFD 502)
- History/Philosophy of American Education (EDFD 500)
- Philosophy and History of Education in the U.S. (EDMS 500)
- Philosophy and History of American Catholic Education (EDMS 500)
- Educational Administration/ Organization of Ed. Systems in the U.S. (EDFD 505)
- Educational Research (EDFD 507/508)
CORE HISTORY OF ED AND PHILOSOPHY OF ED
STUDY GUIDE for COMPREHENSIVE EXAM
(If you were taught either of these classes by anyone other than Dr. Kessinger)

EDFD 501: PHILOSOPHY OF EDUCATION

In thinking about the school curriculum and teaching strategies, be familiar with George
Knight's rendering of the major philosophical schools of thought, as well as the various
contemporary theories of education. This preparation should also help you in thinking about your
own philosophy of education. In addition, review Christopher Phillips' *Six Questions of Socrates*
and be able to apply your own answers to his questions.

EDFD 502: HISTORY OF AMERICAN EDUCATION

Using L. Dean Webb's *The History of American Education: A Great American Experiment* (or
an alternate text/author & title) as a basis for historical interpretation, be able to discuss the
following:

> Progressivism & its basic tenets applied to education at the turn of the 20th century.

> The increasing role of the federal government in education since the 1950's.

> Various policies and practices of school reform.

> The different regional approaches to education in Colonial America.

> Education in the revolutionary and early national periods.

> The Common School.
EDFD 501: Philosophy of Education

In reviewing for the Comprehensive Exam, you should review your notes, relevant handouts, and the appropriate chapters or sections of the required texts for the course. You should also re-familiarize yourself with the following topics and/or key themes:

1. Education—what is it and what has it been?
2. Philosophy—what are three (3) major aspects?
3. "Content" of philosophy: metaphysics, epistemology, axiology
4. "Content" of major traditional (3) and modern (3) philosophies
5. Major educational theories: behaviorism, perennialism, essentialism, progressivism (and its offshoots)
6. Definition of a personal philosophy of education
7. Nature and purposes of public education
8. Educational reform efforts—for past 100 years
9. Major educational exemplars and other movements
EDFD 502: History of American Education

In reviewing for the Comprehensive Exam, you should review your notes, relevant handouts, and the appropriate chapters or sections of the required texts for the course. You should also re-familiarize yourself with the following topics and/or key themes:

1. Education—what is it and what has it been?
2. Colonial education patterns—especially in New England
3. Common school movement
4. Evolution of secondary education
5. Higher education—private and public
6. Teaching and the teaching profession
7. Nature and purpose of public education
8. Educational reform efforts—for the past 100 years
9. Governmental control(s) of schools
10. Major educational exemplars and other movements
CORE: History and Philosophy of American Education Study Guide for Comprehensive Exam

EDFD 500: HISTORY/PHILOSOPHY OF AMERICAN EDUCATION

Use this Study Guide if you completed EDFD 500 [first offered in Fall 2014].

In reviewing for the Comprehensive Exam, you should review your notes, relevant handouts, Canvas selections, and appropriate chapters or sections of your text for the course. You should also review or re-familiarize yourself with the following topics and/or key themes:

1. History, philosophy, and education—definitions and the evolution of various schools of philosophies and educational theories
2. Background to philosophy of education—the major aspects of philosophy and the history of education (covering four major periods)
3. Emphasis on the "content" aspect of philosophy—that is, metaphysics, epistemology, and axiology
4. Traditional philosophies—idealism, realism, and theistic realism—their main ideas, how they compare to one another, and their chief proponents
5. Colonial and revolutionary educational ideas and patterns in early America and later in the U.S.
6. Common school movement
7. Kindergarten movement
8. Rise of secondary education in the U.S.
9. Higher education and its development in the U.S.
10. Contemporary theories of education—progressivism, essentialism, perennialism, and critical theory—the major tenets, various offshoots, and their key proponents
11. Teaching and the profession of teaching
12. Government controls of education
13. Educational reforms in the U.S. during the 19th-21st centuries
14. Analysis and articulation of a "personal" philosophy of education
EDMS 500: PHILOSOPHY AND HISTORY OF EDUCATION IN THE UNITED STATES

Use this Study Guide if you were taught this class by Dr. Tom Kessinger

In reviewing for the Comprehensive Exam, you should review your notes, relevant handouts, Ereserve selections, and the appropriate chapters or sections of your text for the course. You should also review or re-familiarize yourself with the following topics and/or key themes:

1. Philosophy, history, and education – definitions and evolution of various kinds of philosophies and educational theories.

