

IALA Model Course

V-103

On

Train the Trainer

Edition 1

MARCH 2013



AISM Association Internationale de Signalisation Maritime IALA

Document Revisions

Revisions to the IALA Document are to be noted in the table prior to the issue of a revised document.

|  |  |  |
| --- | --- | --- |
| Date | Page / Section Revised | Requirement for Revision |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Foreword

The International Association of Marine Aids to Navigation and Lighthouse Authorities has been associated with Vessel Traffic Services since 1955 and recognises the importance of human resources to the development of efficient Vessel Traffic Services worldwide.

Taking into account the International Convention on Standards of Training, Certification and Watchkeeping of Seafarers, 1978, 2011 as amended (STCW Convention), the Seafarer’s Training, Certification and Watchkeeping Code (STCW Code) and STCW 95 Resolution 10, IALA has adopted Recommendation V-103 on Standards of Training and Certification of VTS Personnel.

The model training courses developed by IALA for VTS Personnel are:

Model Course V-103/1 - VTS Operators

Model Course V-103/2 - VTS Supervisor

Model Course V-103/3 - On-the-Job Training

Model Course V-103/4 – On the Job Training Instructor

Model Course V-103/5 – Train the Trainer of VTS Personnel

These model courses are intended to provide IALA Members and other appropriate Authorities charged with the provision of Vessel Traffic Services with specific guidance on the training of VTS FacilitatorsTTI. They may be used by maritime training Institutes and assistance in implementing any course may be obtained through the Association at the following address:

The Secretary General,

IALA/AISM, Tel: (+) 1 33 34 51 70 01

10, rue des Gaudines Fax: (+) 1 33 34 51 82 05

78100 Saint Germain en Laye, e-mail: contact@iala-aism.org

France

Table of Contents

PART A - COURSE OVERVIEW 4

COURSE OVERVIEW 4

PURPOSE OF THE MODEL COURSE 4

TARGET GROUP 4

USE OF THE MODEL COURSE 4

PART B - DELIVERY OF THE MODEL COURSE 4

INTRODUCTION 4

COURSE MODULES 4

SUBJECT OUTLINE 4

DETAILED TEACHING SYLLABUS 4

PRESENTATION 4

EVALUATION OR ASSESSMENT OF THE TTI 4

IMPLEMENTATION 4

PART C - COURSE FRAMEWORK 4

INTRODUCTION 4

REQUIREMENTS FOR ATTAINING THE COURSE CERTIFICATE 4

TRAINING STAFF REQUIREMENTS [guideline on assessment 1017] 4

4.1 FacilitatorsTTI 4

Part D - GUIDELINES FOR INSTRUCTORS 4

1. INTRODUCTION 4

Trainee’s are appropriately qualified persons performing one or more tasks for a VTS centre. Their technical standard is assumed to be on or above standard. As a consequence the technical training as such is not included in this manual. The module course is designed to train teaching methods and training skills, which may may also include training exercises on the simulator or even real-time. In order to act as facilitator both the Trainee and the should posess social skills such as excellent communication skills, receptiveness, adaptability and awareness of group dynamics. 4

2. CURRICULUM 4

The recommended hours given in the syllabi are intended to be used as approximate guidelines for planning purposes. The hours should be adjusted as necessary to suit local curxumstances in the light of experience 4

3. LESSON PLANS 4

4. EVALUATION OR ASSESSMENT 4

5. PRACTICAL TRAINING 4

Part E - COURSE MODULES 4

Index of Tables

[Table 1 Title required (Title goes above the table)](#TOC216497068) 2

Index of Figures

[Figure 1 Title required (Title goes below the figure)](#TOC216497075) 2

LIST OF ABBREVIATIONS

Trainee Participant of the train the trainer course, future teacher, trainer, instructor.

