4

Course Name

Teaching and Learning through Inquiry 319/519

Tuesday and Thursday / 4:00 – 5:15 p.m.

Herman Brown room 21

Instructor/Title: Sheila Whitford

Office Hours: Tuesday and Thursday, 2:00 – 4:00 p.m.

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**COURSE DESCRIPTION:** Education for the 21st Century of change and innovation demands problem-solving and critical thinking skills. This course approaches the teaching of content areas with a student-focused lens that engages inquiring minds through small group exploration of open-ended problems. Lesson structure, questioning strategies, and assessment will be integral to the course. Required for certification, this course includes five hours of observation in a local secondary school.

**COURSE OBJECTIVES/LEARNING OUTCOMES**

By the end of this course the student will be able to….

1. Recognize lesson structures for both direction and inquiry instruction
2. Recognize and use research that defends the use of inquiry instruction
3. Plan and deliver direct and inquiry lessons
4. Design and practice questioning strategies
5. Recognize and apply the components of assessment in guiding instructional planning
6. Adapt lessons to address students’ varied backgrounds, skills, interests, and learning needs, including the needs of English language learners
7. Apply instructional strategies that promote student achievement of specific learning objectives in the TEKS

**STANDARDS AND COMPENTCIES from Chapter 149, Texas Administrative Code**

Teaching and Learning through Inquiry

|  |  |  |
| --- | --- | --- |
| Standards and Competences |   | Chapter or Assignment  |
| Standard 1: A, iii |  Teachers connect students' prior understanding and real-world experiences to new content and contexts, maximizing learning opportunities. | Larmer, Problem Based and Project Based; 4 Stages of Inquiry |
|  Standard 1: B, i,ii,iii |  Teachers use a range of instructional strategies, appropriate to the content area, to make subject matter accessible to all students. | Maniotes: Guided Inquiry and 5E Model, Journal of Science; Bybee; |
|  Standard 1: E, i, ii,iii |  Teachers provide opportunities for students to engage in individual and collaborative critical thinking and problem solving. | Gillies: Formation of Groups, Frey: Productive Small GroupsGillies: Problem Solving in Small Groups; |
| Standard 2: B,i,ii, iii |  Teachers understand the role of language and culture in learning and know how to modify their practices to support language acquisition so that language is comprehensible and instruction is fully accessible. | English Learners and Project Based LearningCaskell; Boaler; Campbell |

**REQUIRED COURSE MATERIALS**

Textbooks: None.

Other Reading Materials:

Readings and videos that are required reading and viewing are embedded within the modules on Canvas. Otherwise, they will be provided in class.

Other Required Materials:

A bibliography will be posted on Canvas.

**COURSE FORMAT**

Sample Text: Class sessions consist of discussions, and student centered activities that introduce important concepts and demonstrations, examples, and exercises. Students will opportunities to plan and practice teach inquiry lessons. During class, students should feel free to raise questions or discuss the material. It is expected that the classroom atmosphere will be supportive of cooperative efforts among class members and between the instructor and class members.

**PERFORMANCE TASKS (required assignments, examinations, papers, etc.)**

 **The style required for papers is that of the American Psychological Association (APA). Grading rubrics will be made available for each assignment in advance. Your grade will be constructed of several components:**

Students’ final grades will be made up of several components:

