

Videotel NVOD G2: SWOT Analysis and the Use of the Program at Aboa Mare

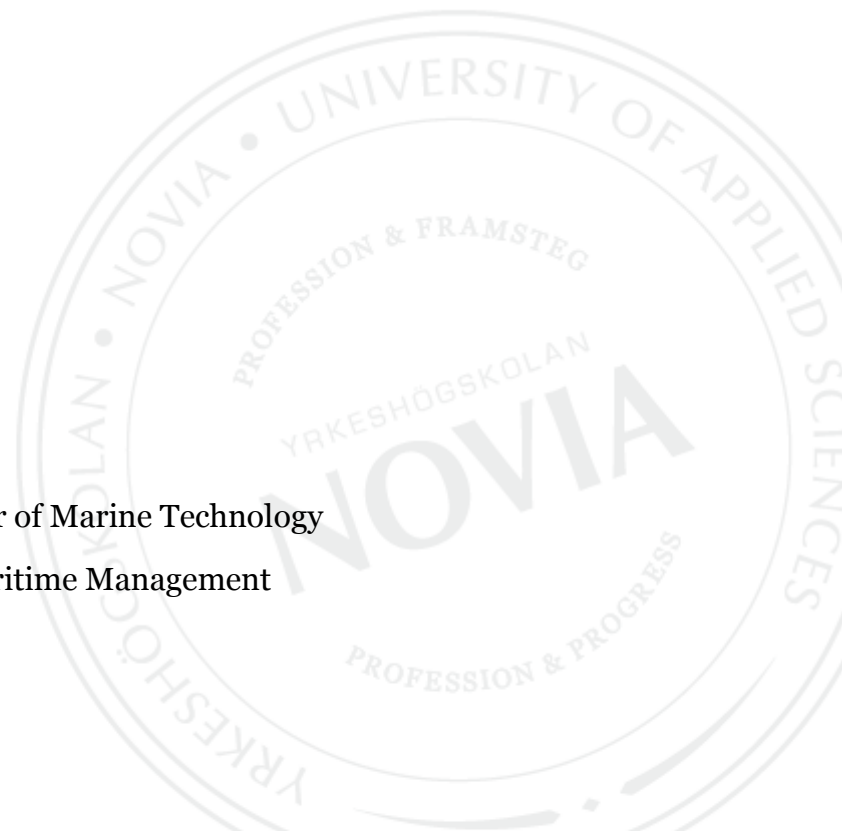
A research on Videotel NVOD G2's strengths, weaknesses, opportunities, and threats basing on the beliefs and experiences of Aboa Mare students and teachers.

Esa Kallio

Degree Thesis for Bachelor of Marine Technology

Degree Programme in Maritime Management

Turku 2015



BACHELOR'S THESIS

Author: Esa Kallio

Degree Programme: Degree Programme in Maritime Management, Turku

Specialization: Bachelor of Marine Technology

Supervisor: Peter Björkroth

Title: Videotel NVOD G2: SWOT Analysis and the Use of the Program at Aboa Mare

Date 18.11.2015

Number of pages 100

Appendices 2

Summary

The thesis culminates in determining the Strengths, Weaknesses, Opportunities, and Threats, as per SWOT analysis, of the Computer Based Training program Videotel NVOD G2 used as a part of maritime education at Aboa Mare. User experiences being highlighted the study bases on online questionnaires to which the answers from Aboa Mare students and teachers were gathered during the summer season of 2015. Both qualitative and quantitative methods were applied in the survey.

The SWOT Analysis is not composed solely over the Videotel NVOD G2 product. Aboa Mare's aspect as an authority, which determines how the program is used as a part of the studies, is taken in account and underlined in the thesis as well.

According to the results of the research the software should be utilized in Aboa Mare but there is also requirement for improvement. The results should be taken into consideration in the program's further use.

Language: English

Key words: Videotel NVOD G2, CBT, SWOT, Aboa Mare

The examination work is available at the electronic library Theseus.fi

Table of contents

List of abbreviations	4
1 Introduction	5
1.1 Objective	7
1.2 Problem formulation.....	7
1.3 Delimitation.....	7
2 Theoretical part: Background information for the survey.....	8
2.1 STCW.....	8
2.2 Aboa Mare	10
2.3 Computer Based Training.....	14
2.3.1 Videotel.....	15
2.3.2 Videotel use in Aboa Mare: Videotel NVOD G2	16
2.4 SWOT Theory.....	18
3 Introduction of the research method	20
3.1 Topics of interest.....	22
3.2 Validity and reliability.....	25
4 Practical part: The results and their interpretation	26
4.1 Students and their background	26
4.1.1 Amount of received information about Videotel.....	28
4.1.2 Use rate.....	29
4.1.3 Voluntary use	30
4.1.4 Tests.....	31
4.1.5 Cheating.....	32
4.1.6 Technical difficulties	34
4.1.7 A complete course or a part of a course in Videotel?.....	37
4.1.8 Where to use Videotel?.....	42
4.1.9 Videotel's utilization rate in Aboa Mare	44
4.1.10 Teaching methods in Aboa Mare.....	45
4.1.11 Videotel NVOD G2 freely listed positive and negative sides according to the students.....	48
4.2 Teachers and their background.....	51
4.2.1 Familiarity with Videotel.....	52
4.2.2 Amount of received information about Videotel.....	53
4.2.3 Use rate.....	54
4.2.4 Voluntary use	55

4.2.5	Tests.....	56
4.2.6	Cheating.....	57
4.2.7	Technical difficulties	59
4.2.8	A complete course or a part of a course in Videotel?.....	61
4.2.9	Same course with and without Videotel.....	63
4.2.10	CBT vs. ordinary teaching.....	65
4.2.11	Videotel - an opportunity or a threat?.....	66
4.2.12	Videotel's utilization rate in Aboa Mare.....	67
4.2.13	Teaching methods in Aboa Mare.....	68
4.2.14	Videotel NVOD G2 freely listed positive and negative sides according to the teachers	70
4.3	Differences between teachers' and students' answers.....	71
4.3.1	Comparison: Amount of received information about Videotel.....	72
4.3.2	Comparison: Videotel's utilization rate	74
4.3.3	Comparison: A complete course or a part of a course in Videotel?.....	75
4.3.4	Comparison: Teaching methods in Aboa Mare	77
5	Summary.....	79
5.1	The fruit of the work – The Videotel NVOD G2 use in Aboa Mare SWOT Analysis.....	80
5.2	Conclusion and recommendations	81
5.3	Critical assessment of the work.....	83
5.3.1	The objective	83
5.3.2	The problem with the SWOT analysis	83
	References.....	84
	Appendices.....	86
	Appendix I - Videotel Questionnaire for Aboa Mare Students 2015.....	86
	Appendix II - Videotel Questionnaire for Aboa Mare Teachers 2015.....	92

List of abbreviations

BIMCO	The Baltic and International Maritime Council
CBT	Computer Based Training
DP	Dynamic Positioning
G2	Second Generation
ISM	International Safety Management
IMO	International Maritime Organization
IMCO	Inter-Governmental Maritime Consultative Organization
MARPOL	International Convention for the Prevention of Pollution from Ships
MLC	Maritime Labour Convention, 2006
MSC	Maritime Safety Committee
NVOD	Networked Video-On-Demand
OBT	Onboard Training
OOW	Officer Of the Watch
SOLAS	International Convention for the Safety of Life at Sea
STCW	Standards of Training, Certification and Watchkeeping for Seafarers
SWOT	Strengths, Weaknesses, Opportunities and Threat
TRAFI	Finnish Transport Safety Agency
VTS	Vessel Traffic Service
WBT	Web Based Training

1 Introduction

In December 2013 I received a phone call from Bore's Crewing Coordinator concerning an Ordinary Seaman's position onboard M/V Klenoden – the same vessel on which I had been working in the same vacancy during my year-off from school. I was asked to go onboard, but this time something was different.

According to STCW 2010 Manila Amendments I suddenly was not competent enough any longer since I was lacking Designated Security Duties certificate (Standard of Competence for Seafarers with Designated Security Duties STCW A-VI/6-2) which was to become mandatory to be carried by all seafarers in order to work onboard Finnish cargo vessels as from the beginning of 2014 providing that they have security related duties on the vessel.

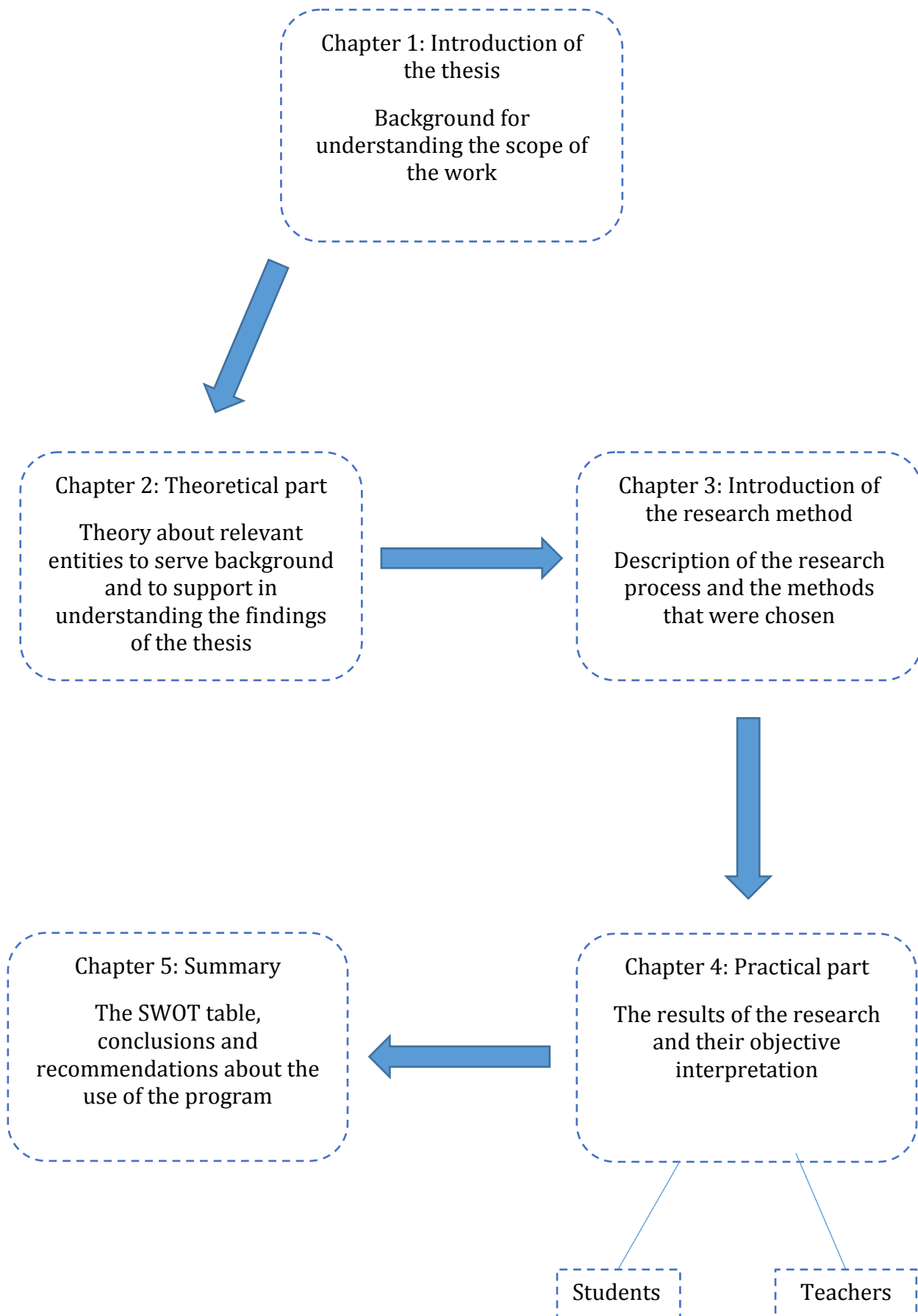
A slight problem was starting develop since I had promised to go onboard and I had limited time of one month to acquire this new competence before joining the crew. To answer my need of education and the relevant competence I contacted the Finnish maritime educational institutes to obtain whether they were providing the Designated Security Duties -course. The schools in Kotka and Rauma were, but Aboa Mare in Turku, according to their website, was not.

Before I enrolled to either of these courses in Kotka or Rauma I had to double-check the situation with the course in Aboa Mare. Why was the course not listed on the website nor on the curriculum although it was becoming compulsory for deck crew? There must have been an increasing demand for the course at the time.

To my great surprise, I received a superb piece of news as a response to my enquiry: the course would be available on Aboa Mare's internal network, in a Computer Based Training program called Videotel NVOD G2. Only the program was brand new in the Finnish maritime education branch at that time and no student had yet tested it.

I got the privilege to be the forerunner and take the first Videotel CBT course in Aboa Mare. Cutting the corners, I received the STCW Designated Security Duties certificate in a timely manner and went onboard with no worries over the competence anymore. Videotel NVOD G2 saved my skin and it was at this point where I decided to study this platform in more detail. The program deserved more attention, so I decided to find out its Strengths, Weaknesses, Opportunities and Threats with SWOT Analysis tool.

The thesis progresses as illustrated below:



1.1 Objective

Living in an age of emerging technologies a variety of alternative teaching methods are available on the side of ordinary classroom lecturing. In Aboa Mare one of the modern digital solutions goes by the name of Videotel NVOD G2 and is used in order to support traditional methods and provide with educational maritime material.