TTI Future teacher, trainer, instructor

Facilitator The trainer of the ‘train the trainer’ course

VTSO VTS-operator

VTSS VTS-service

IALA Model Course on Train the Trainer

PART A - COURSE OVERVIEW

# COURSE OVERVIEW

IALA recommends that training providers utilise accredited training courses as per IALA Guideline1014. This model course contains a generic Train the Trainer course. It is meant to supplement Model Courses V103/1 – VTS Operator, V103/2 – Vessel Traffic Services Supervisor Training, V-103/3 - On-the-Job Training, V-103/4 – On the Job Training Instructor and IALA Guideline 1027 – Simulation in VTS Training. Where-ever in this document a reference to one of the model courses is made this is meant as an addition to the ‘ Train the trainer’ course.

In order to set up a effective and efficient training system a training management system, should be in place according to the requirements in model course V103/3, including continuous professional training of teachers, instructors and assessors.

# PURPOSE OF THE MODEL COURSE

The purpose of the model course is to assist maritime training organisations and their teaching staff in the preparation and introduction of new training courses for future TTI’s, and in enhancing, updating or supplementing existing training material where the quality and effectiveness of the training courses may thereby be improved.

This manual provides the facilitator of the Train the trainer course with the content, sequencing and material required to train future TTI’s (from here referred to as TTI).

This course provides the trainee with the knowledge and tools to maintain, develop and deliver the V-103 modelcourses.

# TARGET GROUP

The course is designed for personnel of a maritime training organization assigned with the task of training professionals of VTS within that organization. The trainees of this training will become either teacher, trainer or instructor (further indicated as TTI) within the VTS-organization. Staff training VTS personell will themselves perform on or above standard with regard to the topics they teach.

Staff already qualified, by means of a training equivalent to IALA guidelines or beyond with regard to teaching, do not have to do the Train the Trainer module course again.

The trainee of this course will receive a certificate upon completion of the module course. The facilitator himself should possess a licence in teaching satisfactory to the competent authority.

.

# USE OF THE MODEL COURSE

The complete course comprises six modules, each of which deals with a specific subject representing a task or role of the future TTI. Each module contains a subject framework stating its scope and aims, a subject outline.

The course should also provide Facilitators with different tools, such as developing/adjusting (parts) of a training, the use of adequate teaching methods, and the evaluation of training in order to assure quality training in the facility. The information in this document has been drawn up by an international group of experts on Train the trainer courses from IALA participants so that the standards implemented may be as uniform as possible.

PART B - DELIVERY OF THE MODEL COURSE

# INTRODUCTION

All training and assessment of personnel for gaining the course certificate as part of the qualification towards becoming a TTI should be:

1  structured in accordance with written programmes, including such methods and means of delivery, procedures and course material as are necessary to achieve the prescribed standard of competence; and,

2  conducted, monitored, assessed by persons qualified in accordance with the Training Management System.

Training staff should review the course outline and detailed syllabus in each subject. The actual level of knowledge, skills and prior technical education of the trainees in the subject concerned should be kept in mind during this review. Any differences between the level of skills and competencies of the trainees and those identified within the detailed training syllabus should be identified, a gap analysis. To compensate for such differences, the is expected to delete from the course, or reduce the emphasis on, items dealing with knowledge or skills already attained by the participants. The should also identify any academic knowledge, skills or technical training that the trainees may not have acquired.

# COURSE MODULES

The modular presentation enables the to adjust the course content to suit the trainee’s intake and provide any revisions of the subject objectives as required. The should draw up lesson plans based on each detailed syllabus and the references in them to the textbooks and teaching material suggested for the course. Where no adjustment has been found necessary in the subjects of a detailed syllabus, the lesson plans may simply consist of the topics indicated in the detailed syllabus with keywords, timeframes and required materials.

Each competence is defined in terms of the learning objectives, required knowledge, skills and attitude. The recommended competence for each subject is indicated in the Subject Outline of each module.

# SUBJECT OUTLINE

The subject outline of each module also includes a total recommended number of hours that should be allotted to each module. However, it should be appreciated that these allocations depend upon the entry level of the trainees. The training staff should therefore review carefully lesson plan design and consider the need to reallocate the time required to achieve each specific learning objective.

