Integrated Lesson Plan

Geology ELA "What kind of rock are you?"

Background Information

Name: Fatimah Abadi Grade Level: 4th grade

Concept: Learning about the three types of rocks

High Leveraged Strategies: Active questioning, setting learning goals, analyzing student work, interactive learning

Standards:

- 4-ESS1-1 MI Identify evidence from patterns in rock formations and fossils in rock layers to support possible explanations of Michigan's geological changes over time.
- EEW.4.2. Write to convey ideas and information clearly. Select a topic and related visual, tactual, or multimedia information.

Objective(s):

- Students will be able to understand and identify the three types of rocks.
- Students will be able to apply their thinking and participate in the class discussion.
- Students will be able to apply what they know by writing about what rock they would be and why.
- Students will be able to use interactive learning to achieve their understanding.

Additional Objective(s): [Address Special Education and/or ELL Needs]

- ELL students will be able to identify the three types of rocks.
- ELL students will be able to participate in the online game allowing them to practice what they have learned.
- ELL students will be able to participate in the ELA portion by using a template.

Students - Prior Knowledge:

Students have been studying geology, and understanding how the earth changes. They learned
about earth layers, earthquakes, and volcanoes. The next step will be for them to learn about the
three types of rocks.

Students - Possible Misconceptions:

- Some students may think that all rocks are the same, which is why they may be confused about learning about the different types that will be presented to them.
- ELL students may be confused during the lecture, which is why I will be switching from English to Arabic to make sure that they understand what is being talked about.

Vocabulary, Materials, Safety, Technology, and Lesson Administration

Lesson Vocabulary - List All of the Vocabulary Terms in the Lesson

- Rock
- Igneous
- Layers
- Sedimentary

- Metamorphic
- Solid
- Material
- Lava

Lesson Materials - List All of the Needed Materials (Manipulatives, Worksheets, Videos, etc.)

- 3 Types of Rocks and The Rock Cycle
- The three types of rocks
- Paper
- Penicil
- Computer

Safety Concerns and Cleanup Procedures

Safety Concerns:

Students will be asked to be mindful of each other's space. When playing the Kahoot game, they
will be asked to respect each other's privacy and not copy off one another.

Cleanup Procedures:

Students will be required to clean up your own space after the lesson.

Technology Incorporated

- 3 Types of Rocks and The Rock Cycle
- The three types of rocks
- Kahoot game page
- <u>Content:</u> Promoting understanding of the three types of rocks.
- <u>Pedagogy</u>: Interactive learning
- Technology: Kahoot game and (Google slideshow presentation)
- PCK (Pedagogical content knowledge)
- Pedagogy: Interactive learning
- Define: Interactive learning (P) is an effective technology in teaching and understanding rock types(C).
- Describe: By using interactive learning and having students work with one another and with their teacher, it can help students in many ways and keep them engaged. The interactive learning in this lesson will consist of a startup with visual learning, class discussion, support, and collaborative work. This can help students by increasing their engagement during the lesson, and it can also help them to improve their collaborative skills since they will be collaborating with the teacher and with each other.
- Support: After much research, an article was found, which was related to this lesson's PCK. The following
 article provides information on interactive learning, and circles six different benefits on how interactive
 learning is helpful to students and can help them in the long run. The article spoke about the benefits of
 interactive learning, which included on how it provides flexible learning, saves time, allows teachers to make
 use of interactive learning tools, and how it can be fun for children.
- Support for interactive learning
- TCK (Technological content knowledge)
- Technology: Kahoot game
- Define: Kahoot (T) is an effective technology integration in teaching rock types(C).
- Describe: By using Kahoot, as an effective technology integration, it can help keep students engaged and
 allow them to recollect what they have learned. This technology can help teachers spice up a lesson and
 allow it to be more interactive and fun for the students. It's also an effective technology for students to use

their computer skills, as well as be able to understand the different types of rocks and their characteristics based on this game.

