The College of Education’s Conceptual Framework
Preparing Ethical and Reflective Professionals for Quality Service in Diverse Communities

The Counseling Program Mission
To prepare diverse, ethical, reflective, and clinically skilled counselors to be multicultural and social justice leaders and advocates.

COURSE INFORMATION
EDUC 5000 - Introduction to Educational Research
This is an online course that contains primarily asynchronous elements as well as a few optional synchronous elements.

Course Credits: 3

REQUIRED TEXTS AND/OR READINGS
TEXT and MATERIALS

Required Text:

Required Materials (these will be available in our on-line classroom in Canvas):


COURSE DESCRIPTION
Graduate Bulletin Description
Introduction to research skills and literature in students’ fields. Includes an orientation to graduate studies. Ordinarily taken early in one’s program of study.

Course Purposes and Goals:
This course provides an introduction to research skills and the literature of research, with the goal of supporting students to:
1) effectively make use of scholarly research, and
2) produce high quality graduate-level research papers.

Students are encouraged to identify specific topics within their fields of interest in which to apply their developing research skills. The course also includes an orientation to graduate studies and to library and computer resources available to graduate students at Seattle University. This course is ordinarily taken as a first graduate course. The primary focus of this course is on critical reading, interpretation, and application of scholarly research.

Course Rationale (Required):
1. CACREP Standards
2. SOCIAL AND CULTURAL DIVERSITY
   a. multicultural and pluralistic characteristics within and among diverse groups nationally and internationally
8. RESEARCH AND PROGRAM EVALUATION
   a. the importance of research in advancing the counseling profession, including how to critique research to inform counseling practice
   b. identification of evidence-based counseling practices
   c. needs assessments
   d. development of outcome measures for counseling programs
   e. evaluation of counseling interventions and programs
   f. qualitative, quantitative, and mixed research methods
   g. designs used in research and program evaluation
   h. statistical methods used in conducting research and program evaluation
   i. analysis and use of data in counseling
   j. ethical and culturally relevant strategies for conducting, interpreting, and reporting the results of research and/or program evaluation

KNOWLEDGE AND SKILLS OUTCOMES
COURSE OBJECTIVES
Students will:
- Utilize knowledge of research to evaluate services and make research based professional judgments.
- Know and understand various types of research (both quantitative and qualitative research) designs, including descriptive/nonexperimental and causal/experimental designs.
• Think critically about ethical issues in research, especially IRB (institutional review board) issues relevant to protecting the rights and welfare of human subjects.
• Use library and internet databases to locate scholarly literature (primary, secondary, and general expert-opinion references).
• Review and critique research.
• Make research-based professional decisions as a critical consumer (identify strengths and limitations of research designs/results/conclusions).
• Analyze/design methodologically sound research (identify strengths and limitations).
• Use APA (current edition) style in scholarly writing.

COURSE INSTRUCTIONAL METHODS
The course will include a variety of instructional methods which will include readings and other multimedia sources, online interactive discussions, written assignments, and optional online office hours.

STUDENT PERFORMANCE EVALUATION CRITERIA AND PROCEDURES

COURSE REQUIREMENTS

A. Assignments and Activities

<table>
<thead>
<tr>
<th>Assignment</th>
<th>CACREP Standard</th>
<th>Points Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Discussion Posts</td>
<td>8.a, 8.b, 8.e, 8.f, 8.g, 8.h, 8.i, 8.j</td>
<td>22</td>
</tr>
<tr>
<td>Paper #1</td>
<td>8.a, 8.b, 8.d., 8.e., 8.f., 8.g., 8.i</td>
<td>10</td>
</tr>
<tr>
<td>Paper #2</td>
<td>2.a, 8.a, 8.b, 8.d, 8.e, 8.f, 8.g, 8.h, 8.i, 8.j</td>
<td>14</td>
</tr>
<tr>
<td>Paper #3</td>
<td>2.a, 8.a, 8.b, 8.c, 8.d, 8.e, 8.f, 8.g, 8.h, 8.i, 8.j</td>
<td>30</td>
</tr>
<tr>
<td>Quizzes</td>
<td>2.a, 8.a, 8.b, 8.c, 8.d, 8.e, 8.f, 8.g, 8.h, 8.i, 8.j</td>
<td>24</td>
</tr>
</tbody>
</table>

B. Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Range</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>94-100 %</td>
<td>80-83</td>
</tr>
<tr>
<td>A-</td>
<td>90-93</td>
<td>77-79</td>
</tr>
<tr>
<td>B+</td>
<td>87-89</td>
<td>74-76</td>
</tr>
<tr>
<td>B</td>
<td>84-86</td>
<td>70-73</td>
</tr>
<tr>
<td>B-</td>
<td>80-83</td>
<td>67-69</td>
</tr>
<tr>
<td>C+</td>
<td>80-83</td>
<td>64-66</td>
</tr>
<tr>
<td>C</td>
<td>80-83</td>
<td>60-63</td>
</tr>
<tr>
<td>C-</td>
<td>80-83</td>
<td>0-59</td>
</tr>
</tbody>
</table>
C. Course Expectations:

## SCHEDULE OF COURSE ACTIVITIES

<table>
<thead>
<tr>
<th>Date</th>
<th>Topics</th>
<th>Readings and Assignments</th>
<th>CACREP STANDARD</th>
<th>Evaluation Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Introduction to Research &amp; Research Ethics</td>
<td>Readings: 1) Chapters 1 &amp; 2 in MacMillan (2016) 2) Watch the General Intro to library resources &amp; services video. Assignments: 1) Post your introduction to the Week 1 Discussion.</td>
<td>2.a, 8.a, 8.b, 8.c, 8.d, 8.e, 8.j.</td>
<td>Quiz 1; Paper 1, 2, &amp; 3; Discussion Posts</td>
</tr>
<tr>
<td>March 27th -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 1st</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 2</td>
<td>Research Problems, Research Questions, &amp; Variables</td>
<td>Readings: 1) Chapter 3 in MacMillan (2016) 2) Lenes, E., Swank, J. M., &amp; Nash, S. (2015) Assignments: 1) Post a response to at least one other student’s initial post in the Week 1 Discussion; 2) Post an initial response to the Week 2 Discussion.</td>
<td>8.a, 8.b, 8.c, 8.d, 8.e, 8.f, 8.g, 8.j.</td>
<td>Quiz 1; Paper 1, 2, &amp; 3; Discussion Posts</td>
</tr>
<tr>
<td>April 2nd -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 8th</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 3</td>
<td>Finding &amp; Reviewing Research</td>
<td>Readings: 1) Chapter 4 in MacMillan, 2016 2) Watch the Resources on reworks and how to use databases to find peer reviewed journal articles video. 3) Read The Reliability of Wikipedia article Assignments: 1) Post a response to at least one other student’s initial post in the Week 2 Discussion; 2) Post an initial response to the Week 3 Discussion. 3) Quiz 1 (McMillan Chapters 1-4)</td>
<td>8.a, 8.b, 8.e, 8.g</td>
<td>Quiz 1; Paper 1, 2, &amp; 3; Discussion Posts</td>
</tr>
<tr>
<td>April 9th -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 15th</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 4</td>
<td>Sampling, Descriptive Statistics, &amp; The</td>
<td>Readings: 1) Read Chapters 5 &amp; 6 in MacMillan, 2016</td>
<td>2.a, 8.a, 8.b, 8.f, 8.g, 8.h, 8.i, 8.j</td>
<td>Quiz 2; Paper 2, &amp; 3; Discussion Posts</td>
</tr>
<tr>
<td>April 16th</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Topics</td>
<td>Readings and Assignments</td>
<td>CACREP STANDARD</td>
<td>Evaluation Method</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>April 22nd</td>
<td>Normal Curve</td>
<td>Assignments: 1) Post a response to at least one other student’s initial post in the Week 3 Discussion; 2) Post Paper 1 for the Week 4 Discussion.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 5</td>
<td>Qualitative Research Design</td>