|  |  |  |  |
| --- | --- | --- | --- |
| **Task**  | **Due Dates**  | **Point Contribution to Final Grade**  | **Expectations (see complete description in Performance Criteria section)**  |
| **Criminal Background Check** | **9/3/15** |  | For students who are not student teachers: complete the VIPS application and submit a copy of your identification prior to 9/3. HISD: [www.houstonisd.org/vips](http://www.houstonisd.org/vips)  Or [www.houstonisd.org/vipslogin](http://www.houstonisd.org/vipslogin)For student teachers: <http://www.applitrack.com/houstonisd/onlineapp/default.aspx?Category=Student+Teachers> |
| **Discussion Board** | **9/1 – 9/30** |  8 pts.  | Post comments to prompt; post two comments in discussion with other students. |
| **Teach a lesson on assessment to another education class (519)** | **9/3 & 9/8** | 20 pts. | See assignment description.  |
| **Journal Part 1** | **9/10** | 12 pts. | Journal Part 1: Compare and contrast “guided and independent practice” to “explore and explain”. Describe what an observer should see during an explore and explain segment of a lesson. Use a lesson you have written or seen.  |
| **Inquiry Lesson Plan 1**  | **9/22** | 18 pts | See assignments for description. |
| **5 hours of classroom observation**  | **TBA** |  | Needed to write paper on observation, class readings, and class experiences. See assignment description. (519)  |
| **Discussion Board** | **10/1 -10/31** | 8 pts. | Post comments to prompt; post two other comments in discussion with other students.  |
| **Journal Part 2** | **10/1** | 12 pts. | Journal Part 2: Describe and reflect on the skills needed to work collaboratively? How might you teach skills needed? |
| **Inquiry Lesson 2** | **10/8** | 18 pts. | See assignments for description. |
| **Teach an Inquiry Class** | 10/6 – 12/3 | 20 pts. | See the assignment description. Sign up to teach 8/27. |
| **Journal Part 3** | 10/22 |  12 pts.  |  Journal Part 3: What process/skills have to be in place for problem based learning? What are the challenges? How do you overcome the challenges? |
| **Discussion Board** | 11/1 -11/30 | 8 pts.  | Post comments to prompt; post two other comments in discussion with other students |
| **Life in School Event**  | 11/5 |   | Attendance required. Students in Methods must present a lesson plan that addresses assessment.  |
| **Journal Part 4** | 11/5 | 12 pts. | Journal Part 4: What would you assess in a project ? How would you assess student learning in a problem-based learning project?  |
| **Project Based Learning Plan** | 11/17 | 25 pts. | See the assignment description.  |
| **Journal Part 5** | 11/24 | 12 pts.  | Journal Part 5: What would your strategies be to align project based learning to the TEKS? How would students be able to identify what they were expected to learn during project based learning.  |
| **Journal Part 6** | 12/3 | 12 pts. | Journal Part 6: What have you learned about problem based learning and the process of inquiry? What have read, what have you experienced, how have you taught, what have you heard, or what have you talked about? |
| **Paper (519)** | 12/10 | 20 pts | See assignment description. |

 **Assignments**

Inquiry Lesson Plan 1 (one day lesson): Using the Rice Teacher Education lesson plan template, construct a lesson plan that integrates inquiry into a lesson cycle. Focus on the scaffolding from explore and explain. State not only the TEK but construct a student friendly objective. Include essential questions. This lesson plan must be different from the lesson plans you are preparing for your Methods or Curriculum Development classes. (20 pts)

Inquiry Lesson Plan 2 (one day lesson): Using the Rice Teacher Education lesson plan template, construct a lesson plan that is complete from engage, explore, explain, elaborate, and check for understanding(evaluate). Work on the transitions and scaffolding of activities. State not only the TEK but construct a student friendly objective. Include essential questions.

Project Based Learning Design: Design a project based learning plan that will take about two weeks of class time in your content area. Identify TEK objectives. Describe the formation of groups, how students will have options, the mini lessons that you need to teach, formative and summative assessments, ( 519) (20 pts)

Journal ( 6): Document your learning about inquiry: designing problem based learning, forming collaborative groups, questioning , project based learning, and assessing. Address the questions for each journal requirement and reflect on how you have used your learning from lessons that you prepared and taught or might use in a class. (60 pts)

Journal Part 1: Journal Part 1: Compare and contrast “guided and independent practice” to “ explore and explain”. Describe what an observer should see when a teacher is checking for understanding

Journal Part 2: Describe and reflect on the skills needed to work collaboratively? How might you teach skills needed? What have you observed about collaborative groups both from your own experience and your class observations.

Journal Part 3: What process/skills have to be in place for problem based learning? What are the challenges with teaching problem based instruction?

Journal Part 4: What would you assess in a project? How would you assess student learning in a problem-based learning project?

Journal Part 5: What would your strategies be to align project based learning to the TEKS? How would students be able to identify what they were expected to learn during project based learning.

Journal Part 6: What have you learned about problem based learning and the process of inquiry? What have read, what have you experienced, how have you taught, what have you heard, or what have you talked about?

Teaching an Inquiry Class: From your Inquiry Lesson Plan, teach the plan. Review the rubric. The lesson time frame is 30 minutes with a 20 minute evaluation. (15 pts. )

Discussion Board: A prompt will be posted at the beginning of each month, September through November. Three responses are required during the month. The first response should be your comments to the prompt; the second and third responses should be comments made to others responses. Use readings, your research, information from other classes, your classroom observations, your experiences with teaching lessons, and your teaching philosophy to support your comments. This is not a place for summaries of readings, critiques of others comments or work but rather a place to explore ideas about learning theories particularly constructivism and inquiry.