- **Support:** The following article provides insight on how using Kahoot as a technology can help students in different ways, as well as provide learning benefits for the students. It talked about fostering positive attitudes, as well as having a positive effect on learning.
- Support for Kahoot being a helpful and beneficial technology
- TPK (Technological, pedagogical knowledge)
- Pedagogy: interactive learning, Technology: Kahoot game
- **Define**: Kahoot (T) facilitates interactive learning (P) for the students to be engaged and be able to apply what they have learned from interactive learning into a game.
- **Describe:** By engaging in a discussion with the students and engaging them through interactive learning in a Kahoot game, they will be able to express their thinking and apply what they have learned with their peers and teacher during the discussion part of the lesson.
- **Support:** The following article provides information on how using Kahoot can help revolutionize the classroom learning experience when it comes to interactive learning, and how it can help it in many ways. These ways include improved learning performances, improved student attitude and attention, more participation, and several others things.
- Support for Kahoot being a good technology in interactive learning.
- TPACK (Technological Pedagogical and Content Knowledge)
- Technology: Kahoot game
- Pedagogy: Interactive learning
- **Content:** Three types of rocks
- **Define:** Kahoot (T) is an effective technology that facilitates the pedagogy of interactive learning (P) allowing the students to apply what they have learned during the class discussion about the three types of rocks (C) content knowledge portion.
- Describe: The TPACK components come together when the teacher uses a Kahoot game to be able to facilitate interactive learning after having a collaborative discussion with the students about the three types of rocks.
- Support: Using a Kahoot game for interactive learning is extremely helpful. They can allow students to be able to apply what they have learned earlier in class discussions by another to answer the questions on the game. A Kahoot game can also promote collaboration and allow the students to be engaged. This focuses on technology and pedagogy. Now for the content, the technology and pedagogy fall under it since they are all connected. By using Kahoot as an interactive learning, I am making sure that the content which is the three types of rocks is being reviewed and thought about. After having class discussions and lectures, that is when the technology and the pedagogy will take their course allowing students to play the game and apply what they learned from the content interactively. The student will be able to pair up and collaborate during the game.
- Summarized support for PCK TCK and TPK:
- To summarize the support from the above components I can say that the articles that I provided for support discuss the positive impact of interactive learning when it comes to students playing an online technological game known as Kahoot to apply what they learned from the content of the three types of rocks. One of the articles supports how Kahoot can positively engage students in learning, and allow their learning experiences to progress positively. The following article supports how learning about the three types of rocks through interactive learning is important and why it matters.

• Why learning about rocks interactively matters

Lesson Administration - Step-by-Step Instructions

- The lesson will start with reminding students of what they have been learning the past few weeks.
- The students will be briefly told what the geology portion of the lesson is and what the ELA portion is.
- The teacher will let the ELL students know to ask for help at any moment.
- The teacher will also let the ELL students know that they are able to pair up with a buddy anytime they need help.
- The teacher will place the student with an IEP with a buddy from the start of the lesson until the end.
- Students will be asked to be patient while pulling up with the slideshow presentation.
- A slideshow will begin introducing the students of the three types of rocks.
- Students will be able to see the different pictures of the different types of rocks at hand.
- Students will be required to make connections to how the rocks are similar to each other.
- A YouTube video will be shown to the students.
- The teacher will ask the students if they have any questions.
- Students will take out their computers and get ready to join a game of Kahoot.
- A Kahoot game will take place.
- The top three winners will receive a treat.
- Feedback will be provided to students about the answers and will give students opportunities to explain the ones they got wrong.
- The teacher will tell the students "When I count down from three, close your computer's and get ready for our next activity."
- The ELA portion of the lesson will be introduced asking the students to pretend that they are a rock and introduce themselves.
- Students will be given a writing frame which they will fill out allowing them to focus on what kind of rock they are and introduce themselves.

What kind of rock are you?

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- Students will ask for help if needed.
- ELL students will be placed with buddies in order to gain help also.
- Students will be given a chance to read their writing to the rest of the class if they want.
- The exit ticket will be given to the students where they will be asked to write about one fact they learned, or one question they have.
- The teacher will thank the students for participating in her lesson.

Assessment

- <u>Summative assessment</u>: To check for understanding, students will be required to take out a pencil and paper and choose one of the rocks that was spoken about. They will be required to pretend that they are the rock and that they are writing a letter introducing who they are. They will be required to include characteristics so that the reader understands exactly what the rock is.
- ELL students will have a choice of working with a buddy to accomplish this writing portion, or they
 will have the choice of using the template provided for them. Help from the teacher will be given
 to them as well.
- The following is the template that will be given to the students, and that will significantly help the ELL students.