The goal of this study is to assess with the SWOT Analysis measure how well this particular Computer Based Training program handles its duty according to the experiences and beliefs of Aboa Mare students and teachers. In other words, the objective is to evaluate the usefulness of the program in Aboa Mare.

The thesis, of which the recommendations in particular, works a decision making tool for developing the platform's further use in Aboa Mare.

1.2 Problem formulation

The thesis endeavours to deem should Videotel NVOD G2 be used in Aboa Mare, and if so, what are the most convenient ways to utilize it? The research is carried out for the benefit of its population that consists of Aboa Mare's students and teachers.

The research questions include:

- Should Videotel be used in Aboa Mare? If so, how?
- What are the internal strengths and weaknesses of Videotel NVOD G2 software?
- What are the external opportunities and threats for the use of Videotel NVOD G2 in Aboa Mare?
- Which means of instruction should Aboa Mare offer to its students?

1.3 Delimitation

Every educational institution other than Aboa Mare in Turku and any other Computer Based Training program provider than Videotel are excluded from the scope of the work. On Videotel's part, only the use of NVOD G2 product is discussed in detail.

2 Theoretical part: Background information for the survey

2.1 STCW

Adopted by the International Conference on Training and Certification of Seafarers on the 7th of July 1978 and entered into force on 28th of April 1984, The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) amended in 1991, 1994, 1995, 1997, 1998, 2004, 2006 and 2010, consists of two parts of which Part A lays down the provisions concerning minimum standards to be maintained by Parties, the states for which the Convention has entered in force.¹ Part B, on the other hand, contains recommended guidance in a uniform manner to assist Parties, and those involved in implementing, applying or enforcing STCW's measures to the STCW convention.¹

As regulated in the Article I in the Code, General obligations under the Convention, by developing common standards for training, certification and watchkeeping for seafarers the Convention, through its Parties, aims to promote safety of life, property at sea and the protection of the marine environment and possibly most importantly to ensure that seafarers are fit for their duties.² In order to give the Convention full impact the Parties commit to promulgate all laws, decrees, orders and regulations, and furthermore, to take all steps necessary to ensure that the goals are achieved.²

The STCW Convention and the STCW Code are applied to seafarers serving on seagoing vessels flying the flag of a Party excluding ones serving on warships, fishing vessels, non-commercial yachts and wooden ships of primitive build as per the Article III in the Code.² The seafarers shall be recognized fit for their duties by certificates which are issued to those candidates who meet the requirements of the Administration referring to the Government of the Party whose flag the vessel is entitled to fly.³ These requirements concerning age, service, medical condition, training, qualification and examination are given in the Annex of the Convention according to Article VI in the General obligations.³

The level of certification and training the seafarers must have at minimum bases on the capacity in which they serve onboard and the type of the particular ship. The three levels of service are according to STCW definitions and clarifications:

- Management level – Masters, Chief Engineers and Chief Mates
- Operational level – Mates and Assistant Engineers
- Support level – Ratings ⁴

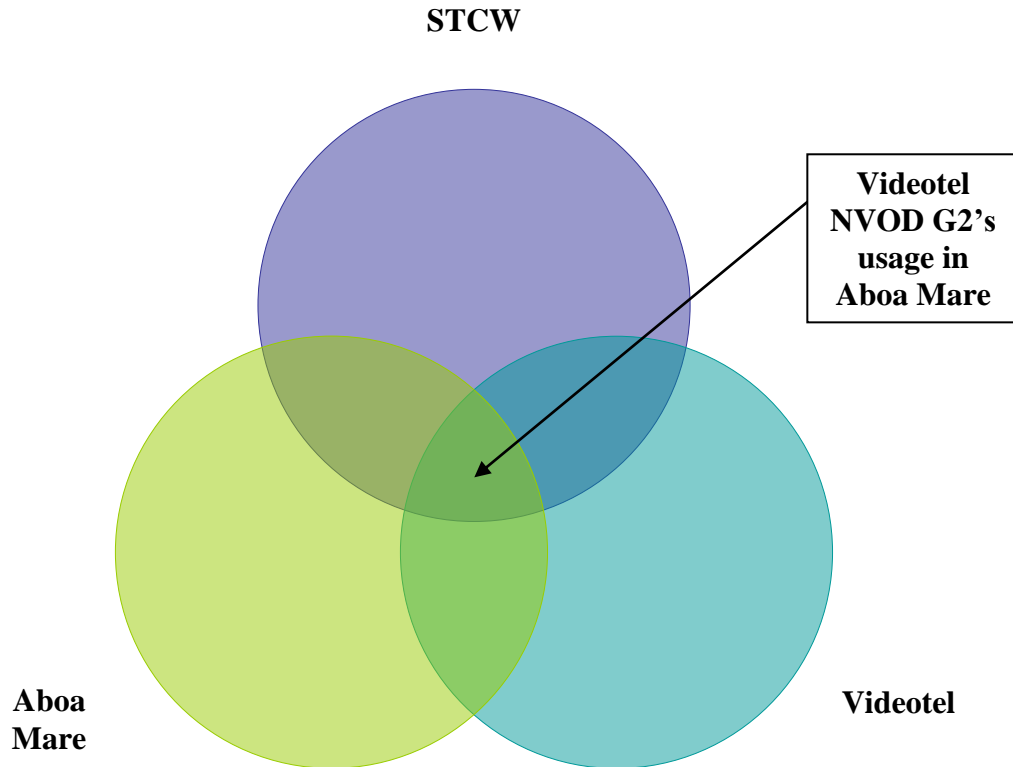
One can argue that since all Parties and their seafarers under STCW Convention follow the same minimum standards to ensure safety of working in an environment friendly fashion and, in addition, respecting the property at sea, by laws, decrees, provisions and regulations committed, Parties are greatly promoting the safety of seafaring in general. The STCW is widely recognized as one the four governing pillars in the international shipping amongst Conventions SOLAS, MARPOL and MLC.

The STCW Convention was significantly amended 21st - 25th of June 2010 in Manila, Philippines with updates to standards of required competence, new training and certification requirements, improvements to enforcement of the Code's provisions, and introducing of detailed requirements concerning hours of work and rest, prevention of alcohol and drug abuse and medical fitness standards. ⁵

Relatively new technologies, such as the simulators and Computer Based Training programs, Videotel NVOD G2 being on the focus in this particular study, offer a wide range of customizable education methods to fulfill and exceed the STCW minimum standard requirements. In the Code the actual requirements are listed in the tables A-II/1-3 concerning Specification of minimum standard of competence for officers in charge of a navigational watch on ships of 500 gross tonnage and more, Mandatory minimum requirements for certification of masters and chief mates on ships of 500 gross tonnage or more, and Mandatory minimum requirements for certification of officers in charge of a navigational watch and of masters on ships of less than 500 gross tonnage, engaged on near-coastal voyages. ⁶

The maritime education in Aboa Mare is designed in accordance with STCW tables as well as the Videotel softwares to which the modules refer in the Videotel's own STCW Maritime Training Catalogue. ^{7, 8} Videotel NVOD G2 platform's role as a third party

product is to support Aboa Mare students' independent learning as per Aboa Mare's internal Quality system. ⁷



An approximate illustration explaining the relations between the STCW Code, Aboa Mare and Videotel.

2.2 Aboa Mare

Headquartered in Turku, Finland, Aboa Mare Ab is a maritime educational institution STCW-audited by Finnish Transport Safety Agency and DP training center audited by Nautical Institute. ⁹ Aboa Mare, lat. Turku Sea, was founded in 1813 and has during 200 years located in varying positions in Turku. ¹⁰ As of 2013 Auriga Business Center has been catering as the present domicile for the academy, the performance and quality of the operation of which, are assured and certified with DNV ISO 9001 and ISO 14001. ^{9, 10}

Today in 2015 Aboa Mare offers maritime education leading to Master Mariner's degree through Novia University of Applied Sciences in English and in Swedish, and on the second degree level, trains both watchkeeping officers and watchkeeping engineers at Axxell in Swedish language. Some practical parts of the education are concluded in co-operation with Meriturva, Wärtsilä and Åland's Maritime Safety Center.⁹

Currently, on the 23rd of September 2015, the total number of students in Aboa Mare is 524. The number consists of 147 students enrolled in Axxell and 377 on Novia's degree programs taking in account both the students that are present and the ones being absent.¹¹ The latter number also includes the students who are enrolled in Novia Open University of Applied Sciences and the students taking Maritime Electrotechnical Engineering degree in Philippines, the count of whom is 20.¹¹

The Aboa Mare staff forms of 34 names of whom 23 are lecturers. The count excludes the number of visiting teachers from Novia's unit in Nunnankatu.¹¹

On the side of traditional degree oriented education Aboa Mare designs, coordinates, and arranges a variety of maritime courses as per STCW regulations to its clients consisting of, but not limited to, shipping companies, port states, pilots, and Finnish Coast Guard, for instance.

In addition to STCW courses, continuing-education courses varying sorts are offered to update one's skills and preparedness. As an example, ECOTRAIN course is developed in order to encourage OOWs to pay attention to energy-efficient matters in shipborne operations.

During 2014 1,500 short-course participants were trained along the degree students.⁹ Furthermore, TraFi has authorized Aboa Mare to organize and deliver VTS and pilotage education in accordance with national regulations.¹²

According to the Aboa Mare webpage the strongest asset of the institute is its ability "to tailor courses according to their clients' need and requirements." A wide range of continuously running courses for maritime professionals take place in Aboa Mare for the purpose of up-keeping professional competence.¹³ For example, such titles as "Medical First Aid" and "Ship Security Officer" are included in the curriculum of Master Mariners but are available to third-parties, too.¹³

For students aiming to become either boatmasters, skippers in domestic traffic or engine attendants, weekend courses are arranged in order to give the candidates the proper competence and skillset to apply for the relevant documents from TraFi. Aboa Mare itself issues over 1,000 course certificates per year to candidates who have successfully completed their respective courses.¹³

As described in chapter 2.1, STCW lays down the qualification standards for the certification of seafarers on seagoing merchant ships on the international level and describes the minimum standards regarding training, certification and watchkeeping, which the Parties are enforced to fulfill or exceed. Through auditing and national legislation TraFi ensures that Aboa Mare on its part provides maritime education that complies with the STCW requirements and certifies the seafarers adequately.⁷

Moreover, Aboa Mare hosts the biggest maritime simulator centre under Finnish flag. The 10 pieces of bridge simulators are greatly utilized in the education and they are located in Turku, Espoo, and Subic Bay, Philippines as a part of Aboa Mare's co-operation network. The brands of the bridge equipment manufacturers include Sperry, Furuno, Consilium, Transas, and Sam Electronics.¹⁴ Engine room simulators, a VTS simulator, Navis DP simulator and a radio simulator are provided by Aboa Mare in its simulator centres as well.¹⁴

According to Aboa Mare's Handbook for Quality System, the methods of instruction used in Aboa Mare are both behavioristic and interactive.¹⁵ Through the aforementioned Aboa Mare aims to develop its students to become independent and responsible professionals.¹⁵

The behavioristic methods have been traditionally in use as a part of seafarers' education and Aboa Mare believes that still today the fundamental abilities of seafarers, that the STCW Convention requires, are safeguarded with the behavioristic approach.¹⁵ Furthermore, projective teaching and learning techniques are utilized on the Applied Sciences level in Aboa Mare.¹⁵

As studying environments and methods of teaching at least lecturing in classrooms, simulators (e.g. navigation, radio communications), computer based training, webcourses, onboard training, practical workshops, and fire and rescue simulations are in use.¹⁵ Each of the techniques has its own goal in educating the student. The accompanying table on the following page, which is constructed from the basis of Aboa Mare's Handbook for Quality System, clarifies the goals of the mentioned instruction methods.

Type of instruction	Objective
Simulators (e.g. navigation, radio communications) and Simulations (e.g. fire, emergency, first aid)	Provide with the sense of reality and prepare the student to meet the scenarios in real life
Onboard Training	Help to build student's professional identity and support in socializing
Computer Based Training and Webcourses	Support student's independent learning
Workshops	Help to connect the practice with theory
Classroom lecturing	Share the information with the student with aid of, for example, presentations and discussions

2.3 Computer Based Training

Computer Based Training, hereafter referred to as CBT, does not have any widely accepted definition, but could be described as a type of behaviorist pedagogic instruction technology which bases on using any kind of specialized training computer program as an aid or sole means in the process of learning. ¹⁶

The behavioral systems family of pedagogic strategy is argued to "change the behavior of the learner and transmit the culture by teaching skills and knowledge". ¹⁷ In other words, the student is considered a system that can be affected by the computer program giving feedback in accordance with the student's actions, on the basis of what kind of answers, decisions, and choices the students make during the training modules. Addedly, the programs feature usually a possibility to track the learner's progress in learning. ¹⁶

According to Edutech Wiki, CBT can be defined as an "interactive instructional approach" that replaces an instructor in the occasion of lecturing by providing stimuli to the student via computer. ¹⁶ The fashion of the stimulus is generally visual and aural e.g. the technology can be whatever providing that it can be presented with aid of a computer in offline mode, meaning that CBT programs do not require network connection. ¹⁶ In case the training software is used over the internet, it is called a WBT (Web Based Training) program which may include, for instance, instant messaging and live-video conferences. ¹⁶

CBT may be used by educational institutions, employers and private organizations, for example. ¹⁶ As a matter of fact, there are practically no restrictions where and when the programs can be utilized due to their nature which is not tied to normal business hours. It is also characteristic for CBT programs that the usage is self-paced. ¹⁶ Furthermore, CBT programs can be used as the principal method of instruction which means no other instruments, tools, nor apparatus is required for the purpose of instruction. ¹⁶

In practice the quiddity of a CBT instruction module can, but is not limited to, consist of for example the following behavioristic learning technologies, according to Learn.org:

- drill-and-practice
- tutorial
- simulation
- educational games
- problem solving
- applications ¹⁸

In developing CBT programs only the imagination of the producer delimits the possible outcome – the final product. Provided that the program manages to transfer its desired instruction to the student its function could be stated satisfactory.

