

Guidance on Field Study Orientation to the Development of Graduate Competence

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ABSTRACT

Field study orientation guidance is intended as an effort to develop elements of behaviour and ability in good learning to produce positive abilities, high learning motivation, and high skills and effective learning skills in students through integrative activities in the learning process in the field to develop the competence of study program graduates. The purpose of this community service is to conduct field study orientation guidance to develop graduate competence on the Km Lawit Ship to Semarang-Karimun. The implementation method used in this service is direct guidance in the field by providing direction, guidance techniques, and evaluating graduate competence development efforts. Field study orientation numbered 100 people, with details of study programs: nautical studies totalling 13 people, ship machinery study program totalling 15 people, marine transportation management study program totalling 40 people, and transportation study program totalling 32 people. The result of this service is the average field study orientation guidance activities to develop the competence of graduates, who answered strongly agreeing by 84.40%, agreeing by 11.80%, neutral by 3.00%, and disagreeing by 0.80%.

Keywords: Orientation, Field Studies, Competencies, Graduates

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INTRODUCTION

Autonomy in the field of education provides opportunities and authority to carry out various innovations in the development and implementation of learning curricula, student guidance, and education management innovations that are appropriate, effective, and efficient (Looney, 2009). The need for good education, which can improve the quality of students, develop character, and provide excellence and creative ability, is increasingly felt (Azmiyah & Astutik, 2021). So to realize this, there is a need for innovative learning models. Therefore, one of the methods used to foster the competence of graduates to think critically and theoretically is to use field study methods (Archer-Kuhn et al., 2021).

Students should have the knowledge, field experience, and abilities and have a high level of commitment in all matters concerning the social life of the community (Boehm & Cohen, 2013). Therefore, they need to get guidance on research or field studies that provide a basic "theory" that is not only a way of research but goes directly into the field to practice a theory during people's lives (Fligstein & McAdam, 2012). The goal is that students can easily get along with the community and face various forms of problems that exist in society (Bielaczyc & Collins, 2013). Because sometimes what is obtained in the classroom is different from what is in reality in society. Field study orientation is a form of outdoor learning where observation activities occur to reveal facts to obtain direct data in the field (Jose et al., 2017). In addition, it can provide descriptions, explanations, predictions, and innovations and also improve the skills of graduates to be ready for the world of work (Council, 2012). Field study orientation is also direct observation at the location of activities/projects based on experience and theoretical knowledge in the classroom to explore and collect data, as well as process & analyze data/Information obtained for problem-solving, which is outlined in the form of a report (Safitri, 2020).

Field study orientation guidance is intended as an effort to develop elements of behaviour and ability in good learning to produce positive abilities, high learning motivation, high skills, and effective learning skills in students through integrative activities in the learning process in the field. According to Supriatna & Budiman (2009) learning guidance and counselling concern: (a) curriculum introduction; (b) elaboration of habituation of good learning activities to create positive abilities; (c) development of achievement motives; (d) ways of learning; (e) completion of tasks and exercises; (f) development of awareness of lifelong learning; (g) search and use of learning resources; (h) adjustment in the demands of educational programs; (i) further education planning; and (j) how to overcome learning difficulties.

According to Regulation Number 53 of the Minister of Education, Culture, Research, and Technology of the Republic of Indonesia concerning Higher Education Quality Assurance states that graduate competency standards are minimum criteria regarding the unity of competencies of attitudes, skills, and knowledge that show student achievements from their learning outcomes at the end of higher education programs (Karla, 2023). Graduate competency standards are used to prepare students to become members of society who have faith, piety, noble character, and character following the values of Pancasila, are able and independent to apply, develop, find science and technology that is beneficial to society, and actively develop their potential

(Handojo et al., 2022). Graduate competency standards are formulated in graduate learning outcomes (N Astriawati et al., 2019). Field study orientation is part of the achievement of learning graduates about the knowledge and skills needed for the world of work and/or continuing studies at a higher level or to obtain professional certificates, especially in the fields of transportation and maritime.