What kind of rock are you?

igneous	sedimentary	metamorphic
Rock Type: (Igneous	/ Sedimentary / Metamorphic)	
How I Was Formed: ((Explain in simple steps)	
My Special Features:	: (Describe at least 3 characteris	stics)
Where You Can Find	Me: (Real-world location exam	ple)
Fun Fact About Me:	(Make it creative!)	
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- u		K. I Was lollileu
when		
when		
when One of m is		eristics
when One of m is	y special characte	eristics
when One of m is Another o	y special characte	eristics acteristics is . You can

- As an exit ticket, students will be asked to write about one fact they learned today, or one question they have for me about what we learned.
- Formative assessment: Observations from the teacher will take place throughout the lesson. A kahoot game will also be given to the students to assess understanding and engagement during the middle of the lesson. signals will be given to the students that can help them see if they are on the right track and if they are doing well. These signals can include a thumbs up, a high five, a "great job!", or a "You're on the right track!".
- For the kahoot game, ELL students will be paired up with a buddy that can read the questions to them as well as the answers.

References

- 3 Types of Rocks and The Rock Cycle
- The three types of rocks
- Please be aware, the following hyperlinks will take you to the articles that supported the TPACK components:
- Support for interactive learning
- Support for Kahoot being a helpful and beneficial technology
- Support for Kahoot being a good technology in interactive learning.
- Why learning about rocks interactively matters

Checklist and Evaluation Rubric

9- EDT 418/EDD 409/EDFP 402 Integrated Lesson Plan

A cross-disciplinary technology-integrated lesson plan requires consideration of several components. The following checklist provides expectations for developing such a lesson plan, ensuring that all aspects, including context/classroom management, concepts/content, pedagogy, materials/technology, differentiation/ESL/IEP, and TPACK components, are carefully addressed to create a comprehensive and effective learning experience for students.

Instructions: To ensure that all required components are present, please utilize the checklist below. **Simply click on the box to add a check if the criteria has been included in your integrated plan**.

Context/Classroom Management

- ☑ Connection to Social and Cultural Context
 - Ensure the lesson plan is relevant to the school and community's social and cultural context. Consider how the content and activities resonate with your students' experiences and backgrounds.

Criteria is included:

- The lesson connects to what the students have been learning in the classroom, resonating with their
 experiences and back. This lesson is the next lesson that the students will be working on after learning
 about fiery volcanoes.
- ☑ Culturally Sustaining Plan
 - Design the lesson plan to be culturally sustaining for your class. Include materials, examples, and activities that reflect and respect your students' diversity.

Criteria is included:

- The materials that will be used will be used to help culturally sustain and be able to allow students to connect what they know to things they can use or find at home.
- ☑ Building and Maintaining Respectful Relationships
 - Incorporate strategies for <u>building and maintaining respectful relationships</u> with your students. This
 might include community-building activities, restorative practices, student voice, and choice
 opportunities.

Criteria is included:

- This is included since students will be told to ask for help at any time they need it. The students will be told that they will be respected through this lesson, and that they will be given opportunities to act upon their student voice, as well as collaborate with their classmates during the Kahoot activity.
- ✓ Learning About Students
 - Include strategies for getting to know your students, such as interest surveys, one-on-one conferences, or icebreaker activities.

Criteria is included:

- I currently know my students, but for this lesson, I can have the students at the beginning of the lesson say their names out loud. This way I am making sure that I am not missing anyone.
- ☑ Sustaining Classroom Norms and Expectations

Develop strategies for sustaining classroom norms, routines, and high community expectations. This
might include establishing clear routines, co-creating classroom expectations with students, and
consistently reinforcing those expectations.

Criteria is included:

• Students understand what is expected of them, and these expectations will be given to them once again at the beginning of the lesson. They will be told to be respectful of each other's space, and be respectful to me as a teacher. They will be told that if they need something, they can raise their hand and ask for help.

Concepts/Content

✓ Measurable Learning Objectives

• Identify measurable learning objectives for the lesson. These objectives should be specific, observable, and achievable.

Criteria is included:

• The objectives that were included are measurable, specific, observable and achievable. The ELL objectives are also achievable, and made to fit the needs of the ELL students.