2.3.1 Videotel

Videotel, a maritime training material providing company owned by KVH Co., Ltd., delivers a range of training solutions to meet the competence requirements set for seafarers serving within different fields of maritime operations and on varying levels of service.¹⁹ The Videotel Company was founded in 1973 as a result of increasing demand for training of crews onboard ships to which IMCO, the precursor of IMO, contributed on its part by recognizing the need for high quality training materials.¹⁹ In fact, the president of Videotel, William O’Neill, is a former IMO Secretary General.¹⁹

Videotel produces multimedia titles, each of which contain training for a certain maritime operation linked field of interest. The titles, the total amount of whom is over 800 in the Videotel’s Maritime Training Catalogue constructed in accordance with the STCW, come out in a variety of formats, including CBT and WBT solutions.¹⁹ Informative video using a combination of documentary and drama, dynamic animated content and tick-box questions are exploited as instructional technologies aiming to increase skills, abilities and ongoing development of students.¹⁹ Furthermore, tutor-led distance learning courses are available in the Videotel Academy.¹⁹

As well as the formats of instruction the languages of the titles vary. A selection of the videos is provided with either subtitles or thoroughly in a language other than English.²⁰ The foreign languages include, but are not limited to, Russian, Turkish, Italian, Chinese Mandarin, and Bahasa Indonesian, for instance.²⁰

Videotel products are in use onboard more than 10,000 vessels and the company argues that they have the widest maritime training portfolio in the world.¹⁹ According to Videotel over 100 million training hours have been accomplished and several hundreds of thousands of seafarers have been assisted in promoting the learning through the training delivery solutions, the names of which are VOD, VOD G2, NVOD, NVOD G2, VOD Online, Rental Library, Maritime Training Courses, Online Courses, Bespoke Training, and Rapid Response Training. Furthermore, the Videotel Academy, Enclosed Space Management

solution, and Bimco eLearning Diploma Programme, which is conducted in co-operation with BIMCO, are included in the Videotel's range of products.¹⁹

The company boasts that the titles are "accurate, up-to-date, quality training solutions" and developed to be in line with actual training requirements.¹⁹ Maritime industry experts are consulted in the progress of title productions as the in-house team aims to achieve the highest levels of accuracy and quality within the processes.¹⁹ The Videotel material is constantly under updating as the operational instructions and regulations in the relevant fields of the subjects change.¹⁹

The Videotel CBTs are available as Video-On-Demand and Networked-Video-On-Demand delivery systems as well as PC CD-ROMs.¹⁹ The difference between VOD and NVOD is that the former is used on a stand-alone computer and the latter can be used on any computer in a certain internal network.

The training titles can also be accessed over the internet with a WBT system VOD Online, which bases on cloud-technology.¹⁹ Its undoubted advantage is the users' freedom to move between locations meaning the training material can be viewed, for example, at home or onboard. In other words, the usage of the program is not tied to a certain place and time. The disadvantage is the dependency of the internet connection, if compared to CBT internal network server solution.

2.3.2 Videotel use in Aboa Mare: Videotel NVOD G2

The Videotel delivery system used in Aboa Mare is NVOD G2 (Networked Video-On-Demand, 2nd Generation) and is utilized as a part of maritime education both on side of traditional lecturing as a supporting means as well as a platform on which complete courses can be taken with no requirement for any other method of instruction, e.g. teacher's presence is not essential. The system works across Aboa Mare's internal network permitting the simultaneous use on multiple computers. In theory, every computer in the network could run Videotel NVOD G2 simultaneously and the users could train on different subjects.

The use of the program is tied to physical presence in Aboa Mare, but the students may choose when they want to use the Videotel software. In comparison with traditional

classroom lecturing, the students have more freedom in planning their schedules when studying with Videotel NVOD G2 in Aboa Mare.

The Videotel's NVOD G2 systems are available for rent (license for use for a period of time) and contain over 350 titles with unlimited access.¹⁹ The system is accompanied with Videotel's own STCW Maritime Training Catalogue which describes the features of each title in written words with their basic information, to which STCW table they refer, who are the target audience, the length of the films and available languages.¹⁹ The same information can be found in the software, too.

According to Videotel, the NVOD G2 solution is equipped with the following features:

- “Flash technology
- Massive storage
- Printable workbooks
- System for viewing all types of training: courses, videos, and CBTs
- Menu options in 10 languages
- Recently viewed items menu
- Favourite items menu
- Rank icons accompanying the titles tell the targeted audience (e.g. Deck officers or Catering department)
- Traffic light system for viewing training process
- Individual company training programs can be uploaded and used alongside Videotel
- Integration possibility with company Safety Management Systems
- WiFi and satellite connection compatibility
- Remote access for technical support”¹⁹

It is up to the Aboa Mare lecturers' discretion how widely they want to utilize the program as a part of their courses. Hence there are great differences in the ways the program is used by the teachers who have the authority to decide how a certain course is executed. Some of the teachers might take full advantage of the program where as some might have a prejudicial opinion.

It must be noted that the Videotel NVOD G2 training solution is not applicable to all courses as per Aboa Mare's curricula, since for instance, there are no modules in the Catalogue that would support learning mathematics or physics. The modules are constructed in line with STCW and they aim to support students' learning in the field of maritime linked operations.

Older curricula than the most recent curriculum of 2014 exploit Videotel in a wider sense as it serves as a platform where complete courses can be taken. This is due to the fact that not all courses, that are included in the older curricula than 2014, are any longer available by any other means of instruction, but some students might still need them.

2.4 SWOT Theory

The SWOT analysis, an acronym of Strengths, Weaknesses, Opportunities and Threats, is a simple and straightforward subjective decision making instrument that allows organizations to recognize helpful and harmful internal functionality factors and external environment factors in their businesses.²¹

First introduced in 1965 in a Harvard University Publication "Business Policy: Text and Cases" by Edmund Philip Learned, Roland Chris Christensen, Kenneth Richmond Andrews and William D. Guth, the concept was developed to answer the need for a tool that takes in account also the environment of an organization as a part of strategic planning.²¹ Nowadays the method is widely used in the branch of marketing in large businesses.²¹ The popularity of the tool might derive from the fact that the measure allows quick analysing and gives the simplified results in a formulaic scheme.

The analysis investigates the current situation of the organization in a forward-looking manner.²¹ Therefore the worth of the SWOT measure is highlighted at a point when it is used finally used as a basis for strategic planning.²¹ The analysis is only valuable in case utilised.

Internal factors are elements that the organization can affect, whereas external factors cannot be influenced by the organization.²¹ According to the SWOT Analysis theory, Strengths and Weaknesses are internal factors, and Opportunities and Threats are of external nature.²¹

Strengths are internal advantages that have a positive effect on an organization's development and its position in competition.²¹ Weaknesses, on the contrary, are the internal problems of an organization, the influence of which are negative on the development and on the organization's competitive position.²¹ In an ideal situation weaknesses are turned into strengths but in practice minimising the negative impact of the weaknesses on the development might be more realistic as an objective.

Opportunities are dependent on the external environment and they should be utilized in order to strengthen an organization's position in competition.²¹ Also originating from the external environment – the threats – might weaken the progression and competitive position of an organization.²¹ If they are noticed in timely manner and action is taken against them, their effect on the performance can be minimized.

The SWOT analysis has received its share of criticism and by no means is a perfect tool.²¹ As a result of a quickly computed analysis the outcome is usually over-simplified, incomplete and approximate.²¹ However, the SWOT should be kept simple and complex over-analysing avoided.²¹

In order to get the most aid out of the SWOT method, it is of essential nature that the findings are backed-up with facts and figures. A slapdash analysis is not usable for any purpose. Also the elements that are included in the SWOT table should be explained so thoroughly that there would be no room for misjudging a factor under wrong title.²¹

In practice, it is sometimes hard to determine whether a particular feature should be perceived negative or positive.²¹ The final authority to decide whether an internal element is a strength or a weakness, or an external element is an opportunity or a threat, is left to the interpreter's discretion. In some cases the internal and external elements are neither helpful nor harmful, which may cause headache to the interpreter.

In this thesis the concept of SWOT tool is stretched to suit the goal of the work better. Other than organizations, the SWOT analysis can be exploited as the means of investigating products as well, but in this research, the analysis is done over product's use in an organization: Videotel NVOD G2 in Aboa Mare. Given the circumstances, the Strengths and Weaknesses are characteristics of the Videotel program whilst the Opportunities and Threats are in relation to the program's use in its environment and thus reflect the Aboa Mare's aspect in the use.

3 Introduction of the research method

The research was carried out by gathering answers to two separate online questionnaires of which the first, Videotel Questionnaire for Aboa Mare Students 2015 (Appendix I) was designed for the purpose of receiving subjective data basing on experiences and beliefs of the Aboa Mare students comprising both students enrolled in Novia and in Axxell. Responses were welcomed from all students regardless are they listed present or absent in Aboa Mare.

The latter of the two questionnaires, Videotel Questionnaire for Aboa Mare Teachers 2015 (Appendix II) was composed for serving the same purpose but from the teachers' point-of-view. The Aboa Mare teachers in Philippines were not included in the survey population.

The scientific background for the investigation lays on the widely recognized fact of democratic nature according to which the power is in numbers. The more support an argument receives, the better it represents the general opinion.

Both qualitative and quantitative methods were utilized in the questionnaires in order to achieve as clear an overview of the investigated subjects as possible. In practice this means that the types of the questions varied in a way that a group of the questions were able to be answered only affirmatively or negatively, some of them were multiple-choice questions, and some were Likert scale questions that could be answered by choosing the most suitable number on a scale from 1-5 the extremes locating at options "1" and "5". Thus choosing answering option "3" would represent a neutral response.

The Likert scale questions gathered quantitative data: raw data, which is in numeral form. On the other hand, qualitative information was received through "Free comment boxes" that were laid after a selection of questions for the purpose of gathering additional data over the relevant subject. These qualitative answers were considered especially valuable for the questionnaire, because they give the respondents the freedom to express their opinions verbally. After all, the research does base on believes and experiences on the side of the facts.

In case free comments are included on the side of the numeric data, both favourable and unfavourable aspects are introduced, if applicable. The citations are modified with their language for misspellings but their content and idea has not been encroached on.

The research method of investigation through online questionnaires were determined to be the most convenient. Accepting answers, i.e. raw data, to the questionnaires demanded no effort on the researcher's side during data gathering after the questionnaires were put online.

The raw development and later the refining of the questionnaires to their final brilliance, which was carried out in close co-operation with a few fellow students and work's supervisor Mr. Björkroth, did demand deep concentrating but after that the process required only advertising effort on the researcher's part. This was deemed practical, since quite unfortunately the research for thesis was not the only work on the researcher's plate and therefore could not deserve all the attention it probably would have gotten otherwise.

Google Forms was chosen for the online server for the questionnaires due being greatly customizable and free-of-charge. The questionnaires were put online on the 5th of May 2015 and the respondent groups were informed about the study by the Aboa Mare Student Affairs Office through group e-mails the staff sent to all Aboa Mare students and teachers. In order to receive more answers at later moments in time, the links to the questionnaires were shared multiple times afterwards via e-mails. Facebook was exploited as a modern channel of advertising as well.

On the 27th of July 2015 Videotel Questionnaire for Aboa Mare Students 2015 had gathered 60 answers and was drawn off in order to start interpreting the results. The teachers' questionnaire, Videotel Questionnaire for Aboa Mare Teachers 2015, was put offline on the 13th of September for the same purpose. 10 respondents contributed in the latter and although it may appear insufficiently small group it represents, in fact, relatively bigger portion of the number of teachers in total than what 60 is of the total amount of students.

Answering rates forming the samples were:

Students: 60 answers / Students total: 504 → 11.9 %

Teachers: 10 answers / Teachers total: 23 → 43.5%

The total amounts of teachers and students in Aboa Mare are discussed in the 3rd paragraph in the chapter "2.2 - Aboa Mare".

3.1 Topics of interest

The topics of interest, or research topics, are in principal the same in both of the questionnaires. Nevertheless, some subjects are either not applicable nor of relevance to the other group of respondents and are therefore excluded. Under the accompanying listing, the topics are introduced with helping hint questions, the purpose of which are to support the interpreter to receive understanding over the given research topic.

The topics were selected amongst all possible topics in regards to Videotel, CBT programs, and teaching by carefully evaluating their relevance to the study. The assessment based on unofficial non-recorded non-formal oral feedback from the respondent groups before the selection of the topics.

Basically one could argue that the matters, to which the study focuses on, are of the greatest interest, since they represent the topics that are relatively widely discussed about by the students and the teachers in general regardless of the thesis. Logically the less concerning topics deserve less or no attention in this study.

Some research topics divide into several arguments in the research. These arguments are represented subsequently with each other in the 4th chapter of the thesis discussing results.

The topics of interest in the questionnaires are:

- Answerers' background

Who answered to the questionnaires? What was their background?

- Familiarity with Videotel and/or Amount of received information about Videotel

Are the answerers familiar with the program and/or have they gotten enough information about it in order to truly utilize it?

- Use rate

Which percentage of the answerers have actually used the program? In what way have they used it?

- Voluntary use

Do the students use Videotel voluntarily outside of compulsion? Do the teachers think so? What do the respondents think about the possibility of voluntary use of the program?

