

Appreciation of Marine Literature and the Training of Crew Quality in Maritime Universities under the View of Information-based Technology

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Abstract: *Based on the exploration of the significance and value of marine literature appreciation in cultivating the crew quality of students in maritime universities, this paper analyses the current situation of marine literature appreciation education, proposes that a complete information-based technology teaching system for marine literature appreciation in terms of educational content, teaching mode, teaching methods, etc. in the context of the information age, and puts forward relevant suggestions and paths.*

Keywords: *Information-based technology teaching; Marine literature; Crew quality; strategy*

1. Introduction

From the level of quality training, quality education not only refers to talent quality education, but also should include personality quality education and humanistic quality education. To train seafaring students in maritime universities, it is necessary not only to train students' excellent professional quality, but also to train students' inner personality quality and rich their humanistic quality. The cultivation of personality quality and humanistic quality depends on the rational utilization of the spiritual resources of Marine literature works by navigation education. "The appreciation of Marine literature is closely related to the training of the quality of seafarers. In the humanistic education platform set up by maritime universities, we should attach importance to and strengthen the course of Marine literature appreciation, organically combine the course of navigation and the course of Marine literature, and make full use of the personality and humanistic resources in Marine literature through reasonable and mutual assistance curriculum. Effectively realize the civilization and practicality of crew quality training." [1] However, there are many difficulties in the teaching of Marine literature in Maritime universities, such as educational concept, teaching content, student level, teacher level, etc., and the great function and value of Marine literature on the quality training of seafarers have not been brought into play. The author believes that with the coming of the information-based age, the application of modern information technology to the appreciation of Marine literature will certainly bring infinite vitality to maritime literature teaching, and it will promote the great changes in educational ideas, teaching modes and learning methods. With advanced information-based technology, practice-based and quality-centered, scientific integration of multi-media, multi-form and multi-level teaching resources will provide an effective extension and innovation way for the crew quality training in maritime universities. This paper will discuss the paths and significance of Marine literature appreciation to the quality training of nautical students from several aspects of crew quality, and try to give feasible ideas and strategic suggestions for the construction of Marine literature appreciation information-based teaching system.

2. Manuscript Marine Literature Appreciation and Crew Quality Training For Students Majoring In Navigation

2.1. "Love the Motherland" and "love the Countryside"--To Establish the Basic Belief of the Crew

Patriotism is the most important part of seafaring education to cultivate crew's quality. A distinctive feature of the content of Marine literature is patriotism. For example, in Wang Qijiang's poem "Wild Geese Ringing", the poem uses the old swan geese to symbolize the old sea soldiers, and the difficulty

of returning the swan geese to symbolize the nostalgia for the motherland, and the patriotic feeling is truly and moving expressed in the poem. For students of navigation majors, the interpretation of such poems can not only stimulate their rich imagination, but also cultivate their personality qualities of loving and returning the motherland. The emotional experience closely related to patriotism is nostalgia for the country. As described in Liu Yanling's "Sailor" about his hometown: "The moon is in the sky, the ship is on the sea, and he holds his face in both hands, hiding in the dark place where the rudder is turned. He is afraid to see the moon blink and the sea stir up waves, leading him to see his hometown where the water and the sky are approaching. But he remembered that by the well where the pomegranate flowers bloomed brightly, the person was setting up bamboo and drying her green cloth clothes"^[2] such works will inevitably have a sense of familiarity and power for students majoring in navigation, It can be seen that appreciating Marine literature works not only helps students to establish the necessary psychological warning for the future life of sailors, but also can cultivate their feelings of home and country. What is valuable is that this kind of education of sense of responsibility and mission is different from traditional preaching, but through works, the subjective and objective, the way of education is not blunt and boring, but friendly and easy to accept.