<td>Readings: 1) Read Chapters 11 and 12 in MacMillan, 2016 2) Read Coy, Lambert, &amp; Miller (2016) 3) Watch the Library Advanced search tips video Assignments: 1) Post an initial response to the Week 5 Discussion; 2) Quiz 2 (McMillan Chapters 5, 6, 11, 12).</td>
<td>8.a, 8.b, 8.d, 8.e, 8.f, 8.g, 8.i, 8.j</td>
<td>Quiz 2; Paper 2, &amp; 3; Discussion Posts</td>
</tr>
<tr>
<td>April 30th - May 6th</td>
<td>Quantitative Design, Nonexperimental Research Design, Regression</td>
<td>Readings: 1) Read Chapters 7 and 8 in MacMillan, 2016 2) Listen to the Freakonomics podcast How Do We Know What Really Works in Healthcare. As an alternative, you may also read the transcript if you would prefer. Assignments: 1) Post a response to at least one other student’s initial post in the Week 5 Discussion; 2) Post an initial response to the Week 6 Discussion.</td>
<td>8.a, 8.b, 8.d, 8.e, 8.f, 8.g, 8.h, 8.i, 8.j</td>
<td>Quiz 3; Paper 2, &amp; 3; Discussion Posts</td>
</tr>
<tr>
<td>May 7th - May 13th</td>
<td>Experimental Design &amp; Experimental Validity</td>
<td>Readings: Read Chapter 9 in MacMillan, 2016 Assignments: 1) Paper 2 due; 2) Post a response to at least one other student’s initial post in the Week 6 Discussion.</td>
<td>2.a, 8.a, 8.b, 8.c, 8.d, 8.e, 8.f, 8.g, 8.h, 8.i, 8.j</td>
<td>Quiz 3; Paper 2, &amp; 3; Discussion Posts</td>
</tr>
<tr>
<td>Week 8</td>
<td>Inferential Statistics, t-Test, ANOVA, &amp;</td>
<td>Readings: 1) Read Chapter 10 in Assignments:</td>
<td>2.a, 8.a, 8.b, 8.c, 8.d, 8.e, 8.f, 8.g</td>
<td>Quiz 3; Paper 3;</td>
</tr>
<tr>
<td>Date</td>
<td>Topics</td>
<td>Readings and Assignments</td>
<td>CACREP STANDARD</td>
<td>Evaluation Method</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>--------------------</td>
</tr>
</tbody>
</table>
| May 14th - May 20th | Chi-Square                   | MacMillan, 2016  
2) Listen to the Hidden Brain podcast How A Theory Of Crime And Policing Was Born, And Went Terribly Wrong. As an alternative, you may also read the transcript if you would prefer  
3) Review the annotated bibliography resources available on the Purdue OWL website  
Assignments:  
1) Post an initial response to the Week 8 discussion.  
2) Quiz 3 (McMillan Chapters 7-10). | 8.h, 8.i, 8.j | Discussion Posts |
| Week 9         | Mixed Method Research        | Readings: 
Read Chapter 13 in MacMillan, 2016  
Assignments:  
1) Post a response to at least one other student’s initial post in the Week 8 discussion;  
2) Post draft of Paper 3 for the Week 9 discussion. | 2.a, 8.a, 8.b, 8.c, 8.d, 8.e, 8.f, 8.g, 8.h, 8.i, 8.j | Quiz 4;  
Paper 3;  
Discussion Posts |
| Week 10        | Course Conclusion, Synthesis & Wrap Up | Readings: 
Read Chapter 14 and 15 in MacMillan, 2016  
Assignments:  
1) Post a response to at least one other student’s initial post in the Week 9 Discussion;  
2) Quiz 4 (McMillan Chapters 13-15).  
3) Final revisions of Paper 3 due. | 2.a, 8.a, 8.b, 8.c, 8.d, 8.e, 8.f, 8.g, 8.h, 8.i, 8.j | Quiz 4;  
Paper 3;  
Discussion Posts |
Lemieux Library and McGoldrick Learning Commons (including such resources as: Learning Assistance Programs, Research [Library] Services, Writing Center, Math Lab) can be accessed on the internet at:

http://www.seattlue.edu/learningcommons

Academic Integrity Tutorial: accessible both on ANGEL and on SUONLINE in the Student Menu using the following hotlink: Academic Integrity Tutorial which contains the URL:

<https://www.seattlue.edu/academicintegrity>

NOTICE to STUDENTS concerning DISABILITIES (Required in all Syllabi)

If you have, or think you may have, a disability (including an ‘invisible disability’ such as a learning disability, a chronic health problem, or a mental health condition) that interferes with your performance as a student in this class, you are encouraged to discuss your needs and arrange support services and/or accommodations through Disabilities Services staff in the Learning Center, Loyola 100, (206) 296-5740.

NOTICE to STUDENTS concerning Seattle University’s ACADEMIC INTEGRITY POLICY which includes the issue of plagiarism (Required in all Syllabi)

The Academic Integrity policy and procedures (academic honesty) of the university define what the university considers academic dishonesty, what penalties can be imposed for violations of academic integrity, and the appeal process if a student is found to have violated academic integrity.

The Academic Integrity policy and procedures can be downloaded at the following URL:

https://www.seattlue.edu/WorkArea/DownloadAsset.aspx?id=78679

Academic Grading Grievance - Procedure for Challenging Course Grades

This grade grievance policy and procedure defines the policies and outlines the processes that govern in those cases when a student wishes to challenge a final course grade.

The academic grading grievance policy and procedure document can downloaded using the following URL:

https://www.seattlue.edu/WorkArea/DownloadAsset.aspx?id=78678

Professional Conduct Policy

The purpose of this policy is to define the appeal policies and processes related to the following
professional program decisions that are related to professional conduct/behavior/dispositions: retaining or graduating a student; permitting a student to enter or continue in a practicum, an internship, or student teaching; or recommending a student for a professional certificate.

The Professional Conduct policy can be downloaded at the following URL:

https://www.seattleu.edu/WorkArea//DownloadAsset.aspx?id=78690

WASHINGTON ADMINISTRATIVE CODE and/or PROFESSIONAL STANDARDS
See Appendix D.
Appendix A

Sample of Paper #1

A sample of Paper #1 is provided below. Please do not use any of the content from this sample as part of your submission for Paper #1. Also, be advised that this is only an example. Your responses for sections 3, 4, and 5 will be significantly longer than what I have proved here.

1. Problem statement:
   My Problem statement is “Does single-sex education appear to result in greater learning outcomes for primary school students than does mixed-sex education?”

2. List of research source(s):
   I consulted both the ERIC and the PsychINFO databases because I could not find a sufficient number of articles from just one database.

3. Descriptors or key terms:
   The descriptors and key terms I searched for were the following.
   - Single-sex
   - Education
   - “single sex education”
   - Primary education
   - “Boys only”
   - “Girls only”

4. List of 10 references, including complete APA citation format:

5. Coded abstracts:
   Abstract of Billger, S. (2009): \[R\]
   “A change to Title IX has spurred new single-sex public schooling in the US. Until recently, nearly all gender-segregated schools were private, and comprehensive data for public school comparisons are not yet available. To investigate the effects of single-sex education, I focus on within private sector comparisons, and additionally address selection bias using an index comparing expectations to outcomes and quantile regressions. Compared to graduates from private coed schools, girls' school alumnae are no more likely to pursue college degrees, and both genders are less likely to meet their own educational expectations. However, single-sex schooling may support gender equity, as single-sex schools yield the least segregated college major choices. On the other hand, higher mean starting salaries among single-sex school graduates do not persistent in regression results. Much of the benefit from single-sex schooling accrues to students already likely to succeed, but selection bias does not explain all gains. There are some benefits for African-American men and low income students. (Contains 3 figures and 7 tables.)”

Grading Rubric for Paper #1

2 points All 5 parts of the assignment are addressed
2 points Parts 2 and 3 logically follow from Part 1
3 points Largely error free APA citation in Part 4
3 points Overall successful coding of abstracts in Part 5
Appendix B

Sample Outline of Paper #2

An outline of Paper #2 is provided below. Your paper must address each of the ten points listed below.

Part 1: Full APA citation for your article
Part 2: What is the hypothesis or question being investigated?
Part 3: What are the dependent and independent variables?
Part 4: What type of research design was used? (For example, experimental, causal-comparative, correlation…)
Part 5: Describe the sampling method used by name (e.g. “random”, or “stratified by gender”, etc.) and comment on its appropriateness. Also comment on how the sampling choices affect generalizability.
Part 6: Do the findings reported in the article match any statistical results given? This refers to the statistical tables, graphs, charts, etc., as well as the text of the article that describes or refers to the results. It does not refer to the part of the article in which other prior studies are critiqued. NOTE that this is a central part of the assignment. Please carefully evaluate articles in choosing one for this assignment-if you choose an article that uses advanced statistical techniques, you must be able to interpret these as required by this part of the assignment.
Part 7: Do the conclusions seem valid?
Part 8: What ethical issues are raised in this study? Were they handled well or are there ethical problems inherent in the study or the article reporting it?
Part 9: What flaws, if any, do you identify in this research? Look especially for over-generalization, uncontrolled moderators, extraneous variables or any other flaws addressed in the course materials.
Part 10: Do you feel that this article has significance for you? If so, what? If not, why not?

