

Integration Training Information in Vietnam Maritime University Based on the Conceive-Design-Implement-Operate

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Abstract— In the integration trend, English has become the global language of the world. Currently, over 50 countries use English as their primary language, and nearly 80 countries use English as a second language; English is the most common language in the world in all fields from business, commerce, communication to tourism, diplomacy. Therefore, English language industry increasingly asserted its role. However, the current situation shows that graduates of this discipline work properly and are still weak in thinking skills, teamwork, and communication. The reason is that most schools are not interested in reviewing, editing the detailed program, curriculum, and English language materials to improve the quality of training, and lecturers are teaching English also showed many limitations. The methods of teaching and learning English of schools are still mainly traditional, backward, and natural methods of teaching grammar, vocabulary. There is a tendency to focus too much on specialized English, not English skills. Therefore, schools and the English language training sector need to coordinate unfriendly to develop training programs, improve the quality of teaching staff, and apply active and active teaching methods. The paper focuses on analyzing and proposing an appropriate solution in improving the quality of English language training at Maritime University by the CDIO approach.

Keywords— CDIO approach; training program; the English language major; learning outcomes.

I. INTRODUCTION

Foreign languages in general and English, in particular, are imperative in the era of globalization. This is a highly international language, with the number of countries choosing to be the first language most and used in all areas when international exchanges take place [1]. It can be said that no successful scientist is not good at a foreign language. Mastering English is the key to understanding more cultures.

On the other hand, in the era of globalization today, English is one of the most popular languages to help us find good jobs [2]. In the current trend of deep and wide integration, the use of English proficiently to solve global maritime issues such as marine environmental pollution [3], [4] due to oil spills [5] and pollution caused by emissions from marine engines [6], [7], solving problems of sustainable and efficient energy use [8], [9], collaborating on new materials. In the globalization trend, English has become a communication bridge for all countries. More than 60 countries use English as their primary language, and over 100 countries choose English as a second language besides their mother tongue. The English language has become a Global Language [10]. Many multinational corporations, foreign companies in Vietnam always choose English as the first criterion in recruitment; This shows that in addition to

professional knowledge, to be able to become a good worker in the integration period requires to work with both knowledge and language skills [11]. English Language Students have many job opportunities with attractive salaries in foreign-invested companies in Vietnam or even a "global job," especially for the signing of the Trans-Pacific Partnership Trade Agreement and joining the Free Trade Agreement with Europe and South Korea. The ASEAN Economic Community has officially operated, the career opportunity for with graduates of English Language courses always open [12].



Fig. 1. The objective to study the English language[10]

Increasing English proficiency for maritime students becomes more important than ever because employers now want their workforce to work flexibly and well in the international environment. For example, in research cooperation on finding solutions to prevent oil pollution at sea [13], search and rescue heart and piracy prevention [14], [15], study solutions to improve fuel injection system [16]–[18] and make effective use of 2nd generation biofuels [19], [20].

CDIO stands for English phrase Conceive - Design - Implement - Operate, meaning: Forming ideas, designing ideas, implementing, and operating. CDIO is an initiative of engineering departments of Massachusetts Technical University, USA, in collaboration with Swedish universities. This is a solution to improve the quality of training to meet social requirements by determining output standards to design training programs and methods according to a scientific process [21].

CDIO is built logically, and about the generalized method of generalization that can be applied to build standard processes for many different training fields besides engineering, including economic sector and business administration [22]. According to the CDIO official website, CDIO's vision is to Integrate professional skills such as teamwork and communication; Enhance active learning and experience; Continuous improvement through a high-quality assurance process; enrich the course with student-designed projects - build and test. Understandably, the CDIO approach aims to train students to develop both knowledge, skills, attitudes, and practical capabilities (C-D-I-O capacity) comprehensively and have a sense of responsibility to society [23].

CDIO model training helps connect students' working ability with the requirements of employers [24].