✓ *Alignment with Standards*

• Ensure that the lesson plan is aligned with a clear set of standards, whether state, district, or other learning objectives.

Criteria is included:

• The objectives and lesson align with the standards, since it focuses on the students learning about patterns in rock formation for the science portion, and being able to select the topic and write about it for the ELA portion.

☑ Sharing Learning Objectives with Students

• Share the learning objectives with your students at the beginning of the lesson. This helps students understand what they will learn and why it is essential.

Criteria is included:

• The objectives will be shared to the students in the Google slides. They will be told at the beginning of the lesson, and they will understand why the objectives are important.

✓ Rationale for Content

• Provide a clear rationale for why this content must be taught. Connect the content to authentic practices that students will care about and understand.

Criteria is included:

• Before moving onto the next lesson students have to understand the three rock types in order to move on to the rock cycle. They need to understand this lesson first.

Anticipation of Misconceptions

• Anticipate and identify common misconceptions or ideas that might challenge student learning. Plan strategies for addressing these misconceptions during the lesson.

Criteria is included:

• The misconceptions that students may have was stated above in the lesson plan template.

Pedagogy (Instructional Strategy)

✓ Articulated Learning Activities

• Develop an articulated set of learning activities aligned with the content objectives. These activities should provide opportunities for students to engage with the content in meaningful ways.

Criteria is included:

• Students will be able to engage with the content in a meaningful way by playing a Kahoot game. They will be given a chance to review what they have learned in this game.

✓ Scaffolded Learning Activities

• Scaffold the learning activities to support student learning. Provide support, guidance, and structure to help students achieve the learning objectives.

Criteria is included:

• Students will be supported throughout the lesson by the teacher, making sure that they are on the right track and not moving on without knowing. I will differentiate instruction by switching from English to Arabic to make sure that my ELL students are understanding what is being taught.

☑ Implementation of Teaching Practices

Include specific strategies to implement high-leverage or core teaching practices, such as leading discussions, explaining and modeling, eliciting and interpreting student understanding, building relationships, and facilitating small group work.

Criteria is included:

There will be a leading discussion along with pictures to explain and model in the Google slides
document that will be shown to the students. I will constantly check for student understanding
throughout the lesson, and will facilitate small group work during the Kahoot game and the ELA portion
of the lesson.

✓ Formative and Summative Assessments

• Measure student learning using both formative and summative assessments. Use formative assessments to monitor student progress and adjust instruction as needed.

Criteria is included:

Both a formative and summative assessment has been added in the lesson template above. A formative
assessment will take place during the lesson. The teacher will be observing the students and making sure
that they are on the right track and are participating in interactive learning. The summative assessment
will take place at the end of a lesson where they will do their ELA portion of the lesson and write about
the rock they want to be.

✓ Addressing Misconceptions

• Plan strategies for responding to common misconceptions or ideas that students may have during the lesson. Be prepared to provide clarification, additional examples, or alternative explanations.

Criteria is included:

• The misconceptions have been added above where students may be a little bit confused since most rocks look all the same. The lesson will teach them about the characteristics of each type of rock, allowing them to understand the difference and be able to learn it.

✓ *Modifying the Lesson*

• Include strategies for modifying the lesson to respond to students' understanding and advancement. Be flexible and responsive to student needs.

Criteria is included:

• I will modify the lesson by switching from English to Arabic and making sure that each of my students are following along with me during the lesson. For my IEP student, I will pair him up with a buddy during the Kahoot game, as well as the ELA portion of the lesson. For my ELL students, they will be placed in pairs when doing the ELA portion of a lesson allowing that to give them support and help.

- ☑ Providing Feedback
 - Plan strategies for providing students with feedback on their understanding. This might include verbal, written, or peer feedback.
 - Criteria is included:
 - Feedback will be provided to the students throughout the discussion, and they will also hear back after the Kahoot game. To check for understanding, questions will be asked randomly throughout the discussion, allowing students to answer and allowing me to give them feedback on their answers.