Teaching a lesson on assessment (519): Using the articles on assessment from class, teach the lesson the lesson on assessment to another education class. The lesson must be presented in class prior to your teaching it to another education class…September 3 and 8. Bonus points (20)

Paper (519): From the classroom observations, Life in Schools, readings, your extended research, class activities and discussion, write a paper analyzing assessment with inquiry learning.

**GRADING POLICIES/PROCEDURES**

Indicate your grading scale.

Example:

The following is the breakdown for the grades. Your points for each assignment will be totaled and a final grade will be assigned as follows:

|  |  |  |
| --- | --- | --- |
|   | MAT  | Undergraduate  |
| Grade A  |  197-177 | 177 - 159 |
| Grade B  |  176 -157 | 158 - 141 |
| Grade C  |  156 - 137  | 140 - 124  |
| Grade D  |  136-118 | 123 - 106  |
| Grade F  |  Below 117  | Below 105  |

CLASS POLICIES

1. Students will be expected to attend all classes and to notify instructor if the student will miss class.
2. Students will be expected to arrive on time to class.
3. Students will be expected to actively participate in class
4. Students will be expected to turn in all assignments on time.
5. Under certain circumstances, papers or other written work with inadequate grades may be resubmitted within an arranged time frame.

 As a final note, as a courtesy to your peers and the instructor, please put your cell phone on silent mode/vibrate during class unless being used for class. Please keep your computer screens at a 45 degree angle during all discussion unless being used for class.

**TENTATIVE SCHEDULE**

The course outline may be modified as the course proceeds depending on the progress of the group. The tentative schedule is as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Module | Dates | Topics/Questions | Readings | Assignments |
| 1 | August 26 & 28 | Exploring how we learn; planning and evaluating a direct instruction lesson (guided and independent practice) | Ertmer ; Wilson; Kozioff | Criminal Background Checks |
| 1 | September 1 & 3 | Planning and evaluating an inquiry lesson. (explore and explain) Present lesson plans for formative assessment.  | Maniotes: Bybee;Fisher, D., & Frey, N. (2009); Fisher, D., Frey, N. Pumpian, I. (2011);Guskey, T. R. (2013). Darling-Hammond, L., & Hill-Lynch. (2006)  | Inquiry Lesson Plan for Assessment (9/1) |
| 1 | September 1 |  |  | Discussion Board |
| 1 | September 8  | Present lessons for assessment.   |  | Journal Part 1: Compare and contrast “guided and independent practice” to “ explore and explain”. Describe what an observer should see when a teacher is checking for understanding.  |
| 2 | September 10, 15 & 17 | Using collaborative group. Questioning: Structuring questions for extended discussion that requires analysis, evaluation, and synthesis Problem based learning (engaging and exploring).  | Gillies: Formation of Groups, Frey: Productive Small Groups<http://www.paideia.org/about-paideia/socratic-seminar/>Walsh; Three Story Intellect; Cazden;<https://www.youtube.com/watch?v=zxTuPVtayOI> Larmer,<http://www.edutopia.org/blog/pbl-vs-pbl-vs-xbl-john-larmer> ; 4 Stages of Inquiry <http://www.teachthought.com/learning/4-phases-inquiry-based-learning-guide-teachers/>  |  |
| 2 | September 22 & 25 | Designing problem based learning ( explain and evaluate) and its evaluation ; Using collaborative groups. | <http://www.studygs.net/pbl.htm> Gillies: Problem Solving in Small Groups; | Inquiry Lesson Plan 1 |
| 2 | September 29 & October 1 | Assessing Problem Based Learning and its extension into project based learning.  | Fry; Tomlinson; <http://www.edutopia.org/video/real-world-connections-keys-pbl-series-1> <http://www.edutopia.org/project-based-learning-introduction-video> English Learners and Project Based Learning | Journal Part 2: Describe and reflect on the skills needed to work collaboratively? How might you teach skills needed?  |
| 3 | October 1 |  |  | Discussion Board |
| 3 | October 6 & 8 | Observing formative assessment, identifying the lesson cycle; Teaching an inquiry lesson and its evaluation  |  eEvidence Base for Social Studies, Stiggins Part 1 and Part 2 | Inquiry Lesson Plan 2 |
|  | October 13 | Midterm Break |  |  |
| 3 | October 15  | Deliberate grouping and collaborative group strategies | Belland; Clifford |  |
| 3 | October 20 & 22 | Developing project based learning aligned to TEKS; & Teaching an inquiry lesson online | Description of a PBL in a San Diego School<http://bie.org/resources>  |  Journal Part 3: What process/skills have to be in place for problem based learning? What are the challenges? |
| 4 | October 27 & 29 | Teaching an inquiry lesson online Working with Diverse Population | Caskell; Boaler; Campbell; Hovey(Chapter Six) |  |
| 4 | November 3 & 5 | Teaching an inquiry lesson and its evaluation; Life in Schools |  | Journal Part 4: What would you assess in a project ? How would you assess student learning in a problem-based learning project? ?  |
| 5 | November 10 & 12 | Teaching an inquiry lesson and its evaluation. Training students for collaborative work.  | Kagan, Heller; add the collaborative group contract video |  |
| 5 | November 17 & 19 | Teaching an inquiry lesson and its evaluation. Teaching students questioning skills.  | <https://www.teachingchannel.org/videos/inquiry-based-discussions-for-text> | Project based learning plan  |
| 5 | November 24 | Teaching an inquiry lesson and its evaluation |  | Journal Part 5: What would your strategies be to align project based learning to the TEKS? How would students be able to identify what they were expected to learn during project based learning?  |
|  | November 26 | Thanksgiving Break |  |  |
| 5 | December 1 & 3 | Teaching an inquiry lesson and its evaluation. Using problem based and project based learning in real world scenarios.  | <https://www.youtube.com/watch?v=GYkb6vfKMI4>  |  Journal Part 6: What have you learned about problem based learning and the process of inquiry?  |
|  | December 10 |  |  | Paper (MAT) Analysis of observations, readings, and experience with pbl. (20 )  |