2.2. "Love for the Sea" and "Hard Work" – To Strengthen the Psychological Motivation of Career Choice

Love for the sea is another positive emotion expressed in Marine literature. In Marine literature, the sea is full of marvelous pictures: blue sky, blue sea, night and morning stars, beach islands, bright and myriad. The quiet bay in Quasimodo's "Island", the gentle waves in Haussmann's "Vosmia Leap out of the Sea", the fish and birds in Elytis's "of Course", the stars on the sea in Pushkin's "Where the Golden Venice dominates"... These works carry a passionate emotion towards the ocean presenting the infinite charm of the sea and making readers yearn for it endlessly. Appreciation of this kind of works is bound to produce positive emotional guidance for future sailors going to the sea. In addition, in Marine literature, the struggle of sailors against natural or man-made disasters is a common storyline. For example, Hugo's "Sea Labor", Kobayashi Dokiji's "Crab Worker Boat", Connor's "Youth", Stevenson's "Treasure Island" and other works, or the expression of human courage and wisdom to conquer difficulties, or eulogize the heroic spirit of hard work and not afraid of sacrifice. Reading this kind of works will enable students to psychologically complete the spiritual test of the crew occupation, cast the personality quality needed by the crew, and strengthen the psychological motivation of career choice.

2.3. "Fulfilling the Mission" and "Selfless Dedication" – To Shape the Crew's Professional Spirit

In order to ultimately win in the international shipping market competition, crew members must have the professional spirit of being true to their promises, fulfilling their missions, sacrificing their families, and achieving everyone's success. In this regard, the appreciation of Marine literature will provide students with textual basis. For example, Liu Yong's sense of responsibility for the people in "The Song of the Sea", Liu Yi's spiritual character of helping the poor in "Liu Yi Biography", and Captain Ahab's conscientious dedication in Melville's "Moby-Dick", all these works have a strong artistic appeal. When reading and appreciating such works, students will not only be attracted by the fascinating plot, but also deeply admire the characters in the story. Crew is a high-risk occupation, although the ship technology is increasingly developed, but the safety of navigation and the completion of the task ultimately lies in the crew's professional spirit. In Marine literature, we can see a large number of thrilling accidents at sea, which are caused by the irresponsibility of the crew, as well as the strong promotion of the professional spirit of crew members in many works. These works are of great educational significance for cultivating the professional quality of seafaring students.

2.4. "Love life" and "Optimistic Attitude" -- To Ensure the Physical and Mental Health of the Crew

In the work of the crew, far away from their relatives, far away from the secular life, long sea drifts, erratic climate environment, unpredictable risks, etc., all of these elements may cause the crew to have negative psychological emotions such as world-weariness. In addition, the gender of the students in the navigation major of the maritime universities is relatively single, and the students are prone to lack of gender sense and are not good at communicating with the opposite sex. If this lack of ability cannot be effectively corrected, it will easily have a negative impact on the marriage and family life of the crew in the future. In order to prevent these hidden dangers, during the school period, we should cultivate students' love for life and positive and optimistic personality mentality through various channels, attach

importance to students' emotional intelligence education, and teach students interpersonal skills and love ability. Among the many channels, Marine literature reading is undoubtedly the most effective way. For example, O'Neill's "Beyond the horizon", the protagonist carries the dream of going to sea, and the tenacious life belief flickers in her insistence. The moving love of the ocean novel "Titanic" teaches students the correct attitude of love communication. For example, O'Neill's "Beyond the horizon", the protagonist carries the dream of going to sea, and the tenacious life belief flickers in her insistence. The moving love of the ocean novel "Titanic" teaches students the correct attitude of love communication. In Conrad's "Youth", there is the presentation of the wisdom of the crew's interpersonal communication. And Mason's "Sea Love" is more thought-provoking in the passion of life writing. Reading can not only help crew get rid of loneliness, relieve negative emotions and enrich their spare time life, but also fill their spiritual world and stimulate their enthusiasm for life, thus help them form an optimistic and open attitude towards life, overcome career crisis, eliminate life confusion and safeguard their physical and mental health.

3. The Main Problems Currently Existing in the Teaching of Marine Literature

Due to the association and correspondence between the appreciation of marine literature and students' professions, it can have a more practical effect on cultivating students' seafaring skills. However, in the current education status of maritime universities in our country, there are some problems and dilemmas in the teaching of marine literature appreciation, which has not fully realized the important function and value of marine literature in cultivating the quality of crew members. To a certain extent, this has restricted the role and effectiveness of marine literature appreciation in cultivating the quality of crew members.