Materials/Technology

- ✓ List of Materials/Technology
 - Include a list of materials, technology, and other resources needed to implement the lesson project.
 - Criteria is included:
 - 3 Types of Rocks and The Rock Cycle
 - The three types of rocks
 - Paper
 - Penicil
 - Computer
- ✓ Appropriateness of Materials/Technology
 - Ensure the materials and technology choices are appropriate for the lesson's content and pedagogy.
 - Criteria is included:
 - The materials match the content and pedagogy. The materials used will be helpful for the pedagogy since it will be interactive learning that will take place with the students and the teacher.
- ☑ Distribution and Use of Materials/Technology
 - Describe how the materials and technology will be distributed and used during the lesson. Provide clear instructions for students.
 - Criteria is included:
 - Students will be required to retrieve their own computer during the time of the technology component of the lesson which will be a Kahoot game. After the Kahoot game, they will be required to pull out a blank sheet of paper and a pencil for the writing portion of the activity.
- ✓ Prior Skills and Knowledge
 - Include strategies to ensure students have the prior skills and knowledge to use the appropriate materials and technology effectively.
 - Criteria is included:
 - In the lesson above, it stated the students had begun to learn about geology, so they have a clear understanding and prior knowledge of what will be taught. The lesson falls within the technology that will be used, and the students still have knowledge on how to work the technology to participate in the technology interactive portion of the lesson.
- ✓ Safe and Ethical Use
 - Plan strategies to ensure the safe and ethical use of the materials and technology. Provide guidance on responsible use and digital citizenship.
 - Criteria is included:

• In the lesson template above it is stated that students will have to be mindful of each other's space during the technology portion of a lesson. They should also be mindful during the ELA portion. They will be asked at the beginning of the lesson to be respectful.

Differentiation/ESL/IEP

- ☑ Support for English Learners/Multilingual Learners
 - Include appropriate strategies for supporting English learners and multilingual learners. This might include providing language support, using visual aids, or incorporating culturally relevant materials.

Criteria is included:

- Support will be given to the ELL students throughout the class discussion, and in the template above we stated how the assessments will be tinkered with for the ELL students
- **☑** Support for Different Abilities
 - Include appropriate strategies for supporting learners with different abilities, including those with special education needs. This might include modifying assignments, providing additional support, or offering alternative assessments.

Criteria is included:

- In order to support the abilities of the students, the writing portion of the lesson can be tailored. For the technological game, the students will be given the choice of pairing up with a buddy or going solo. Students will also be given support from the teacher at any time and they should ask for it when needed.
- ✓ Support for Students with IEPs
 - Ensure the lesson plan appropriately supports students with Individualized Education Programs (IEPs). This might include accommodations, modifications, or specialized instruction.

Criteria is included:

• For the students with an IEP, he will be placed with a classmate throughout the entire lesson who can help him and collaborate with him.

TPACK Components

- ✓ Lesson Description
 - Briefly describe the lesson and state the main content (C), pedagogy (P), and technology (T).
 - Criteria is included:
 - Content: Promoting understanding of the three types of rocks.
 - Pedagogy: Interactive learning
 - Technology: Kahoot game and (Google slideshow presentation)
- ✓ Pedagogical Content Knowledge (PCK)
 - Explain the effectiveness of the selected pedagogy (instructional strategy) in teaching the lesson's content and provide research-based evidence to support your decision.
 - Criteria is included here and in template:
 - PCK (Pedagogical content knowledge)
 - Pedagogy: Interactive learning
 - **Define:** Interactive learning (P) is an effective technology in teaching and understanding rock types(C).
 - Describe: By using interactive learning and having students work with one another and with their teacher, it can help students in many ways and keep them engaged. The interactive learning in this

lesson will consist of a startup with visual learning, class discussion, support, and collaborative work. This can help students by increasing their engagement during the lesson, and it can also help them to improve their collaborative skills since they will be collaborating with the teacher and with each other.

- **Support**: After much research, an article was found, which was related to this lesson's PCK. The following article provides information on interactive learning, and circles six different benefits on how interactive learning is helpful to students and can help them in the long run. The article spoke about the benefits of interactive learning, which included on how it provides flexible learning, saves time, allows teachers to make use of interactive learning tools, and how it can be fun for children.
- Support for interactive learning

☑ Technological Content Knowledge (TCK)