Part D - GUIDELINES FOR S

1. INTRODUCTION

s are appropriately qualified persons as described in part A 1.This model course is designed to train teaching methods and training skills, which may also include training exercises on the simulator or even real-time. In order to act as facilitator both the trainee and the facilitator should posess social skills such as excellent communication skills, receptiveness, adaptability and awareness of group dynamics.

2. CURRICULUM

The recommended hours given in the syllabi are intended to be used as approximate guidelines for planning purposes. The hours should be adjusted as necessary to suit local curcumstances in the light of experience

**3.** LESSON PLANS

The modular presentation enables the instructor to adjust the course content and provide any revisions of the subject objectives as required. The should draw up lesson plans based on each detailed syllabus and the references in them to the textbooks and teaching material suggested for the course.

Subject Outline, of each module also includes a recommended assessment of the time that should be allotted to each subject. However, it should be appreciated that these allocations depend on the entry level of the trainees. The instructor should therefore review carefully these assessments during course and lesson plan design and consider the need to reallocate the time required to achieve each specific learning objective.

Detailed teaching syllabus, of each module has been written in learning-objective format in which the objective describes what the trainee must do to demonstrate that knowledge has been transferred.

In preparing a teaching scheme and lesson plans, the instructor is free to use any teaching method or combination of methods that will ensure trainees can meet the stated objectives. However, it is essential that trainees attain all objectives set out in each syllabus.

**4.** ASSESSMENT

Continuous assessment of participants should be undertaken. In many cases the assessment can be based on the participants’ competence, demonstrated via assignments. These assessments are required for the purposes of certification.

An adequate period of time should be allowed at the end of the course for revision and review of the course content.

The Competent Authority may recognize documented evidence including assessments completed for the attainment of TTI certificates.

# DETAILED TEACHING SYLLABUS

The detailed teaching syllabus, of each module has been written in learning-objective format in which the objective describes what the participant must do to demonstrate the knowledge which has been transferred. All objectives are understood to be prefixed by the words:

the expected learning outcome is that the trainee has acquired the recommended competence in conducting training.

In preparing a teaching scheme and lesson plans, the trainee is encouraged to use a variety of teaching method and/or combination of methods that will ensure that trainees can meet the stated objectives. However, it is essential that participants complete the subject matter set-out in each module.

# PRESENTATION

The presentation of concepts and methodologies may be repeated as necessary in various ways until the tainer is satisfied that the trainee has attained a good working knowledge in each subject.

# EVALUATION OR ASSESSMENT OF THE TRAINEES

The evaluation criteria are contained in column 4 of the Train the trainer competence chart (pag 13), and provides the means for a to assess whether a trainee is competent to perform the related tasks, duties and responsibilities.

# IMPLEMENTATION

For the course to run smoothly and effectively, considerable attention must be paid to the availability and use of:

* qualified
* support staff
* facilities
* equipment
* textbooks, technical papers
* Computers, internet connections
* Audio/Video material
* other reference material.

Thorough preparation is key to successful implementation of the course.

PART C - COURSE FRAMEWORK

# INTRODUCTION

On successful completion of the course and assessments, the trainees should have been provided with sufficient training in their teaching facility and/or a VTS centre.

# REQUIREMENTS FOR ATTAINING THE COURSE CERTIFICATE

Every candidate for a Train the Trainer certificate should satisfy the maritime training organization/Vessel Traffic Service by passing the assignments of the course, showing that they possess the theoretical and practical knowledge appropriate to the Competent Authority.

# TRAINING STAFF REQUIREMENTS

# In accordance with IALA Guideline No. 1017, all s and assessors should be appropriately qualified for the particular types and levels of training or assessment required for the model course.

# The accredited training programme for Train the Trainer should ensure that the qualifications and experiences of s and assessors are covered in the application of appropriate quality training standards. Such qualifications, experience, and application of quality standards should incorporate appropriate training in instructional techniques, and training and assessment methods and practices, and comply with all applicable recommendations set out in the following paragraphs

# TEACHING FACILITIES AND EQUIPMENT

Facilities should be appropriate for training purposes and present training material must add to the training process. Necessary equipment and material will be described in the lesson plans developed by the .