- Narrowing the gap between the school's training and the requirements of the human resource users
- help learners develop comprehensively with "hard skills" and "soft skills" to quickly adapt to the changing work environment and even take the lead in changing it
- help training programs to be built and designed according to a standard process; the training process is interconnected and closely linked with science
- Associate training curriculum with transfer and evaluate the effectiveness of higher education, contributing to improving the quality of higher education [25].

On a macro level, the application of the CDIO approach contributed to solving the current "higher education quality" problem. In addition, because training programs are designed and implemented according to a standard process, it contributed to reducing costs and resources related to training. On the students' side, they were trained in a formal process and comprehensively developed on knowledge, skills, and attitudes. This is a high-quality human resource for society [26]. Finally, lecturers in the training programs must also follow advanced teaching methods and meet the standards of scientific research. As a result, it will contribute to creating a high-quality teaching staff, meeting

international standards, thereby enhancing the prestige for training units [27].

The application of CDIO method to improve the quality of human resources with proficient foreign language skills has been the main motivation for the Department of Foreign Languages of Vietnam Maritime University to rebuild the entire training program according to CDIO approach. The English Language Specialist has also actively participated in and developed the industry-training program to meet the standards of output and social needs.

Development routes (schematic)				
Year 1	Introductory course	Physics	Mathematics I	
	Mechanics I	Mathematics II	Numerical Methods	
Year 2	Mechanics II	Fluid Mechanics	Product development	
	Thermodynamics	Mathematics III	Fluid mechanics	Sound and Vibrations
Year 3	Control Theory	Electrical Eng.	Statistics	Signal analysis
		Oral communication	Written communication	Project management
				Teamwork

Fig.2. Systematic assignment of program learning outcomes to learning activities - negotiating the contribution [28]

The goal of the program is to provide students with basic knowledge of the language, culture, practical English skills Listening, Speaking, Reading, and Writing effectively [29]. Students have logical thinking, criticism, and specialized knowledge including basic and advanced linguistic theory, specialized English used in the fields of economics, commerce, maritime, translation, and interpretation, culture, and cultural interference of English-speaking countries. The skills and attitudes needed to form ideas, establish, deploy, and operate ship operation processes. The training program also prepares students to work in areas related to the use of English [30].

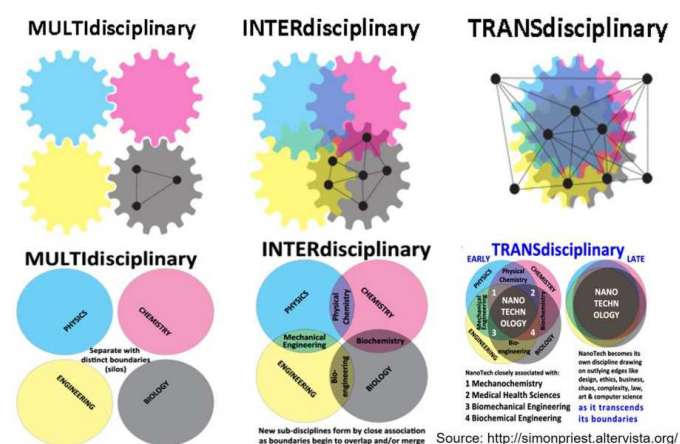


Fig.3. An integrated curriculum (Organized around disciplines with skills and projects are interwoven) [31]

The program framework is the nucleus of a training program. It helps the performers always to achieve results as planned, further making the program stable, helping learners to confirm whether they have completed the course or not.

However, a training program must always aim at the quality to serve the labor market needs, so there must be changes by the requirements and demands of the era as well as meeting the learners' wishes [32]. Wanting to change a program framework is not an easy thing; it needs to focus on factors such as mechanisms, social needs, and human resources. This paper will analyze the process of developing the English language-training program in the direction of approaching CDIO learning outcomes at Vietnam Maritime University.

