STEM Infused Curriculum Project Rubric: Elementary K-6 Electronic Evidence #3

Evidence Descriptors and Evaluation Tool

Highlighted yellow text below describes how the evidence specifically addresses each of the descriptors. The rubric will be used for the instructor's evaluation of the project as it related to the course grade as well as for gateway assessment for the unit's comprehensive assessment plan for CAPE.

Alignment with the NC Professional Teaching Standards

The STEM Infused Curriculum Project assessment is designed to provide evidence of the candidate's performance relative to the following standards and elements:

Teachers demonstrate leadership. This performance assessment requires candidates to develop a unit of cohesive, meaningful, and purposeful lesson plans that integrate Language Arts, STEM, and Social Studies *North Carolina Common Core/Essential Standards*, as well as, the appropriate North Carolina Professional Teaching Standards for technology integration.

1a.2 Draws on appropriate data to develop classroom and instructional plans	Emerging/Developing 1 (Below 80%)	Proficient 2 (80-89%)	Accomplished 3 (90-100%)	Evaluation
The candidate will demonstrate the ability to develop a series of instructional strategies based on existing performance data for students in the EDU 4134 classroom and the relevant NCCC/ES/NCPTS to produce a cohesive unit of five (5) lesson plans centered on a topic in social studies.	The five (5) social studies/STEM lesson plans do not purposefully use available student performance data and the relevant NCCC/ES/NCTPS to plan a cohesive unit of study.	The five (5) social studies/STEM lesson plans form a cohesive unit which evidences the purposeful integration of the relevant NCCC/ES/NCTPS along with available student performance data.	The five (5) lesson plans form a cohesive social studies/STEM unit which uses relevant NCCC/ES/NCPTS and available performance data. The unit evidences thoughtful application of available student performance data to develop activities that will promote a classroom culture of student engagement and lifelong learning.	EDU 4110 EDU 4134 EDU 4132/4532 EDU 4133
	hers demonstrate leaders	•	Score:	
Teachers establish a res	pectful environment for a	diverse population of stud	lents. This performance assessm	ent requires

	candidates to spotlight a student with special needs and plan modifications that will enable the student to be successful in						
e v	r all lesson plans in the STI	EM Infused Curriculum Proj	ect.				
2b.3 Understands the influence of diversity	Emerging/Developing	Proficient 2	Accomplished 3	Evaluation			
and plans instruction accordingly.	(Below 80%)	(80-89%)	(90-100%)	Livatation			
The candidate must identify a student with special needs and thoughtfully and purposefully plan appropriate modifications for each of the lesson plans that will enable the student to be successful.	The modifications are not appropriate for the identified unique learner and/or some of the lesson plans reflect inappropriate modifications to enable the learner to be successful in meeting stated five (5) ES.	All of the modifications for the identified unique learner are appropriate and deemed to be effective in enabling the student to be successful in meeting the ES on all five (5) lesson plans.	Multiple types of modifications (instructional/behavioral/phy sical) for the identified unique learner are provided to enable the student to be successful in meeting the ES on all five (5) lesson plans.	EDU 4131 EDU 4133 EDU 4134			
2d.1 Cooperates with specialists and uses resources to support the special learning	Emerging/Developing 1 (Below 80%)	Proficient 2 (80-89%)	Accomplished 3 (90-100%)	Evaluation			
needs of all students.			(90-100%)				

	Literacy Infused	Curriculum Project.		
For at least one lesson	Curriculum Project.			
plan, the candidate will	, and the second			
demonstrate the ability	The candidate fails to			
to incorporate co-	appropriately			
teaching strategies (to	incorporate co-teaching			
work with a special	or differentiated			
needs, English	strategies into at least			
language learner, or	three of the lesson plans.			
academically gifted	_			
teacher).				
Total Standard 2: To	Total Standard 2: Teachers establish a respectful environment for a			
diverse population of st	diverse population of students.			
Topology know the content they topol. This performance assessment requires condidates to investigate the Newth Caroline				

Teachers know the content they teach. This performance assessment requires candidates to investigate the North Carolina Common Core and Essential Standards for Language Arts, Social Studies, Science, Math, and Computer/Technology (STEM) areas in order to plan a rigorous and relevant social studies unit that enhances literacy and technology skills.

