

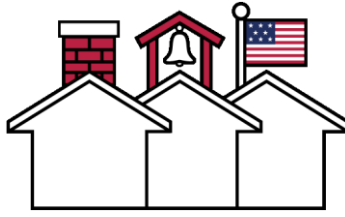
# School District of Indian River County



## STEAM DESIGNATION 2021-2022



Curriculum & Instruction  
School District of Indian River County



## School District of Indian River County Public Schools

### **Unified Mission:**

Our district has identified “Transforming education to inspire & empower ALL students to reach their full potential” as our unifying mission.

### **GUIDING PRINCIPLES**

Invest in collaborative cultures that promote the growth of all.

Provide equitable access to high-quality, rigorous instruction.

Engage in innovative practices to optimize outcomes.

Communicate with transparency & integrity with all stakeholders.

Empower problem solvers at every level of the organization.

### **School Board Members:**

*Brian Barefoot, Chairman*

*Dr. Mara Schiff, Vice Chairman*

*Dr. Peggy Jones, Member*

*Terry Barenborg, Member*

*Jacqueline Rosario, Member*

## According to the Florida Department of Education

*“STEM education is the intentional integration of science, technology, engineering, and mathematics, and their associated practices to create a student-centered learning environment in which students investigate and engineer solutions to problems, and construct evidence-based explanations of real-world phenomena with a focus on a student’s social, emotional, physical, and academic needs through shared contributions of schools, families, and community partners.”*

### STEAM Program Features

- A curriculum that is driven by problem solving, discovery, exploratory learning, and independent and collaborative research projects and requires students to actively engage in a problem involving a natural phenomenon to find a solution.
- A curriculum that incorporates the habits of mind for students to use technology; integrates engineering and design; and requires systems of thinking.
- Innovative instruction that allows students to explore greater depths of all the core subjects (English, Mathematics, Science, and Social Studies), and by using the skills learned (reading, writing, speaking and listening).
- Technology that provides creative and innovative ways for students to solve problems and apply what they have learned conceptually.

### Attributes of a STEAM Classroom

- Active and student centered
- Equipped to support spontaneous questioning as well as planned investigation.
- A center for innovation and invention
- Classroom, laboratory, engineering lab are one
- Supportive in teaching multiple modalities
- Serves students with a variety of learning styles and disabilities
- Integrates real world situations or problems

### Characteristics of STEAM Educated Students

- **Problem Solvers:** Define questions and problems, design investigations to gather data, collect and organize data, draw conclusions and apply understanding to new and novel situations
- **Innovators:** Creatively use science, mathematics, and technology concepts and principles by applying them to the engineering design process
- **Inventors:** Recognize the needs of the world and creatively design, test, redesign, and implement solutions
- **Self-Reliant:** Use initiative and self-motivation to set agendas, develop self-confidence, and work within specified time frames
- **Logical Thinkers:** Apply rational and logical thought processes of science, math, engineering design to innovations and inventions
- **Technology Literate:** Explain the nature of technology, develop the skills needed, and apply technology appropriately

**Unified Mission:** To provide equitable and inclusive STEAM learning experiences that prepare SDIRC students for the 21<sup>st</sup> century.

**Purpose:** SDIRC STEAM education fosters creativity and innovative thinking. Interdisciplinary STEAM learning experiences promote inquiry, technology integration, and authentic project-based learning that is connected to the real world. In the STEAM classroom, partnerships reach beyond the walls of the school to include higher education and community organizations.

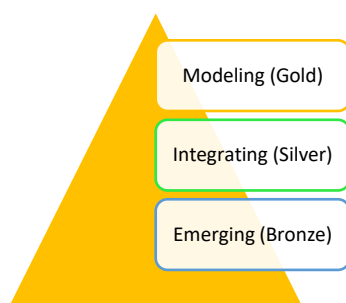
### **Designation Process Timeline**

<b>Summer</b>	Schools fill out interest form for STEAM Designation.
<b>Fall</b>	SDIRC STEAM Team meets with schools individually to submit a STEAM plan to the STEAM Team.
<b>Fall</b>	Schools initiate STEAM plans and begin to develop portfolio of evidence.
<b>Fall</b>	SDIRC STEAM Team conducts initial site visits. During the visit, the team reviews the plan, conducts classroom walkthroughs, and school completes the self-assessment.
<b>Spring</b>	SDIRC STEAM Team visits the schools, and the team reviews the plan, conducts classroom walkthroughs, and school completes the self-assessment.
<b>Spring</b>	Schools show portfolio of evidence at the district STEAM Showcase.
<b>End of Year</b>	SDIRC STEAM Team meets with schools to review evidence, data (pending state release of scores), and scoring rubric to finalize designation.

### **Designation Rubric Indicators**

1. STEAM Plan and Support
2. Collaborative Planning
3. Student Learning Experiences
4. Technology Integration
5. Mathematics and Science Achievement Data
6. Extended Learning Activities

### **STEAM Designation Levels**



### **STEAM Portfolio**

Each school is responsible for collecting evidence and analyzing data for each of the indicators in the STEAM Designation Rubric. Schools will have multiple opportunities throughout the year to self-assess and evaluate their progress towards STEAM Designation using the portfolio to share their evidence.

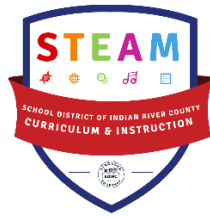
### **SDIRC STEAM Team and STEAM Committee**

SDIRC STEAM Team is comprised of district staff who lead the STEAM Designation program. The STEAM Committee is comprised of teachers, staff, parents, and community members. The STEAM Committee provides input and suggestions to help guide the vision and implementation of STEAM Designation.

### **STEAM Showcase**

Each school will be given a designated time slot to share their work and progress towards implementation of their STEAM plan with the indicators on the STEAM Designation Rubric. The final indicator will be scored after state assessment date is released from the FLDOE. The showcase will be open to the public. The STEAM Committee will participate in the showcase by providing feedback and suggestions to support SDIRC STEAM Team.

# STEAM School Designation Participation 2021-2022



Unified Mission: To provide equitable and inclusive STEAM learning experiences that prepare SDIRC students for the 21<sup>st</sup> century.

Purpose: SDIRC STEAM education fosters creativity and innovative thinking. Interdisciplinary STEAM learning experiences promote inquiry, technology integration, and authentic project-based learning that is connected to the real world. In the STEAM classroom, partnerships reach beyond the walls of the school and include higher education and community organizations.

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## School Name

- Our school would like to participate in the STEAM School Designation for the 2021-2022. Our staff understands the expectations for the STEAM School Designation and commits to:
  - Utilizing the Unified Mission and Purpose along with the rubric to guide planning, implementing and evaluating their progress towards STEAM Designation.
  - Attending the EPIC STEAM Professional Development in July 2021.
  - Participating in the book study with the book: *STEM, Standards, and Strategies for High-Quality Units* by Roger W. Bybee on August 24 and September 21, 2021.
  - Facilitating a Fall and Spring Visit from the SDIRC STEAM team to share student learning experiences and evidence of work towards STEAM Designation.
  - Participating in SDIRC STEAM Fair and Expo on January 29, 2022.
  - Sharing the school's work towards STEAM Designation with the community at the STEAM Showcase on May 26, 2022 at the District Office.
  - Contributing to the STEAM Advisory Committee meetings to provide feedback on the process of STEAM Designation on September 1, October 20 and February 9.
  - Update school Teams folder with evidence for each indicator quarterly.
- Our school does not want to participate in the STEAM School Designation for the 2021-2022 school year.

Administrator Name: \_\_\_\_\_

Administrator Signature: \_\_\_\_\_



## SDIRC STEAM Designation Elementary School Rubric 2021-2022 Final



### 1. STEAM Plan and Support

The school has created a detailed STEAM strategic plan and STEAM team. The plan outlines important dates, professional development opportunities, and accountability measures. The STEAM Team collaborates frequently to review the plan's design and effectiveness. The STEAM Team gathers ideas and feedback from all stakeholders to make decisions.

Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Suggested Artifacts:</b> -Written plan with goals and implementation steps aligned with SIP -PD calendar -PD PowerPoint and handouts -STEAM Team agendas and meeting minutes	School and STEAM leadership creates a culture of STEAM leading and learning. Leadership has created a STEAM plan.	School and STEAM leadership creates a culture of STEAM leading and learning. Leadership has created a detailed plan and followed through with the implementation steps. The STEAM team meets quarterly to review the plan.	School and STEAM leadership creates a culture of STEAM leading and learning. Leadership has created a detailed plan and followed through with the implementation steps. The STEAM team meets more than quarterly to review the plan. The plan and implementation are visible school wide and involves all staff members.	/3
<b>Suggested Artifacts:</b> -walkthrough tool and feedback provided to teachers -trend data to showcase school grows and grows	School leadership provides teachers feedback on the STEAM lessons they implement to continue improve instruction with less than 25% of the staff.	School leadership provides teachers feedback on the STEAM lessons they implement to continue improve instruction with 25% to 75% of the staff.	School leadership provides teachers feedback on the STEAM lessons they implement to continue improve instruction with more than 75% of the staff.	/3
<b>Suggested Artifacts:</b> -Teacher survey(s) on STEAM -Feedback responses on survey(s) or plan	The school leadership has an articulated process for less than 25% of staff members to give input and provide feedback to the plan.	The school leadership has an articulated process for 25% to 75% of staff to give input and provide feedback to the plan.	The school leadership has an articulated process for more than 75% of staff to give input and provide feedback to the plan.	/3
<b>Suggested Artifacts:</b> -PD Calendar -PD Agendas and sign in sheets -PD PowerPoints and handouts -Walkthrough tool and feedback provided to teachers.	Teachers participate in one professional development session focusing on critical STEAM teaching methods/skills and at least 75% of the teachers implement strategies in the classroom.	Teachers participate in two professional development sessions focusing on critical STEAM teaching methods/skills and at least 75% of the teachers implement strategies in the classroom.	Teachers participate in three or more professional development sessions focusing on critical STEAM teaching methods/skills and more than 75% of the teachers implement strategies in the classroom.	/3
	If there is no evidence provided, a score of zero will be used for that indicator.  <div style="text-align: right;"> <b>1. STEAM Plan</b>  <b>Total Score    ___/ 12</b> </div>			



## SDIRC STEAM Designation Elementary School Rubric



### 2. Collaborative Planning

The school provides evidence that teachers collaborate formally and informally to plan for interdisciplinary lessons and learning outcomes. Planning is frequent, timely and reflective. The school's culture promotes collaboration across grade levels, departments, and content areas.

Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Suggested Artifacts:</b> -Grade level planning agendas, meeting notes -Lesson plans that include standards used to incorporate STEAM into lessons	Less than 25% of teachers or grade levels use collaborative planning time to develop interdisciplinary lessons that are standards based.	Between 25 to 75% of teachers, or grade levels use collaborative planning time to develop interdisciplinary lessons that are standards based.	More than 75% of teachers, or grade levels use collaborative planning time to develop interdisciplinary lessons that are standards based.	/3
<b>Suggested Artifacts:</b> -Vertical STEAM plans (Dept and/or Grade Level) -Meeting agendas on vertical planning (STEAM, Grade level or Dept)	Teachers develop and implement one or more STEAM unit per year.	Teachers develop and three implement two or three STEAM units per year.	Teachers develop and implement four or more STEAM units per year.	/3
<b>Suggested Artifacts:</b> -Lesson plans include teaching strategies that include subgroups or individual students -Documentation of differentiated options for students to show mastery of standards -Data for diverse learners and subgroups for STEAM unit	During collaborative planning time, less than 25% of teachers, or grade levels develop lessons or activities that are intentionally planned to meet the needs of the diverse learners and subgroups.	During collaborative planning time, 25 to 75% of teachers, or grade levels develop lessons or activities that are intentionally planned to meet the needs of the diverse learners and subgroups.	During collaborative planning time, more than 75% of teachers, or grade levels develop lessons or activities that are intentionally planned to meet the needs of the diverse learners and subgroups.	/3
	If there is no evidence provided, a score of zero will be used for that indicator.			
	<div>2. Collaborative Planning</div> <div>Total Score ____/ 9</div>			





## SDIRC STEAM Designation Elementary School Rubric



### 3. Student Learning Experiences

**\*This section will be scored during the Fall and Spring STEAM team visits with this section being used as a classroom walkthrough tool to collect data on STEAM student learning experiences\***

Student learning experiences are anchored to standards and are focused on the big ideas and foundational skills critical to future learning. STEAM methods/skills are explicitly embedded throughout the curriculum. Learning experiences drive students to ask questions and look for answers. Student learning experiences create opportunities for students to make connections to the real world through creativity, innovative thinking, collaboration, and communication. Students can articulate the relationship among the concepts they learned to others. Students are given the opportunity to present their work learned through investigations and/or evidence. During this process teachers use formative assessments and monitor student learning frequently to gauge student learning and understanding. Learning experiences are intentionally designed to help students explore the relevant STEAM careers and their educational requirements. [NSTA Science and Engineering Practices help teachers develop quality science lesson plans.](#) [NSTA Science Crosscutting Concepts can also help teachers develop quality science lesson plans.](#)

Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Suggested Artifacts:</b> -Observations of student learning experiences -Observations of classroom physical environments -STEAM lesson plans -Teacher feedback -Student feedback	Less than 25% of students are required to think <b>creatively</b> to ask questions and define problems by demonstrating curiosity, imagination, risk-taking, and flexibility.	Between 25 to 75% of students are required to think <b>creatively</b> to ask questions and define problems by demonstrating curiosity, imagination, risk-taking, and flexibility.	More than 75% of students are required to think <b>creatively</b> to ask questions and define problems by demonstrating curiosity, imagination, risk-taking, and flexibility.	/3
<b>Suggested Artifacts:</b> -Observations of student learning experiences -Observations of classroom physical environments -STEAM Lesson Plans -Teacher feedback -Student feedback	Less than 25% of students engage in learning experiences that require them to <b>think critically</b> by reflecting, analyzing, and evaluating evidence, arguments, claims and beliefs to draw reasoning and conclusions.	Between 25 to 75% of students engage in learning experiences that require them to <b>think critically</b> by reflecting, analyzing, and evaluating evidence, arguments, claims and beliefs to draw reasoning and conclusions.	More than 75% of students engage in learning experiences that require them to <b>think critically</b> by reflecting, analyzing, and evaluating evidence, arguments, claims and beliefs to draw reasoning and conclusions	/3
<b>Suggested Artifacts:</b> -Observations of student learning experiences -Observations of classroom physical environments -STEAM lesson plans -Teacher feedback -Student feedback	Less than 25% of students engage in learning experiences that require them to work <b>collaboratively</b> to share responsibility by compromising and respecting others to design solutions to real-world problems.	Between 25% to 75% of students engage in learning experiences that require them to work <b>collaboratively</b> to share responsibility by compromising and respecting others to design solutions to real-world problems.	More than 75% of students engage in learning experiences that require them to work <b>collaboratively</b> to share responsibility by compromising and respecting others to design solutions to real-world problems.	/3
<b>Suggested Artifacts:</b> -Observations of student learning experiences -Observations of classroom physical environments -STEAM lesson plans -Teacher feedback -Student feedback	Less than 25% of students engage in learning experiences that require them to use verbal and nonverbal <b>communication</b> skills such as actively listening, written expression, delivering oral presentations, and engaging in conversations, debates, and discussions.	Between 25% to 75% of students engage in learning experiences that require them to use verbal and nonverbal <b>communication</b> skills such as actively listening, written expression, delivering oral presentations, and engaging in conversations, debates, and discussions.	More than 75% of students engage in learning experiences that require them to use verbal and nonverbal <b>communication</b> skills such as actively listening, written expression, delivering oral presentations, and engaging in conversations, debates, and discussions.	/3

