

FORMATIVE-ASSESSMENT OF TRAINING

A COMPETENCY-BASED APPROACH

HSBO 2023
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SOME WARMUP QUESTIONS

- How many of you has organized a training?
- How many of you assessed the training?
- Did you assess it with a debriefing?
- Did you designed a specific tool to do the assessment?
- Did you give feedback to the participants?
- Did you evaluate the outcome of the learning?



USUAL OBJECTIVES OF TRAINING

1

**Develop
new skills**

2

**Skill
retention**

3

**Skill
certification**



WHY SHOULD WE ASSESS?

1

**Improve
learning
outcome**

2

**Awareness
of learning
proces_s**

3

**Certify
Skills**



HOW SHOULD WE ASSESS?



Instructor
assessment



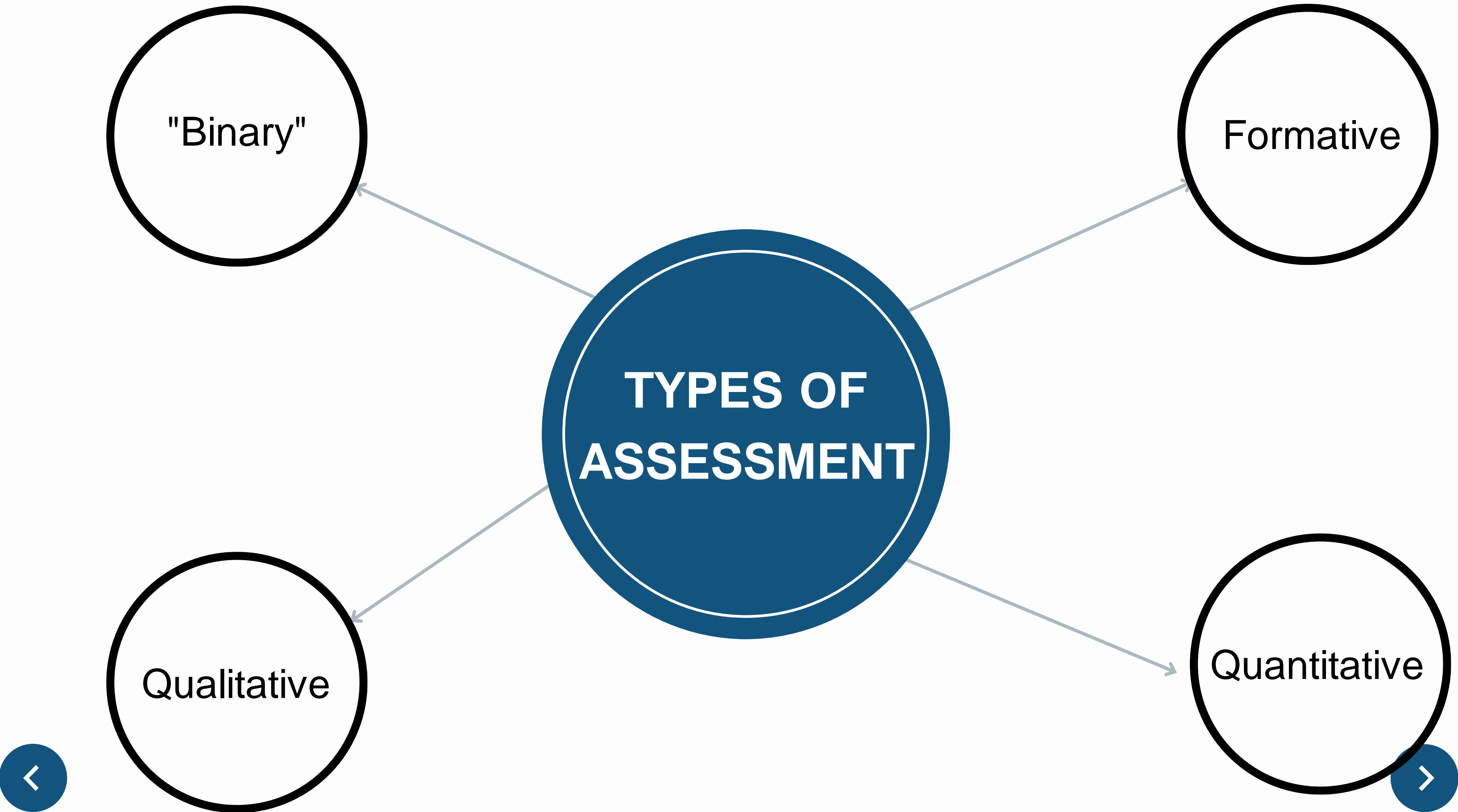
Self-assessment



Co-assessment

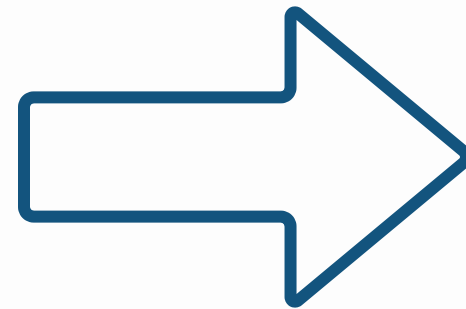






BINARY ASSESSMENT

- Binary assessment has two outcomes: Pass / No Pass.
- No real knowledge of the achieved level.
- No feedback to go on improving.
- Dangerous misconceptions about proficiency.



FORMATIVE-ASSESSMENT

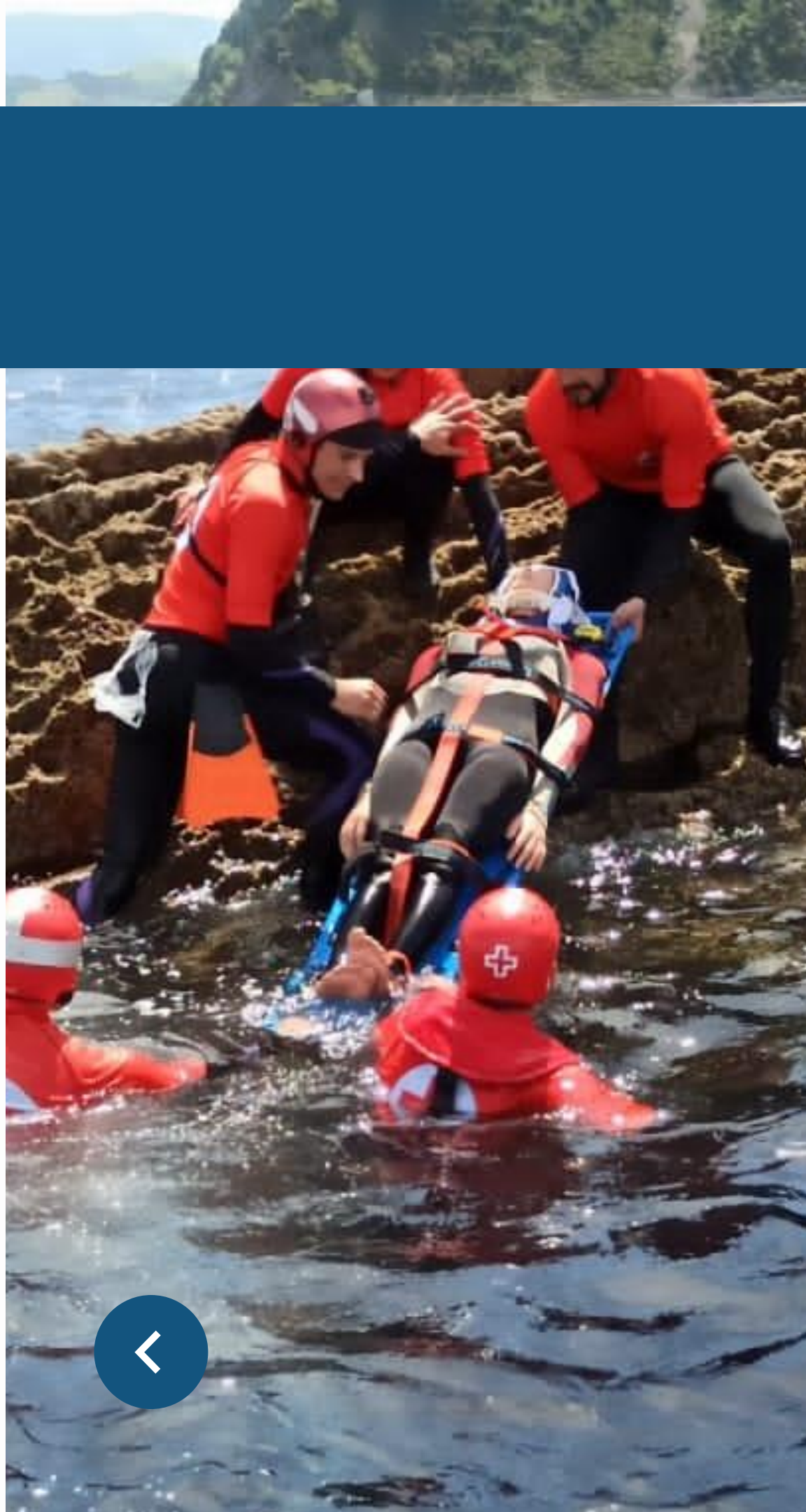
Formative assessment, formative evaluation, formative feedback, or assessment for learning, including diagnostic testing, is a range of formal and informal assessment procedures conducted by teachers during the learning process in order to modify teaching and learning activities to improve student attainment.