- Explain the effectiveness of the selected technology in teaching the lesson's content and provide research-based evidence to support your decision.
- Criteria is included here and in template:
- TCK (Technological content knowledge)
- Technology: Kahoot game
- **Define:** Kahoot (T) is an effective technology integration in teaching rock types(C).
- **Describe**: by using Kahoot, as an effective technology integration, it can help keep students engaged and allow them to recollect what they have learned. This technology can help teachers spice up a lesson and allow it to be more interactive and fun for the students. It's also an effective technology for students to use their computer skills, as well as be able to understand the different types of rocks and their characteristics based on this game.
- **Support:** The following article provides insight on how using Kahoot as a technology can help students in different ways, as well as provide learning benefits for the students. It talked about fostering positive attitudes, as well as having a positive effect on learning.
- Support for Kahoot being a helpful and beneficial technology
- ☑ Technological Pedagogical Knowledge (TPK)
 - Explain the effectiveness of the technology integration in facilitating the chosen pedagogy (instructional strategy) and provide research-based evidence to support your decision.
 - Criteria is included here and in template:
 - TPK (Technological, pedagogical knowledge)
 - Pedagogy: interactive learning, Technology: Kahoot game
 - **Define**: Kahoot (T) facilitates interactive learning (P) for the students to be engaged and be able to apply what they have learned from interactive learning into a game.
 - **Describe:** By engaging in a discussion with the students and engaging them through interactive learning in a Kahoot game, they will be able to express their thinking and apply what they have learned with their peers and teacher during the discussion part of the lesson.
 - **Support:** The following article provides information on how using Kahoot can help revolutionize the classroom learning experience when it comes to interactive learning, and how it can help it in many ways. These ways include improved learning performances, improved student attitude and attention, more participation, and several others things.
 - Support for Kahoot being a good technology in interactive learning.
- ☑ Technological Pedagogical and Content Knowledge (TPACK)
 - Explain your decision-making process in selecting the pedagogy and technology for effective teaching and learning in the lesson's content area and provide research-based evidence to support your decision.
 - Criteria is included:
 - TPACK (Technological Pedagogical and Content Knowledge)
 - **Technology:** Kahoot game

- Pedagogy: Interactive learning
- Content: Three types of rocks
- **Define:** Kahoot (T) is an effective technology that facilitates the pedagogy of interactive learning (P) allowing the students to apply what they have learned during the class discussion about the three types of rocks (C) content knowledge portion.
- Describe: The TPACK components come together when the teacher uses a Kahoot game to be able to facilitate interactive learning after having a collaborative discussion with the students about the three types of rocks.
- Support: using a Kahoot game for interactive learning is extremely helpful. They can allow students to be able to apply what they have learned earlier in class discussions by another to answer the questions on the game. A Kahoot game can also promote collaboration and allow the students to be engaged. This focuses on technology and pedagogy. Now for the content, the technology and pedagogy fall under it since they are all connected. By using Kahoot as an interactive learning tool, I am making sure that the content of the three types of rocks is being reviewed and thought about. After having class discussions and lectures, that is when the technology and the pedagogy will take their course allowing students to play the game and apply what they learned from the content interactively. The student will be able to pair up and collaborate during the game.

Summarized support for PCK TCK and TPK:

- To summarize the support from the above components I can say that the articles that I provided for support discuss the positive impact of interactive learning when it comes to students playing an online technological game known as Kahoot to apply what they learned from the content of the three types of rocks. One of the articles supports how Kahoot can positively engage students in learning, and allow their learning experiences to progress positively. The following article supports how learning about the three types of rocks through interactive learning is important and why it matters.
- While learning about rocks interactively matters

Evaluation Rubric

The following rubric will be used to evaluate your integrated lesson plan.