<b>Suggested Artifacts:</b> -Formative assessment checklists/records -Data chat artifacts -Pre/post assessments are used to show student growth -STEAM lesson plans	Less than 25% of teachers use <b><u>formative assessments</u></b> and monitor student work on mastery of STEAM lesson and standards.	Between 25% to 75% teachers use <b><u>formative assessments</u></b> and monitor student work on mastery of STEAM lessons and standards.	More than 75 % of teachers use <b><u>formative assessments</u></b> and monitoring student work on STEAM lessons and standards.	/3
<b>Suggested Artifacts:</b> -Observations of teacher feedback in classrooms and on student work	Less than 25% of teachers give <b><u>feedback</u></b> to students to ensure students are meeting the learning targets and standards.	Between 25% to 75% of teachers give <b><u>feedback</u></b> to students to ensure students are meeting the learning targets and standards.	More than 75% of teachers give <b><u>feedback</u></b> to students to ensure students are meeting the learning targets and standards.	/3
<b>Suggested Artifacts:</b> -STEAM career resource information for teachers and students -Career exploration lesson plans -Pictures of career experiences	Less than 25% of students participate in <b><u>career exploration activities.</u></b>	Between 25% to 75% of students participate in <b><u>career exploration activities.</u></b>	More than 75% of students participate in <b><u>career exploration activities.</u></b>	/3
<b>Suggested Artifacts:</b> -STEAM lesson plans -Student work examples -Vertical integration plans for STEAM -School plans for STEAM integration	Evidence of STEAM curriculum <b><u>integration in less than 25% of the entire school.</u></b>	Evidence of STEAM curriculum <b><u>integration between 25% to 75% of the entire school.</u></b>	Evidence of STEAM curriculum <b><u>integration in more than 75% of the entire school.</u></b>	/3
If there is no evidence provided, a score of zero will be used for that indicator.				
<div>3. Student Learning Experiences</div> <div>Total Score ____24</div>				



## SDIRC STEAM Designation Elementary School Rubric



### 4. Technology Integration

Technology is seamlessly embedded within the classroom, lesson and activities of all content areas and is not demonstrated as a separate entity, providing a student-centered environment that encourages personalized and blended learning. Students use a variety of technology in the investigative process including virtual, computer based, mobile collection devices, web-based lessons, computer applications, researching, reporting, communicating in ways not possible without the use of technology.

Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Suggested Artifacts:</b> -Pictures or videos of students using coding programs or robotics -Video conferencing with community partners or digital field trips -Use of technology tools to manage and enhance classroom (Canvas, OneNote, Teams) -examples, pictures or videos of students working collaboratively and/or as a team	Less than 25% of teachers use digital integration tools to enhance STEAM lessons and student collaboration on a weekly basis.	Between 25 to 75% of teachers use digital integration tools to enhance STEAM lessons and student collaboration on a weekly basis.	More than 75% of teachers use digital integration tools to enhance STEAM lessons and student collaboration on a weekly basis.	/3
<b>Suggested Artifacts:</b> -Results from lab discs/probes -Artifacts showcasing student data collection using technology -STEAM lesson plans	Less than 25% of students use a variety of digital integration tools to collect data, respond to problems, research, design, communicate, or experimentation.	Between 25 to 75% of students use a variety of digital integration tools to collect data, respond to problems, research, design, communicate, or experimentation.	More than 75% of students use a variety of digital integration tools to collect data, respond to problems, research, design, communicate, or experimentation.	/3
<b>Suggested Artifacts:</b> -Digital learning products -Story telling through media -Student created videos to share their learning -Student created websites to summarize their learning -Student created applications	Less than 25% of students are given opportunities to demonstrate knowledge or learning virtually by creating videos, classroom digital products, websites, blogs, computer programs or other digital applications.	Between 25 to 75% of students are given opportunities to demonstrate knowledge or learning virtually by creating videos, classroom digital products, websites, blogs, computer programs or other digital applications.	More than 75% of students are given opportunities to demonstrate knowledge or learning virtually by creating videos, classroom digital products, websites, blogs, computer programs or other digital applications.	/3
<b>Suggested Artifacts:</b> -Observations of classroom physical environments -Observations of student learning experiences -Pictures or video of consistent daily technology integration -STEAM lesson plans	Less than 25% of teachers use technology daily in the classroom and have created a classroom environment where technology is seamlessly integrated.	Between 25% to 75% of teachers use technology daily in the classroom and have created a classroom environment where technology is seamlessly integrated.	More than 75% of teachers use technology daily in the classroom and have created a classroom environment where technology is seamlessly integrated.	/3
	If there is no evidence provided, a score of zero will be used for that indicator. <div>4. Technology Integration</div> Total Score ____ / 12			



## SDIRC STEAM Designation Elementary School Rubric



### 5. Mathematics and Science Achievement Data

A variety of assessments are incorporated to measure student outcomes and drive instruction. Evidence that diagnostic, ongoing, and vertically and horizontally aligned formative and summative assessments are used for all students to drive instructional decisions. The school has a clear process to help teachers interpret student data and adjust their instruction accordingly. The school uses data from state, district and school assessments to drive instructional decisions. Teachers provide students immediate and specific feedback.

**\*Data for scoring this section of the rubric will be taken from the 2022 School Grades Report at end of the school year.\***

Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Required Artifact:</b> 2022 Florida School Grade Report from FDOE	<b>Mathematics FSA</b> Increase of <b>three to four percentage points</b> scoring at a Level three or higher on the FSA <b>OR</b> 40 to 59% of students at Level three or higher on the FSA for  <b>Overall Achievement</b>	<b>Mathematics FSA</b> Increase of <b>five to seven percentage points</b> scoring at a Level three or higher on the FSA <b>OR</b> 60 to 79% of students at Level three or higher on the FSA for  <b>Overall Achievement</b>	<b>Mathematics FSA</b> Increase of <b>eight or more percentage points</b> scoring at a Level three or higher on the FSA <b>OR</b> at least 80% of students at Level three or higher on the FS for  <b>Overall Achievement</b>	/3
	Subgroup: African American	Subgroup: African American	Subgroup: African American	/3
	Subgroup: Economically Disadvantaged	Subgroup: Economically Disadvantaged	Subgroup: Economically Disadvantaged	/3
<b>Required Artifact:</b> 2022 Florida School Grade Report from FDOE	<b>Science SSA</b> Increase of <b>three to four percentage points</b> scoring at a Level three or higher on the SSA <b>OR</b> 40 to 59% of students at Level three or higher on the SSA.  <b>Overall Achievement</b>	<b>Science SSA</b> Increase of <b>five to seven percentage points</b> scoring at a Level three or higher on the SSA <b>OR</b> 60 to 79% of students at Level three or higher on the SSA.  <b>Overall Achievement</b>	<b>Science SSA</b> Increase of <b>eight or more percentage points</b> scoring at a Level three or higher on the SSA <b>OR</b> at least 80% of students at Level three or higher on the SSA.  <b>Overall Achievement</b>	/3
	Subgroup: African American	Subgroup: African American	Subgroup: African American	/3
	Subgroup: Economically Disadvantaged	Subgroup: Economically Disadvantaged	Subgroup: Economically Disadvantaged	/3
<b>5. Science and Mathematics Achievement Data</b> Total Score ____/ 18				