2. Background to philosophy of education (major aspects of philosophy) and history of education

3. Emphasis on the “content” of philosophy – that is, metaphysics, epistemology, and axiology

4. Traditional philosophies – idealism, realism, and theistic realism – and their proponents

5. Colonial and revolutionary educational patterns in early America and later in the U.S.

6. Common school movement

7. Advances in kindergarten and secondary education in the U.S.

8. Higher education and its growth

9. Contemporary theories of education – progressivism, essentialism, and perennialism – their key proponents and major offshoots

10. Teaching and the profession of teaching

11. Government control(s) of education

12. Educational reforms in the U.S. during the 19th – 21st centuries

13. Research, development or formulation, and articulation of a “personal philosophy of education”
EDMS 500: PHILOSOPHY AND HISTORY OF AMERICAN CATHOLIC EDUCATION

Be able to answer **one of these four questions** if you took Philosophy and History of American Catholic Education from Fr. Bob Bueter, S.J. or Roger Bosse

1. Describe in depth the crisis in the Catholic Church and/or Catholic education in the 1990's and compare it to the rise of the Catholic Church and/or Catholic education in the 1890's and the zenith of the Catholic Church and/or Catholic education in the 1950's.

2. Describe in depth the influence of the Irish bishops, clergy, and seminary training on the Catholic Church and/or Catholic education from the 1800's to the 1950's.

3. Describe in depth the ways in which Neo-scholasticism, Social Catholicism, and the Second Vatican Council have influenced the intellectual and spiritual tradition of the Catholic Church and Catholic education.

4. Answer in depth the following two questions: Why did many Catholic bishops, educators, and parents react negatively to Horace Mann's "Common School" movement? How did the Catholic attitude toward public schooling systematically develop during the three Councils of Baltimore?
EDFD 505: Educational Administration/Organization of Ed. Systems in the U.S.
(Be able to answer two of the 3 questions below. The exam has the same questions and you only have to prepare two answers.)

1. What is the constitutional basis for the federal government’s role in education? Support your opinion with facts, references and examples.

2. What is administration? Leadership? What are the major tasks of administration? Discuss administrative theory?

3. What are the major issues in education relative to curriculum, law and finance?
EDFD 507: Educational Research

Listed below are five hypotheses that have been found in the literature:

1. The greater the number of students classified with special needs included in the regular classroom, the lower all students in the classroom will score on state mandated assessments.

2. There is a direct relationship between the amount of money (% of the total budget) a school district spends on instructional materials and their students’ scores on the Ohio Graduation Test (OGT).

3. The higher the level of education of a child’s parents, the more likely the parents are to actively participate in the child’s education.

4. The greater the number of different schools a child has attended (mobility) in grades K-3, the lower the child will score on state mandated assessments in grade 4.

5. Parents send their children to parochial schools over public schools because parochial schools provide moral education, a safe, drug-free environment, and a strong academic program.

Select ONE of the five hypotheses and be able to answer each of the following questions:

1. Write a problem statement for the hypothesis you selected that you would like to investigate further.

2. In developing Chapter II, Review of the Related Literature, list two possible subtopics for this chapter that would be components of your literature review.

3. What is the significance of your study based on the hypothesis selected?

4. Briefly detail how you would conduct the study (methodology, sample, and setting).

5. What data would you collect and how would you collect the data?

6. Does your proposed study have any threats to human subjects? If yes, how would you control these threats?
EDFD 507: Educational Research

Be able to answer each of the following questions carefully and completely.

1. This research study attempts to answer two questions. Briefly state these questions.

2. Briefly state the author's conclusions regarding each of the two questions.

3. Study the results in Table 2. a.) On which item do the students have the most negative feelings about mathematics? b.) Identify one item on which more people had a positive attitude about mathematics than a negative attitude (there are three possible right answers).