II. MATERIALS AND METHODS

A. Some Principles of New Training Development Program

New specialties with high social needs have been surveyed and surveyed, have forecasted demand for short-term and long-term human resources with high efficiency, meeting the requirements of socio-economic development. By the overall planning in training, sector development plans and missions, functions and tasks, associated with the implementation of the development strategy of the unit, by the planning of human resource development of industry, local, regional and national.

We are ensuring the systematic and interconnection between university, master, and doctoral training programs in the sectorial and specialized development plans of units. The name of the training sector is included in the List of education and training at level IV level of university and college-issued by the Ministry of Education and Training. In case the name of the training branch is not included in the List of education and training at level IV, the level of the university, the academy, and the university must present the scientific argument about the new training branch, which has been approved by the Scientific Training Council. Practice and training experience of some countries in the world, accompanied by reference training programs of at least two universities that have been accredited abroad.

Develop programs according to output standards including steps: Investigation of needs and idea formation - Developing programs - Conducting experiments - Mass deployment (Conceive - Design - Implement - Operate, referred to as CDIO); Consistent with the criteria for accrediting training programs, existing quality assurance conditions, including conditions for lecturers, facilities, programs, and materials.

B. The Process of Developing a Project to Open the CDIO Training Program

Project development process to open the CDIO training program usually consists of eight steps as follows:

1) *Step 1:* Faculty/institute builds the plan according to the period, diverging each year, according to the priority order of the development orientation of the sector, the specialization of the faculty/institute by the mission, development strategies of units and localities and appoints a team leader to develop a training program. Based on that plan, the Faculty / Institute establishes a group of experts to compile projects, develop training programs and syllabuses (called projects) according to the output standards of knowledge, competence, and skills, moral qualities. The composition of the expert group includes representatives for

lecturers; managers at all levels; domestic and foreign experts related to training major; establishments using learners after graduation.

2) *Step 2:* The expert group studies current programs of the specialized units and educational institutions in the country, proposes ideas to consult experts, and based on the expected output standards of the curriculum with the knowledge blocks or modules of the modules in each module and the relationship between the subjects. The product of this step is the First Training Program Draft:

- Choose a specialized training program of a foreign university with updated knowledge with the level of scientific and technological development of the world, meeting the requirements of Vietnam's socio-economic, scientific and technological development and suitable to the conditions of units and localities
- Adding additional subjects by the regulations of relevant ministries and units;
- Adjust the subjects of foreign universities to suit the conditions of Vietnam. Arrange subjects into knowledge blocks according to the Training Regulations of the Ministry of Education and Training and the Faculty.

3) *Step 3:* Organize the survey of social needs: The expert group discusses the design of survey questionnaires, plans the survey and survey, and determines the information to be collected, the objects, and time for the survey, survey, and project. Funding for investigation, training, conducting a study, and adjusting the survey questionnaires, etc. and conducting surveys to survey related groups. By processing questionnaires and related information, complete the training program to develop the Second Training Program Draft.

4) *Step 4:* Organize the development of learning outcomes for each subject in the second training program draft according to the outcomes of the training program in the following order: Organize a workshop on developing learning outcomes for the subjects in the program. Develop learning outcomes for each subject based on the outcomes of the training program. Organize the training science council meeting of specialized units (faculties of member schools, departments of faculties, institutes, affiliated centers) to assess the learning outcomes of subjects. Based on their specific conditions, the units determine the learning outcomes for each training discipline, the learning outcomes of each subject to complete the training program to meet the high social needs. I am organizing the adjustment of outcomes according to the conclusions of the Training Council of specialized units. The result of this step is the Learning Outcome integrated from the subject is learning the outcome of the proposed training program.