## SDIRC STEAM Elementary School Designation Rubric



6. Extended Learning Activities				
Students are given the opportunity to participate in STEAM enrichment activities that take place before, during or after school hours. Partnerships with business, industry, and other community partners have been formed and are involved by directly connecting to in-class instruction, project/problem-based learning, and exposing students to STEAM skills. There are opportunities for students to interact with STEAM professionals to support curriculum.				
Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Suggested Artifacts:</b> -Pictures, newsletters, or social media posts showcasing partnerships -Community service or service-learning artifacts related to STEAM -Guest Speaker Artifacts	The school has one business, community, or post-secondary (at least four interactions per year) partnerships that support STEAM related learning experiences.	The school has two or three business, community, or post-secondary (at least four interactions per year) partnerships that support STEAM related learning experiences.	The school has four or more business, community, or post-secondary partnerships (at least four interactions per year) that support STEAM related learning experiences.	/3
<b>Suggested Artifacts:</b> -Rosters, sign in sheets from school, District or Regional Competitions for: Science Olympiad, Robotics, Coding, Science Fair	School participates in one science competition.	School participates in two or three science competitions.	School participates in four or more science competitions.	/3
<b>Suggested Artifacts:</b> -Flyers, rosters, social media posts from performances -Sign in sheets for after school clubs	One or two afterschool activities promoting visual and performing arts or community service activities.	Three to five afterschool activities promoting visual and performing arts or community service activities.	Six or more afterschool activities promoting visual and performing arts or community service activities.	/3
<b>Suggested Artifacts:</b> -Flyers, agenda, social media posts of STEAM showcases.	Two school-wide showcases for the school year. Must include all areas of STEAM that are aligned to grade level standards. Examples would include students showcasing their unit project to other grade levels or parents.	Three school-wide showcases for the school year. Must include all areas of STEAM that are aligned to grade level standards. Examples would include students showcasing their unit project to other grade levels or parents.	Four or more showcases for the school year. Must include all areas of STEAM that are aligned to grade level standards. Examples would include students showcasing their unit project to other grade levels or parents.	/3
If there is no evidence provided, a score of zero will be used for that indicator.				
6. Extended Learning Activities Total Score ____/ 12				



# SDIRC STEAM Designation Middle School Rubric 2021-2022 Final



## 1. STEAM Plan and Support

The school has created a detailed STEAM strategic plan and STEAM team. The plan outlines important dates, professional development opportunities, and accountability measures. The STEAM Team collaborates frequently to review the plan's design and effectiveness. The STEAM Team gathers ideas and feedback from all stakeholders to make decisions.

Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Suggested Artifacts:</b> -Written plan with goals and implementation steps aligned with SIP -PD calendar -PD PowerPoint and handouts -STEAM Team agendas and meeting minutes	School and STEAM leadership creates a culture of STEAM leading and learning. Leadership has created a STEAM plan.	School and STEAM leadership creates a culture of STEAM leading and learning. Leadership has created a detailed plan and followed through with the implementation steps. The STEAM team meets quarterly to review the plan.	School and STEAM leadership creates a culture of STEAM leading and learning. Leadership has created a detailed plan and followed through with the implementation steps. The STEAM team meets more than quarterly to review the plan. The plan and implementation are visible school wide and involves all staff members.	/3
<b>Suggested Artifacts:</b> -walkthrough tool and feedback provided to teachers -trend data to showcase school grows and grows	School leadership provides teachers feedback on the STEAM lessons they implement to continue improve instruction with less than 25% of the staff.	School leadership provides teachers feedback on the STEAM lessons they implement to continue improve instruction with 25% to 75% of the staff.	School leadership provides teachers feedback on the STEAM lessons they implement to continue improve instruction with more than 75% of the staff.	/3
<b>Suggested Artifacts:</b> -Teacher survey(s) on STEAM -Feedback responses on survey(s) or plan	The school leadership has an articulated process for less than 25% of staff members give input and provide feedback to the plan.	The school leadership has an articulated process for 25% to 75% of staff to give input and provide feedback to the plan.	The school leadership has an articulated process for more than 75% of staff to give input and provide feedback to the plan.	/3
<b>Suggested Artifacts:</b> -PD Calendar -PD Agendas and sign in sheets -PD PowerPoints and handouts -Walkthrough tool and feedback provided to teachers.	Teachers participate in one professional development session focusing on critical STEAM teaching methods/skills and at least 75% of the teachers implement strategies in the classroom.	Teachers participate in two professional development sessions focusing on critical STEAM teaching methods/skills and at least 75% of the teachers implement strategies in the classroom.	Teachers participate in three or more professional development sessions focusing on critical STEAM teaching methods/skills and more than 75% of the teachers implement strategies in the classroom.	/3
	If there is no evidence provided, a score of zero will be used for that indicator.  <div>1. STEAM Plan</div> <div>Total Score ____/ 12</div>			



## SDIRC STEAM Designation Middle School Rubric



### 2. Collaborative Planning

The school provides evidence that teachers collaborate formally and informally to plan for interdisciplinary lessons and learning outcomes. Planning is frequent, timely and reflective. The school's culture promotes collaboration across grade levels, departments, and content areas.

Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Suggested Artifacts:</b> -Grade level planning agendas, meeting notes -Lesson plans that include standards used to incorporate STEAM into lessons	Less than 25% of teachers or grade levels use collaborative planning time to develop interdisciplinary lessons that are standards based.	Between 25 to 75% of teachers, or grade levels use collaborative planning time to develop interdisciplinary lessons that are standards based.	More than 75% of teachers, or grade levels use collaborative planning time to develop interdisciplinary lessons that are standards based.	/3
<b>Suggested Artifacts:</b> -Vertical STEAM plans (Dept and/or Grade Level) -Meeting agendas on vertical planning (STEAM, Grade level or Dept)	Teachers develop and implement one STEAM unit per year.	Teachers develop and implement two or three STEAM units per year.	Teachers develop and implement four or more STEAM units per year.	/3
<b>Suggested Artifacts:</b> -Lesson plans include teaching strategies that include subgroups or individual students -Documentation of differentiated options for students to show mastery of standards -Data for diverse learners and subgroups for STEAM unit	During collaborative planning time, less than 25% of teachers, or grade levels develop lessons or activities that are intentionally planned to meet the needs of the diverse learners and subgroups.	During collaborative planning time, 25 to 75% of teachers, or grade levels develop lessons or activities that are intentionally planned to meet the needs of the diverse learners and subgroups.	During collaborative planning time, more than 75% of teachers, or grade levels develop lessons or activities that are intentionally planned to meet the needs of the diverse learners and subgroups.	/3
	If there is no evidence provided, a score of zero will be used for that indicator.			
	<div>2. Collaborative Planning</div> <div>Total Score ____/ 9</div>			





## SDIRC STEAM Designation Middle School Rubric



### 3. Student Learning Experiences

**\*This section will be scored during the Fall and Spring STEAM team visits with this section being used as a classroom walkthrough tool to collect data on STEAM student learning experiences\***

Student learning experiences are anchored to standards and are focused on the big ideas and foundational skills critical to future learning. STEAM methods/skills are explicitly embedded throughout the curriculum. Learning experiences drive students to ask questions and look for answers. Student learning experiences create opportunities for students to make connections to the real world through creativity, innovative thinking, collaboration, and communication. Students can articulate the relationship among the concepts they learned to others. Students are given the opportunity to present their work learned through investigations and/or evidence. During this process teachers use formative assessments and monitor student learning frequently to gauge student learning and understanding. Learning experiences are intentionally designed to help students explore the relevant STEAM careers and their educational requirements. [NSTA Science and Engineering Practices help teachers develop quality science lesson plans.](#) [NSTA Science Crosscutting Concepts can also help teachers develop quality science lesson plans.](#)

Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Suggested Artifacts:</b> -Observations of student learning experiences -Observations of classroom physical environments -STEAM lesson plans -Teacher feedback -Student feedback	Less than 25% of students are required to think <b>creatively</b> to ask questions and define problems by demonstrating curiosity, imagination, risk-taking, and flexibility.	Between 25 to 75% of students are required to think <b>creatively</b> to ask questions and define problems by demonstrating curiosity, imagination, risk-taking, and flexibility.	More than 75% of students are required to think <b>creatively</b> to ask questions and define problems by demonstrating curiosity, imagination, risk-taking, and flexibility.	/3
<b>Suggested Artifacts:</b> -Observations of student learning experiences -Observations of classroom physical environments -STEAM Lesson Plans -Teacher feedback -Student feedback	Less than 25% of students engage in learning experiences that require them to <b>think critically</b> by reflecting, analyzing, and evaluating evidence, arguments, claims and beliefs to draw reasoning and conclusions.	Between 25 to 75% of students engage in learning experiences that require them <b>to think critically</b> by reflecting, analyzing, and evaluating evidence, arguments, claims and beliefs to draw reasoning and conclusions.	More than 75% of students engage in learning experiences that require them <b>to think critically</b> by reflecting, analyzing, and evaluating evidence, arguments, claims and beliefs to draw reasoning and conclusions	/3
<b>Suggested Artifacts:</b> -Observations of student learning experiences -Observations of classroom physical environments -STEAM lesson plans -Teacher feedback -Student feedback	Less than 25% of students engage in learning experiences that require them to <b>work collaboratively</b> to share responsibility by compromising and respecting others to design solutions to real-world problems.	Between 25% to 75% of students engage in learning experiences that require them to <b>work collaboratively</b> to share responsibility by compromising and respecting others to design solutions to real-world problems.	More than 75% of students engage in learning experiences that require them <b>to work collaboratively</b> to share responsibility by compromising and respecting others to design solutions to real-world problems.	/3
<b>Suggested Artifacts:</b> -Observations of student learning experiences -Observations of classroom physical environments -STEAM lesson plans -Teacher feedback -Student feedback	Less than 25% of students engage in learning experiences that require them to use verbal and nonverbal <b>communication</b> skills such as actively listening, written expression, delivering oral presentations, and engaging in	Between 25% to 75% of students engage in learning experiences that require them to use verbal and nonverbal <b>communication</b> skills such as actively listening, written expression, delivering oral presentations, and engaging in	More than 75% of students engage in learning experiences that require them to use verbal and nonverbal <b>communication</b> skills such as actively listening, written expression, delivering oral	/3