The goal of a formative assessment is to monitor student learning to provide ongoing feedback that can help students identify their strengths and weaknesses and target areas that need work.

It also helps faculty recognize where students are struggling and address problems immediately. It typically involves qualitative feedback (rather than scores) for both student and teacher that focuses on the details of content and performance.

Wikipedia dixit





COMPETENCES (WIKIPEDIA DIXIT)

- Competence is the set of demonstrable characteristics and skills that enable and improve the efficiency or performance of a job.
- Competency is a series of knowledge, abilities, skills, experiences and behaviors, which leads to effective performance in an individual's activities.
- Competency is measurable and can be developed through training.





DESCRIPTORS (INDICATORS OF ACHIEVEMENT)

- These are the set of statements that make up each competence that guide us to program the different areas and check whether the students are developing these competences.
- It is a didactic and pedagogical guide to work on the competences.





RUBRICS (CRITERIA FOR GRADING)

- **Rubrics** are a set of criteria for grading
- **Rubrics** usually contain evaluative criteria, quality definitions for those criteria at particular levels of achievement, and a scoring strategy.
- A scoring rubric can provide a basis for self-evaluation, reflection, and peer review. It is aimed at accurate and fair assessment, fostering understanding, and indicating a way to proceed with subsequent learning/teaching.



LET'S PUT IN PRACTICE

- Decide who are we going to assess.
- Decide which competencies are we going to assess.
- Write down the descriptors.
- Design evaluation tools.
- Design training session.
- Perform the training.
- Assess the part we are interested in.
- Evaluate the whole process.



Designing the training session



- Who are we going to assess.
- What are we going to assess (Competences)...
- Assessment process and type.
- When, where, under which sea state.
- Safety parameters.
- Equipment and human resources.
- Operating procedures.
- Safety plan.
- Documentation.
- Briefing/Debriefing.



COMPETENCES AND DESCRIPTORS

**Who I'm going to assess
(driver of the boarding boat)**

**What I'm going to assess:
Approach to boat, contact, station keeping.**

Competence	Drives the boat alongside the boarded during the boarding operations.
Descriptors	Approaches safely to the intended boarding point.
	Keeps station during boarding segment of the operation
	Exits the boarding point safely



Ready for an example? (Evaluation tool aka the rubric) ChatGPT style

Descriptor	Beginning	Developing	Proficient	Distinguished
Approaches safely to the intended boarding point.	<ul style="list-style-type: none"> The driver fails to make contact with the boarded vessel at the intended point. Significant deviations occur, preventing successful contact. The boarding operation is disrupted or delayed as a result. 	<ul style="list-style-type: none"> The driver makes contact with the boarded vessel, but not precisely on the intended point. Minor adjustments are needed to establish proper contact. Some delays or minor disruptions may occur during the process. 	<ul style="list-style-type: none"> The driver successfully contacts the boarded vessel at the intended point. Contact is made with reasonable accuracy, requiring only minor adjustments. The boarding operation proceeds smoothly without significant disruptions. 	<ul style="list-style-type: none"> The driver flawlessly contacts the boarded vessel precisely on the intended point. Contact is made with exceptional accuracy, requiring no adjustments. The boarding operation progresses seamlessly, with no disruptions.
Keeps station during boarding segment of the operation	<ul style="list-style-type: none"> The boat is unable to maintain a stable position alongside the boarded vessel. Frequent collisions or near misses occur during the operation. Poor manoeuvring skills are displayed, causing disruption to the boarding process. 	<ul style="list-style-type: none"> The boat generally maintains a position alongside the boarded vessel but with occasional deviations. Minor collisions or near misses may occur, but they are quickly corrected. Some areas of improvement in manoeuvring skills are evident. 	<ul style="list-style-type: none"> The boat consistently maintains a stable position alongside the boarded vessel. No collisions or near misses occur during the operation. Demonstrates competent manoeuvring skills, maintaining control and precision. 	<ul style="list-style-type: none"> The boat flawlessly maintains a precise position alongside the boarded vessel throughout the operation. Demonstrates exceptional manoeuvring skills, adapting to changing conditions seamlessly. No collisions or near misses occur, even in challenging circumstances.
Exits the boarding point safely	<ul style="list-style-type: none"> The driver fails to exit the boat safely from the boarding point. Unsafe or uncontrolled manoeuvres are observed during the exit process. The boarding operation is compromised due to the driver's unsafe actions. 	<ul style="list-style-type: none"> The driver exits the boat from the boarding point with minor safety concerns. Some adjustments or corrections may be needed to ensure a safe exit. The overall safety of the operation is maintained, but improvements are necessary. 	<ul style="list-style-type: none"> The driver safely exits the boat from the boarding point. The exit process is controlled and executed with reasonable safety measures. The driver demonstrates good judgment and adherence to safety protocols. 	<ul style="list-style-type: none"> The driver flawlessly exits the boat from the boarding point with utmost safety. All safety procedures and protocols are followed meticulously. The driver's actions contribute to an overall safe and efficient boarding operation.