5) *Step 5:* Develop a matrix of knowledge development, skills, or training sequences for courses or schemes for developing knowledge and skills. The Science and Training Council of the Faculty determine the order for optimal implementation of knowledge blocks and subjects. The sequence of subjects clearly describes the development of knowledge, skills and moral qualities through research, study in one or more subjects in a certain period or during the entire training process. The product of this step is the

matrix of developing knowledge and skills corresponding to the order of implementation of the identified subjects. The combined results of this output standard matrix help determine the sequence of developing knowledge, skills, ethical qualities and the ability to apply knowledge into practice and serve as a basis for finalizing the 2nd Program training Draft.

6) *Step 6:* Organize a wide conference to get feedback from managers, scientists, experts, and recruitment agencies for graduates, lecturers, students, and alumni...and complete the above training program. This step product is the third training program Draft.

7) *Step 7:*The Science and Training Council of the professional appraising unit contributes to complete and compare the training program with the output standards, quality control standards and resources review, analyzing socio-economic efficiency, program accounting with the career positioning of training products. The product of this step is a complete training program.

8) *Step 8:* Finalize the packaging of the project and submit it to the Ministry of Education and Training for appraisal organization.

C. Steps to Build Learning Outcomes

1) *Step 1:* The Dean establishes the group and assigns the expert team leader to set the outcomes for the training industry. The expert team consists of representatives of the establishment using graduates (agencies, organizations, businesses); lecturers; managers at all levels; domestic and foreign experts from universities and research institutes related to the training industry; students and alumni.

2) *Step 2:* The dean organizes to discuss and agree on the objectives, content, structure, time plan, how to deploy, resources and assign tasks to individuals and collectives responsible for build outcomes (1st Workshop).

3) *Step 3:* Experts study current training programs of the major (inside and outside the unit), propose ideas to consult experts, propose relevant knowledge, skills, moral qualities and capacities with the training major to have a list of major's standard outputs (Draft CDR 1) towards a specific career-oriented training product. The expert group plans to identify the objects, estimates the survey budget, organizes discussions, requests expert opinions on the work to be done to gather information to complete the outcomes.

4) *Step 4:*The expert team consulted the sample question to design the questionnaire that was appropriate for the respondents and the information needed to know. Training for officials, employees, and people conducting surveys. The level of knowledge, skills, and ethical qualities required is described according to the proficiency levels: know, understand, manipulate, analyze, synthesize, and evaluate. Conduct a trial investigation and adjust the questionnaire. The result of this step is the questionnaire form for different subjects.

5) *Step 5:*The expert group conducting survey and survey collected information from the subjects including: lecturers, training department officials, centers / quality

accreditation units of higher education institutions, personnel and leaders of HR departments, heads of divisions of units using graduate students and alumni graduates within 5 years, alumni graduating over 15 years, first-year students, senior students, ...

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7) *Step 7:*

- The Dean held the second Conference to get comments from representatives of managers, scientists, experts, lecturers, students, and alumni; the training industry's international accreditation criteria and perfecting the learning outcomes based on the professional positioning of the training products.
- Compare and review the knowledge blocks, skills, and moral qualities that have been equipped according to the draft CDR 2 in accordance with the job position requirements of the training products of the discipline (Appendix 5).
- Summarize systematic outcomes to develop corresponding training program objectives.

8) *Step 8:* Head of the training subject to meet the learning outcomes, organize a workshop to get additional comments and through the Science Council to train to get the perfect outcomes of all training branches in the unit. The product of this step is the outcomes of the training units (Appendix 6).

9) *Step 9:* After receiving the comments and completing the learning outcome documents, the head of the training unit signs the outcomes of the training units of the unit. Outcomes are posted on the homepage (website) of the unit, student handbook, instructor handbook.

D. Teaching and Learning Methods to Meet Learning Outcomes

The method of teaching and learning by the CDIO method ensures students achieve the knowledge, skills, and ethical qualities that have been defined in the learning outcomes and according to the built training program.