	conversations, debates, and discussions.	conversations, debates, and discussions.	presentations, and engaging in conversations, debates, and discussions.	
<b>Suggested Artifacts:</b> -Formative assessment checklists/records -Data chat artifacts -Pre/post assessments are used to show student growth -STEAM lesson plans	Less than 25% of teachers use <b><u>formative assessments</u></b> and monitor student work on mastery of STEAM lesson and standards.	Between 25% to 75% teachers use <b><u>formative assessments</u></b> and monitor student work on mastery of STEAM lessons and standards.	More than 75 % of teachers use <b><u>formative assessments</u></b> and monitoring student work on STEAM lessons and standards.	/3
<b>Suggested Artifacts:</b> -Observations of teacher feedback in classrooms and on student work	Less than 25% of teachers give <b><u>feedback</u></b> to students to ensure students are meeting the learning targets and standards.	Between 25% to 75% of teachers give <b><u>feedback</u></b> to students to ensure students are meeting the learning targets and standards.	More than 75% of teachers give <b><u>feedback</u></b> to students to ensure students are meeting the learning targets and standards.	/3
<b>Suggested Artifacts:</b> -STEAM career resource information for teachers and students -Career exploration lesson plans -Pictures of career experiences	Less than 25% of students participate in <b><u>career exploration activities.</u></b>	Between 25% to 75% of students participate in <b><u>career exploration activities.</u></b>	More than 75% of students participate in <b><u>career exploration activities.</u></b>	/3
<b>Suggested Artifacts:</b> -STEAM lesson plans -Student work examples -Vertical integration plans for STEAM -School plans for STEAM integration	Evidence of STEAM curriculum <b><u>integration in less than 25% of the entire school.</u></b> If there is no evidence provided, a score of zero will be used for that indicator.	Evidence of STEAM curriculum <b><u>integration between 25% to 75% of the entire school.</u></b> If there is no evidence provided, a score of zero will be used for that indicator.	Evidence of STEAM curriculum <b><u>integration in more than 75% of the entire school.</u></b> If there is no evidence provided, a score of zero will be used for that indicator.	/3
<div>3. Student Learning Experiences</div> <div>Total Score ____24</div>				



## SDIRC STEAM Designation Middle School Rubric



### 4. Technology Integration

Technology is seamlessly embedded within the classroom, lessons and activities of all content areas and is not demonstrated as a separate entity, providing a student-centered environment that encourages personalized and blended learning. Students use a variety of technology in the investigative process including virtual, computer based, mobile collection devices, web-based lessons, computer applications, researching, reporting, communicating in ways not possible without the use of technology.

Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Suggested Artifacts:</b> -Pictures or videos of students using coding programs or robotics -Video conferencing with community partners or digital field trips -Use of technology tools to manage and enhance classroom (Canvas, OneNote, Teams) -examples, pictures or videos of students working collaboratively and/or as a team	Less than 25% of teachers use digital integration tools to enhance STEAM lessons and student collaboration on a weekly basis.	Between 25 to 75% of teachers use digital integration tools to enhance STEAM lessons and student collaboration on a weekly basis.	More than 75% of teachers use digital integration tools to enhance STEAM lessons and student collaboration on a weekly basis.	/3
<b>Suggested Artifacts:</b> -Results from lab discs/probes -Artifacts showcasing student data collection using technology -STEAM lesson plans	Less than 25% of students use a variety of digital integration tools to collect data, respond to problems, research, design, communicate, or experimentation.	Between 25 to 75% of students use a variety of digital integration tools to collect data, respond to problems, research, design, communicate, or experimentation.	More than 75% of students use a variety of digital integration tools to collect data, respond to problems, research, design, communicate, or experimentation.	/3
<b>Suggested Artifacts:</b> -Digital learning products -Story telling through media -Student created videos to share their learning -Student created websites to summarize their learning -Student created applications	Less than 25% of students are given opportunities to demonstrate knowledge or learning virtually by creating videos, classroom digital products, websites, blogs, computer programs or other digital applications.	Between 25 to 75% of students are given opportunities to demonstrate knowledge or learning virtually by creating videos, classroom digital products, websites, blogs, computer programs or other digital applications.	More than 75% of students are given opportunities to demonstrate knowledge or learning virtually by creating videos, classroom digital products, websites, blogs, computer programs or other digital applications.	/3
<b>Suggested Artifacts:</b> -Observations of classroom physical environments -Observations of student learning experiences -Pictures or video of consistent daily technology integration -STEAM lesson plans	Less than 25% of teachers use technology daily in the classroom and have created a classroom environment where technology is seamlessly integrated.	Between 25% to 75% of teachers use technology daily in the classroom and have created a classroom environment where technology is seamlessly integrated.	More than 75% of teachers use technology daily in the classroom and have created a classroom environment where technology is seamlessly integrated.	/3
	If there is no evidence provided, a score of zero will be used for that indicator. 4. Technology Integration Total Score ____ / 12			



## SDIRC STEAM Designation Middle School Rubric



### 5. Florida School Grades Achievement Data

A variety of assessments are incorporated to measure student outcomes and drive instruction. Evidence that diagnostic, ongoing, and vertically and horizontally aligned formative and summative assessments are used for all students to drive instructional decisions. The school has a clear process to help teachers interpret student data and adjust their instruction accordingly. The school uses data from state, district and school assessments to drive instructional decisions. Teachers provide students immediate and specific feedback.

**\*Data for scoring this section of the rubric will be taken from the 2022 School Grades Report at end of the school year.\***

Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Required Artifact:</b> 2022 Florida School Grade Report from FDOE	<b>Mathematics FSA</b> Increase of <b>three to four percentage points</b> scoring at a Level three or higher on the FSA <b>OR 40 to 59%</b> of students at Level three or higher on the FSA for  <b>Overall Achievement</b>  <b>Subgroup: African American</b>	<b>Mathematics FSA</b> Increase of <b>five to seven percentage points</b> scoring at a Level three or higher on the FSA <b>60 to 79%</b> of students at Level three or higher on the FSA for  <b>Overall Achievement</b>  <b>Subgroup: African American</b>	<b>Mathematics FSA</b> Increase of <b>eight or more percentage points</b> scoring at a Level three or higher on the FSA <b>OR at least 80%</b> of students at Level three or higher on the FSA for  <b>Overall Achievement</b>  <b>Subgroup: African American</b>	/3
	<b>Subgroup: Economically Disadvantaged</b>	<b>Subgroup: Economically Disadvantaged</b>	<b>Subgroup: Economically Disadvantaged</b>	/3
				/3
<b>Required Artifact:</b> 2022 Florida School Grade Report from FDOE	<b>Science SSA</b> Increase of <b>three to four percentage points</b> scoring at a Level three or higher on the SSA <b>OR 40 to 59%</b> of students at Level three or higher on the SSA.  <b>Overall Achievement</b>  <b>Subgroup: African American</b>	<b>Science SSA</b> Increase of <b>five to seven percentage points</b> scoring at a Level three or higher on the SSA <b>OR 60 to 79%</b> of students at Level three or higher on the SSA.  <b>Overall Achievement</b>  <b>Subgroup: African American</b>	<b>Science SSA</b> Increase of <b>eight or more percentage points</b> scoring at a Level three or higher on the SSA <b>OR at least 80%</b> of students at Level three or higher on the SSA.  <b>Overall Achievement</b>  <b>Subgroup: African American</b>	/3
	<b>Subgroup: Economically Disadvantaged</b>	<b>Subgroup: Economically Disadvantaged</b>	<b>Subgroup: Economically Disadvantaged</b>	/3
				/3
<b>Required Artifact:</b> 2022 Florida School Grade Report from FDOE	<b>Acceleration Points with School Grades</b>  <b>50 to 69 points for acceleration</b>	<b>Acceleration Points with School Grades</b>  <b>70 to 89 points for acceleration</b>	<b>Acceleration Points with School Grades</b>  <b>At least 90 points for acceleration</b>	/3