4. Identify a strength of this study. Briefly explain its value to the study.

5. Identify a weakness of this research. Briefly explain how it affects the validity of the study.
A Look at the Mathematics Attitudes of Prospective Teachers in Four Concentration Areas

Loretta F. Clark-Meeks  
Assistant Professor  
Sangamon State University  
Springfield, Illinois 62708

Nancy L. Quisenberry  
Associate Dean  
Southern Illinois University at Carbondale  
Carbondale, Illinois 62901

and

John T. Mouw  
Associate Professor  
Southern Illinois University at Carbondale  
Carbondale, Illinois 62901

The effectiveness of mathematics instruction is being examined on various levels due to the growing concern that the nation’s children, as well as adults, lack competence in the subject. Educational researchers prodded by this concern have investigated various factors thought to be related to success in mathematics with groups which include students in the elementary, junior high and high schools; parents of these various groups of students; prospective teachers of these groups and present teachers associated with these groups of students.

One of the factors which is receiving much attention in relationship to mathematics instruction is mathematics attitude, and one of the groups which is steadily being investigated is prospective teachers. These prospective teachers are generally assessed for mathematics attitude with a Likert-type scale and are usually grouped as education majors.

The purpose of the following study was twofold. The primary objective was to determine if there was a difference in mathematics attitude among prospective teachers interested in one of four concentration areas: Early Childhood (Preschool), Early Childhood (K-3), Intermediate (4-9), and Special Education. Research in this area has been minimal. Early (1970) ¹ conducted a study in which he investigated the attitude and achievement in mathematics of prospective teachers choosing either the Early Childhood (K-2) concentration area or the Intermediate (3-6) concentration areas. The results from the study indicated that the groups were significantly different in attitude toward mathematics but not

achievement in mathematics. No studies were found that included the Early Childhood (Preschool) group or the Special Education group; therefore, the inclusion of these groups in this study is significant.

The second objective of the study was to determine the validity of a Likert-type scale such as the Revised Math Attitude Scale for the particular groups that were included in the study. The Revised Math Attitude Scale was constructed by Lewis Aiken and Ralph Dreger. The instrument measures attitude toward mathematics with opinions ranging from strongly disagree to strongly agree. The scale consists of 10 items which express negative attitudes and 10 items which express positive attitudes. The test-retest reliability of the test has been found to be 0.94 (Aiken and Dreger, 1961)².

PROCEDURE

There were 64 subjects involved in the study. These students were sophomores enrolled in one section of the course entitled "Philosophy of Creativity," and two sections of the course "Understanding the Elementary Child." These courses were used because they were requirements for students interested in all four concentration areas. The data was collected during the regular class periods by the instructors and the researcher.

The concentration areas included 19 students who chose Early Childhood (Preschool); 17 students who chose Early Childhood (K-3); 16 students who chose Intermediate (4-9) and 6 students who chose Special Education. Six of the questionnaires had to be discarded because the students failed to identify a concentration area.

The scale was distributed and collected before class. All the students participated and it was later found that the students responded to all the items.

The statistical package used in the analysis of the data was the Statistical Analysis System (SAS). Analysis of variance was used to test the differences between the means of the groups, with a probability level <0.05. The relationship of the items on the Revised Math Attitude Scale was determined by using the Pearson Product Moment Correlation. The frequency of the responses for each of the items on the scale was also determined by a frequency distribution for each item.

FINDINGS

The results from the analysis of variance technique indicated that there is no difference in mathematics attitudes among the four concentration areas: Early Childhood (Preschool), Early Childhood (K-3), Intermediate (4-9) and Special Education. The analysis yielded an F-value of 1.09 which was not significant at the <0.05 level. The results are shown in Table 1, (page 319).

Table 1
Analysis of Variance Results for Attitude

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>3</td>
<td>1525.01</td>
<td>508.33</td>
<td>1.09</td>
</tr>
<tr>
<td>Error</td>
<td>54</td>
<td>25097.47</td>
<td>464.76</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>57</td>
<td>26622.48</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It was found that the items on the Revised Math Attitude Scale were highly correlated. All the items were correlated at the <0.0001 level. The scale was found to be univariate measuring one concept, mathematics attitude.

The frequency distribution indicated that the responses to the items were clustered around the choices strongly disagree, disagree, strongly agree and agree. This indicated that the scale had content validity since the groups had definite reactions to the items. An analysis of responses and a list of items is shown in Table 2, (page 320).

DISCUSSION

The prospective teachers in the four concentration areas were not found to differ significantly in attitude toward mathematics when their performance was measured using the Revised Math Attitude Scale. These groups, however, appeared to have definite attitudes toward mathematics as indicated by the responses to the items on the scale.