3a.1 Develops and applies lessons based on the North Carolina Common Core and Essential Standards	Emerging/Developing 1 (Below 80%)	Proficient 2 (80-89%)	Accomplished 3 (90-100%)	Evaluation
The candidate must	The five (5) lessons are	The five (5) lessons are	In addition to the relevant	
align lesson plans with	not centered on a social	centered on a social	North Carolina Common	
the North Carolina	studies/STEM topic	studies/STEM topic for	Core and Essential Standards	
Common Core and	and/or do not address all	one grade level/subject	for social studies, STEM	EDU 4110
Essential Standards to	of the relevant North	and all of the relevant	areas, and ELA, candidate	EDU
produce a cohesive unit	Carolina Common Core	North Carolina Common	uses standards developed by	4132/4532
centered on a social	and Essential Standards	Core and Essential	professional organizations to	EDU 4131
studies topic infused	for one grade	Standards for social	make the curriculum	EDU 4133
with literacy, and	level/subject. The	studies/STEM, and ELA	balanced, rigorous, and	
STEM areas including	project has failed to	have been purposefully	relevant. STEM areas	
technology.	integrated STEM	and meaningfully	including technology goals	

	content areas in less than 3 of the lesson plans.	addressed across the STEM Infused Curriculum Project. Additionally, the project has purposefully integrated STEM areas including technology in at least 4 of the 5 lessons.	are incorporated into all of the lessons developed for the unit.	
3c.1 Demonstrates knowledge of links between grade/subject and the North Carolina Common Core and Essential Standards by relating content to other disciplines.	Emerging/Developing 1 (Below 80%)	Proficient 2 (80-89%)	Accomplished 3 (90-100%)	Evaluation
The candidate will demonstrate his/her ability to integrate social studies, (STEM) Math, Science, Engineering computer/technology ES from the North Carolina Common Core and Essential Standards in a series of five (5) lesson plans.	Project does not integrate relevant Language Arts, STEM areas and computer/technology objectives with social studies content.	The project demonstrates purposeful integration of relevant STEM areas including computer/ technology content and all of the relevant Language Arts objectives from the North Carolina Common Core and Essential Standards in a cohesive unit centered on a social studies/STEM topic for one grade level.	Project demonstrates purposeful integration of relevant STEM areas including computer/ technology objectives and all of the relevant Language Arts objectives from the North Carolina Common Core and Essential Standards in a cohesive unit centered on a social studies/STEM topic for one grade level.	EDU 4110 EDU 4132/4532 EDU 4131 EDU 4133
3c.2 Relates global awareness to the subject	Emerging/Developing 1 (Below 80%)	Proficient 2 (80-89%)	Accomplished 3 (90-100%)	Evaluation

Collaborative team activities and the integration of technology where appropriate that encourages students to analyze, compare, infer, interpret, evaluate, synthesize, and/or problem solve to enhance understanding of social studies topic. Collaborative team activities and the integration of technology where appropriate that encourages students to analyze, compare, infer, interpret, evaluate, synthesize, and/or problem solve to enhance understanding of social studies topic. Collaborative team activities and technology integration is minimal. Activities for student engagement and problem solving to enhance the development of 21st century skills are lacking. Both collaborative team activities and technology integration are included in the unit. Activities for students are engaging and the development of 21st century skills are addressed in the unit. EDU 4110	The candidate will integrate literary works which align with the social studies topic that heightens awareness of diversity and global connections.	Less than three of the lessons have literary works which heighten awareness to diversity do not appear to be integrated into the unit and/or the alignment of the literary works to the social studies/STEM topic is questionable.	Literary works which heighten awareness of diversity and/or global connections and align with the social studies/STEM topic have been purposefully incorporated into at least three of the lesson plans.	A deliberate effort is made to integrate literary works which heighten awareness of diversity and/or global connections into at least four of the lessons which appear in the unit. Activities specifically designed to enhance awareness of student diversity and/or global connections that are related to these literary works are included in the social studies/STEM lessons.	EDU 4131 EDU 4133
The candidate will encourage collaboration with team activities and the integration of technology where appropriate that encourages students to analyze, compare, infer, interpret, evaluate, synthesize, and/or problem solve to enhance understanding of social studies topic. (Below 80%) (80-89%) (90-100%) Both collaborative team activities and technology integration is minimal. Activities for student engagement and problem solving to enhance the development of 21st century skills are lacking. EDU 4110 EDU 4133 EDU 4133	3d.1 Integrates 21st	Emerging/Developing	Proficient	Accomplished	Evoluation
The candidate will encourage collaboration with team activities and the integration of technology where appropriate that encourages students to analyze, compare, infer, interpret, evaluate, synthesize, and/or problem solve to enhance understanding of social studies topic. Collaborative team activities and technology integration is minimal. Activities for student engagement and problem solving to enhance the development of 21st century skills are lacking. Both collaborative team activities and technology integration are included in the unit. Activities for students are engaging and the development of 21st century skills are addressed in the unit.	•	(Below 80%)	=	(90-100%)	Evaluation
Total Standard 3. Teachers know the content they teach	encourage collaboration with team activities and the integration of technology where appropriate that encourages students to analyze, compare, infer, interpret, evaluate, synthesize, and/or	Collaborative team activities and/or technology integration is minimal. Activities for student engagement and problem solving to enhance the development of 21st	Both collaborative team activities and technology integration are included in the unit. Activities for students are engaging and the development of 21st century skills are	Both collaborative team activities and technology integration consistently and effectively engage students in problem solving and allow application of 21 st century skills to the social studies	