3.1. On the level of Student Quality: The Ability of Students to Read and Understand literary Works is Worrying

Maritime universities mainly focus on the education of maritime technology and ocean engineering, with a majority of students coming from science and engineering backgrounds. Most students have poor Chinese language foundations, and their grasp of cultural knowledge, reading ability, work analysis ability, and aesthetic ability are weak. They have not developed good reading habits in high school, and lack interest in reading literary works. When reading, they only focus on the plot and lack critical thinking. Shallow reading directly affects the emotional resonance and depth of understanding of the works, and ultimately it is difficult to internalize the spirit of the works into personal qualities, and humanistic qualities cannot be properly accumulated.

3.2. On the level of Educational Concept: Schools have Misconceptions about Non-professional Courses

Maritime universities aim to cultivate professional and research-oriented talents. Professional talents entering shipping units can utilize their professional knowledge to form core workplace competitiveness and better realize their social value. Research oriented talents can further study and research, contribute scientific and technological achievements to their profession, and promote innovation and development in the industry. The connotation and objectives of the marine literature appreciation course are more inclined to enhance students' personality, spirit, and humanistic literacy, which have a profound and potential impact on society. Comparatively speaking, the education of maritime universities attaches more importance to the development of professional courses, and neglects the construction of literature elective courses, resulting in a significant gap between liberal arts teaching and professional course teaching. The university's misunderstanding of non-professional courses also leads to students' low self-expectation, one-sided emphasis on the improvement of skills, neglect of the learning of literature courses, and makes students pay insufficient attention to teaching content, and lack of learning initiative.

3.3. On the level of Teaching Content: Knowledge and Practice is Separated, and Students have a Low Desire to Participate

Some teachers' teaching content only focuses on the interpretation of works and the explanation of knowledge points, and there is less integration between reading works and real life practice of crew members, which makes it difficult for students to develop empathy in the learning process. Literary

works originate from reality and are higher than reality, reflecting the author's observation and understanding of real life, as well as incorporating the author's imagination and creativity, thus forming artistic images that are higher than reality. Some teachers only pursue novelty and profundity in interpreting works, and it seems irrelevant whether students truly understand them. Teachers do not attach much importance to the guidance of teaching content on real life. Due to the lack of practicality in teaching content, students are unwilling to think deeply about it, some students only listen to the excitement point and have low participation, which cannot achieve the expected teaching effect.

3.4. On the level of Teaching Methods: Most of them are Traditional Modes, and The Teaching Methods are Relatively Single

Although we are currently in the era of information-based technology, many liberal arts teachers still rely on traditional teaching methods. Teachers give lectures on stage while students listen in person, and some teachers even only use chalk to teach. The class atmosphere is dull, leading to a serious phenomenon of students playing with their phones in the class. This one-sided teaching method of imparting knowledge to students does not reflect their subject status and cannot form a good learning atmosphere. Some teachers, although using multimedia for teaching, overly rely on traditional PPT presentations and neglect other information-based technology methods such as virtual reality, image materials, artificial intelligence, etc., failing to fully leverage the advantages of information-based teaching. The singularity of teaching methods also leads to students lacking interest in learning, the value of the curriculum is not fully realized, and the course objectives cannot be achieved.

3.5. Teacher Quality Level: The Teaching Staff is Relatively Weak and Lacks Training in Information-based Technology Teaching Skills

The teaching staff of the Chinese major at Maritime Universities is generally weak, with a small number of teachers and scattered research topics, making it difficult to form a teaching team for a certain course. Although many teachers have good professional qualities, they lack understanding of maritime related professional knowledge and industry status, resulting in the separation of ideological elements and industry professional knowledge in the curriculum or the combination of the two aspects is not natural enough, or the exploration is not deep enough. Many teachers have never participated in formal training on information-based technology teaching, and have not attached enough importance to the role of multimedia assisted teaching, resulting in unskilled operation of information-based technology and unsatisfactory teaching results.