## SDIRC STEAM Designation Middle School Rubric

**6. Extended Learning Activities**

Students are given the opportunity to participate in STEAM enrichment activities that take place before, during or after school hours. Partnerships with business, industry, and other community partners have been formed and are involved by directly connecting to in-class instruction, project/problem-based learning, and exposing students to STEAM skills. There are opportunities for students to interact with STEAM professionals to support curriculum.

Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Suggested Artifacts:</b> -Pictures, newsletters, or social media posts showcasing partnerships -Community service or service-learning artifacts related to STEAM -Guest Speaker Artifacts	The school has one business, community, or post-secondary (at least four interactions per year) partnerships that support STEAM related learning experiences.	The school has two or three business, community, or post-secondary (at least four interactions per year) partnerships that support STEAM related learning experiences.	The school has four or more business, community, or post-secondary partnerships (at least four interactions per year) that support STEAM related learning experiences.	/3
<b>Suggested Artifacts:</b> -Student Rosters from IR Regional Science Fair	The school has 15 students participate in the Indian River Regional Science and Engineering Fair.	The school has between 16 and 30 students participate in the Indian River Regional Science and Engineering Fair.	The school has over 30 students participate in the Indian River Regional Science and Engineering Fair.	/3
<b>Suggested Artifacts:</b> -Rosters, sign in sheets from school, District or Regional Competitions for: Envirothon, Mu Alpha Theta, Robotics, Coding, Etc.	School participates in one science competition (in addition to the Regional Science Fair), or math competition.	School participates in two science competitions (in addition to the Regional Science Fair), or math competitions.	School participates in three or more science competitions (in addition to the Regional Science Fair), or math competitions.	/3
<b>Suggested Artifacts:</b> -Flyers, rosters, social media posts from performances -Sign in sheets for after school clubs	One or two afterschool activities promoting visual and performing arts or community service activities.	Three to five afterschool activities promoting visual and performing arts or community service activities.	Six or more afterschool activities promoting visual and performing arts or community service activities.	/3
<b>Suggested Artifacts:</b> -Rosters, sign in sheets from school, District or Regional Competitions for: band, chorus, orchestra, visual arts performance assessments.	The school participates in one visual or performing arts assessment.	The school participates in two visual or performing arts assessments.	The school participates in three visual or performing arts assessments.	/3
If there is no evidence provided, a score of zero will be used for that indicator.				
<b>6. Extended Learning Activities</b> Total Score ____/ 15				



## SDIRC STEAM Designation High School Rubric 2021-2022 Final



### 1. STEAM Plan and Support

The school has created a detailed STEAM strategic plan and STEAM team. The plan outlines important dates, professional development opportunities, and accountability measures. The STEAM Team collaborates frequently to review the plan's design and effectiveness. The STEAM Team gathers ideas and feedback from all stakeholders to make decisions.

Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Suggested Artifacts:</b> -Written plan with goals and implementation steps aligned with SIP -PD calendar -PD PowerPoint and handouts -STEAM Team agendas and meeting minutes	School and STEAM leadership creates a culture of STEAM leading and learning. Leadership has created a STEAM plan.	School and STEAM leadership creates a culture of STEAM leading and learning. Leadership has created a detailed plan and followed through with the has implement steps. The STEAM team meets quarterly to review the plan.	School and STEAM leadership creates a culture of STEAM leading and learning. Leadership has created a detailed plan and followed through with the implementation steps. The STEAM team meets more than quarterly to review the plan. The plan and implementation are visible school wide and involves all staff members.	/3
<b>Suggested Artifacts:</b> -walkthrough tool and feedback provided to teachers -trend data to showcase school glows and grows	School leadership provides teachers feedback on the STEAM lessons they implement to continue improve instruction with less than 25% of the staff.	School leadership provides teachers feedback on the STEAM lessons they implement to continue improve instruction with 25% to 75% of the staff.	School leadership provides teachers feedback on the STEAM lessons they implement to continue improve instruction with more than 75% of the staff.	/3
<b>Suggested Artifacts:</b> -Teacher survey(s) on STEAM -Feedback responses on survey(s) or plan	The school leadership has an articulated process for less than 25% of staff members give input and provide feedback to the plan.	The school leadership has an articulated process for 25% to 75% of staff to give input and provide feedback to the plan.	The school leadership has an articulated process for more than 75% of staff to give input and provide feedback to the plan.	/3
<b>Suggested Artifacts:</b> -PD Calendar -PD Agendas and sign in sheets -PD PowerPoints and handouts -Walkthrough tool and feedback provided to teachers.	Teachers participate in one professional development session focusing on critical STEAM teaching methods/skills and at least 75% of the teachers implement strategies in the classroom.	Teachers participate in two professional development sessions focusing on critical STEAM teaching methods/skills and at least 75% of the teachers implement strategies in the classroom.	Teachers participate in three or more professional development sessions focusing on critical STEAM teaching methods/skills and more than 75% of the teachers implement strategies in the classroom.	/3

	<p>If there is no evidence provided, a score of zero will be used for that indicator.</p> <p style="text-align: right;">1. STEAM Plan</p> <p style="text-align: right;">Total Score ____/ 12</p>
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## SDIRC STEAM Designation High School Rubric



<b>2. Collaborative Planning</b> The school provides evidence that teachers collaborate formally and informally to plan for interdisciplinary lessons and learning outcomes. Planning is frequent, timely and reflective. The school's culture promotes collaboration across grade levels, departments, and content areas.				
Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Suggested Artifacts:</b> -Grade level planning agendas, meeting notes -Lesson plans that include standards used to incorporate STEAM into lessons	Less than 25% of teachers or grade levels use collaborative planning time to develop interdisciplinary lessons that are standards based.	Between 25 to 75% of teachers, or grade levels use collaborative planning time to develop interdisciplinary lessons that are standards based.	More than 75% of teachers, or grade levels use collaborative planning time to develop interdisciplinary lessons that are standards based.	/3
<b>Suggested Artifacts:</b> -Vertical STEAM plans (Dept and/or Grade Level) -Meeting agendas on vertical planning (STEAM, Grade level or Dept)	Teachers develop and implement one STEAM unit per year.	Teachers develop and implement two or three STEAM units per year.	Teachers develop and implement four or more STEAM units per year.	/3
<b>Suggested Artifacts:</b> -Lesson plans include teaching strategies that include subgroups or individual students -Documentation of differentiated options for students to show mastery of standards -Data for diverse learners and subgroups for STEAM unit	During collaborative planning time, less than 25% of teachers, or grade levels develop lessons or activities that are intentionally planned to meet the needs of the diverse learners and subgroups.	During collaborative planning time, 25 to 75% of teachers, or grade levels develop lessons or activities that are intentionally planned to meet the needs of the diverse learners and subgroups.	During collaborative planning time, more than 75% of teachers, or grade levels develop lessons or activities that are intentionally planned to meet the needs of the diverse learners and subgroups.	/3
	<p>If there is no evidence provided, a score of zero will be used for that indicator.</p> <p style="text-align: right;"><b>2. Collaborative Planning</b></p> <p style="text-align: right;">Total Score ____/ 9</p>			