Teachers facilitate learning for their students. This performance assessment requires candidates to understand how students learn and design instruction that demonstrates their ability to differentiate instruction in order to meet the learning needs of all

students.					
4a.1 Identifies					
developmental levels of	Emerging/Developing	Proficient	Accomplished	T 1 (1	
individual students and	1	2	3	Evaluation	
plans instruction	(Below 80%)	(80-89%)	(90-100%)		
accordingly. The candidate will identify one unique learner for whom modifications are made to enable the learner to be successful in meeting the lesson objective(s).	The narrative is either missing or does not fully describe the unique learner and how to support his learning needs.	A narrative describing one learner with special needs and how to enable him to successfully meet each of the lesson's objective(s) is included in the Literacy Infusion Project.	A narrative describing one learner with special needs and appropriately differentiates instruction to optimally enable him to successfully meet each of the lesson's objective(s) is included in the Literacy Infusion Project. Data is included to support his developmental level and plan for instruction.	EDU 4133	
4a.2 Assesses and uses resources needed to address strengths and weaknesses of students.	Emerging/Developing 1 (Below 80%)	Proficient 2 (80-89%)	Accomplished 3 (90-100%)	Evaluation	
The candidate must	The assessment plan is	Three to four of the	All five of the lesson plans in		
collect and analyze data	poorly developed or	lesson plans in the	the STEM Infusion Project is		
from each lesson to	lacking. Fewer than	STEM Infusion Project	accompanied by an	EDU	
determine if the	three of the lessons	are accompanied by an	appropriate assessment tool	4132/4532	
objective(s) was met	evidence that assessment	assessment tool that	that aligns with the	EDU 4133	
and to what degree	data was incorporated	aligns with the	objective(s) of the lesson and		
students were	into the STEM Fusion	objective(s). Data to	provides data to allow the	EDU 4134	
successful in meeting the stated objective.	Project <u>or</u> the assessments do not	allow the candidate to plan the next	candidate to plan next		
The analysis of data	appear to align with the	instructional steps is	instructional steps. Evidence that the candidate used the		

will enable candidate to plan next instructional steps.	objective(s) of the lessons included in the unit.	provided.	assessment tool in delivering select lessons during EDU 4134 is provided.	
4b.1 Collaborates with colleagues to monitor student performance and make instruction responsive to cultural differences and individual learning needs.	Emerging/Developing 1 (Below 80%)	Proficient 2 (80-89%)	Accomplished 3 (90-100%)	Evaluation
The candidate will review lesson plans with the cooperating teacher in EDU 4134 to ensure that the modifications for the unique learner are appropriate and will maximize the likelihood that the learner will be successful in meeting lesson objective(s).	One or more of the lesson plans which are taught in EDU 4134 do not have the cooperating teacher's signature or the evaluation by the cooperating teacher is consistently below proficiency.	Each of the lesson plans which are taught in EDU 4134 have the cooperating teacher's signature indicating affirmation that the modifications for the unique learner are appropriate and will serve to maximize his learning. Evaluation by the cooperating teacher is consistently at proficiency standard.	Each of the lesson plans which are taught in EDU 4134 have the cooperating teacher's signature indicating affirmation that the modifications for the unique learner are appropriate and will serve to maximize his learning. Evaluation by the cooperating teacher is consistently at an accomplished standard.	EDU 4133 EDU 4134
4c.1 Uses a variety of appropriate methods and materials to meet the needs of all students.	Emerging/Developing 1 (Below 80%)	Proficient 2 (80-89%)	Accomplished 3 (90-100%)	Evaluation
The candidate will	The instructional	The instructional	The instructional strategies	EDU