- Tests

Are the tests too easy or too hard, or are they even of relevance? Do the teachers check that the students have passed the tests? What do the respondents think about the tests?

- Cheating

Do the students tend to cheat in Videotel? Why? What does it mean? Do the teachers know it is possible? Do the respondents have any opinions about cheating?

- Technical difficulties

Are there any technical difficulties in Videotel? If so, what kind? Can they be of so severe sort that the use of Videotel is prevented?

- Where to use Videotel?

If Videotel should be used by the students, where would they rather use it?

- Teaching methods in Aboa Mare

Is there enough of anything or too much of something? What methods do the respondents wish more or what do they not want to have so much?

- A complete course or a part of a course in Videotel?

Should Videotel be used in Aboa Mare? If so, should complete courses be available on Videotel or only parts of courses?

- Same course with and without Videotel

If the teacher have given the same course with and without Videotel, which is better? Can the results be compared?

- CBT vs. ordinary teaching

Is it reasonable to fear that CBT could replace teachers? Why? Why not? Can CBT replace a bad teacher? Why cannot CBT replace a good teacher?

- Videotel – an opportunity or a threat?

Is Videotel considered to be a threat or an opportunity to teaching? Does it support teaching or does it replace the teacher?

- Videotel's utilization rate in Aboa Mare

Is Videotel utilized enough, too little or too much in Aboa Mare? Should it even be used in the first place? Do the respondents wish more Videotel education to Aboa Mare?

- Positive and negative sides

What are the positive and the negative sides of the program?

3.2 Validity and reliability

Validity refers to the extent to which a measurement, a conclusion or a concept is well-founded, meaning findings should correspond to the reality accurately. If you measure something, the validity is considered to be the accuracy of the measurement. When talking about a study, the validity describes if the study can scientifically answer to what it is intended to answer.

The concept of reliability, in turn, belongs usually in the methodology of quantitative research. When one intends to measure something, how reliable is the result, if it is not measurable? The result one receives as a response to a question might differ due to a wide range of adverse factors. For example, the researcher might have a negative impact on the measured matter.

Concerning this particular research, the highest validity and reliability would be reached with accurate, simple, fair, and objective investigation. The questions presented in the questionnaires (Appendices I and II) are developed to be as simple as possible, do not lead the respondent to any direction, nor do they advertise one option over another. The questionnaires were deemed logical and their extent not either too narrow or too wide according to the fellow students who helped in developing them.

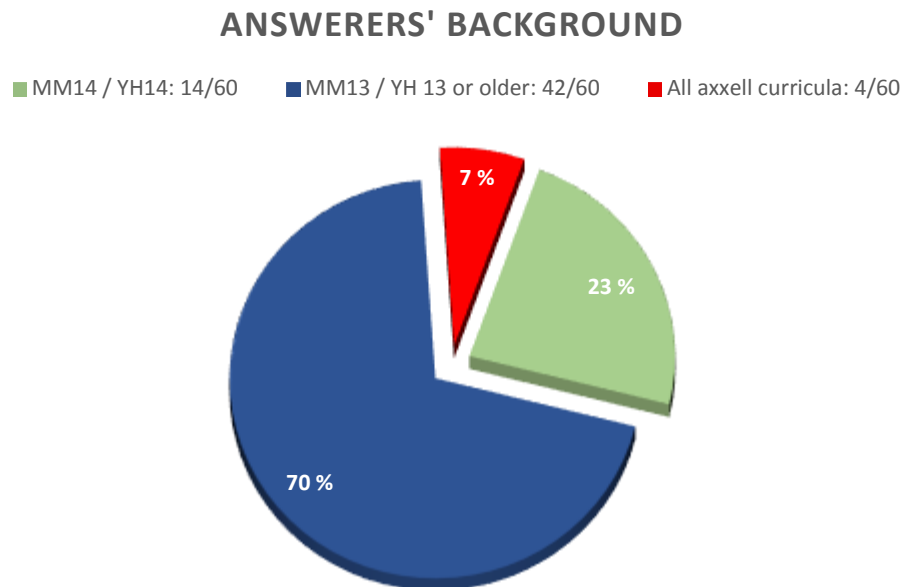
Interpreting the results is also carried out in a manner that leaves no room for researcher's personal interests. Only facts are discussed and if there are any conclusions drawn, they are logical or lean on widely accepted common sense.

What could have an impact on the validity and reliability of the study are the sample sizes. They could have been greatly larger in order to correspond to the total populations better. However, every reasonable effort was done in advertising the questionnaires. Perhaps more answers would have been received if the questionnaires were posted online for a period of time other than summer, when the population do not probably tend to concentrate on school related matters so much as during the academic year.

4 Practical part: The results and their interpretation

4.1 Students and their background

The Videotel Questionnaire for Aboa Mare Students 2015 (Appendix I) gathered altogether 60 answers which all were anonymously given. Nevertheless, separation was made in regards to the curriculum followed by the student and to the fact whether the student was enrolled in Axxell or Novia. Following statistics apply to the answerers' background:



The number of the answers of the students with MM14 / YH14 and of the students with MM13 / YH13 or older curriculum are in balance. It can be assumed that approximately 14 students from each year class answered the questionnaire since the degree programs of Maritime Management and Sjökapten on YH side both last 4.5 years - presuming that there are no delays in the studies - meaning that there should be 4 active year classes all the time on the Novia's side in Aboa Mare. Thus the respondent group represents the research population on Novia's part sufficiently.

It is not relevant for the study which year the MM13 / YH13 or older -group students began with their studies. When it comes to separation of curricula, this research only aims to find the differences between MM14 / YH14 and MM13 / YH13 or older -groups.

Separation to these groups was chosen in order to spot differences in the Videotel attitudes between the newer and older curriculum students due to their differing Videotel use habits.

The answering rate of Axxell students was insufficient. The group does not form a strong sample of the Axxell students in total and thus focusing on these results is not convenient. However, the Axxell students are included in the respondent group of the Aboa Mare students.

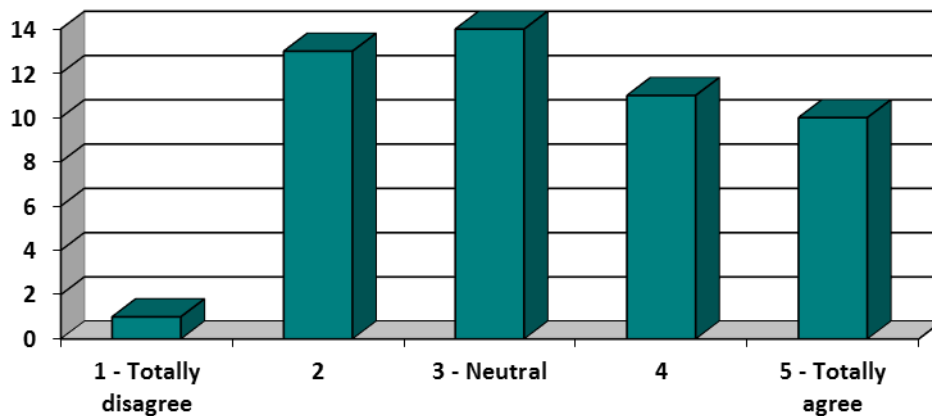
The reason for low answering rate on Axxell's side might derive from the fact that second degree students do not tend to read their e-mail on as regular a basis as the third degree Novia students who, at least to some extent, complete courses in summer time as well.

It shall be noted that the time period under which the questionnaires were to be answered was from the beginning of May 2015 until late July 2015, when second degree students were on vacation or doing their onboard training at seas with no or limited internet access.

4.1.1 Amount of received information about Videotel

The respondents assessed the sufficiency of the received information about the program on how it is utilized as a part of the maritime studies in the following way on Likert scale.

Argument: I have gotten enough information about Videotel and its use from the Aboa Mare staff.



The distribution of the answers is virtually even between options “2”, “3”, “4”, and “5”. “3” being the single most favored option, the majority of the students believe that they don’t agree nor disagree that they have gotten enough information about Videotel and its use from the Aboa Mare staff.

Furthermore, “2” and “3” together represent greater group of the answers than “4” and “5” together. This can be interpreted so that most of the students do not agree, either partly or totally, that the Aboa Mare staff has provided with enough guidance to the Videotel platform and its use. It must be noted also that the neutral answerers do not believe to have received too little information either.

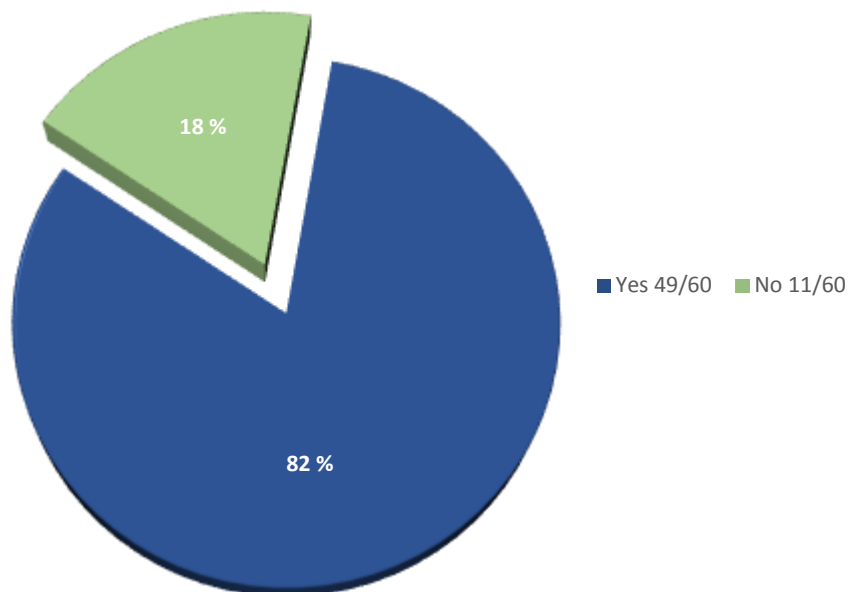
Only one student of the sample totally disagrees to the statement and thus thinks that the information given is not adequate.

4.1.2 Use rate

Since it is vital for the purpose of developing the use of Videotel in Aboa Mare that the answerers of the questionnaire have already used the program, the unwanted answerers - in this case the students with no Videotel experience - must be excluded from the final sample.

Of the total sample of 60 students, 49 students have in fact used Videotel. Therefore the size of the final sample is 49 representing 81.7 % of the total answers by the Aboa Mare students as illustrated in the piechart below.

Argument: I have used Videotel.

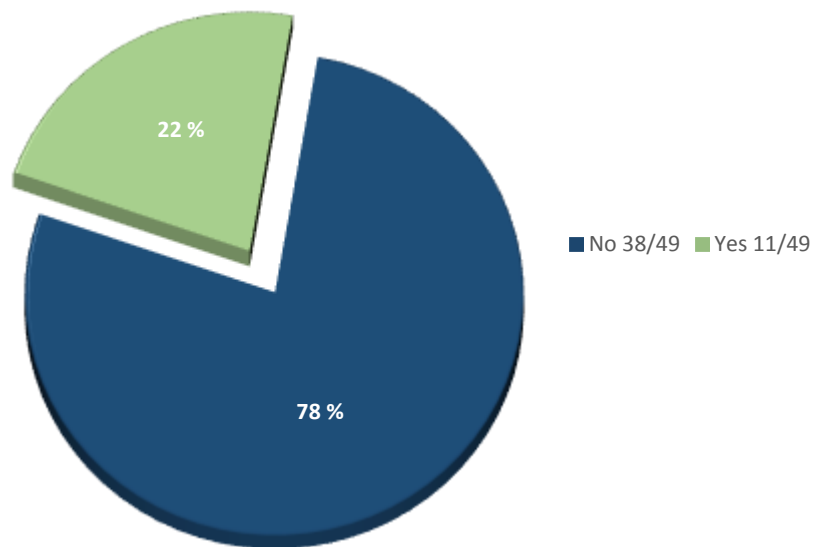


All the upcoming topics discussed under the chapter 4.1 were only available to those 49 respondents who actually had used Videotel.

4.1.3 Voluntary use

The topic aims to find out if Videotel is utilized in Aboa Mare voluntarily – without compulsion – as in order to support student’s independent learning.

Argument: I have used Videotel outside of Aboa Mare courses.



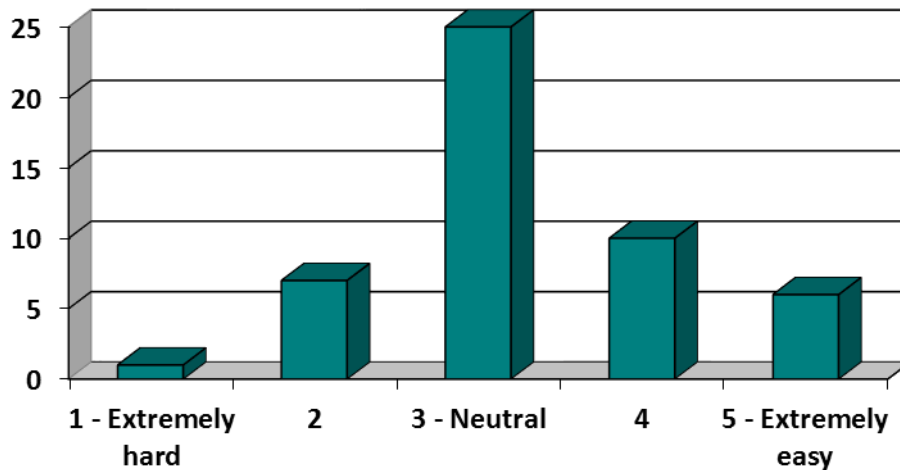
The results argue that less than one fourth of the answerers have used Videotel voluntarily outside of Aboa Mare’s courses. The small percentage of the positive answers might be in connection with the fact that the students do not believe to be fully informed about Videotel’s use and possibilities as shown in the paragraph 4.1.2.