1) *Teaching and learning integrated by CDIO method:* In integrated learning, students learn, practice their skills and personal qualities, coordination skills, core skills (skills to apply knowledge into practice) and CDIO capabilities simultaneously with learning knowledge. Integrated learning is demonstrated by learning each subject and conducting practical, practical activities according to a built-in integrated route. Integrated teaching and learning must aim at the learning outcomes of each subject, by the level and cognitive capacity of students built by classifying learning objectives. Typical examples of integrated learning are learning through large assignments, annals, scientific research, practice, fieldwork, fieldwork, scientific research,

and graduation thesis. Lecturer builds integrated learning scenarios in terms of knowledge, skills, moral qualities, and competencies. Faculty guides students to career situations, case studies, simulations and plays a job solver and other activities to meet the subject's outcome.

2) *Active teaching and learning – experience:* The active learning method forces students to think and engage directly in problem-solving and discovery activities. By thinking about concepts and analyzing, evaluating ideas, students not only learn more but also evaluate what they have learned and how to learn, thereby forming motivation and deep learning habits and lifelong learning. In order to teach proactively, lecturers play an active role in connecting concepts learned with new situations, different from the situation learned, lecturers design lectures, teaching methods and how to check the assessment appropriately. Appropriate teaching methods include teaching methods that address problems, teaching based on practical problems, using questions to test understanding of concepts, organizing students to discuss in pairs or groups, using electronic answering systems, marking student problems ready to present ...

In practical experience learning method, students participate in real simulation situations, real projects or solve case studies, using methods and methods to collect information and data to assess expected to learn outcomes based on output standards according to clear criteria. In order to implement teaching practices, teachers design and use different teaching methods such as project-based, simulation, case studies. Instructors combine one or more teaching methods in each subject, depending on learning goals and actual conditions.

III. RESULTS AND DISCUSSIONS

Graduates of the undergraduate program in English Language majors have (1) basic and specialized knowledge; (2) the ability to create ideas, build, implement, and develop professional activities related to the English language in the context of national modernization and international integration.

A. Knowledge and Specialized Arguments

1) *General knowledge by sector:*

- Understanding basic knowledge of political theory, international integration, psychology, linguistics, information technology.
- We applied the basic knowledge of statistical science in learning and scientific research related to the training industry.

2) *General knowledge of the specialty:*

- Explain basic knowledge of English language theory, English literature, and English-speaking countries; use English at level 5 according to the 6-level foreign language competency framework for Vietnam.
- Understand the nature and function, origin and development of language, basic concepts of phonetics, grammar, semantics, learn Vietnamese to

serve to learn and studying foreign languages and develop professional and professional skills later.

- We applied knowledge of Vietnamese practice such as receiving documents, creating documents to enhance the ability to communicate in Vietnamese.
- Understanding cultural and social knowledge, art, developing critical thinking capacity, forming effective language learning method.
- Understanding the history of Asian civilizations and cultures.

3) *General knowledge of the sector group:*

- Seize and apply basic knowledge of English as a system including knowledge of English Phonetics and Phonology to be able to adjust, improve pronunciation and can communicate and correct pronunciation errors for students during the teaching process.
- Capture the basics of English language semantics and semantic analysis skills to be able to grasp the meaning of each English language unit accurately.
- Applying specialized knowledge on translation and interpreting, guiding tourism, office administration, communication and project construction.
- Apply presentation skills, critical analysis, teamwork, and interdisciplinary research and debate skills, improve vocabulary, English skills.
- Applying knowledge to develop professional activities.

4) *Skills, personal qualities, and careers:*

- Proficient in English skills in communication and the field of translation-interpreting, guiding tourism, office administration, communication, project construction.
- Apply the skills in reasoning, analysis, and problem solving in professional activities. You are applying skills of experimental research, knowledge discovery.
- Apply system thinking in professional activities. Demonstrate professional behavior, honesty, responsibility, and discipline in professional activities.
- Formulating hypotheses, collecting, analyzing, and processing information, participating in empirical research, testing hypotheses and applications to study issues related to the field of teaching.
- Ability to develop logical and systematic thinking when approaching and dealing with issues in the field of expertise in particular and cultural and social issues in general.
- Ability to create, lead, and develop careers through the ability to self-study, lifelong learning, research associated with teaching practice, develop the necessary knowledge and skills and the ability to adapt quickly to the change of reality.