Integrated Lesson Plan Components will be graded in EDD 418/ EDD 409/EDFP 402

Context/Classroom Management

Criteria	Exemplary (3 pts)	Proficient (2 pts)	Developing (1 pt)	Unsatisfactory (0 pt)
Connection to Social and Cultural Context	Deeply integrates students' social and cultural backgrounds into classroom practices.	Effectively connects to students' social and cultural contexts.	Some attempt to connect to social and cultural contexts but lack depth and consistency.	Little to no effort to understand or integrate students' social and cultural contexts.
Culturally Sustaining Plan	Develops and implements a robust plan that supports and sustains students' cultural identities.	Has a clear plan to sustain cultural identities, though may lack comprehensive implementation.	Plan exists but is basic and not fully integrated into the classroom practice.	No evident plan to sustain students' cultural identities.
Building and Maintaining Respectful Relationships	Consistently builds and maintains respectful relationships with all students.	Generally maintains respectful relationships, with occasional lapses.	Some efforts to build respectful relationships, but inconsistent or superficial.	Rarely or never builds respectful relationships.
Learning About Students	Thoroughly learns about students' interests, backgrounds, and learning styles. Uses this knowledge to inform teaching practices.	Makes a strong effort to learn about students and incorporates this knowledge into teaching.	Attempts to learn about students but with limited application in the classroom.	Minimal effort to learn about students' individual characteristics.
Sustaining Classroom Norms and Expectations	Clearly communicates and consistently enforces classroom norms and expectations. Involves students in the process.	Communicates norms and expectations clearly, but enforcement may vary.	Norms and expectations are set but not consistently communicated or enforced.	Lacks clear norms and expectations, or they are inconsistently applied.

Criteria	Exemplary (3 pts)	Proficient (2 pts)	Developing (1 pt)	Unsatisfactory (0 pt)
Measurable Learning Objectives	Objectives are specific, measurable, and aligned with standards. Clearly articulate what students will know and be able to do.	Objectives are clear and measurable but may lack some specificity.	Objectives are present but may not be easily measurable or clear.	Objectives are vague or missing.
Alignment with Standards	All learning objectives and activities are tightly aligned with relevant standards.	Most objectives and activities align well with standards.	Some objectives and activities align with standards, but there are gaps.	Little to no alignment with standards.
Sharing Learning Objectives with Students	Learning objectives are regularly shared and discussed with students, ensuring clarity and understanding.	Learning objectives are shared with students, though not always discussed in depth.	Learning objectives are occasionally shared, with limited discussion.	Learning objectives are rarely or never shared with students.
Rationale for Content	Provides clear and compelling rationale for content, connecting it to students' lives and future learning.	Provides a rationale for content, though connections to students' lives may be less explicit.	Some rationale is provided, but it may not be clear or compelling.	Little to no rationale for content is provided.
Anticipation of Misconceptions	Proactively anticipates and plans for potential misconceptions, addressing them effectively in instruction.	Anticipates some misconceptions and addresses them as they arise.	Occasionally anticipates misconceptions but may not plan for them.	Rarely anticipates or addresses misconceptions.

Pedagogy (Instructional Strategy)

Criteria	Exemplary	Proficient	Developing	Unsatisfactory
	(3 pts)	(2 pts)	(1 pt)	(0 pt)
Articulated Learning Activities	Learning activities are well-articulated, engaging, and clearly support learning objectives.	Activities are articulated and support learning objectives, though may lack some engagement.	Activities are present but may not be well-articulated or fully support learning objectives.	Activities are poorly articulated or disconnected from learning objectives.

Scaffolded Learning Activities	Learning activities are effectively scaffolded, building on prior knowledge and skills.	Some scaffolding is present but may not fully support all students.	Limited scaffolding is present, with gaps in support for students.	Little to no scaffolding of learning activities.
Implementation of Teaching Practices	Implements a variety of effective teaching practices, adapting as needed to meet student needs.	Uses effective teaching practices but may lack variety or flexibility.	Some effective practices are used, but implementation is inconsistent.	Few effective teaching practices are implemented.
Formative and Summative Assessments	Uses a balanced mix of formative and summative assessments to guide instruction and measure student progress.	Uses both types of assessments, but may rely more heavily on one type.	Some assessments are used, but they may not be balanced or effectively inform instruction.	Rarely uses assessments or relies on a single type.
Addressing Misconceptions	Actively addresses misconceptions through targeted instruction and feedback.	Addresses misconceptions as they arise but may lack a systematic approach.	Occasionally addresses misconceptions but often misses opportunities.	Rarely addresses misconceptions.
Modifying the Lesson	Regularly modifies lessons based on student feedback and assessment data to improve learning outcomes.	Modifies lessons occasionally, though not always based on clear evidence.	Makes minimal modifications to lessons, often without clear rationale.	Rarely or never modifies lessons.
Providing Feedback	Provides timely, specific, and constructive feedback that helps students improve.	Provides feedback that is generally timely and helpful but may lack specificity.	Feedback is given but may be infrequent, untimely, or vague.	Little to no feedback is provided.