A student highlights the matter with the following comment: *“I don’t know if it’s possible”* and another one points out that if Videotel worked outside the school premises, they might use Videotel in order to find additional information about the relevant subject: *“No, though I would if Videotel program would work in every computer at school... Or even better, access from your own computer from the couch at home”*.

4.1.4 Tests

When asked whether the tests and examinations in the end of the Videotel modules are experienced too easy or too challenging, the results proved as follows on Likert scale:

Argument: I think the tests / examinations at the end of Videotel modules are



A clear majority (25/49) believes that the tests are neither too hard nor too easy and have chosen the neutral option “3”. In other words, the degree of difficulty is seen convenient. On the contrary, the results mean that the minority of the Aboa Mares students sees the examinations either too easy or too hard. Disregarding the neutral option, the options “4” and “5” put together gathered more answers than the options “1” and “2” (16 vs. 8 answers respectively) suggesting that the tests are rather on the easy side to most students than hard.

The Free comment section gathered some valuable opinions regarding the tests: *“What’s the use when the exam run is the same as the test run with exactly same questions?”* a student wonders and points out the fact that one can exercise for the test with exactly the same questions. This might not serve the purpose of learning as well as it might encourage the students to learn the correct answering pattern by heart.

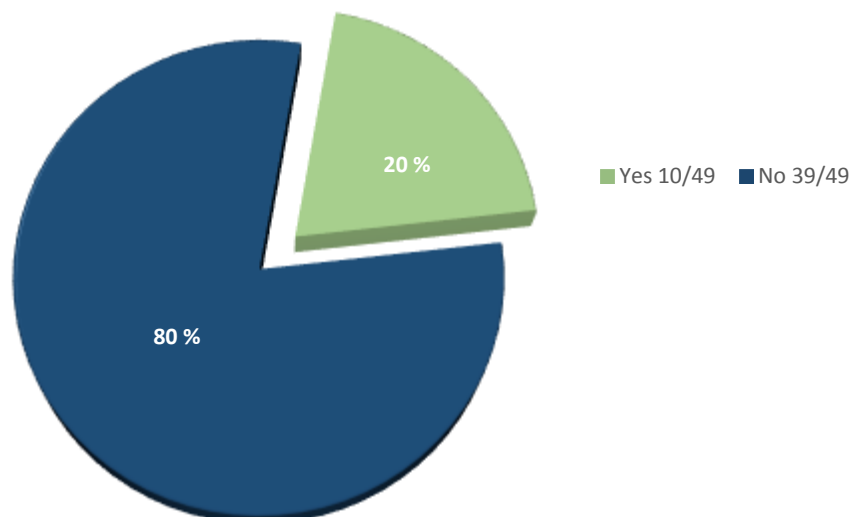
Another commenter speculates the relevance of the questions in the tests: *“Mostly to my mind they ask questions that have to do with something else than if the student understood, comprehended, or picked up the main things from the lesson movie. So I think they’re not filling their job.”*

4.1.5 Cheating

It is widely known among students that there are ways to pass the Videotel modules with less effort. The goal of the topic is to increase discussion about the possibility of cheating, which can be seen as a threat for the use of the program.

In the question regarding cheating the respondents in the sample were able to choose either “Yes” or “No” as an answer to the question if they have cheated in using the program. The answers distributed as follows:

Argument: I have cheated in Videotel in order to pass.



As seen from the diagram, approximately 4/5 of the answerers have not cheated in Videotel whereas the remaining group of approximately 1/5 has. It must be considered vital as per the topic that not everybody describe the concept of cheating in the same way. It cannot be stated what is and what is not considered unfair in terms of cheating, since someone might that it is acceptable to keep a video only running in the background and do something else, whereas someone else might believe that doing the modules with a friend is cheating, for instance.

A student comments the matter and describes how they have cheated: *"I have moved the cursor a few times to the end of the videos to proceed to questions or to tests if I have known the subject well enough beforehand"*.

Another student makes a point regarding the test runs that are taken before the actual test: *"Testejä edeltävät harjoituskokeet voi tehdä useampaan kertaan ja niissä on samat vastaukset kuin virallisessa kokeessa. Käytännössä et siis opi muuta kuin muistamaan oikeat vastaukset oikeisiin kysymyksiin."*

The same answerer also highlights the possibility to abuse the feature of adding additional students to the same video: *"Toisen opiskelijan lisääminen katsottuun videoon on aika kyseenalaista. Kuka on katsonut videon ja kuka ei?"*

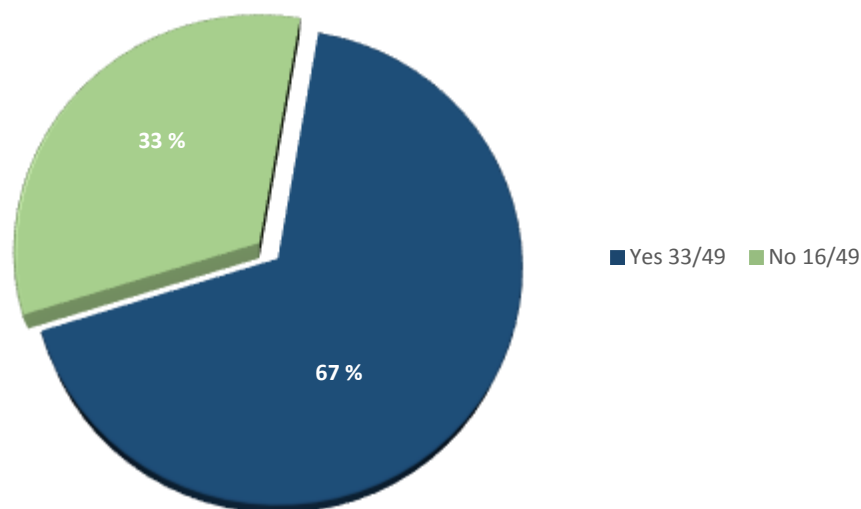
A solution is also offered to the problem by a respondent: *"To prevent students from cheating in Videotel and actually paying attention to it (the videos), teachers should make a written test afterwards from the topic."*

4.1.6 Technical difficulties

This topic of interest deals with the technical obstacles, the presence of which are possible in CBT programs and in computers in general. There are two arguments under this topic and the latter was only available for those who responded affirmatively to the first one. The technical difficulties to which the topic refers are presumed to be Videotel's internal weaknesses, referring to errors in code, or depending on the school's computers hardware or software.

In the first argument the respondents had two possibilities to choose from: "Yes" and "No".

Argument: I have met technical difficulties with Videotel.



The pie chart illustrates that 67% (33/49) of the students have met technical difficulties with the program. In other words, approximately one third of the students have averted technical problems.

The students shared actively their experiences on the “Free comments box” which was inserted to supplement the research topic. Several of the commenters draw attention to the logging problem:

“Eihän se aina toimi, eikä anna kirjautua sisään.”

“Sometimes I have to log in several times before it keeps me logged in.”

“Settings are not in place resulting in not being able to login - need to login several times before the program works.”

Also one major issue, according to the comments, seems to be that the program does not work on all computers:

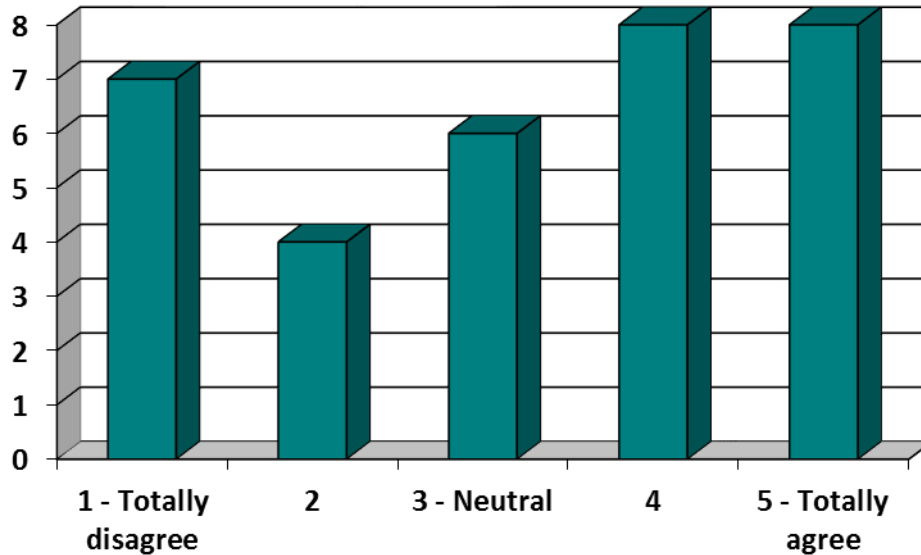
“Videotel doesn't run in every computer at school. And when it runs there might still be difficulties to view some material.”

“Definitely the biggest issue with the whole Videotel thing! Make sure that the programme is running on ALL the computers in school, not only on few of them. It's so annoying when you want to watch something but you spend the first half an hour with searching for a computer that is able to play Videotel since most of them are giving you the friendly advice that there's an Adobe Plugin missing (and no, you cannot just install it) Annoying!”

One of the students suggests a solution to the difficulties but does not argue their opinion: *“Due to the technical difficulties with Videotel, it would be better to be able to use it at home also.”* Possibly the commenter presumes that it is the fault of the school’s computers that Videotel does not function properly.

On the second argument the students were to choose the most suitable option on 5-point Likert scale. This follow-up question was only available for the group of 33 respondents - students, who have met technical difficulties with Videotel.

Argument 2: These technical difficulties have prevented my intentions to use Videotel totally.



The answers of the respondents were distributed along the options relatively evenly, although the options “4” and “5” were chosen by the most, 8 respondents respectively. The total amount of answers under options “1”, “2” is smaller than the total amount under “4” and “5”. 16 persons in total agree on some level with the argument and 11 persons on some level disagree.

The neutral answers, the amount of which are 6, suggest that there have been some technical difficulties but the answerers do not agree nor disagree with the argument, or that the answerers for one reason or another cannot answer to the question.

Some comments were given to support the quantitative data with details basing on negative experiences:

“At the time yes, when no one knew what was the problem, including teachers.”

“Got frustrated. Tried again next day.”

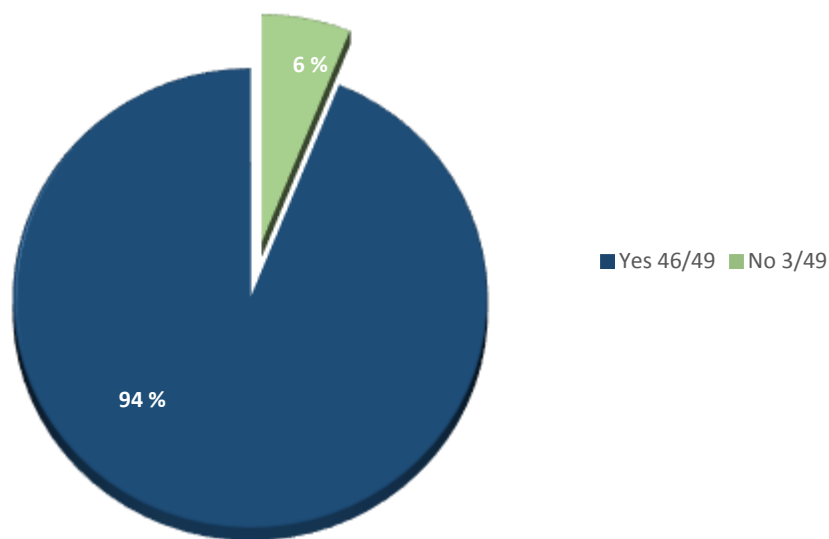
“Not totally, but frustration has been occurring.”

4.1.7 A complete course or a part of a course in Videotel?

This topic handles the matter how the students believe Videotel is best utilized in Aboa Mare as a teaching means. There were four arguments in the questionnaire concerning the given topic of interest, of which the two first survey the background of the respondent group to editorialize in the matter, and the two latter discuss how the students believe the Videotel CBT platform is best utilized as a part of the maritime studies in Aboa Mare.

In the first question of the series the respondents were able to pick either “Yes” or “No” to the argument.

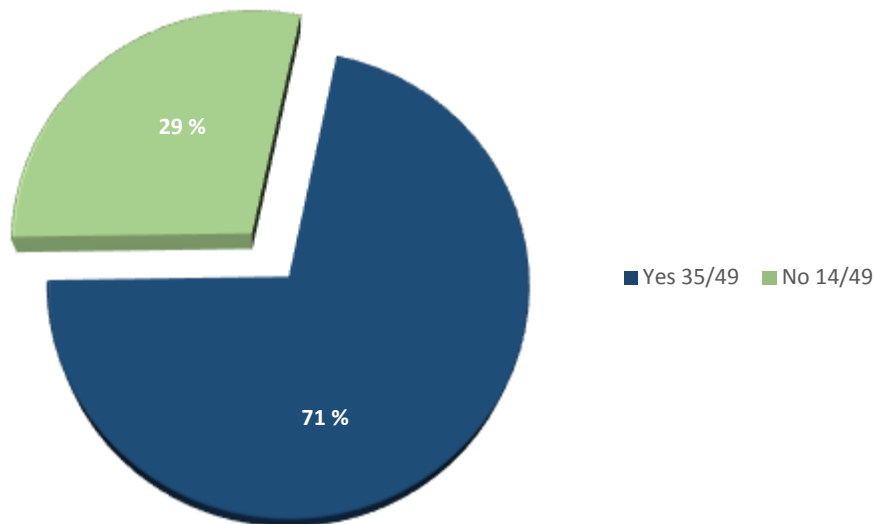
Argument 1: I have taken a course where Videotel is used as a part of studies.