## SDIRC STEAM Designation High School Rubric



### 3. Student Learning Experiences

**\*This section will be scored during the Fall and Spring STEAM team visits with this section being used as a classroom walkthrough tool to collect data on STEAM student learning experiences\***

Student learning experiences are anchored to standards and are focused on the big ideas and foundational skills critical to future learning. STEAM methods/skills are explicitly embedded throughout the curriculum. Learning experiences drive students to ask questions and look for answers. Student learning experiences create opportunities for students to make connections to the real world through creativity, innovative thinking, collaboration, and communication. Students can articulate the relationship among the concepts they learned to others. Students are given the opportunity to present their work learned through investigations and/or evidence. During this process teachers use formative assessments and monitor student learning frequently to gauge student learning and understanding. Learning experiences are intentionally designed to help students explore the relevant STEAM careers and their educational requirements. [NSTA Science and Engineering Practices help teachers develop quality science lesson plans.](#) [NSTA Science Crosscutting Concepts can also help teachers develop quality science lesson plans.](#)

Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Suggested Artifacts:</b> -Observations of student learning experiences -Observations of classroom physical environments -STEAM lesson plans -Teacher feedback -Student feedback	Less than 25% of students are required to think <b>creatively</b> to ask questions and define problems by demonstrating curiosity, imagination, risk-taking, and flexibility.	Between 25 to 75% of students are required to think <b>creatively</b> to ask questions and define problems by demonstrating curiosity, imagination, risk-taking, and flexibility.	More than 75% of students are required to think <b>creatively</b> to ask questions and define problems by demonstrating curiosity, imagination, risk-taking, and flexibility.	/3
<b>Suggested Artifacts:</b> -Observations of student learning experiences -Observations of classroom physical environments -STEAM Lesson Plans -Teacher feedback -Student feedback	Less than 25% of students engage in learning experiences that require them to <b>think critically</b> by reflecting, analyzing, and evaluating evidence, arguments, claims and beliefs to draw reasoning and conclusions.	Between 25 to 75% of students engage in learning experiences that require them to <b>think critically</b> by reflecting, analyzing, and evaluating evidence, arguments, claims and beliefs to draw reasoning and conclusions.	More than 75% of students engage in learning experiences that require them to <b>think critically</b> by reflecting, analyzing, and evaluating evidence, arguments, claims and beliefs to draw reasoning and conclusions.	/3
<b>Suggested Artifacts:</b> -Observations of student learning experiences -Observations of classroom physical environments -STEAM lesson plans -Teacher feedback -Student feedback	Less than 25% of students engage in learning experiences that require them to work <b>collaboratively</b> to share responsibility by compromising and respecting others to design solutions to real-world problems.	Between 25% to 75% of students engage in learning experiences that require them to work <b>collaboratively</b> to share responsibility by compromising and respecting others to design solutions to real-world problems.	More than 75% of students engage in learning experiences that require them to work <b>collaboratively</b> to share responsibility by compromising and respecting others to design solutions to real-world problems.	/3



<b>Suggested Artifacts:</b> -Observations of student learning experiences -Observations of classroom physical environments -STEAM lesson plans -Teacher feedback -Student feedback	Less than 25% of students engage in learning experiences that require them to use verbal and nonverbal <b><u>communication</u></b> skills such as actively listening, written expression, delivering oral presentations, and engaging in conversations, debates, and discussions.	Between 25% to 75% of students engage in learning experiences that require them to use verbal and nonverbal <b><u>communication</u></b> skills such as actively listening, written expression, delivering oral presentations, and engaging in conversations, debates, and discussions.	More than 75% of students engage in learning experiences that require them to use verbal and nonverbal <b><u>communication</u></b> skills such as actively listening, written expression, delivering oral presentations, and engaging in conversations, debates, and discussions.	/3
<b>Suggested Artifacts:</b> -Formative assessment checklists/records -Data chart artifacts -Pre/post assessments are used to show student growth -STEAM lesson plans	Less than 25% of teachers use <b><u>formative assessments</u></b> and monitor student work on mastery of STEAM lesson and standards.	Between 25% to 75% teachers use <b><u>formative assessments</u></b> and monitor student work on mastery of STEAM lessons and standards.	More than 75 % of teachers use <b><u>formative assessments</u></b> and monitoring student work on STEAM lessons and standards.	/3
<b>Suggested Artifacts:</b> -Observations of teacher feedback in classrooms and on student work	Less than 25% of teachers give <b><u>feedback</u></b> to students to ensure students are meeting the learning targets and standards.	Between 25% to 75% of teachers give <b><u>feedback</u></b> to students to ensure students are meeting the learning targets and standards.	More than 75% of teachers give <b><u>feedback</u></b> to students to ensure students are meeting the learning targets and standards.	/3
<b>Suggested Artifacts:</b> -STEAM career resource information for teachers and students -Career exploration lesson plans -Pictures of career experiences	Less than 25% of students participate in <b><u>career exploration activities.</u></b>	Between 25% to 75% of students participate in <b><u>career exploration activities.</u></b>	More than 75% of students participate in <b><u>career exploration activities.</u></b>	/3
<b>Suggested Artifacts:</b> -STEAM lesson plans -Student work examples -Vertical integration plans for STEAM -School plans for STEAM integration	Evidence of STEAM curriculum <b><u>integration in less than 25% of the entire school.</u></b>	Evidence of STEAM curriculum <b><u>integration between 25% to 75% of the entire school.</u></b>	Evidence of STEAM curriculum <b><u>integration in more than 75% of the entire school.</u></b>	/3
If there is no evidence provided, a score of zero will be used for that indicator.				
<div>3. Student Learning Experiences</div> <div>Total Score ____24</div>				





## SDIRC STEAM Designation High School Rubric



### 4. Technology Integration

Technology is seamlessly embedded within the classroom, lesson and activities of all content areas and is not demonstrated as a separate entity, providing a student-centered environment that encourages personalized and blended learning. Students use a variety of technology in the investigative process including virtual, computer based, mobile collection devices, web-based lessons, computer applications, researching, reporting, communicating in ways not possible without the use of technology.

Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Suggested Artifacts:</b> -Pictures or videos of students using coding programs or robotics -Video conferencing with community partners or digital field trips -Use of technology tools to manage and enhance classroom (Canvas, OneNote, Teams) -examples, pictures or videos of students working collaboratively and/or as a team.	Less than 25% of teachers use digital integration tools to enhance STEAM lessons and student collaboration on a weekly basis.	Between 25 to 75% of teachers use digital integration tools to enhance STEAM lessons and student collaboration on a weekly basis.	More than 75% of teachers use digital integration tools to enhance STEAM lessons and student collaboration on a weekly basis.	/3
<b>Suggested Artifacts:</b> -Results from lab discs/probes -Artifacts showcasing student data collection using technology -STEAM lesson plans	Less than 25% of students use a variety of digital integration tools to collect data, respond to problems, research, design, communicate, or experimentation.	Between 25 to 75% of students use a variety of digital integration tools to collect data, respond to problems, research, design, communicate, or experimentation.	More than 75% of students use a variety of digital integration tools to collect data, respond to problems, research, design, communicate, or experimentation.	/3
<b>Suggested Artifacts:</b> -Digital learning products -Story telling through media -Student created videos to share their learning -Student created websites to summarize their learning -Student created applications	Less than 25% of students are given opportunities to demonstrate knowledge or learning virtually by creating videos, classroom digital products, websites, blogs, computer programs or other digital applications.	Between 25 to 75% of students are given opportunities to demonstrate knowledge or learning virtually by creating videos, classroom digital products, websites, blogs, computer programs or other digital applications.	More than 75% of students are given opportunities to demonstrate knowledge or learning virtually by creating videos, classroom digital products, websites, blogs, computer programs or other digital applications.	/3
<b>Suggested Artifacts:</b> -Observations of classroom physical environments -Observations of student learning experiences -Pictures or video of consistent daily technology integration -STEAM lesson plans	Less than 25% of teachers use technology daily in the classroom and have created a classroom environment where technology is seamlessly integrated.	Between 25% to 75% of teachers use technology daily in the classroom and have created a classroom environment where technology is seamlessly integrated.	More than 75% of teachers use technology daily in the classroom and have created a classroom environment where technology is seamlessly integrated.	/3
	If there is no evidence provided, a score of zero will be used for that indicator. <b>4. Technology Integration</b> <b>Total Score ____ / 12</b>			



## SDIRC STEAM Designation High School Rubric



### 5. Florida School Grades Achievement Data

A variety of assessments are incorporated to measure student outcomes and drive instruction. Evidence that diagnostic, ongoing, and vertically and horizontally aligned formative and summative assessments are used for all students to drive instructional decisions. The school has a clear process to help teachers interpret student data and adjust their instruction accordingly. The school uses data from state, district and school assessments to drive instructional decisions. Teachers provide students immediate and specific feedback.