Materials/Technology

Criteria	Exemplary	Proficient	Developing	Unsatisfactory
	(3 pts)	(2 pts)	(1 pt)	(0 pt)
List of Materials/Technology	Comprehensive and detailed list of all materials and technology needed for the lesson.	List includes most materials and technology needed.	List is incomplete or lacks detail.	Little to no list of materials and technology.

Appropriateness of Materials/Technology	All materials and technology are highly appropriate and enhance learning.	Most materials and technology are appropriate and support learning.	Some materials and technology are appropriate, but others may not be well-suited.	Materials and technology are largely inappropriate or ineffective.
Distribution and Use of Materials/Technology	Materials and technology are efficiently distributed and effectively used in the lesson.	Distribution and use are generally effective but may have minor issues.	Distribution or use of materials and technology is somewhat ineffective.	Distribution and use are poorly managed.
Prior Skills and Knowledge	Thoroughly considers students' prior skills and knowledge when selecting materials and technology.	Considers prior skills and knowledge but may not fully align materials and technology with them.	Limited consideration of prior skills and knowledge.	Little to no consideration of prior skills and knowledge.
Safe and Ethical Use	Consistently promotes and ensures safe and ethical use of materials and technology.	Generally promotes safe and ethical use, with occasional lapses.	Some attention to safe and ethical use but inconsistently applied.	Little to no attention to safe and ethical use.

Differentiation/ESL/IEP

Criteria	Exemplary (3 pts)	Proficient (2 pts)	Developing (1 pt)	Unsatisfactory (0 pt)
Support for English Learners/Multilingu al Learners	Provides comprehensive and effective support tailored to the needs of English learners/multilingua I learners.	Provides support, though it may not be fully tailored to individual needs.	Some support is provided but is generally limited and not tailored.	Little to no support is provided for English learners/multilingua I learners.
Support for Different Abilities	Provides diverse and effective support tailored to the needs of students with varying abilities.	Provides support, though it may not be fully tailored to individual needs.	Some support is provided but is generally limited and not tailored.	Little to no support is provided for students with different abilities.
Support for Students with IEPs	Provides comprehensive and effective support tailored to the needs of students with IEPs.	Provides support, though it may not be fully tailored to individual needs.	Some support is provided but is generally limited and not tailored.	Little to no support is provided for students with IEPs.

Criteria	Exemplary (3 pts)	Proficient (2 pts)	Developing (1 pt)	Unsatisfactory (0 pt)
Lesson Description	Lesson is clearly described, and the content, pedagogy, and technology of the lesson are clearly stated	Content, pedagogy, and technology of the lesson are mostly clear	Content, pedagogy, and technology of the lesson are somewhat clear	Content, pedagogy, and technology of the lesson lack clarity
Content/Subject Domain & Instructional Strategies (PCK) (content-specific pedagogy use)	Pedagogy selection(s) are exemplary, given the content/subject domain, and supported by research-based evidence	Pedagogy selection(s) are appropriate, but not exemplary, given the content/subject domain	Pedagogy selection(s) are marginally appropriate, given the content/subject domain	Pedagogy selection(s) are inappropriate, given the content/subject domain
Curriculum Goals & Technologies (TCK) (curriculum-based technology use)	Technologies selected for use in the instructional plan are strongly aligned with one or more curriculum goals and supported by research-based evidence	Technologies selected for use in the instructional plan are aligned with one or more curriculum goals	Technologies selected for use in the instructional plan are partially aligned with one or more curriculum goals	Technologies selected for use in the instructional plan are not aligned with any curriculum goals
Instructional Strategies & Technologies (TPK) (pedagogical affordances and constraints of technological tools)	Technology use optimally supports instructional strategies and supported by research-based evidence	Technology use supports instructional strategies	Technology use minimally supports instructional strategies	Technology use does not support instructional strategies
"Fit" (TPACK) (content, pedagogy, and technology together)	Content, instructional strategies and technology fit together strongly within the instructional plan	Content, instructional strategies, and technology fit together within the instructional plan	Content, instructional strategies and technology fit together somewhat within the instructional	Content, instructional strategies and technology do not fit together within the instructional plan

and are supported by research-based evidence	plan	

The TPACK rubric is adapted from <u>"Testing a TPACK-Based Technology Integration Assessment Rubric."</u>