5) *Teamwork and communication skills:*

- Can manage personal time and resources well, adapt to the complexity of reality, and handle well when facing pressure at work, self-assessing work

results, planning, completing timely work, goal setting, self-development, self-improvement, and career development.

- Can form an effective working group; group operation and development; team leadership (management, task assignment, personal coordination in the group, using mobilization methods), working in different groups.
- Ability to lead, manage changes or apply new advances in career activities.
- Can communicate well in writing and speech (exchange, presentation), communicate information, and transfer knowledge in the form of speaking and writing.
- Ability to apply sophisticated language use skills in specific and diverse circumstances.
- Can communicate in a foreign language (English) with C1 equivalent level or higher.
- Can communicate in other languages with equivalent level B1 or higher.
- Can proficiently use information tools such as office software (Word, Excel, PowerPoint) and software for professional work.
- Proficient in finding materials on the Internet for learning and research.
- Ability to organize information stored on computers and use computers to solve common problems.
- Good use of a specific database management system.
- Ability to analyze, evaluate, and program management through simple macros and modules in Visual Basic.

6) *The capacity on CDID*: Capacity to formulate ideas (C), design (D), implement (I) and develop (D) career activities in the social and organizational context include some issues as follows:

- Understanding the social context and training industry.
- Understanding the organizational context.
- Forming ideas for professional activities.
- Develop plans for professional activities.
- Implement feasible plans for professional activities.
- Development of professional activities.

B. Job Placement after Graduation

1) *Group 1 - Translators / Interpreters / Communication collaborators*: Able to work independently as a translator or an interpreter at an enterprise, agency or organization; editing and editing newsletters (English-Vietnamese, Vietnamese-English) for news, social-cultural programs of media agencies.

2) *Group 2 - Secretary of the Office / Project Coordinator / Tour Guide*: Ability to work at offices of foreign companies, state agencies, non-governmental organizations; participate in work related to cooperation, business, foreign affairs and tourism projects with foreign partners; participating in planning, international reception program, organizing/guiding tours.

Graduates of undergraduate programs in English Language majors can study postgraduate qualifications in English Language Theory, Applied Linguistics, and Interpreter.

A. Framework for English Language Training Program

The English language-training program is designed with a full course of 130 credits (excluding the credits of the Physical Education and Defense Education modules). The structure of knowledge blocks that constitute the English language-training program and the volume of credits are distributed to the following knowledge blocks.

TABLE I
FRAMEWORK FOR ENGLISH LANGUAGE TRAINING PROGRAM

Knowledge blocks		Number of credits		
		Total	BB	TC
A – General curriculum		38	26	12
A1	Political theory	10	10	0
A2	Physical education	0	0	0
A3	Defense Education	0	0	0
A4	Foreign Language	7	7	0
A5	Mathematics, Informatics, Natural Sciences	3	3	0
A6	Social Sciences and Humanities	18	6	12
B - Professional education knowledge		92	67	25
B1	Knowledge base	48	48	0
B2	Industry knowledge	38	19	19
B3	Additional knowledge	6	0	6
Total		130	93	37

B. Training Program Content Knowledge of General Education (38 credits)

A training program requires meeting many criteria: Approaching international standards, publishing output standards, diversity in consistency, ensuring compactness, reducing pressure, increasing autonomy positive, changing teaching and learning methods and above all to meet the needs of learners and the practical needs of the labor market. This requires the training unit to constantly change the thinking and orientation of training associated with social practice, identify learners as the center, promote all strengths of inherent resources while dissatisfied with the built program, but must continue to interact with employers, learners and experts to improve the training program, meeting the increasing needs of learners and society.