The success of maritime education is proven through graduates who truly answer and meet the challenges of the world of maritime work at the international level (Hartanto et al., 2023). That is why every time an educator does learning, they must refer to these standards (Ningrum Astriawati et al., 2021). Yogyakarta Maritime College (STIMARYO) held a field study orientation activity for three days on November 10–12, 2023, on the KM Lawit ship bound for Semarang-Karimun. Field study activities provide a first-hand picture of activities on board, so cadets are better prepared for work. The purpose of this community service activity is to guide the implementation of field study orientation for STIMARYO cadets in four study programs in the third semester of the 2023-2024 academic year.

METHOD

The place for this service activity is on the KM Lawit Ship for the Semarang-Karimun Academic Year 2023-2024. The implementation model used in this service is through direct guidance in the field by providing direction, guidance techniques, and assessment of students participating in field study orientation activities, and then giving work assignments to make reports on activities for 3 days on the ship. Field study orientation participants numbered 100 people, with details of study programs: nautical studies totalling 13 people, ship machinery study program totalling 15 people, marine transportation management study program totalling 40 people, and transportation study program totalling 32 people. Data collection is carried out by evaluating the results in the form of reports on the results of field studies on knowledge and skills on board. Before the implementation of the activity, it began with a coordination meeting of the advisory team. Furthermore, the schedule for the implementation of the service is set for three days on November 10–12, 2023, on the KM Lawit ship bound for Semarang-Karimun. Before conducting a field visit, the supervisor guides in advance on what to do on board. Then create guidelines for writing field study orientation reports. Evaluation is related to efforts to develop graduate competence by distributing questionnaires. A questionnaire is a set of written questions used to obtain information from a respondent in the sense of a report about his person or things he knows. In this study, questionnaires were made using open-ended questions. The technique used in measuring questionnaires or online questionnaires on Google Forms in this study is a Likert scale. On this scale, develop questions that generate agree-disagree points in a vulnerable range of values. The scale used to measure is a scale with an interval of values of 1–5. This survey consists of five scales:

Table 1. Value Scale

Scale	Information
5	Totally Agree
4	Agree
3	Neutral

2 Disagree Less

1 Disagree

In this method, the data that has been obtained and collected, then processed for analysis can then be used as a basis for making discussions.

RESULTS AND DISCUSSION

Sekolah Tinggi Maritim Yogyakarta (STIMARYO) is a maritime education institution established on September 23, 1964 in Yogyakarta and based on the Decree of the Minister of Research and Technology of Higher Education Number: 787 / KPT / I / 2019 Date: August 26, 2019 has changed its form from the Yogyakarta Maritime Academy (AMY) to the Yogyakarta Maritime College (STIMARYO), with the change in the form of the Yogyakarta Maritime Academy to the Yogyakarta Maritime College according to the Decree of the Minister of Research, Technology and Higher Education of the Republic of Indonesia Number: 257 / M / KPT / 2017 Date: September 5, 2017 About the Name of the Study Program in Higher Education followed by a change in the name of the Commercial Shipping Administration study program (D3) to Marine Transportation Management (D3), the Engineering study program (D3) to Ship Machinery (D3), the Nautical study program to become Nautical Studies and the addition of a new study program S1 Transportation.

The institute is organized by Yayasan Institut Pendidikan Maritim Yogyakarta. STIMARYO aims to produce Human Resources who have competence in the field of Maritime and Transportation in the digital era so that they have high competitiveness in the world of work. This is marked by thousands of STIMARYO alumni who have been absorbed in the world of work both nationally and internationally. Continuously improve the quality of education by referring to standards set by national regulations and the International Maritime Organization (IMO). In maintaining its quality, STIMARYO always improves learning methods, one of which is by conducting field study orientation. Field Study Orientation is a curricular activity that is mandatory 1 credit and is a combination of educational, recreative and scientific development activities, especially in the maritime field. Field Study Orientation is one of the means of verification in bridging the understanding and understanding of cadets of lecture material that is more theoretical with actual field conditions.