Grading Rubric for Paper #2

1 Point APA citation is provided and is virtually error free in Part 1.
1 Point The research hypothesis or research question is clearly and accurately stated in Part 2.
1 Point The dependent and independent variables are accurately identified in Part 3.
1 Point The research design is clearly and accurately stated in Part 4.
2 Points The sampling method is accurately identified and a logical analysis of the appropriateness of this sampling method is provided in Part 5.
2 Points A logical analysis of the article’s findings is provided in Part 6.
2 Points Analysis of the validity of the conclusions reported in the article is largely accurate and clearly explained in Part 7.
1 Point At least one ethical issue and one issue of social/cultural diversity are addressed and logically discussed in Part 8.
2 Points At least one research flaw is accurately identified and clearly explained in Part 9.
1 Point A logical discussion of the significance and/or applicability of this article is provided in Part 10.
Appendix C

Sample Outline of Paper #3 (Research Design)

The Research Design summative assignment or Paper #3 is used to determine student knowledge and skills in the Research and Program Evaluation CACREP core area. This assignment is a summative assignment for counseling students. Counseling students who fail a summative assignment (receive a rating scale of 2 or below) are required to meet with the issuing faculty. Such students are either placed on a developmental plan or dismissed from the program.

Evaluation Process

The professor will complete the following rubric to assess student research and program evaluation knowledge and skills. Points correspond to the rating scale.

<table>
<thead>
<tr>
<th>Points</th>
<th>Overall Rating</th>
<th>Rating Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>27-30</td>
<td>Mastery</td>
<td>4</td>
<td>Able to perform at a high level without supervision on a consistent basis</td>
</tr>
<tr>
<td>24-26</td>
<td>Proficient</td>
<td>3</td>
<td>Able to perform without supervision on a consistent basis</td>
</tr>
<tr>
<td>21-23</td>
<td>Developing</td>
<td>2</td>
<td>Able to perform with supervision on a consistent basis</td>
</tr>
<tr>
<td>18-20</td>
<td>Beginning</td>
<td>1</td>
<td>Able to perform with supervision on an inconsistent basis</td>
</tr>
<tr>
<td>17 and below</td>
<td>Inadequate</td>
<td>0</td>
<td>Unable to perform with supervision</td>
</tr>
</tbody>
</table>

An outline of Paper #3 is provided below. Your paper must address each of the five parts listed below.

Part 1: Cover Page and Abstract
In accordance with APA style, you need to have a cover page and an abstract on its own page. I’d suggest you write the abstract last (it’s much easier that way).

Part 2: Research Topic and Research Question
In no more than one or two pages, this part must include the following:

a) A statement of your general Research topic
b) A statement of your specific Research Question
c) A brief discussion of how your proposed research study will add to the body of knowledge in your identified research topic.

*You must provide citations to existing literature in this section. I would strongly recommend that you draw upon your work in Paper #1 and Paper #2 for this part.*

Part 3: Methods or Procedure
In three to five pages, explain and discuss your proposed research method or procedure. At a minimum, you must include the following:

a) Identify the independent and dependent variables and the level of measurement for each (nominal/categorical, ordinal, or interval.)

b) Describe your population sample, including your procedure for selecting a sample and forming groups if any, details on sample size, possible sources of sampling bias, and a justification of the sampling
procedure you propose to use. You must name the type of sample, such as random, purposive, systematic, convenience, and so on. For example, if you study would not work with any kind of sampling except convenience, choose this, describe how it would be implemented, and describe the consequences, (such as low generalizability).

c) Identify the instruments you would use to measure your variables. There are usually three ways to get data. First, you could use data that has “face validity.” An example would be GPA obtained from the registrar, special education status obtained from a school district, etc. For these variables, just describe how you would gather the data, and then state that it has face validity.

Second, you might use a published test—the TOEFL, the Meyers-Briggs, or any available psychological test. For published tests, you can find more information about the test in the Mental Measurements Yearbook (MMY), or Tests in Print (TIP). There is a great table of information for finding these resources in Table 7.4 on page 199 in the McMillan (2016) text. You can find these sources in print in the reference section of the library or online. Once you have identified a test to use as a measure, finding an article that reviews that test will give you the information you need in order to determine whether or not it would be a reasonable choice for you to use.

Third, if there is no existing test that fits exactly what you want to measure, you could choose to create a test yourself. For your own instruments, describe what the test would be like and describe what type of reliability and validity would be important and how you could establish them. For example, for a survey or questionnaire that you would construct to do your research, you do not have to make up the whole instrument. You should describe why you need to create something new, then describe the process that you would use to maximize reliability and validity, such as field tests, expert opinion, etc. You should also create one or two "sample items" to show.

d) Describe your proposed research design. Your description should include:

Naming the specific research design you plan to use. For example, experimental, correlational, etc.
Describing the procedures you plan to follow. That is, how will you obtain your data for analysis. This should be described in enough detail to let someone else carry out the research you are proposing.
Addressing how major threats to internal validity will be controlled.
Discussing possible limitations to external validity.