demonstrate the ability to use many and varied instructional strategies and materials that purposefully and meaningfully address the social studies topic through varied learning styles, readiness level and/or diverse background.	strategies and materials do not show a variety of strategies incorporating varied learning styles, differentiated instruction for interests, readiness, and/or diversity of background.	strategies and materials purposefully and meaningfully address students' varied learning styles, readiness levels through differentiated instructional strategies and diversity of background in four of the lessons provided.	and materials purposefully and meaningfully address students' varied learning styles and differentiated needs in readiness level and diversity of background in all the lessons contained in the social studies/STEM unit.	4132/4532 EDU 4133
4d.1 Integrates technology with instruction to maximize student learning.	Emerging/Developing 1 (Below 80%)	Proficient 2 (80-89%)	Accomplished 3 (90-100%)	Evaluation
The candidate must integrate technology in the STEM fusion project to enhance students' learning, where appropriate, and include the accompanying artifacts.	Technology integration is evident in two or fewer of the lessons and/or is not used to effectively increase student involvement and engagement in the learning process.	Technology integration is evident in at least three of the lessons and includes strategies to effectively increase student involvement and engagement in the learning process.	Technology integration is evident in four or more of the lessons and includes a variety of strategies that will effectively increase student involvement and engagement in the learning process.	EDU 4110
4e.1 Integrates specific instruction that helps students develop the ability to apply processes and strategies for critical thinking and problem	Emerging/Developing 1 (Below 80%)	Proficient 2 (80-89%)	Accomplished 3 (90-100%)	Evaluation

solving.						
The candidate will craft lessons that encourage learners to ask questions, think creatively, synthesize knowledge, draw conclusions, and solve problems.	The instructional strategies for each of the five lessons do not enable students to develop the ability to apply processes and strategies for critical thinking and problem solving.	The instructional strategies for each of the five lessons enable students to develop the ability to apply processes and strategies for critical thinking and problem solving.	The instructional strategies for each of the five lessons enable students to develop the ability to consistently apply processes and strategies for critical thinking and problem solving. Evidence of student growth in these skills is also provided by the candidate.	EDU 4132/4532 EDU 4133 And- EDU 4134		
4f.1 Organizes student learning teams for the purpose of developing cooperation, collaboration, and student leadership.	Emerging/Developing 1 (Below 80%)	Proficient 2 (80-89%)	Accomplished 3 (90-100%)	Evaluation		
The candidate will plan and implement lessons that encourage cooperation and collaboration among students (reflecting the social constructivist philosophy), and are relevant to the social studies topic.	There are minimal opportunities provided in the unit for students to cooperate and collaborate with one another in regard to the topic presented.	The lessons presented in the Literacy Fusion Project include many opportunities for students to cooperate and collaborate with each other with regard to the social studies topic.	There are instructional strategies in the Literacy Fusion Project that are relevant to the social studies topic and encourage students to create and manage learning teams to effectively encourage the development of cooperation and collaboration.	EDU 4133		
	chers facilitate learning for		Score:			
			ndidates to think critically about	student learning		
	to determine if the instruction was effective in helping students meet stated objectives.					
5c.1 Considers and	Emerging/Developing	Proficient	Accomplished	_		
uses a variety of	1	2	3	Evaluation		
research-verified	(Below 80%)	(80-89%)	(90-100%)			

approaches to improve teaching and learning. The candidate will reflect upon their	The candidate's reflection paper shows little or no evidence of	The candidate's reflection paper evidences thoughtful consideration		
choices of instructional strategies and student data in an effort to enhance future teaching decisions and effectively meet the learning needs of their students.	thoughtful consideration regarding the impact of their instructional decisions on student learning and/or does not demonstrate a desire to seek out research-verified approaches to improve future teaching and learning.	regarding the impact of their instructional decisions on student learning and demonstrates a desire to seek out research-verified approaches to improve future teaching and learning.	The candidate's reflection paper evidences an active investigation of innovative research-verified approaches to improve teaching and learning.	EDU 4132/4532 EDU 4133
Total Standard 5: Teac	hers reflect on their pract		Score:	

Total Score from All			
Standards	Total Score	Total Score	Total Score
	Emerging	Proficient	Accomplished

Emerging: Total Score: 24-25=C-; 26-27=C; 28-29=C+ Proficient: Total Score: 30-32=B-; 33-35=B; 36-38=B+ Accomplished: Total Score: 39-41=A-; 42-44=A; 45=A+

Grader(s):	

Date:	
Follow-Up Needed (Comment if Necessary):	