According to the answers only few students, approximately 6%, have not used Videotel as an additional means to a course. On the contrary, almost everybody (46/49) of the sample has.

As a follow-up question the students were presented the following argument:

Argument 2: I have done a complete course in Videotel.

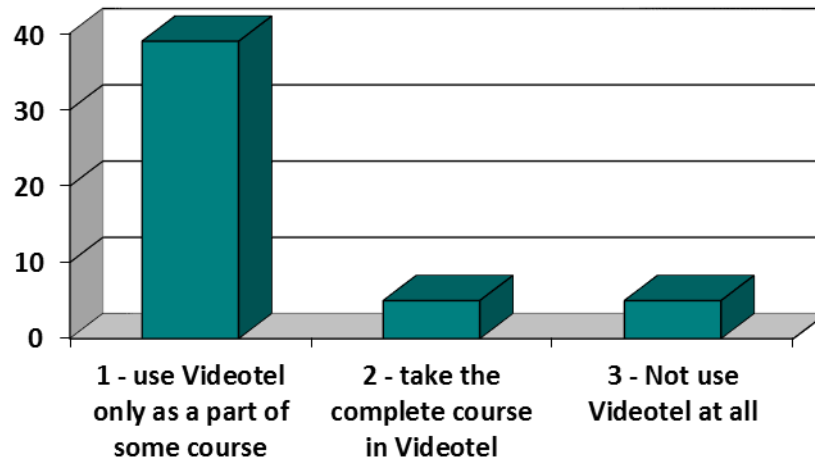


The study argues that a little over two thirds (35/49) of the students have taken a complete course on Videotel. In comparison with the Argument 1 under the topic, more students have used Videotel only as a part of course than taken a complete course with the platform, according to the results.

The two first arguments serve as a background for the following arguments. It is important to know how the students have used the program for the sake of understanding the next results more accurately.

In the third question of the series under the topic discussing whether Videotel should be used as a part of courses or as a platform on which complete courses can be taken, the students were asked to choose the most suitable continuation option in relation to the given argument.

Argument 3: I believe it is best to



According to the statistics 44/49 students see that Videotel should be utilized in some way. About 88.6 % of those in favour of Videotel (44/49) believe that the platform should only be used as an addition to the traditional courses. A clear minority of 11.4 % of the students, who think that Videotel should be used in Aboa Mare, consider that Videotel should be used as a platform on which complete courses could be taken.

Free comments to this topic were actively given.

"Only small parts should be taken in Videotel. It (Videotel) leaves out the possibility to have conversations and Q&A." A student points out and believes that a good way in learning is a continuous discussion and questioning between teachers and students. With Videotel this is not possible.

Another student has noticed the same and shares their valuable opinion: *Videotel is one good way to get information, but should never be the only way and learning should never lean on it. I see it (Videotel) should be rather for support material and for memorizing important things than the first source of information. Videotel does not let the student really study the thing, doubt or question."*

One student agrees to the latter: "Videotel should be used only as a complement to the studies. Especially when watched together in class and the subject being chatted afterwards. Videotel is a good method when not used too extensively as a "Lazy lecturer's tool"."

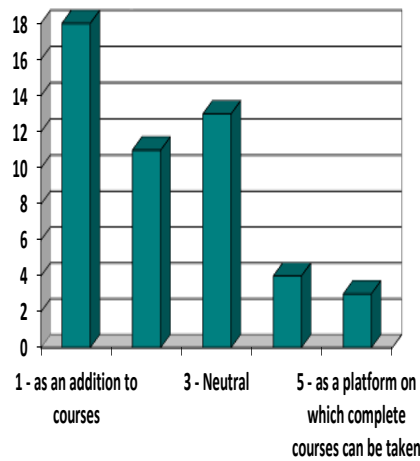
A common opinion shared in the free comments to this topic is that Videotel should be used only on side of classroom teaching. However, it is not enough that the students are only commanded to watch the videos, some of the students point out. The topics of the relevant videos and modules should be furthermore discussed in the classroom according a student's suggestion: *"It would be nicer to maybe watch some videos in Videotel and then discuss about it in class than having a whole course just from watching clips"*. The commenter thinks that passive watching is not as efficient as active processing.

It is also suggested in the free comments that Videotel could be used as a source for writing essay or similar. Thus the processing of the information received from Videotel would be active rather than passive and the learning results might be better.

5/49 answerers, representing an obvious minority, think Videotel should not be used in any way. One of these students comment: *"I would personally rather have an experienced teacher having the course than sitting brain-dead by a computer screen"*.

The fourth question under the topic discussing the use of Videotel handled exactly the same thing as the third, but with the difference that the possibility to choose “not to use Videotel at all” was excluded. These two questions were not subsequently asked in the questionnaire in order to not lead the answers in any direction. The students were asked to choose the most suitable option to the given argument.

Argument 2: Videotel should rather be used



The answers were distributed along the 5-point Likert scale as shown. According to the answers, 31/49 students believe that Videotel should be used as an addition to the courses, meaning that using Videotel should not take anything away from any other means of teaching. Of these 31 answers 18 students chose the option “1” and 13 chose the option “2”.

Approximately 25% of the students picked the neutral answering option “3”. This could suggest that the students want to use Videotel in both ways, or they do not have a clear opinion about the matter. What is more, it could also mean that the students would like to use Videotel in neither way, since it was presented under Argument 3 in this series that 5/49 (10%) of the students would not like to use Videotel at all.

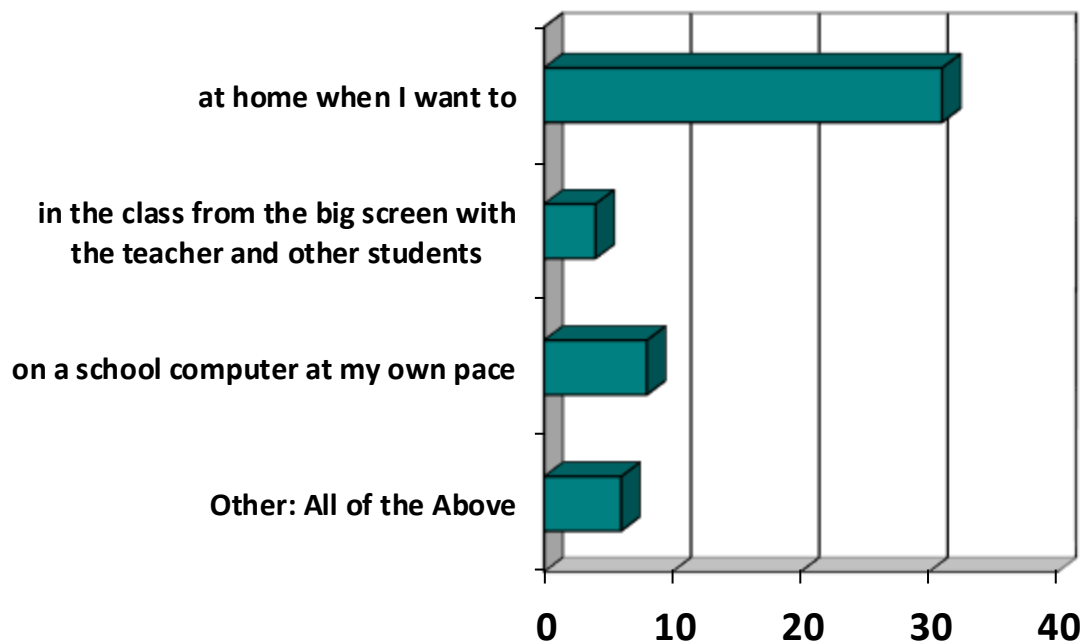
Answering options “4” and “5”, suggesting that Videotel should be used as the sole means for some courses in Aboa Mare, were chosen by approximately 14% (7/49) of the students

of whom three chose the option “5”. Put simply, only about 6% (3/49) of the respondents think that Videotel should not be used as a part of any courses, rather as a platform on which a complete course can be taken.

4.1.8 Where to use Videotel?

This topic discusses where Videotel should be used and the students were asked to pick the most suitable option or suggest their own solution. Since freedom in use is characteristic for CBT and WBT programs, the question aims to find what location is considered to best serve the purpose of independent learning.

Argument: If Videotel is used as a part of a course, I would rather use it



An obvious majority of 63.3 %, nearly 2/3 of the answerers, would use Videotel at home rather than in the school building. Nonetheless, this is not possible since the Videotel

NVOD server physically locates at Aboa Mare premises and works in Aboa Mare Local Area Network.

The second biggest group representing approximately 16% (8/49) of the student respondents would rather watch the videos on their own pace on a random school computer. According to the responses students clearly give value to the freedom when it comes to the use of Videotel, since only about 8% (4/49) of the students would primarily want to use Videotel together with a teacher and other students in a classroom.

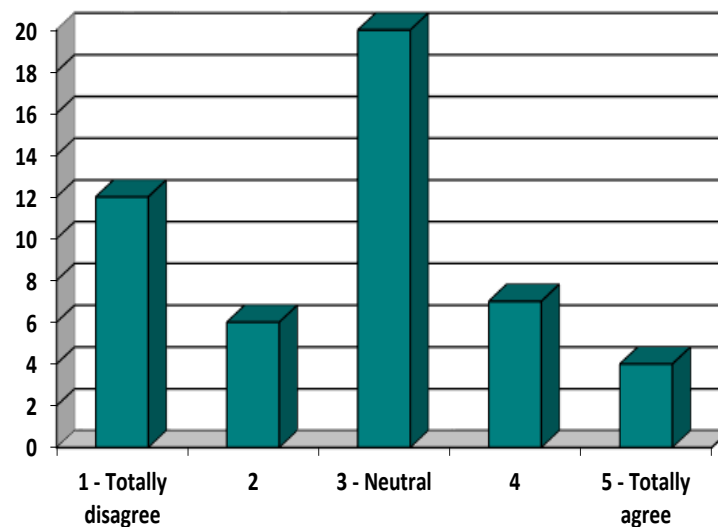
Furthermore, the students had the possibility to suggest their own ideas as answers to this topic under the answering opportunity of "Other" and as seen from the diagram, about 12% (6/49) of the students did. These students are in favour of all of the suggested ways to use Videotel.

One of the respondents clarifies by sharing a more detailed answer: *"Depending on the situation: in class from a big screen and at home. Not at school in an IT class, as it is very uncomfortable and also annoying for the others working in the same room."*

4.1.9 Videotel's utilization rate in Aboa Mare

The objective of the research topic is to find whether the students believe that Videotel is utilized sufficiently enough in Aboa Mare or not. The respondents were given 5 alternatives from which to choose the most suitable option to the given argument.

Argument: I wish more Videotel education to Aboa Mare



The responses show that a clear majority of 20/49 (40.8%) students do not either agree or disagree with the argument that Videotel should be utilized more in Aboa Mare. This could suggest that the amount of Videotel education is sufficient currently or the students do not have a clear opinion to the topic.

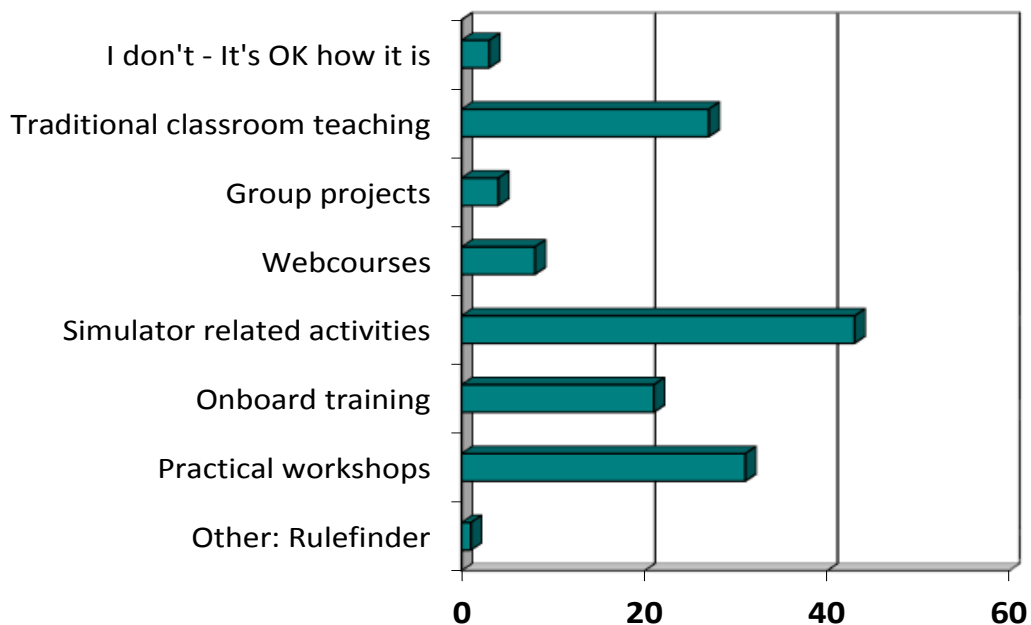
18 out of the 49 respondents (36.7%) totally or somewhat disagree with the argument. This could be interpreted so that the respondents might believe that the amount of Videotel education is too high at the moment or at least they do not want more of it by any means.