Part D - GUIDELINES FOR FACILITATORS

1. INTRODUCTION

Facilitatords are appropriately qualified persons performing one or more TTI-tasks for a VTS centre. Their technical standard is assumed to be on or above standard. As a consequence the technical training as such is not included in this manual. This module course is designed to train teaching methods and training skills, which may also include training exercises on the simulator or even real-time. In order to act as facilitator both the TTI and the Facilitator should posess social skills such as excellent communication skills, receptiveness, adaptability and awareness of group dynamics.

2. CURRICULUM

The recommended hours given in the syllabi are intended to be used as approximate guidelines for planning purposes. The hours should be adjusted as necessary to suit local curcumstances in the light of experience

**3.** LESSON PLANS

The modular presentation enables the instructor to adjust the course content and provide any revisions of the subject objectives as required. The trainer should draw up lesson plans based on each detailed syllabus and the references in them to the textbooks and teaching material suggested for the course. Where no adjustment has been found necessary in the learning objectives of a detailed syllabus, the lesson plans may simply consist of the detailed syllabus with keywords, timelines and required material.

Subject Outline, of each module also includes a recommended assessment of the time that should be allotted to each subject. However, it should be appreciated that these allocations depend on the entry level of the TTI’s. The instructor should therefore review carefully these assessments during course and lesson plan design and consider the need to reallocate the time required to achieve each specific learning objective.

Detailed Teaching Syllabus, of each module has been written in learning-objective format in which the objective describes what the trainee must do to demonstrate that knowledge has been transferred. All objectives are understood to be prefixed by the words:

the expected learning outcome is that the trainee has acquired the recommended levels of competence in .......

In preparing a teaching scheme and lesson plans, the instructor is free to use any teaching method or combination of methods that will ensure trainees can meet the stated objectives. However, it is essential that trainees attain all objectives set out in each syllabus.

**4.** EVALUATION OR ASSESSMENT

Continuous assessment of participants should be undertaken. In many cases the assessment can be based on the participants’ competence, demonstrated via assignments. These assessments are required for the purposes of certification.

An adequate period of time should be allowed at the end of the course for revision and review of the course content.

The Competent Authority may recognize documented evidence including assessments completed for the attainment of TTI certificates.



Part E - COURSE MODULES

The complete course comprises six modules, each of which deals with a specific subject representing a requirement or function of a VTS Trainee.

Adult learning

| Competence Area | Aim/learning outcome | Hours per module | |
| --- | --- | --- | --- |
| Lecture | Exercise |
| Module 1  Training development | 1. able to make a gap analysis 2. Translates training needs into teaching goals. 3. Plans the training with assistance of a lesson plan. 4. Describe learning objectives 5. describe and use SMART acronym 6. link objectives to parts of the syllabus 7. plan teaching aids and reference material 8. sequence the training elements logically 9. make a time schedule 10. Evaluates and adjusts the training | 2 | 4 |  |
| Module 2 Instructional Techniques  Teaching Methods  Classroom Instruction  Simulator Instruction | 1. Describes and is able to apply a variety of teaching methods. 2. explains the advantages and disadvantages of each method 3. links teaching methods to learning objectives 4. Chooses a student focussed approach. 5. Prepares his lessons 6. Tailors instruction to student’s needs 7. Knows how to operate equipment 8. Knows the exercises, scenario’s that will be used | 2 | 4 |
| Module 3 Communications   * Briefing * De-briefing, see amendment A. * Bad news * Feedback. | 1. the trainee conducts a thorough and clear briefing of an exercise 2. Debriefing is conducted according to IALA SOP’s and IALA guideline 1027. 3. Knows how to bring bad news 4. Instructor gives constructive feedback according to the feedbackrules in amendment X. | 2 | 4 |
| Module 4 Assessment   * Assessing Performance, * Assessment Issues, | 1. Knows several methods for assessing performance. 2. Is aware of the importance of objectivity while assessing performance 3. Knows at least 4 assessment errors. 4. make an assessment exercise or exam 5. make an appraisal form for the assessment of the performance 6. describe some basic considerations about scales and make an assessment form 7. is aware of the methodological mistakes which can be made during assessment 8. describe what reliability and validity are 9. describes what inter-rater reliability is and knows remedies 10. distinguish observations from interpretations 11. calculate norms and calculate the (weighted average) | 2 | 4 |
| Module 6 Training Management System  Course Administration,   * Quality Control * Evaluations | 1. Able to make a course evaluation 2. Understands the difference between content validity and criterium validity. 3. Knows and uses the quality management system [IALA guideline 1014, accred. of VTS training courses] implemented by his organization. 4. Follows a system (set up by the training institute or the trainee) to maintain the course material. | 2 | 2 |