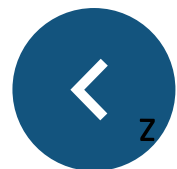
Ready for an example? (Evaluation tool aka the rubric)

Descriptor	Beginning	Developing	Proficient	Distinguished
<p style="text-align: center;">Contacts properly on the intended entry point</p>	<ul style="list-style-type: none"> The driver fails to make contact with the boarded vessel at the intended point. Significant deviations occur, preventing successful contact. The boarding operation is disrupted or delayed as a result. 	<ul style="list-style-type: none"> The driver makes contact with the boarded vessel, but not precisely on the intended point. Minor adjustments are needed to establish proper contact. Some delays or minor disruptions may occur during the process. 	<ul style="list-style-type: none"> The driver successfully contacts the boarded vessel at the intended point. Contact is made with reasonable accuracy, requiring only minor adjustments. The boarding operation proceeds smoothly without significant disruptions. 	<ul style="list-style-type: none"> The driver flawlessly contacts the boarded vessel precisely on the intended point. Contact is made with exceptional accuracy, requiring no adjustments. The boarding operation progresses seamlessly, with no disruptions.



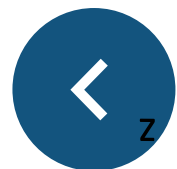
Ready for an example? (Evaluation tool aka the rubric)

Descriptor	Beginning	Developing	Proficient	Distinguished
<p>Keeps station during boarding segment of the operation</p>	<ul style="list-style-type: none"> The boat is unable to maintain a stable position alongside the boarded vessel. Frequent collisions or near misses occur during the operation. Poor manoeuvring skills are displayed, causing disruption to the boarding process. 	<ul style="list-style-type: none"> The boat generally maintains a position alongside the boarded vessel but with occasional deviations. Minor collisions or near misses may occur, but they are quickly corrected. Some areas of improvement in manoeuvring skills are evident. 	<ul style="list-style-type: none"> The boat consistently maintains a stable position alongside the boarded vessel. No collisions or near misses occur during the operation. Demonstrates competent manoeuvring skills, maintaining control and precision. 	<ul style="list-style-type: none"> The boat flawlessly maintains a precise position alongside the boarded vessel throughout the operation. Demonstrates exceptional manoeuvring skills, adapting to changing conditions seamlessly. No collisions or near misses occur, even in challenging circumstances.



Ready for an example? (Evaluation tool aka the rubric)

Descriptor	Beginning	Developing	Proficient	Distinguished
<p style="text-align: center;">Exits the boarding point safely</p>	<ul style="list-style-type: none"> • The driver fails to exit the boat safely from the boarding point. • Unsafe or uncontrolled manoeuvres are observed during the exit process. • The boarding operation is compromised due to the driver's unsafe actions. 	<ul style="list-style-type: none"> • The driver exits the boat from the boarding point with minor safety concerns. • Some adjustments or corrections may be needed to ensure a safe exit. • The overall safety of the operation is maintained, but improvements are necessary. 	<ul style="list-style-type: none"> • The driver safely exits the boat from the boarding point. • The exit process is controlled and executed with reasonable safety measures. • The driver demonstrates good judgment and adherence to safety protocols. 	<ul style="list-style-type: none"> • The driver flawlessly exits the boat from the boarding point with utmost safety. • All safety procedures and protocols are followed meticulously. • The driver's actions contribute to an overall safe and efficient boarding operation.



ASSESSMENT, FEEDBACK AND EVALUATION

From If achieved
to when achieved




- Analysis of the data gathered.
- Assessment of the driver:
 - Self-assessment.
 - Co-assessment.
 - Instructor assessment.
- Feedback (Cr@p sandwich).
- Evaluation of the whole process.



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