**ACADEMIC HONESTY**

 The academic Honor System is one of the most valued traditions at Rice, but it can only be effective if the entire student body accepts its responsibilities, individually and collectively, for maintaining the integrity of the system. The effectiveness of the Honor System also depends upon the support and cooperation of the faculty. Every student should read the Constitution and By-laws of the Honor Council and the Honor Code. Copies can be obtained in the Office of the Assistant Dean, Student Judicial Programs. A brief guide to policies and procedures can be found at [http://students.rice.edu/Template\_DOU.aspx?id=3024.](http://students.rice.edu/Template_DOU.aspx?id=3024)

**ADA STATEMENT**

When possible, and in accordance with 504/ADA guidelines, we will attempt to provide reasonable academic accommodations to students who request and require them. If you require support services, let me know and contact Alan Russell, Director of Disability Support Services, at adarice@rice.edu or 713-348-5841. Please notify us no later than the first week of class.

**ADDRESSING THE NEEDS OF DIVERSE LEARNERS**

Sample text: It is especially important to use appropriate and multiple forms of assessment with diverse learners and students with special needs. To ensure that diverse student preferences for learning and expression are honored, a variety of learning modes will be used.

**ATTENDANCE:**

Sample text: Attainment of the objectives of this course is directly related to the developmental sequences of experiences from one class meeting to another; thus, frequent absences from class makes it unlikely that a grade of A could be earned. Students will be expected to attend all classes and be punctual. If you come late because of traffic or other reasons, please come in and make sure you get the handout/s, activities, etc.

As busy individuals, there may be a time when you cannot be in class. In this case, please let the instructor know in advance. **One class may be missed for a valid reason with permission**. You are responsible for the content and assignments that are missed.

**DROP DATES:**

Please refer to the academic calendar for drop dates: <http://registrar.rice.edu/content.aspx?id=173>

**INCOMPLETE GRADES:**

Often, students enter a course thinking that they can take an “Incomplete” (INC) grade of they decide they will not complete the course requirements on time. Please keep in mind that students will not be allowed to take a grade of INC in this course due to poor planning on their part.