1017

MODULE 1 COURSE DEVELOPMENT

* 1. INTRODUCTION

Good training is based upon a thorough situation analysis. The analysis provides information regarding the required competencies. Competencies are the way that we deal with our work and with other people. They are the combination of personality, intelligence and innate skills together with learned knowledge, skills and an attitude.

SITUATION ANALYSIS

REQUIRED COMPETENCE

PERSONAL COMPETENCE

TRAINING GAP

Instructors should be skilled in the development of training. Although very often some sort of training may be present and available to training staff, from time to time the training may require alterations, which may be more or less extensive.. The trainee will have to learn to use a structured method enabling him to make an assessment of the requirements of the training. It is important to set up a time table in order to be able to develop course material, exercises and/or simulator training. Trainees will have to be made aware that sufficient time is taken in order to be sure that resources (such as simulator time) are available. Exercises should be tested before they are used in any training programm.

1.1.1 Background

A good course requires preparation. A vital element in this preperation is the development of a lesson plan. The use of a lesson plan not only gives the course a sound foundation but also raises the Trainees awareness regarding the course content, teaching methods, structure and timing, course materials and facilities.

A thorough evaluation of a course is only possible if the goals of this course are described prior to its execution arrording to the SMART acronym.

1.2 SUBJECT FRAMEWORK

1.2.1 Scope

This syllabus motivates and enables Trainee’s to work with lesson plans.

1.3 Content

While there are many formats for a lesson plan to choose from a lesson plan should at least contain the following elements:

* Title of the lesson
* List of objectives, which may be knowledge (what the Trainee knows at lesson completion) and/or skillsy (what the Trainee can do at lesson completion)
* The different components/elements the course contains
* The sequence of components
* The teaching methods to be used for this particular component including instruction, video’s and exercises.
* List of required materials
* Time required to complete the lesson
* Where a summary is incorporated
* How the course will be evaluated
* How the teacher will analyse the effectiveness of the training
* A continuity report, suggesting changes in the lessonplan, course material, facilities and so on.

A template for a lesson plan can be found in appendix A

MODULE 2 INSTRUCTIONAL TECHNIQUES

There are many ways to teach and instruct.

2.1 INTRODUCTION

There are many teaching methods available to enhance adult learning. A sound balance of teaching methods greatly improves the level of activity of the students, their involvement in course-activities and thereby the learning process. It is of the utmost importance that the Trainee knows different teaching methods and consciously applies them where appropriate. A well designed course will typically contain different theaching methods.

2.1.1 Background

The active involvement of participants in a course has proven to increase the ability to learn, to retreive and apply the learned material to a large extent. Furthermore when students are aware of what the goals of the training are and what is expected of them at the end of the training, increases their focus, enables them to apply their own learning strategies and therefore improves the end result. Training should always be learner-centered not instructor-centered.

2.2 SUBJECT FRAMEWORK

2.2.1 Scope

This syllabus gives the Trainee insight in a number of teaching methods, their advantages and disadvantages and when they are best used.