3.6. At the Level of Teaching Resources and Course Evaluation: Knowledge Expansion is Limited, and the Course Evaluation System is Incomplete

There are various types of liberal arts textbooks at the maritime universities, and different textbook versions are used, resulting in uneven quality of teaching resources. Although there is a vast amount of online reading information, the quality of online resources is uneven and disorganized. Besides the works taught in class, students often feel lost and confused when faced with a massive amount of information about their works outside of class. Moreover, the network resources for high-quality courses in marine literature are few. From the perspective of teaching resource content, students' extracurricular knowledge expansion is limited, and there is a lack of resources for students to learn independently and explore innovation. The curriculum evaluation system and standards are also not perfect. Generally, the examination is conducted mainly in the form of papers, with a single examination form and a lack of evaluation of students' personality traits and practical abilities, which cannot fully reflect their learning outcomes and comprehensive effectiveness.

4. The Path and Strategy to Solve Problems: Constructing An Information-Based Teaching System In Marine Literature Appreciation Teaching

In summary, appreciation of marine literature is a very important course in the education system of maritime majors, and its teaching quality cannot be ignored for the cultivation of maritime talents. However, due to the problems in the cultivation of crew quality in the appreciation of marine literature, the achievement and implementation of teaching objectives are seriously restricted. The author believes that in the context of the information-based age, curriculum reform must be carried out to solve these problems. In addition to avoiding cognitive misunderstandings about non-professional courses and

emphasizing the courses, and increasing public opinion propaganda, we should construct a complete information-based teaching system in terms of educational content, teaching modes, teaching methods, etc.

4.1. Clarify the Importance of Building an Information-Based Teaching System

In recent years, with the development of information-based technology, the Internet and multimedia technology have had a significant impact on the current education. The application of information-based technology has also brought many new changes to teaching methods. Excellent courses, high-quality resource courses, and high-quality resource sharing courses are constantly emerging, and various forms of information-based teaching such as recorded courses, MOOCs, micro courses, and interactive classrooms are very popular. All of these provide reference for the teaching reform of marine literature course at the Maritime Universities. In the current era, in order to achieve the cultivation of crew quality in the maritime literature appreciation course, we should keep up with the pace of the times, actively reverse concepts, actively accept new challenges of the information-based age, change traditional concepts and methods, introduce information-based teaching strategies, and provide full integration and support of information-based technology in the course. Only by building a complete information-based teaching system can the course overcome many difficulties and truly "survive".

4.2. Exploration of the Path and Strategy for Building an Information-based Teaching System

This study explores the application of information-based technology in the teaching reform of marine literature courses. It is necessary to change the traditional teaching mode and construct a complete set of information-based teaching system to improve teaching effectiveness of marine literature appreciation course. The information-based teaching system is a comprehensive concept, which is a comprehensive and multi-level system, including teaching content, teaching methods, teaching staff, resource construction, evaluation system, and other aspects. Specifically, we can adopt the following paths and strategies.

4.2.1. Changing the Teaching Content, Introducing Information-Based Teaching Methods, and Enhancing Students' Interest, Participation, and Sense of Achievement

We should change the traditional teaching content and teaching mode to introduce information-based technology into class teaching. Firstly, in the traditional teaching mode, teachers give lectures, while students listen to lectures as a supplement. There is little interaction between teachers and students, and the learning effect is difficult to be acquired. After we introduce teaching methods of information-based technology, the teaching approach has shifted from traditional teacher lectures to student-centered teaching. In the teaching process, teachers distribute learning materials and assign learning tasks through online learning platforms before class, and students complete personalized learning task. During the pre-class preparation process, students can watch course videos, read online works, and search for learning materials, collect discussion materials, and complete tests online. In the classroom, teachers and students log in to the digital learning platform to conduct online voting and selection for students' personalized learning tasks through the intelligent classroom, teachers and students discuss the topics that students are most interested in, and open-ended proposition assignments will be given to students. Students will submit their assignments online, and teachers will provide targeted corrections or answers online. Teachers encourage students to search for online materials and communicate online out of class. The teaching method has changed, teachers doesn't design teaching content by themselves, but design teaching content based on students' interests and the teaching method will maximize personalized teaching. The application of information-based technology will change the dull classroom and enhance students' interest and sense of achievement in learning. Secondly, in the traditional teaching mode, teachers focus on analyzing and interpreting the ideological connotations and artistic techniques of works, students learn knowledge but they don't have chance to practice. In the information-based teaching mode, teachers create problem scenarios and increase practical activities. Students can select classic works before class and be divided into groups to choose classic scenes from the works. Various forms of performances can be carried out based on the story plot. Students can post them on the teaching platform by shooting short videos and other methods. In class, students watch the submitted video materials, discuss the character images and emotional connotations of the works, explore the deep meaning of the works, at the same time teachers guide students to empathize with the works, and cultivate their reading interest; Teachers encourage students to write and share their original works while students study the works, and conduct them peer evaluations, and establish reward mechanisms; Assignments can be submitted in groups to avoid