Moderately high percentages were reported in agreement with items 1, 3, 6, 7, 10 and 16. Agreement with these statements indicate that the prospective teachers experience strain in math classes; do not like mathematics, and experience fear when taking it; cannot think clearly when working math; feel insecure when attempting math; feel confused when working math; and feel nervous about mathematics. A moderately high percentage was reported in disagreement with item 18, which indicates that these groups do not like mathematics better than other subjects.

These results indicate that, for the most part, prospective teachers still have unfavorable attitudes toward mathematics. These groups continue to experience strain, dislike, fear, insecurity and confusion when confronted with mathematics.
Table 2  
FREQUENCY DISTRIBUTION OF ATTITUDE RESULTS

<table>
<thead>
<tr>
<th>Item</th>
<th>% Disagree-Straightly Disagree</th>
<th>% Undecided</th>
<th>% Agree Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am always under a terrible strain in a math class.</td>
<td>24%</td>
<td>14%</td>
<td>62%</td>
</tr>
<tr>
<td>2. Mathematics is very interesting to me, and I enjoy math courses.</td>
<td>45%</td>
<td>15%</td>
<td>40%</td>
</tr>
<tr>
<td>3. I do not like mathematics, and it scares me to have to take it.</td>
<td>31%</td>
<td>3%</td>
<td>66%</td>
</tr>
<tr>
<td>4. Mathematics is fascinating and fun.</td>
<td>31%</td>
<td>28%</td>
<td>41%</td>
</tr>
<tr>
<td>5. Mathematics makes me feel secure, and at the same time it is stimulating.</td>
<td>48%</td>
<td>28%</td>
<td>24%</td>
</tr>
<tr>
<td>6. My mind goes blank, and I am unable to think clearly when working math.</td>
<td>17%</td>
<td>17%</td>
<td>66%</td>
</tr>
<tr>
<td>7. I feel a sense of insecurity when attempting mathematics.</td>
<td>27%</td>
<td>9%</td>
<td>64%</td>
</tr>
<tr>
<td>8. Mathematics makes me feel uncomfortable, restless, irritable, and impatient.</td>
<td>28%</td>
<td>15%</td>
<td>57%</td>
</tr>
<tr>
<td>9. The feeling that I have toward mathematics is a good feeling.</td>
<td>38%</td>
<td>19%</td>
<td>43%</td>
</tr>
<tr>
<td>10. Mathematics makes me feel as though I’m lost in a jungle of numbers and cannot find my way out.</td>
<td>28%</td>
<td>10%</td>
<td>62%</td>
</tr>
<tr>
<td>11. Mathematics is something which I enjoy a great deal.</td>
<td>49%</td>
<td>17%</td>
<td>34%</td>
</tr>
<tr>
<td>12. When I hear the word math, I have a feeling of dislike.</td>
<td>38%</td>
<td>3%</td>
<td>59%</td>
</tr>
<tr>
<td>13. I approach math with a feeling of hesitation, resulting from a fear of not being able to do math.</td>
<td>40%</td>
<td>5%</td>
<td>55%</td>
</tr>
<tr>
<td>14. I really like mathematics.</td>
<td>40%</td>
<td>15%</td>
<td>45%</td>
</tr>
<tr>
<td>15. Mathematics is a course in school that I have always enjoyed studying.</td>
<td>46%</td>
<td>14%</td>
<td>40%</td>
</tr>
<tr>
<td>16. It makes me nervous to even think about having to do a math problem.</td>
<td>28%</td>
<td>7%</td>
<td>65%</td>
</tr>
<tr>
<td>17. I have never liked math, and it is my most dreaded subject.</td>
<td>29%</td>
<td>14%</td>
<td>57%</td>
</tr>
<tr>
<td>18. I am happier in a math class, than any other class.</td>
<td>69%</td>
<td>21%</td>
<td>10%</td>
</tr>
<tr>
<td>19. I feel at ease in mathematics, and I like it very much.</td>
<td>43%</td>
<td>14%</td>
<td>43%</td>
</tr>
<tr>
<td>20. I feel a definite positive reaction to mathematics; it is enjoyable.</td>
<td>45%</td>
<td>14%</td>
<td>41%</td>
</tr>
</tbody>
</table>
References