11 out of the 49 students (22.5%) partly or totally agree with the argument. Only 4 respondents totally agree, while 7 somewhat agree. According to this group representing 22.5% of the total population, the amount of Videotel should be increased in Aboa Mare.

4.1.10 Teaching methods in Aboa Mare

This topic deals with the variety of available teaching methods that could, for example, be used as a tool of instruction as a part of maritime studies in Aboa Mare. The students were able to choose as many methods as they thought would best serve the purpose. The options that are listed as default are chosen from the grounds of Aboa Mare Quality Systems Handbook chapter 6.0 and their objectives are showcased in chapter “2.2 Aboa Mare”.

Argument: I think Aboa Mare should provide more with some other means of teaching and learning (than Videotel), what?



If the respondent chose an option to this question, it means that they wish more of that particular means as a method of instruction to Aboa Mare. On the contrary, if they did not choose a particular option, it can be interpreted that they are satisfied with the current

amount of supply relating to that method or even think that the particular means is used too much.

Only 3/49 of the students are satisfied with the current distribution of teaching methods that are utilized in the Aboa Mare courses. On the other hand, a greater share of 46/49 of the students think that there is at least some instructional method that could be increased or decreased.

The diagram shows that 43/49 of the student sample wishes more Simulator related activities to Aboa Mare, whereas only 6/49 consider the amount sufficient or too high. Practical workshops are also highly anticipated as 31/49 of the sample wish more of them. A little over half of the respondents, 27/49, stand behind the belief that the amount of Traditional classroom lecturing should be increased.

21/49 of the answerers think that more time should be spent onboard actual vessels in terms of Onboard training. Turning the fact the other way around, the sea time as a part of Aboa Mare studies, which is 360 days of guided onboard training, is seen sufficiently high or even too high by 28/49 of the respondents.

More Webcourses should be provided according to 8/49 of the students. Increasing the amount of group projects is also demanded by a group of 4/49 of the answerers. However, in both cases the majority of the respondents, 41/49 and 45/9 respectively, believe that the amount of Webcourses and Group projects offered in Aboa Mare are ample.

The answering option “Other” was put in place so that the students could suggest some teaching methods of their own proposal, thinking “outside of the box”. Only one suggestion was given, and the student wished more use for a PC-based software system called “Rulefinder” to Aboa Mare.

The topic aroused a fair amount of discussion in the “Free comments” section from the students. Accompanying a selection of non-formally quoted statements regarding the used teaching methods in Aboa Mare:

“Group work only if applicable. More focus on simulator training.”

“Web courses are a stumbling block in our school. I can see their idea in theory but in practice, a web course usually means a course put up from really old and out-dated material - A web needs constant updating, and active participation of the teacher during the course. Now it is mostly used to move the responsibility of learning completely to the student's shoulders and to give the lecturer more spare time at work, so that he only needs to read through the assignments (or sometimes not even this, as the whole class seems to get the same grades at the same time, though some of the class members haven't even sent the assignments yet) after some deadline ridiculously 5 months from the beginning.”

“The education has too much webcourses. Learning by hearing from experienced teacher is always better than reading from internet with a risk of focusing in not so important material.”

“Many crewmembers on several ships have told about their concerns of disappearing seamen's practical skills. Could the teaching at school concentrate a bit more on the practical matters, to support the onboard training which is an enormous part of the studies?”

4.1.11 Videotel NVOG G2 freely listed positive and negative sides according to the students

Positive:

- *You can easily repeat some important knowledge, like basic COLREGS facts.*
- *Might touch areas and subjects that are not able to learn in school.*
- *Quick, easy, low-cost, no need for personnel.*
- *Selfstudy, easy to concentrate, educational.*
- *Concise and gives you necessary information. Exam to test your knowledge*
- *Open 24/7*
- *Many interesting contents, allows learning at one's own pace.*
- *Very good in general means.*
- *Quick learning; provides the most important details of course material.*
- *Time-saving*
- *It is good but it will be better if it can be assessed at home so that it can be fully utilized. Because, it's quite difficult to come to school only to use Videotel, meanwhile there is internet and computer at home.*
- *Voi edetä rauhassa omaan tahtiin. Videot ovat usein todella mielenkiintoisia. Videotelin harjoitteluosio on todella hyvä preppaus ennen todellisen kokeen tekemistä. Miksei vastaavaa käytetä tuntiopetuksessa ja ns. perinteisissä tenteissä?*
- *Videot ovat tehty selkeiksi, toiston vuoksi ehkä hieman tylsiksi (ei kuitenkaan häiritsevä).*
- *Interesting compared to normal classroom teaching, "havainnollistava", possibility to measure your own skills immediately.*
- *"Really like the program and material found. I can do school work when I want.*
- *If it's a good module, you learn more in a couple of hours than you do in several weeks (in lectures).*
- *Helt bra sätt att lära sig på med video.*
- *Short courses can be done without lectures. Gives freedom to do the courses at my own pace and when I feel like I have time to do them.*
- *Visualisation*

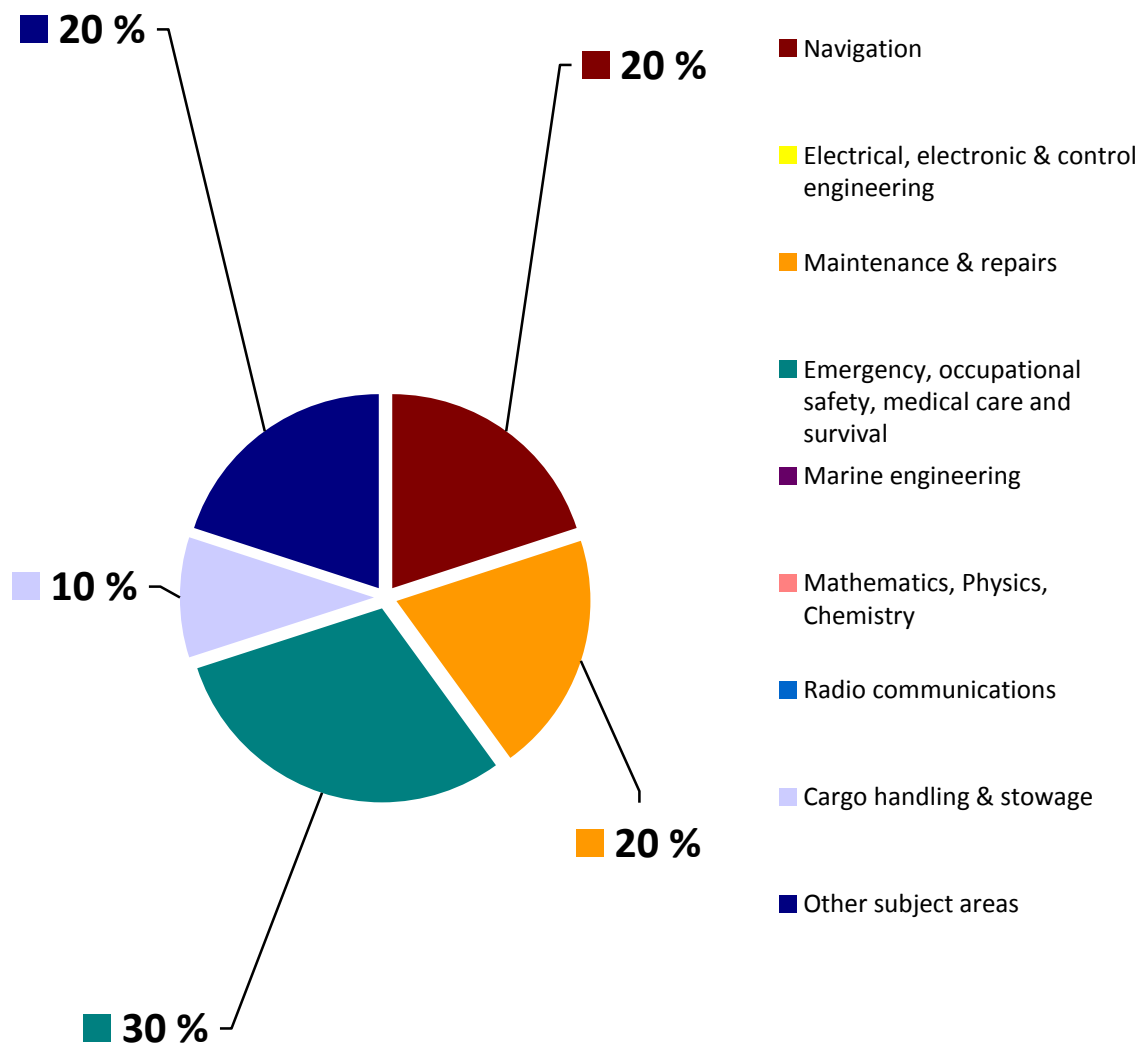
Negative:

- *Sisäänkirjautumisongelmat, videoiden toimivuusongelmat, toimii vain koulun tietokoneilla - olisi hyvä jos voisi myös kotona käyttää.*
- *The fact that one is sitting by a computer screen.*
- *I think the technical problem concerning the login that are encountered should be checked. Secondly, the school computers should be updated regularly to use the Videotel because there are problems with the computers that their Java flash players are outdated and do not support Videotel, so if the computer room is full or busy, one cannot use Videotel. I strongly wish and suggest that Videotel should be allowed to be used at home, to prevent some of these technical inconveniences."*
- *A bit monotonous, and hard to concentrate for longer period of time.*
- *Old-fashioned*
- *Some Modules look like a kid made them*
- *Layout är kanske inte den bästa möjliga*
- *I still have to go to school to do it. Most of the videos are 50% bullshit, too repetitive and too much random video material shown which doesn't really help.*
- *No possibility for Q&A.*
- *No possibility to watch modules at home. Some modules are quite repetitive or rather easy (can be a bit boring).*
- *Can't access to Videotel from my own laptop. Can't access to Videotel from every computer at school. Teachers should view and do the work with Videotel modules before giving them to students to do. Sometimes the modules given are far away from the topic that we are going through in the class.*
- *Haven't done so many courses yet with Videotel. But the technical problems should be fixed as soon as possible.*
- *Stupid and old videos. Videos are like from 90's.*
- *Would be so much nicer if we could also use it at home since some people can learn better there than at noisy computer classrooms - definitely the technical problems that I mentioned before - also the credit handling, I mean from our class we all logged in to our own account but still the final scoring at the end goes to the same one student... looks like he did it 20 times then.*
- *Easy to cheat. Long videos. Videos should maybe be updated.*
- *Technical difficulties, passive teaching method (no conversation, no chance for questions), quite boring*
- *Doesn't work, too easy to cheat*
- *Can only be executed on school computers and technically unstable due to environmental technical problems*

- *Todella suuri huono puoli on se, että sitä ei voi käyttää kotona vaan ainoastaan koululla (näin olen ymmärtänyt ainakin). Jos Videoteliä voisi käyttää kotona, olisi huomattavasti helpompi keskittyä. Tällöin voisi myös suorittaa kursseja esim. laivalla ollessa. Toinen hieman huono puoli on se, että videot ovat usein todella pitkiä (tekee helpommin mieli huijata ja katsoa videosta vain osa). Parempi olisi jos olisi useita lyhyitä videoita!”*
- “All”

4.2 Teachers and their background

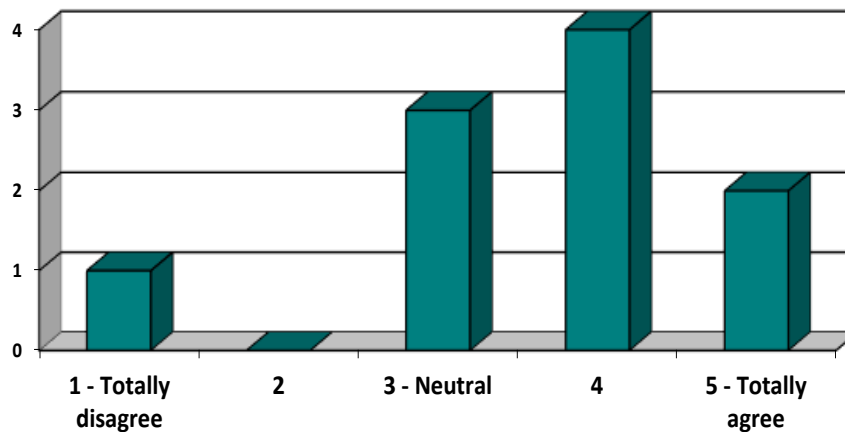
The Videotel Questionnaire for Aboa Mare Teachers 2015 (Appendix II) gathered 10 answers which all were anonymously given. However, separation was made in regards to the field of expertise described by STCW Code. Following statistics apply to the background of the respondents:



4.2.1 Familiarity with Videotel

The respondents assessed their familiarity with the platform on Likert scale as shown in the diagram:

Argument: I am familiar with Videotel and in principal know how the program is used.



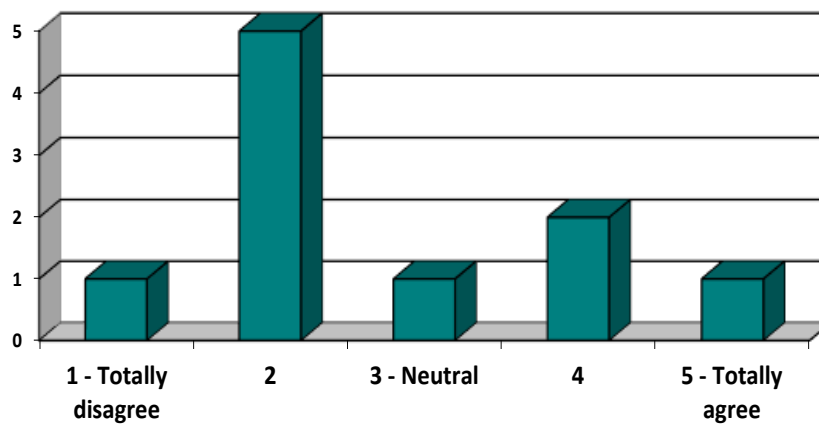
The diagram suggests that only 1 teacher of 10 disagrees with the argument and, on the contrary, 2 teachers totally agree and a majority of 4 teachers somewhat agree with the argument. Three answers are neutral meaning that the answerers do not either agree or disagree. In practice this could mean that the teachers have some kind of an instinct about the use of the program but do not consider to be familiar nor unfamiliar with it.