arbitrary copying and enhance team collaborative learning abilities. Once again, teacher should establish a teaching model that combines classroom teaching with extracurricular practical activities and carry out various forms of online practical activities for marine literature after class. For example, reading conferences online, academic lectures and academic salons online on the theme of marine literature, writers' meetings online, marine film appreciation activities, selection of students' marine literature creation competitions are hold etc. Media resources such as campus networks and official account are used for publicity and reporting, so as to enhance the influence of the curriculum and mobilize students' enthusiasm for learning. Finally, teachers fully cooperate with marine research institutions, marine protected areas, museums, ocean stations and other units to share relevant network resources, and broaden students' understanding of the industry. Exploratory and demonstrative learning should be carried out in class, and on-site observation should be arranged outside of class. Through visits and social research, students can connect and integrate knowledge they learned in class and out of class, on campus and off campus. When students practice in reality, they will immerse themselves in real life and understand the works in deed. It is believed that this path of curriculum reform will ultimately achieve the training goal of teaching.

4.2.2. Strengthening Training, Reasonable Division of Labor, Complementary Advantages, and Enhancing the Construction of Information-Based Technology Teaching Staff.

The teaching staff of the Marine literature appreciation Course at Maritime University is weak, and it is particularly important to strengthen and improve the information-based teaching faculty staff. The teachers' mindset need to be changed. Senior teachers in the teaching staff are usually accustomed to using traditional teaching methods, and they have a fear of learning and applying new technologies in their concepts. To guide and mobilize these teachers, it is necessary to explain the importance of information-based technology teaching in a simple and understandable way and inject new vitality into their traditional teaching. Information-based technology teaching skills training should be provided to teachers. In the training, teachers should learn comprehensive and detailed tool demonstrations on various platform systems and technological software that can be used in daily teaching activities, Universities should help teachers to proficiently master the use of these information-based tools and improve their teaching abilities and levels. Departments should integrate teaching staff, achieve complementary advantages and regularly evaluate the teaching staff and encourage teachers with rich theoretical teaching experience to cooperate those teachers who have excellent information-based technology teaching skills. Teachers should observe the class, learn from each other, and universities should regularly conduct teaching seminars, and design teaching tasks that can be reasonably divided among multiple teachers to highlight strengths and avoid weaknesses, achieve complementary abilities among teachers with different abilities, and thus improve the overall teaching quality of the teaching staff.

4.2.3. To Actively Develop and Integrate Information Resources, Creative Intelligent Learning Scenarios, and Build Digital intelligent Learning Platforms.

Universities should actively integrate information resources, build a digital intelligent learning platform, and provide rich and high-quality services for course teaching and practice through relying on information-based technology reform of course teaching content, teaching methods, and teaching staff, The digital intelligent learning platform mainly includes high-quality teaching and auxiliary resources such as teaching and training plans, teaching calendars, various textbooks, teacher courseware, books online, course recordings, micro courses, question banks, Q&A platforms, student homework evaluations, student work exhibitions, various audios and video materials, and student opinion sheets. Students can take elective courses, and teachers and students can communicate and discuss through a learning platform. The platform can follow up on students' learning situation and progress, supervise students to carry out self-learning, and broaden the extension of teaching. Learning platforms should actively cooperate with other institutions, such as libraries, maritime bureaus, and other units offering courses, the platforms should open up resource sharing channels, link data resource libraries, and integrate online and offline, on campus and off campus learning resources. Universities should also accelerate the construction of information-based technology facilities such as intelligent classrooms and virtual simulations, create intelligent learning scenarios, and promote the construction of course information-based systems.