**\*Data for scoring this section of the rubric will be taken from the 2022 School Grades Report at end of the school year.\***

Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Required Artifact:</b> 2022 Florida School Grade Report from FDOE	<b>Algebra 1/Geometry EOC</b> Increase of <b>three to four percentage points</b> scoring at a Level three or higher on the FSA <b>OR 40 to 59%</b> of students at Level three or higher on the FSA for  <b>Overall Achievement</b>	<b>Algebra 1/Geometry EOC</b> Increase of <b>five to seven percentage points</b> scoring at a Level three or higher on the FSA <b>60 to 79%</b> of students at Level three or higher on the FSA for  <b>Overall Achievement</b>	<b>Algebra 1/Geometry EOC</b> Increase of <b>eight or more percentage points</b> scoring at a Level three or higher on the FSA <b>OR at least 80%</b> of students at Level three or higher on the FSA for  <b>Overall Achievement</b>	/3
	Subgroup: African American	Subgroup: African American	Subgroup: African American	/3
	Subgroup: Economically Disadvantaged	Subgroup: Economically Disadvantaged	Subgroup: Economically Disadvantaged	/3
<b>Required Artifact:</b> 2022 Florida School Grade Report from FDOE	<b>Biology EOC</b> Increase of <b>three to four percentage points</b> scoring at a Level three or higher on the SSA <b>OR 40 to 59%</b> of students at Level three or higher on the SSA.  <b>Overall Achievement</b>	<b>Biology EOC</b> Increase of <b>five to seven percentage points</b> scoring at a Level three or higher on the SSA <b>OR 60 to 79%</b> of students at Level three or higher on the SSA.  <b>Overall Achievement</b>	<b>Biology EOC</b> Increase of <b>eight or more percentage points</b> scoring at a Level three or higher on the SSA <b>OR at least 80%</b> of students at Level three or higher on the SSA.  <b>Overall Achievement</b>	/3
	Subgroup: African American	Subgroup: African American	Subgroup: African American	/3
	Subgroup: Economically Disadvantaged	Subgroup: Economically Disadvantaged	Subgroup: Economically Disadvantaged	/3
<b>Required Artifact:</b> 2022 Florida School Grade Report from FDOE	<b>Acceleration Points with School Grades</b>  <b>50 to 79 points</b> for acceleration	<b>Acceleration Points with School Grades</b>  <b>70 to 89 points</b> for acceleration	<b>Acceleration Points with School Grades</b>  At least <b>90 points</b> for acceleration	/3
	5. Florida School Grades Achievement Data			



## SDIRC STEAM Designation High School Rubric

**6. Extended Learning Activities**

Students are given the opportunity to participate in STEAM enrichment activities that take place before, during or after school hours. Partnerships with business, industry, and other community partners have been formed and are involved by directly connecting to in-class instruction, project/problem-based learning, and exposing students to STEAM skills. There are opportunities for students to interact with STEAM professionals to support curriculum.

Artifacts	Emerging (1) Bronze	Integrating (2) Silver	Modeling (3) Gold	Score
<b>Suggested Artifacts:</b> -Pictures, newsletters, or social media posts showcasing partnerships -Community service or service-learning artifacts related to STEAM -Guest Speaker Artifacts	The school has one business, community, or post-secondary (at least four interactions per year) partnerships that support STEAM related learning experiences.	The school has two or three business, community, or post-secondary (at least four interactions per year) partnerships that support STEAM related learning experiences.	The school has four or more business, community, or post-secondary partnerships (at least four interactions per year) that support STEAM related learning experiences.	/3
<b>Suggested Artifacts:</b> -Student Rosters from IR Regional Science Fair	The school has 0-5 students participate in the Indian River Regional Science and Engineering Fair.	The school has between 6 - 10 students participate in the Indian River Regional Science and Engineering Fair.	The school has over 10 students participate in the Indian River Regional Science and Engineering Fair.	/3
<b>Suggested Artifacts:</b> -Rosters, sign in sheets from school, District or Regional Competitions for: Envirothon, Mu Alpha Theta, Robotics, Coding, Etc.	School participates in one science competition (in addition to the Regional Science Fair), or math competition.	School participates in two to three science competitions (in addition to the Regional Science Fair), or math competitions.	School participates in four or more science competitions (in addition to the Regional Science Fair), or math competitions.	/3
<b>Suggested Artifacts:</b> -Flyers, rosters, social media posts from performances -Sign in sheets for after school clubs	One or two afterschool activities promoting visual and performing arts or community service activities.	Three to five afterschool activities promoting visual and performing arts or community service activities.	Six or more afterschool activities promoting visual and performing arts or community service activities.	/3
<b>Suggested Artifacts:</b> -Rosters, sign in sheets from school, District or Regional Competitions for: band, chorus, orchestra, visual arts performance assessments.	The school participates in one visual or performing arts assessment.	The school participates in two visual or performing arts assessments.	The school participates in three visual or performing arts assessments.	/3
	If there is no evidence provided, a score of zero will be used for that indicator. <b>6. Extended Learning Activities</b>			



## SDIRC STEAM School Designation Plan 2021-2022

### School:

Please save this document and fill it out. Please upload the finalized document into the STEAM Designation Teams Files Folder: School Files.

- Who are the members of the school's STEAM team and their role? Indicate primary STEAM leader.
- Please fill out the data tables below and answer the following questions.

% Of Students Scoring 3+ on Science State Assessment			% Of Economically Disadvantaged Students Scoring 3+ on Science State Assessment			% Of African American Students Scoring 3+ on Science State Assessments		
18-19	20-21	Change	18-19	20-21	Change	18-19	20-21	Change

% Of Students Scoring 3+ on Mathematics State Assessment			% Of Economically Disadvantaged Students Scoring 3+ on Mathematics State Assessment			% Of African American Students Scoring 3+ on Mathematics State Assessments		
18-19	20-21	Change	18-19	20-21	Change	18-19	20-21	Change

- What High Yield Strategies will the school implement to support improvements in the above data?
- What priority actions will the school implement to support improvements in the ESSA subgroups?

**5. What is the school implementation plan for improvements in STEAM Team Meetings and STEAM PD?**

Implementation Dates	Implementation Steps	Person Responsible (First and Last Name, Position)	Expected Evidence (What evidence would demonstrate the implementation step was successfully completed?)	Monitoring (How and Who?)

**6. What is the school implementation plan for improvements in Student Learnings Experiences?**

Implementation Dates	Implementation Steps	Person Responsible (First and Last Name, Position)	Expected Evidence (What evidence would demonstrate the implementation step was successfully completed?)	Monitoring (How and Who?)

**7. What is the school implementation plan for improvements with Technology Integration?**

Implementation Dates	Implementation Steps	Person Responsible (First and Last Name, Position)	Expected Evidence (What evidence would demonstrate the implementation step was successfully completed?)	Monitoring (How and Who?)

**8. What is the school implementation plan for improvements in Extended Learning Opportunities?**

Implementation Dates	Implementation Steps	Person Responsible (First and Last Name, Position)	Expected Evidence (What evidence would demonstrate the implementation step was successfully completed?)	Monitoring (How and Who?)

**9. What budget have you set aside for STEAM?**

**10. What support does the school need from the SDIRC STEAM Team?**