As your instructor, I am required to report this designation to the Office of the Registrar when a student fails to complete a course because of verified illness or other circumstances beyond the student’s control that occur during the semester. If you find you do have a legitimate reason for the INC grade, please talk to me as soon as possible to discuss the situation and to identify the documentation that will be required to support your request. For additional information please refer to [http://registrar.rice.edu/facstaff/grade\_info/.](http://registrar.rice.edu/facstaff/grade_info/)

**INTEGRATION OF TECHNOLOGY**

Sample text: All students will be expected to be proficient with a word processing system and using internet for literature review searches. In addition, all students are required to: (1) communicate by email; (2) complete assignments using a word processing program; (3) submit assignments to the instructor by email if absent from class on the day the assignment is due; (5) use the library’s electronic databases for literature reviews; (6) possibly, we will create a class blog for ongoing questions, discussions and student concerns.

*Note. We might integrate other forms of technology as necessary. I welcome your ideas as well.*

**OTHER USEFUL REFERENCES**

**NOTE: Information contained in this course syllabus, other than the absence policy, may be subject to change with reasonable advance notice, as deemed appropriate by the instructor.**

**Inquiry Learning Lesson Rubric (5 E Model)**

As you prepare to design an inquiry lesson, review the performance indicators listed below. This rubric will be used to grade your work.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Objective/Criteria** | **3 - Outstanding** | **2 – Exceeds Expectation** | **1 - Proficient** | **0 – Below Average** |
| **Objective** | Students’ understanding of objective can be checked | Lesson develops aspects of objective | Clear objective written in words of students | No objective |
| **Agenda** | Smooth transitions between activities | Clear way for students to move through activities | Activities mentioned | No or unclear agenda |
| **Engage students** | Initial activity is led by the students and sets the stage for the next activity in the lesson | Students are active participants in the initial activity | Initial activity sets the stage for the 2ndactivity | Instructor uses the initial activity to model student action on 2nd activity |
| **Explore the material with students** | Student-led activity with the instructor on the side | Activity is student-centered with the instructor facilitating the action | Second activity builds on the first activity but is teacher-led | Second activity does not build on the first activity |
| **Explain**  | Activities build on the explore and focus on students’ discussion with one another that is facilitated by the teacher. Teacher may guide students into deeper understanding or correct misconceptions.  | Activities somewhat build on explore and allow students to express understanding of gained knowledge, but does not include inaction between student. Discussion is dominated more by the teacher than the students.  | Activities build somewhat on the explore and allow students to express their gained knowledge but is interrupted by teacher talk. | Activity is controlled by teacher. The teacher controls the discussion and may not build on the explore.  |
| **Check for understanding** | Final activity assesses students’ understanding | Clear assessment of students’ understanding | Some assessment of students’ understanding | No assessment of students’ understanding |
| **Total** |

**Project-Based Learning Rubric**

As you prepare to design your project-based unit, review the performance indicators listed below. This rubric will be used to grade your work.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CATEGORY** | **5 - Outstanding** | **4 – Exceeds expectations** | **3 - Proficient** | **2 – Below average** |
| **Project Outcomes** | Teacher identify and defend at  least  4 researched, insightful, creative outcomes to pursue. | Teacher identify and defend at least  4 researched outcomes to pursue. | Teacher identify 2 reasonable outcomes with plausible defense. | teacher identifies 2 reasonable outcomes with little defense. |
| **Assessments** | Teacher prepares and defends individual and group rubrics that succinctly evaluate the important elements of the project. | Teachers prepares and defends individual and group rubrics that evaluate the important elements of the project. | Teacher prepares individual and group rubrics that evaluate the important elements of the project. | Teacher prepares assessment rubrics that evaluate the project. |
| **Grouping** | Grouping of students is defended using researched, reasonable methods. | Grouping of students is defended using research methods. | Grouping of students is defended with a strong explanation. | Grouping of students is defended. |
| **Skill Lessons** | Teacher composes and defends at least 3 researched skill lessons using inquiry techniques for student success in the project. | Teacher composes and defends at least 3 skill lessons using inquiry techniques for student success in the project. | Teacher composes at least 3 skill lessons using inquiry techniques. | Teacher composes lessons for the project. |
| **Timeline** | Teacher develops and defends a reasonable, complete timeline with assigned dates, duties, and with the   high points of  the timeline. | Teacher develops and defends a timeline with assigned dates, duties, and with the high points of  the timeline. | Teacher develops a complete timeline with assigned dates, duties, and with the  high points of  the timeline. | Teacher develops timeline with the high points of  the timeline. |
| **Total:** |