TABLE II
TRAINING PROGRAM CONTENT KNOWLEDGE OF GENERAL EDUCATION

B - Professional education knowledge		92		
B1	Knowledgebase	48		
	<i>Required modules</i>	48		
NN1101	English Grammar 1	3	2	1
NN1102	Listening 1	3	2	1
NN1103	Speaking 1	3	2	1
NN1104	Speaking 2	3	2	1
NN1105	Reading 1	3	2	1
NN1106	Reading 2	3	2	1
NN1107	Writing 1	3	2	1
NN2108	Writing 2	3	2	1
NN2109	Writing 3	3	2	1
NN2110	Listening 2	3	2	1
NN2111	Listening 3	3	2	1
NN2112	Speaking 3	3	2	1
NN2113	Speaking 4	3	2	1
NN2114	Reading 3	3	2	1
NN3115	Listening 4	3	2	1
NN3116	Writing 4	3	2	1
B2	Major knowledge	38		
	<i>Required modules</i>	19	2	1
NN2201	Business English 1	3	2	1
NN2202	English for Tourism 1	3	2	1
NN3203	English - Vietnamese translation 1	3	2	1
NN3204	Vietnamese - English translation 1	3	2	1
NN3205	Business English 2	3	2	1
NN3501	Practicing career	4	0	4
	<i>Elective modules</i>	19		
NN1207	English Grammar 2	3	2	1
NN2208	Reading 4	3	2	1
NN3209	English - Vietnamese translation 2	3	2	1
NN3210	Vietnamese - English translation 2	3	2	1
NN3211	Interpretation 1	3	2	1
NN3212	Interpretation 2	3	2	1
NN3213	Business English 3	3	2	1
NN3214	English for Tourism 2	3	2	1
NN3215	English for Tourism 3	3	2	1
NN3216	Speaking 5	3	2	1

NN4217	Writing 5	3	2	1
NN4218	English - Vietnamese translation 3	3	2	1
NN4219	Vietnamese - English translation 3	3	2	1
NN4220	Research methods	3	2	1
B3	Additional knowledge (optional)	6		
NN4301	British literature	3	2	1
NN4302	American literature	3	2	1
NN4303	Applying IT in foreign language teaching	3	1	2
NN4304	English for journalism	3	2	1
NN4305	Business English 4	3	2	1
NN4306	English for Tourism 4	3	2	1
NN4307	Interpretation 3	3	2	1
NN4308	English in teaching	3	2	1
NN4309	American studies	3	2	1
NN4601	Graduation thesis (conditional)	3	0	3
Total		130		

IV. CONCLUSIONS

From the 2017-2018 school year, Vietnam Maritime University has developed a CDIO-based training program for all groups. School leaders are always interested in facilitating lecturers to update their knowledge and useful information about new solutions, contributing to building training programs to meet the needs of high-quality training, adapt to the reality of the labor market. The school is determined to organize training courses for leaders, lecturers as well as those who serve in training according to CDIO approach in a methodical manner because lecturers also need to study and research and have been trained in CDIO seriously to best convey the output standards set by the program framework.

After nearly two years of learning and implementing, from experience, the project of CDIO implementation of the University has been increasingly improved. The application of CDIO model to the training program for the technical, economic, and linguistic sectors has been urgently implemented and initially achieved very positive results. This is clear evidence for the right direction of the University in choosing solutions to improve the quality of training, comprehensively develop the knowledge, skills, qualities, and competencies necessary for students.

Developing training programs based on the CDIO approach at the university level in the language sector is a new and urgent issue in the process of innovation and improving the quality of higher education in Vietnam. Nowadays, there should be comprehensive and comprehensive research on application issues by the development requirements because there are many different perspectives and perspectives on approaches, program

development models according to capacity. The training program follows the CDIO approach at the undergraduate level in the social sector and the language to improve the quality of comprehensive training to meet the needs of society.

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