This activity is carried out once during education at STIMARYO, which is scheduled in Semester III for all study programs: nautical studies, ship machinery, marine transportation management (MTL), and transportation, in the hope that it can refresh the physical and mental horizons and broaden scientific horizons in their respective fields. The purpose of this Field Study Orientation activity is so that cadets are better prepared and get to know their profession more closely after graduation. In this activity, cadets are grouped and get material directly from the crew according to their respective study programs. Cadets of the Marine Transportation and Transportation Management study program gain knowledge about ship documents, some of which are sailing permits, passenger manifests, sea letters, and international measuring letters. In addition, cadets also gain knowledge about the process of embarkation and debarkation of passengers and the facilities on board. On the other hand, the Nautical and Ship Machinery Study program is trained to carry out guard

service while sailing ships. During the guard service, cadets of the Nautical Studies study program received material from officers regarding the ship's navigation system, determining the position of the ship, and making the bow. Nautical Studies cadets were also shown all the navigation tools scattered throughout the ship, from the top deck to the main hole. Ship Machinery cadets have the opportunity to enter the Engine Room and see firsthand how ship engines work, including an introduction to the responsibilities of each machinist, the type of engine, and the preparation of ship motion when arriving at the port. In addition, this activity adds to and increases the knowledge that cadets usually learn in the classroom, supported by the facilities and infrastructure on board. The following is a team of lecturers who gave directions on board the ship shown in Figure 1 below.



Figure 1. The supervisor gives a briefing on the board

In the implementation of field study orientation, all participants get information about KM onboard objects. Lawit began an introduction to the entire crew, duties and responsibilities of the crew, ship facilities, cabin room, engine room, navigation equipment, ship radio communication equipment, the implementation of lifeboat lowering drills, an introduction to fire equipment and its use on board, clearance in and out, and ship documents. In the Ship Machinery Study Program, cadets get guidance material on Introduction to the responsibilities of each machinist, Introduction to the engines contained on the ship, introduction to the types of pipes on the ship, preparation of motion processing when rejecting from the port, how to start the auxiliary engine and main engine, introduction to telegraph for motion processing, how to synchronize generators, how the oil-water separator and purifier work, the implementation of the planned maintenance system on the main engine, preparation of motion when the ship arrives at the port. The preparation of ship motion when arriving is to place an order 1 hour before arrival that has been signed by the duty machinist, check the oil level gauges of the aircraft needed, prepare an air compressor, start the auxiliary engine and stand by for motion processing purposes, move the seawater suction faucet to the upper section, move the command of the Engine Control Room to the platform, prepare the power bow thruster, carry out the motion process that has been recorded in the motion processing book, and when the ship arrives, the motion process has been completed. In the Study Program: Nautical Studies, cadets get material on preparing ships before leaving and learning about navigation guard services when the ship sails, introduction to familiarization accommodation around the ship, introduction to navigation tools, how to plot the position of the ship on the map and make a cruise route waypoint, introduction to how to use and use fireman outfits, introduction to safety equipment, and practice doing lifeboat lowering drills and fire drills on deck. In the Transportation Study Program, guidance materials are provided regarding the introduction of ship cabin

space, introduction to work safety equipment, explanation and introduction to lifeboats, drill implementers lowering lifeboats, introduction to fire extinguishers, introduction to ship certificates and documents, ship document clearance process, introduction and application of mooring, the process of departing ships, and berthing ships. In the marine transportation management study program, guidance materials are about the introduction of ship crews, introduction to all ship rooms and ship sections, introduction to ship documents², clearance documents at port, safety equipment, drill (fire drill and lifeboat drill), learn and see how to dock the ship, learn and see how tugboats work when going to dock, and learn about the process of embarkation and debarkation of passengers. Evaluation data on the implementation of service in the form of field study orientation guidance on the KM Lawit Ship to Semarang-Karimun Destination spread across 4 study programs with the following percentages:

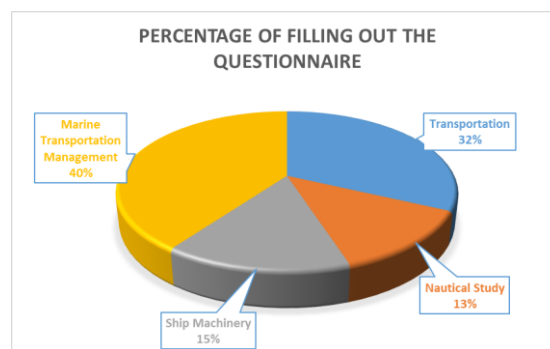


Figure 2. Percentage Of Filling Out The Questionnaire

From Figure 2 above, the most field study orientation participants were 40% filling out questionnaires from the Marine Transportation Management study program, 32% came from the S1 Transportation study program, 15% came from the Ship Machinery study program, and 13% came from the Nautical study program. Meanwhile, the results of the evaluation of the implementation of service in the form of field study orientation guidance on the KM Lawit Ship Destination Semarang-Karimun to develop the competence of case study graduates are as follows:

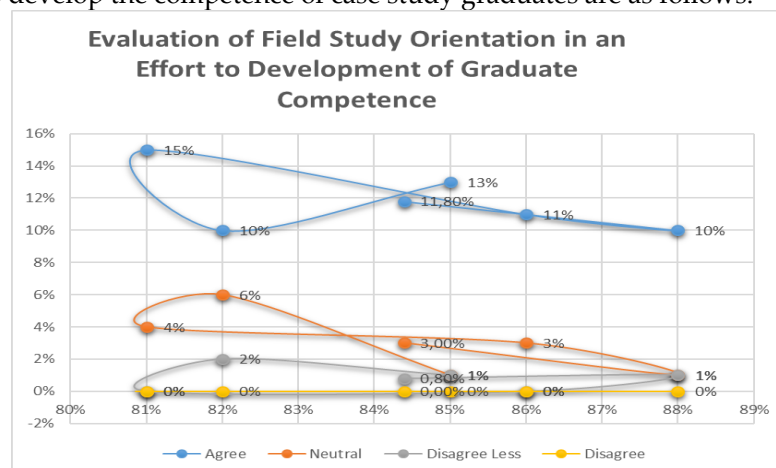


Figure 3. Evaluation of Field Study Orientation to Development of Graduate Competence

In Figure 3, based on a survey that has been conducted with participants of the Field Study Orientation of Yogyakarta Maritime High School, the following results

were obtained: Field study orientation on the KM Lawit ship to Semarang-Karimun can improve soft skills in developing competencies and skills as a provision for work practice after graduation. Strongly agree by 85%, agree by 13%, neutral by 1%, and disagree by 1%. Field study orientation activities are very following the curriculum and theory taught during lectures, with students strongly agreeing by 82%, agreeing by 10%, neutral by 6%, and disagreeing by 2%. Field study orientation activities can introduce cadets from an early age to support the achievement of graduate quality according to the needs of the business world and the industrial world, which answered strongly agree by 81%, agree by 15%, neutral by 4%, and disagree by 0%. Field study orientation activities can add practical insight, allowing students to recognize and understand knowledge according to their respective study program fields, with each answering strongly agreeing by 86%, agreeing by 11%, neutral by 3%, and disagreeing by 0%. Field study orientation activities can support and provide an overview of work practices, industrial practices, or marine practices. When completing the final project, respondents will strongly agree by 88%, agree by 10%, neutral by 1%, disagree by 1%, and disagree by 0%. The average field study orientation guidance activities to develop graduate competence amounted to answering strongly agreeing by 84.40%, agreeing by 11.80%, neutral by 3.00%, and disagreeing by 0.80%. The following are all participants in the Field Study Orientation on the KM Lawit Ship to Semarang-Karimun.



Figure 4. Participants in Field Study Orientation activities

CONCLUSION

Field Study Orientation is one of the means of verification in bridging the understanding of lecture material that is more theoretical with actual field conditions. This activity is carried out once during education at STIMARYO, which is scheduled in the third semester for all study programs: nautical studies, ship machinery, marine transportation management (MTL), and transportation, in the hope that it can refresh the physical and mental horizons and broaden scientific horizons in their respective

fields. In this activity, cadets are grouped and get material directly from the crew according to their respective study programs. Cadets of the Marine Transportation and Transportation Management study program gain knowledge about ship documents, some of which are sailing permits, passenger manifests, sea letters, and international measuring letters. In addition, cadets also gain knowledge about the process of embarkation and debarkation of passengers and the facilities on board. The result of this service is the average field study orientation guidance activities to develop the competence of graduates, who answered strongly agreeing by 84.40%, agreeing by 11.80%, neutral by 3.00%, and disagreeing by 0.80%.

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