Journal Rubric

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Category | 4 – Exceeds Expectations | 3– Proficient | 2 – Developing | 1 – Below expectations |
| Assertions | The assertions made about the question prompts have an exceptional and relevant interpretation in its relationship to inquiry in classroom practice. | The assertion made about the question prompts has a relevant interpretation in its relationship to inquiry in classroom practice.  | An assertion is made about the question prompt that is not completely relevant in its relationship to inquiry in classroom practice.  | There is no assertion made to the question that is relevant to inquiry in classroom practice.  |
| Evidence | Evidence is used from readings, research, personal teaching or learning experiences to support assertion. ,  | Evidence is used from readings, personal teaching or learning to support assertions .  | Evidence is used from readings but tends to summarize rather than support assertion.  | Evidence provided is not appropriate for the support of the assertion.  |
| Analysis | The analysis about inquiry or other learning theories offer insights about the impact on student learning, about the comparison of learning theories, and conclusions about how inquiry can be used in the classroom.  | The analysis about inquiry or other learning theories offer some insights on student learning and make one relevant conclusion about how inquiry can be used in the classroom.  | The analysis is limited to a summary of readings without a conclusion that is relevant to the assertion or evidence.  | The analysis is not aligned with the assertion or evidence.  |

**Teaching Rubric**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Teaching element** | **4 -Exceeds expectations: Student teacher analyzes, discusses, and applies effective instruction** | **3- Proficient: Student teacher manages instructional practices and directs instruction** | **2- Below average: Student teacher prepares and directs** | **1 - Unsatisfactory: Student teacher attempts management of content**  |
| Creates a learning environment ( engaging, respectful, manage routines and organizational procedures; redirects behavior) |  |  |  |  |
| Delivers effective lessons (scaffolding, transitions, checking for understanding) |  |  |  |  |
| Structures lesson with cognitive design that includes inquiry (questioning, problem poising, small group work, student choice) |  |  |  |  |
| Utilizes questioning strategies that push student thinking |  |  |  |  |
| Checks for understanding ( facilitates student self-evaluation and goal setting; continual checking for understanding (formative assessments) using a variety of strategies; |  |  |  |  |
| Total |  |  |  |  |
| Comments |  |

 **Discussion Rubric**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Component** |  **4 – Exceeds expectations** | **3- Proficient** | **2 – Developing** | 1. **Below average**
 |
| Responses to prompt | Response is meaningful in relationship to the student learning and teaching practices. Refers to readings or videos from a variety of sources.  | Response address some relationship to student learning and teaching practices. Refers to readings or videos from class. | Response is relevant , but lacks relationship to student learning and teaching practices. | Response is irrelevant and off topic. |
| Responses to others prompt | Response extends a discussion, poises an open-ended question, offers new thoughts to the topic. | Response poises a question and adds to ideas that may have already been expressed.  | Response is simply a statement of opinion or summary of others comments.  | Response is not made.  |

**Paper Rubric**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Component** | **Exemplary - 4** | **Competent - 3** | **Developing - 2** | **Unsatisfactory -1** |
| Information complete | The paper is complete and leaves no important aspect not addressed | The paper is complete and leaves no important aspect not addressed | The paper is somewhat complete but is missing several important aspects of the topic.  | The paper is clearly incomplete with many important aspects of the topic left out |
| Comprehension of topic | The author has a good grasp of what is known, what is generally accepted and what is yet to be discovered | The author has a good grasp of relevant information but fails to distinguish between what is known, what is generally accepted, and what is yet to be discovered | The author has a fair grasp of relevant information but fails to distinguish known, accepted, and what is yet to be discovered | The author has a poor grasp of the relevant information |
| Information supported with significant details | \_\_\_\_Appropriate significance is assigned to the information presented and irrelevant information is rarely included | The paper occasionally used information in a way inappropriate to its significance or includes much irrelevant information | The paper often misuses information and its significance | The paper frequently uses information inappropriately or uses irrelevant information |
| Information connected to instructional implementation  | Connections between the topic of the paper and related topics are made that enhance understanding | Some connections are made to related topics | Few connections are made to related topics | No connections are made to related topics to help clarify the information presented |
| Examples from classrooms experiences or observations | The author seems to be writing from personal knowledge or experience | The author seems to be writing from knowledge or experience but has difficulty going from general observations to specifics | \_\_\_\_ The author attempts to apply knowledge from experiences but fails to make the transition from personal to specific | The work seems to be a simple restatement of the assignment or a simple, overly broad answer to a question with little evidence of expertise on the part of the author |
| Total |  |  |  |  |