



COMMUNITY BOATING CENTER
INDIA POINT PARK, PROVIDENCE

Daily Program Quality

SUPPORTIVE ENVIRONMENT

Welcoming atmosphere

- Staff greet youth
- Staff tone of voice and language
- Smile, friendly gestures, eye contact

Session flow

- Start and end on time
- Materials and supplies ready
- Enough materials and supplies for all
- Staff explain activities clearly
- Appropriate time for activities

Active engagement

- Youth engage with materials or ideas
- Tangible products or performances
- Youth talk about what they are doing
- Balance concrete and abstract

Building new skills

- Youth encouraged to try new skills
- Mistakes allowed

Encouragement

- Staff actively involved with youth
- Specific, non-evaluative language
- Open-ended questions

Reframing conflict

- Staff approach calmly
- Staff seek input from youth
- Frame actions and consequences
- Staff follow up

INTERACTION

Sense of belonging

- Get to know each other
- Inclusive relationships
- Youth identify with program offering
- Publicly acknowledge achievements

Small groups

- Ways to form number of small groups
- Groups have purpose, cooperate

Youth lead and mentor

- Group-process skills
- Opportunities to lead & mentor

Youth-adult partnerships

- Staff share control with youth
- Staff explain guidelines

ENGAGEMENT

Youth set goals and make plans

- Plans for projects and activities
- Planning strategies

Youth make choices

- Content & process choices

Youth reflect

- Youth reflect in multiple ways
- Youth make presentations
- Youth give feedback on the activities

Learning Strategy, Theory, & Tools

Inquiry-Based Learning

INQUIRY-BASED LEARNING CONTEXT

- Youth guide, shape, and lead their own learning in partnership with educators.
- Educators are facilitators of youth learning, not just transmitters of knowledge.
- Learning is engaging & fun for youth/adults.
- Youth engage in real-world applications and problem-solving - personally meaningful.

INQUIRY-BASED LEARNING PROCESS

- Activate prior knowledge of particular topics
- Develop explanations around questions posed by youth and educators.
- Engage youth in hands-on exploration and observation with data collection, analysis, and using evidence to form conclusions.
- Provide opportunities for youth & educators to reflect upon what has been learned.
- Empower youth to publicly demonstrate and articulate their content & process learning.

Social/Emotional Skills

WHAT/WHY STUDENTS LEARN

- Self-management: internal and responsible decision making.
- Empathy: grow social & self-awareness.
- Communication: learn to resolve conflicts, express opinions, make an argument.
- Questioning: develop a sense of curiosity.
- Imagination: think critically and creatively.
- Tenacity: show dedication and commitment to complete a task/goal despite difficulty.
- Passion: feel a sense of personal drive and internal motivation.

Learning Tools – Day 5

DAILY FLOW

- Build-in flexibility, balance theory/hands-on
- Encourage spirited, friendly competition.

ACTIVITIES USED

- Captain's log, round table, board lesson.
- Reading out loud, US Sailing book time.
- Data collection/recording, Hands-on sailing.

SUPPORTIVE LEARNING STRATEGIES

- Discussion, lecture, small and large groups.
- Youth planning opportunities.
- Simulation or role playing.
- Cooperative learning, youth reflection.

MATERIALS USED

- 22' Hunter 216 sailboats, PFD's.
- LSR-BS, SBS-RB, pencils.
- Anemometer, thermometers.
- Special - See Reach M3.

REFLECTION & FEEDBACK

- Logbooks will prompt reflection.
- Discussion, feedback, review, questions.
- Talk time to share experiences.

Day 5 – STEM Sailing Group Experience

Curriculum – Day 5

OBJECTIVES (180 min. session)

- Review of Day 4
- Intro to tacking
- Intro to points of sail

WELCOME (10 min.)

- Round table discussion of day 4 events.
- Distribute LSR-BS & SBS-RB books.

PRIMING QUESTIONS (10 min.)

- What's shortest distance between 2 points?
- What shape are sails and why?

DATA COLLECTION/ RECORDING (10 min.)

- Split into small crews.
- Wind speed, air & water temperature.

CHALK TALK – LSR-BS (10 min)

- **Review chapter 6** - steering
- Intro chapter 11 – tacking
- **Intro chapter 5** – points of sail

Reach – M3 – PERIMETER & AREA (60 min.)

- Part I – Sails as triangles (10)
- Part II – Area of sails (10)
- Part III – Pythagorean's Theorem (40)

ON-THE-DOCK (15 min.)

- Instructor demo – tacking

ON-THE-WATER (50 min.)

- Tacking – "Tack Tiller Toward" sail
- Points of sail – "When in doubt – let it out"
- 360 deg. circle illustrated w/ points of sail
- Right angle illustrated w/ "No Go Zone"
- 45 deg. angles for close-hauled position

DE-BRIEF (10 min.)

- How are angles important to our sailing?
- Questions? Reflection time - captain's logs.

Expanded Learning – Day 5

SCIENCE – PERIMETER & AREA

- Measure the area of a triangle.
- Compute Pythagorean's Theorem.
- Review triangle base, height, hypotenuse.
- Identify the parts of a sail, head, foot, luff, and leech – compare to triangle.
- Compare sail area of a main and jib sail.

LITERACY COMPONENT

- Youth logbooks – SBS-RB.
- Volunteers read LSR-BS aloud.
- New mariner vocabulary words taught daily.
- Word Wall – always present, youth owned.