Part 4: Research Ethics and Social/Cultural Diversity
In one or two pages, identify and describe any significant ethical issues and issues of social/cultural diversity that will need to be addressed. Describe how you will address these issues, and the possible impact these issues will have on your study.

Part 5: Analysis and Results
In one or two pages, identify the statistical test you would use. This should be one of the four primary tests discussed in your text: chi-square, t-tests, ANOVA, or correlation. Discuss why you chose this particular statistical test and what results you expect to find. Lastly discuss the possible implications if your study produces significant results or if your study shows no significant differences.

Grading Rubric for Paper #3
4 Points The APA formatting, style and citation are largely error free.
3 Points Writing style is appropriately formal and academic for graduate level work. Paper is largely free of typos, misspellings, and grammatical errors.
5 Points Research Topic and Research Question are clearly described and supported by citations to existing scholarly research.
8 Points  Methods or Procedures are logical and clearly stated.
5 Points  At least one ethical issue and one issue relating to social/cultural diversity are identified and clearly discussed.
5 Points  Analysis and Results are logical and are clearly described.
Appendix D

EDUC 5000 and Program Standards

Additional Information regarding EDUC 5000 and program standards is provided below. Note that this information is subject to correction and change.

Washington Administrative Code
WAC 246-809-221(8) Research and evaluation.

Council for Exceptional Children (CEC):
Standard 1: Foundations
“Special educators understand the field as an evolving and changing discipline based on philosophies, evidence-based principles and theories,…”

Interstate Teacher Assessment and Support Consortium (InTASC):
Principle 8
The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the learner.

Principle 9
The teacher is a reflective practitioner who continuously evaluates the effects of his/her choices…

International Reading Association (IRA):
Standard 1
Foundational Knowledge
Standard 3
Assessment, Diagnosis, and Evaluation

Educational Leadership Constituent Council (ELCC):
Standard 1.1 Develop a vision
c. Candidates use data-based research strategies to create a vision that takes into account the diversity of learners in a district.
Standard 1.2 Articulate a Vision
b. Candidates demonstrate the ability to use data-based research strategies and strategic planning processes that focus on student learning to inform the development of a vision, drawing on relevant information sources such as student assessment results, student and family demographic data, and an analysis of community needs.
Standard 1.3 Implement a Vision
b. Candidates design research-based processes to effectively implement a district vision throughout an entire school district and community.
b. Candidates design or adopt a system for using data-based research strategies to regularly monitor, evaluate, and revise the vision.
Standard 2.2 Provide Effective Instructional Program
instructional research methodologies and can analyze the comparable strengths and weaknesses of each method.
b. Candidates are able to use qualitative and quantitative data, appropriate research methods, technology, and information systems to develop a long-range plan for a district that assesses the district’s improvement and accountability systems.
Standard 2.3 Apply Best Practice to Student Learning
c. Candidates demonstrate an understanding of how to use appropriate research strategies to promote an environment for improved student achievement.
a. Candidates demonstrate the ability to facilitate and engage in activities that use best practices and sound educational research to improve instructional programs.

Standard 3.1 Manage the Organization
a. Candidates demonstrate the ability to use research-based knowledge of learning, teaching, student development, organizational development, and data management to optimize learning for all students.

Standard 3.2 Manage Operations
b. Candidates can use appropriate and effective needs assessment, research-based data, and group process skills to build consensus, communicate, and resolve conflicts in order to align resources with the district vision.

Interstate School Leaders Licensure Consortium (ISLLC):
Performances
The administrator facilitates processes and engages in activities ensuring that:
curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies

National Association of School Psychologists (NASP):
Standards for Training and Field Placement Program in School Psychology
The mission of the National Association of School Psychologists (NASP) is to promote educationally and psychologically healthy environments for all children and youth by implementing research based, effective programs that prevent problems, enhance independence, and promote optimal learning.

2.9 Research and Program Evaluation
School psychologists have knowledge of research, statistics, and evaluation methods. School psychologists evaluate research, translate research into practice, and understand research design and statistics in sufficient depth to plan and conduct investigations and program evaluations for improvement of services.