2.3 Content

The Trainee will learn about the different teaching methods and to include these in his lesson plans. The outcome should be a balanced teaching plan which contains a number of teaching methods encouraging the involvement of the Trainee. For your convenience a number of teaching methods is presented in Appendix B.

MODULE 3 COMMUNICATION

Trainee’s should have extensive knowledge about briefing and providing feedback to the student. In oeder to enhance learning every activity should be as student centred as possible. Good communication form the bases for these important learning activities.

3.1 INTRODUCTION

A future TTI should possess excellent communication skills. These skills consist of:

Briefing and debriefing are the most critica parts of the learning process. Comunication, however is not a skill that we posess by nature. The skill must be learned, maintained and developed. This module provides the Trainee with the tools required to conduct a good briefing and debriefing. While the briefing is often instructor-centered the debriefing should be student-centered. During the debriefing a large part of the learning takes place. It is therefore essential that the debriefing is student-centered.

3.1.1 Background

The briefing, debriefing, giving bad new and feedback are essential tools that the Trainee should posses. These vital elements of a training facilitate the learning process largely.

3.2 SUBJECT FRAMEWORK

3.2.1 Scope

The syllabus stresses the importance of good briefing/debriefing techniques. It shows what these are and enables the participant to practice with these techniques. It clarifies the rules for feedback and bad news conversations and gives the participant the possibility to practice with these untill a satisfactory level is achieved.

3.3 Content

The participant learns how to conduct a good briefing. He learns which elelements should be included in the briefing and practices to give the debriefing to a ‘ student’.

It is adviced to teach how to conduct a debriefing and practice the technique in Appecix B. This way the debriefing technique shall contribute to the learning process.

The module will containt the rules for giving feedback. Participants will practice this skill after having learned the rules.

MODULE 4 ASSESSING PERFORMANCE

Sometimes the complexity of assessing performance is not fully understood. During this module the trainee will gain full understanding of the importance and methodological constraints of assessing performance.

* 4.1 INTRODUCTION

While assessing performance many methodological and statistical considerations must be made. Assessing performance is far more complex than making questions or giving someone an exercise. Methodologically the assessment must meet the learning objectives and be a reliable and valid instrument. It is important for the trainee to understand some of the constraints and pittfalls that may arise during asssessment.

4.1.1 Background

Assesments may be made by several means such as: multiple-choice test, open questions, cases, interviews, interview or simulator exercise and so on. The trainee should be able to determine what is a good appraisal and what is not. Using the correct appraisal system, the trainee will be able to make a reliable assessment.

4.2 SUBJECT FRAMEWORK

4.2.1 Scope

The syllabus gives background information regarding some statistical and methodological issues to be considered while assing performance. The trainee is able to develop a test, assess the performance and evaluate the effectiveness of the test.

4.3 Content

The Trainee will learn about the complexity of developing a good assessment. He will be able to link the assessment to learning objectives, develop the assessment, choose an appropriate scale and compare the outcome to a norm. He will be able to calculate the weighted average. Finally he will understand how to measure the effectiveness (validity) of the assessment and is able to increase the reliability of the program.

MODULE 5 TRAINING MANAGEMENT SYSTEM, COURSE ADMINISTRATION

2.2 SUBJECT FRAMEWORK

2.2.1 Scope

This course gives the trainee tools to manage the course.

nsight in a number of teaching methods, their advantages and disadvantages and when they are best used.

2.3 Content

This module will teach the trainee to continually review and to make adjustment to the course material. The trainee will administer what alterations were made, when and why.

APPENDIX A

|  |  |  |  |
| --- | --- | --- | --- |
| Lesson name & ID | | | |
| Target Group | | | |
| Learning objectives | | | |
| Activity/teaching method | | Material | Time  required |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 |  |  |  |
| Assessment | | | |
| Evaluation | | | |
| Modifications | | | |
| Signature Date | | | |

Appendix B Teaching methods

The following is a list of possible teaching methods to be used in training.