4.2.4. Broadening Practical Content, Assisting Students in Personalized Development, and Improving the Information-Based Evaluation System

The traditional course evaluation methods are often based on class attendance, class questioning, homework, and final exams, which have characteristics such as randomness, one-sided, simplification, and lagging, which are not conducive to testing students' comprehensive qualities. To build a complete

information-based teaching system, it is necessary to reform and optimize the course evaluation methods based on information-based technology. A comprehensive information evaluation system should combine process evaluation and outcome evaluation, utilize the advantages of information-based technology, attach importance to stage evaluation, process evaluation, and goal evaluation. In the evaluation system, personalized development of students should be considered, practical content should be expanded, evaluation methods should be enriched, and a diversified evaluation system should be constructed. For example, in stage assessments, teachers can quickly and proactively know students' learning situation and progress on intelligent digital learning platforms. Through pre class, in class, and post class learning data and profile reports, teachers can objectively score students' stage learning. This information-based scoring method is more comprehensive, scientific, and reasonable compared to traditional paper scoring methods. In the process evaluation, emphasis should be placed on testing students' practical abilities. The enthusiasm of students to participate in class discussions, the knowledge, attitudes, values reflected in the discussion process, whether they actively participate in role-playing, writing activities, video production, and the effectiveness of self-media operations can all be included in the process evaluation. Compared to a "test paper", these can better reflect students' learning status and quality. In the target evaluation, students can be organized to conduct self-evaluation and self-testing through online-voting, online-questionnaire surveys, and other methods, to make students aware of the importance of ideological and political education, and to attach importance to the transformation of the inner personality of literary works' thoughts and emotions. In the evaluation system, attention should also be paid to establishing a reward mechanism, teachers give appropriate bonus points to outstanding students, clarify reward rules, enrich reward forms, and teachers should also listen to students' suggestions to update the assessment and evaluation methods, turn the evaluation into a rational, diversified, scientific, and interesting interactive participation, maximizing the value function of course evaluation.

"Education promotion of information technology 2.0 Action Plan" issued by the Ministry of Education in 2018 pointed out that information-based technology education is the basic connotation and significant feature of educational modernization. With the rapid development of information-based science such as artificial intelligence, block chain technology, and interactive technology, the forms of talent cultivation and education are also undergoing changes. At present, the development and service capabilities of digital education resources are not strong, the construction and application level of information-based learning environment is not high, teachers have basic information-based technology application abilities, but their innovation ability in information-based teaching is still insufficient, the deep integration of information-based technology and subject teaching is not enough, and there is still a shortage of advanced research and practical talents.^[3] The construction of the information-based teaching system for marine literature appreciation courses still has a long way to go, but the author believes that only by applying the above paths and strategies in practice and applying them to courses offered to students majoring in navigation, can we gradually clarify the roadmap for information-based teaching reform and promote the construction of a complete information-based teaching system.

5. Conclusions

In summary, "As the most active, core, and valuable element in the ocean transportation industry, Seafarers play an irreplaceable role in the entire industry chain."^[4] The ocean literature appreciation course which integrates literary knowledge, cultural ideology and politics, and humanistic morality is an important course to improve the overall quality and cultural level of sailors in navigation majors. There are still many problems in the appreciation of marine literature and the cultivation of future crew quality in the current information-based age, we face new challenges. Implementing curriculum promotion of information-based technology reform is an inevitable requirement of the times, especially in the context of the strategy of building a maritime power country. It is urgent to enhance the quality of crew members. We should face the many advantages brought by information technology to make reasonable improvements to the current teaching mode, and to continuously enrich the content and methods of information-based teaching. We should optimize the teacher team, integrate information resources, and construct an information-based teaching system. Of course, not all teaching objects and content are suitable for using information-based learning methods. Teaching content such as emotional analysis of texts and inspiration from works must be achieved through the ways of traditional classroom teaching. The information-based teaching method cannot completely replace the ways of traditional classroom teaching. The combination of tradition education method and modernity education method is not a simple replacement, but a fusion that adapts to the times. The ultimate goal of integrating modern information-based technology into curriculum teaching is to continuously

stimulate students' interest and driving force for learning, to closely integrate the humanistic spirit of marine literature with the spirit and emotional experience of sailors, and to establish a spiritual connection between literary appreciation and students' career choices. Only in this way can we ultimately achieve the real effect of improving the crew quality and cultivating advanced excellent talents for the maritime industry.

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