Passive

Teaching

Reading reference material

Watching video

Listening audio material

Making exercise questions

Observation

Exchange experience

Semi-active

Guided discussion

Case study

Asking questions

Pair work

Group exercise

Essay

Active

Excursion

Role play

Presentation

Making puzzles

Simulator exercise

Quiz

Game

Fieldwork

Making questions

Teaching by student

APPENDIX C DEBRIEFING PROCESS

This appendix contains a method for debriefing offered to you by IALA.

This appendix is a practical tool to be used in the debriefing of the exercises. It contains a system that has become prevalent in aviation after extensive research into the effectiveness of various forms of debriefing by NASA.

Make the debriefing student orientedHow much a student actually learns depends to a large extent on an important learning moment, namely the debriefing. Practising is a busy and intense experience for the learner. It is therefore important that after the exercise the has enough time to find out what went right and what went wrong. The instructor facilitates this process and encourages the candidate in his analysis, but does not analyze the situation himself. The student-oriented approach not only encourages learning but also the ability of the student to analyze and be self-critical.

Encourage the student to be active during the debriefing.The logic behind this form of debriefing is that adults learn and remember better when they are active and evaluate their performance themselves. Processing the past events in their own minds makes learning far more effective than when they passively listen to the instructor. Processing events actively also gives the student the oppertunity to think about possible solutions. Being active during debriefing allows him to retrieve what he learned more easily at a later moment.

Encourage self-analysisIn a debriefing, the objective for the instructor to lead the self-analysis. The student is doing most of the talking, he participates and analyzes. It is the responsibility of the instructor to ensure that the student makes a good analysis. This may not be the same as what the instructor believes to be the best solution. During a good debriefing the student will come up with the correct solution.The ability to analyze their own performance varies from student to student. When a student fails to make a good analysis, the instructor should not take this over. The instructor will ask the right questions leading the student to a good analysis. How this is possible will be later illustrated with examples.QuestionsThe task of the instructor is to ask questions. The debriefing starts with the question:

1. What went well?
2. What went wrong.
3. How would you improve performance?The instructor gives the student enough time to mention all relevant points.

What the instructor doesThe instructor: completes missed learning goals corrects erroneous statements of the student provides necessary information also gives positive feedback encourages quiet students provides students with sufficient time for analysis Gives a high-performing student also enough time for analysisWhat the instructor avoids

The instructorDoesn’t make it an instructor-oriented sessionAvoids to analyze before the student has done so.Does not give the impression that the student is guided to an answer. This will reduce his/her motivation to self-analyze significantly.Doesn’t make the impression that only the opinion of the instructor counts.Doesn’t interrupt the studentMakes it no cross-examinationApproaches problems positivelyImportant advantages of this method of debriefing The student becomes accustomed to evaluating his/her performance  The student will not only answer the ‘ what‘ question but especially the ‘why’ question (more depth) The student can more easily apply what is learned The disadvantage of this method of debriefingThis method of debriefing takes more time than instruction debriefings. Restrict yourselves to the learning objectives of the exercise. If an exercise was very poor, only discuss a few major points, the most important learning objectives. In that case it is especially important to give positive feedback as well.Facilitation does not mean that the instructor may not give his opinion. Example 1 A good exampleLearner: I don’t know what went wrong. Did I see it too late?Instructor: Did you see it too late?Learner: Well I saw it, but I thought he was going to starboard?Instructor: Why did you think that?Learner: well, I told him that, I assumed that he would do it?Instructor: What would you do differently next time?Learner: Well I'd rather check whether he really is going to do it.Example 1 Bad ExampleLearner: I don’t know what went wrong. Did I see it too late?.Instructor: Well I think so, next time check whether he really intends to go starboard.Example 2 A good exampleLearner: I thought it was going well at that cornerInstuctor: Yes? Why did it go well?Example 2 Bad ExampleLearner: I thought it was going well at that cornerInstuctor: Yes, I agree. Next point then.Example 3 Bad ExampleLearner: I think that it went well with that tanker. What do you think?Instructor: Yes, I agreeExample 3 A good exampleLearner: I think that it went well with that tanker. What do you think?Instructor: I'll save my comments until last.