The majority of the teachers can be argued to be somewhat familiar with the Videotel platform and its use, though not so obviously as possible. It is noteworthy that only 2/10 of the Aboa Mare teachers totally agree with the argument and consider themselves to know in principal how the program is used.

4.2.2 Amount of received information about Videotel

The respondents assessed the sufficiency of the received information about the program and how it is utilized as a part of the Aboa Mare maritime education in the following way on 5-point Likert scale:

Argument: I have received enough information about Videotel and how to utilize it.



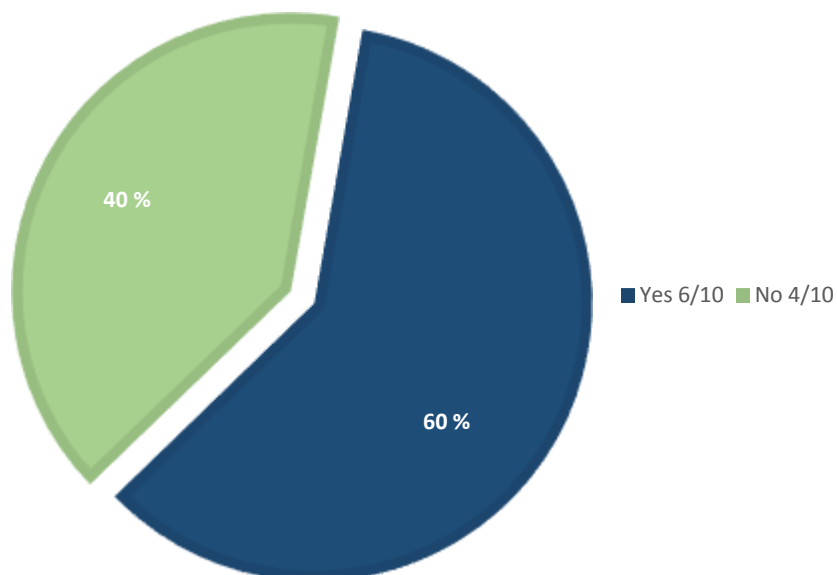
The obvious majority of 5 teachers answered that they somewhat disagree with the argument (answering option “2”) but only 1 teacher totally disagrees (option “1”). On the other hand, only 1 teacher totally concurs to the claim. 2/10 of the teachers somewhat agree that they have received enough information about Videotel.

Not paying attention to the one neutral answer, in total the majority of 6 out of 9 have not been informed sufficiently about Videotel and how it can be utilized as a means of teaching.

4.2.3 Use rate

The Videotel Questionnaire for Aboa Mare Teachers 2015 (Appendix II) was available to all teachers not depending on the fact whether they had actually used the program. This was reasoned due to low total number of answerers in comparison with the Videotel Questionnaire for Aboa Mare Students 2015 (Appendix I). The sample would have been insufficient otherwise.

Argument: I have used Videotel as a part of my course or courses.



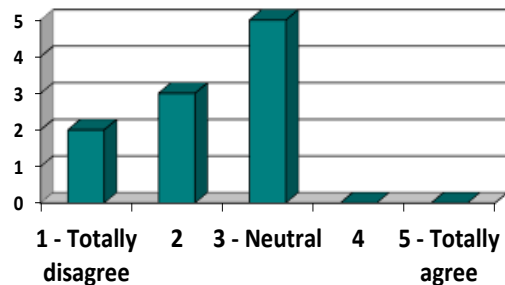
According to the answers the plurality of 60% of the Aboa Mare teachers have included Videotel modules to at least one of their courses.

The majority of the following topics were available to all teachers to answer even if they had not used Videotel CBT in Aboa Mare.

4.2.4 Voluntary use

The topic of “Voluntary use” concerns the use of Videotel outside of compulsion – out of students’ own personal interest. The objective was to chart what the teachers believe about the students’ voluntary use. The answers were given on Likert scale and distributed along options as shown in the diagram:

Argument: I believe that the students voluntarily use Videotel outside of the courses in order to get additional information.



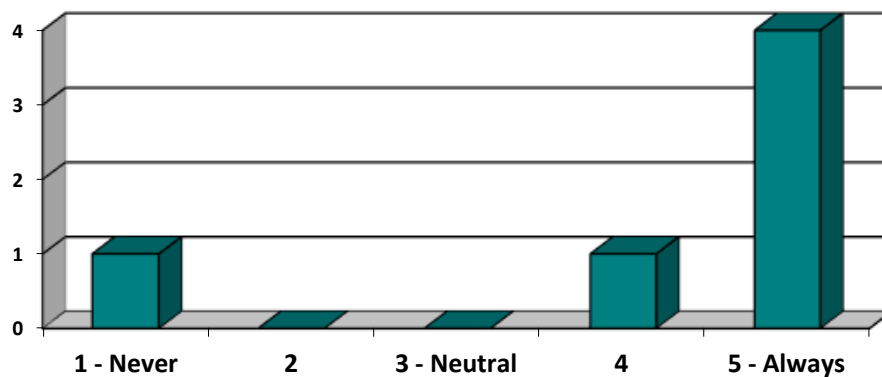
The distribution of the answers suggests that not one teacher believes that Videotel is used free-willingly by the students. However, five neutral answers were given, which postulate that the teachers do neither agree nor disagree with the argument.

A respondent comments to the argument: *”I believe it requires a personal interest or need for more information. I don’t think students in general voluntarily use it”*, and points out that the voluntary use depends on the student’s own accord. Another answerer highlights the possibility to utilize the program: *”I hope so since they are given the chance”*.

4.2.5 Tests

This argument concerning the tests was only available to those teachers (6) who had used Videotel as a part of at least one of their courses.

Argument: If there is a test involved in the Videotel module, I ensure that the students have passed the test.



On Likert scale the answers of the teachers were distributed as shown in the diagram.

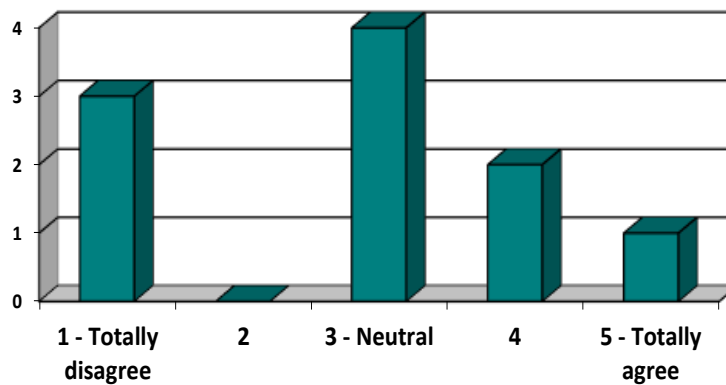
Apart from the one answer of "1 - Never" all the teachers claim that they always verify that the students have passed the Videotel tests. This suggests that the teachers are generally interested in the performance of their students.

It's noteworthy that one of the teachers, with high odds the one answering "Never", commented on the matter: "Not really applicable - The test is not of relevance for me". This might suggest that all the teachers, who think the tests are of relevance, do ensure that the students have passed the tests.

4.2.6 Cheating

Under the topic of cheating two arguments were introduced to the teachers and on the 5-point Likert scale the responses were distributed in the following way:

Argument 1: I'm aware that the students are able to cheat in Videotel.



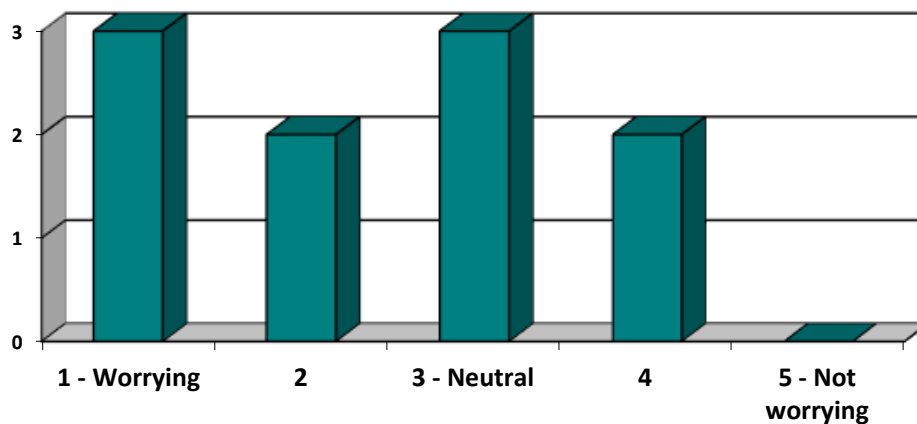
The diagram presents that the most popular choice of answering (40%) was the neutral option. This can reasonably be interpreted to suggest that the teachers are not familiar with the possibility of cheating or do not know if the phenomenon exists.

30% of the teachers answered that they totally disagree with the argument which suggest that approximately 1/3 of the Aboa Mare teachers do not avow Videotel cheating to exist. On the opposite, nonetheless, 30% of the teachers are either aware or somewhat aware of the possibility to cheat.

A questioning comment is given to the argument by a respondent: *"That isn't really relevant, is it? That defeats the purpose"*, as a teacher finds it odd that somebody would even consider cheating, since it is widely understood that cheating does not support learning, rather vice versa.

The other argument under the topic of cheating aims to generate discussion on how worrying the possibility to cheat is. The distribution of the answers is expressed in the accompanying Likert scale diagram.

Argument 2: The possibility to cheat is



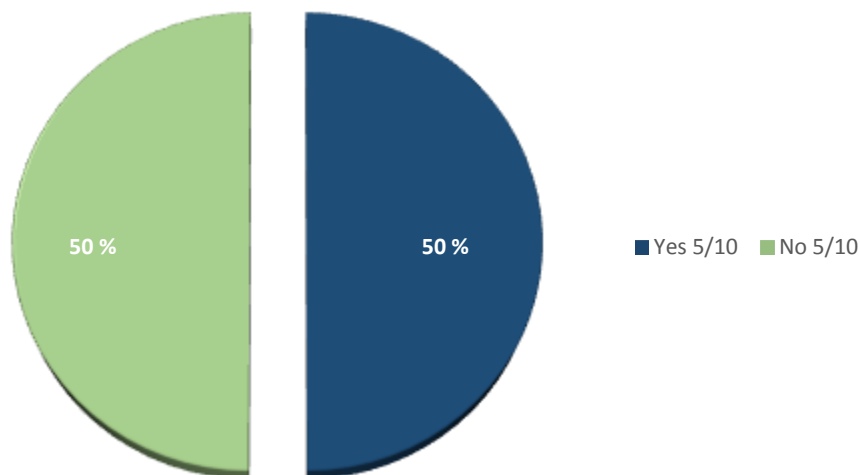
The diagram shows that 50% of the answerers consider the possibility to cheat worrying on some level. 30% of the teachers picked answering option 3, the neutral answer, and do not consider the possibility either worrying or not worrying. Lastly, 20% of the teachers believe that the possibility to cheat is only partly worrying. What is more to note, no teacher answered that the cheating possibility is not worrying at all.

4.2.7 Technical difficulties

This topic of interest deals with the technical obstacles, the presence of which is possible in CBT programs. There are two arguments under this topic and the latter was only available for those who responded affirmatively to the first question.

The respondents had two possibilities to choose from: “Yes” and “No”.

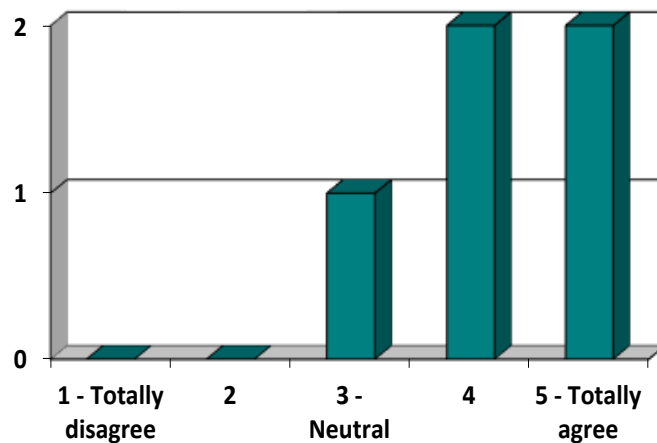
Argument: I have met technical difficulties with Videotel.



As per the answers half (5/10) of the respondents have met technical difficulties with Videotel and the other half have not. One of the respondents gave an example in the free comments section of what can be encountered: *“Logging problem and printing out results”*.

On the second argument the teachers were to pick the most suitable option on Likert scale. This follow-up question was only available for the group of 5 respondents - teachers, who have met technical difficulties with Videotel.

Argument 2: These technical difficulties have prevented my intentions to use Videotel totally.



The diagram explains that the difficulties met have been of a sort that severe that they have obstructed the user's intentions to use Videotel totally (option "5") in 2 out 5 cases or at least partly (option "4") in 2 out 5 cases. One neutral response (option "3") was also given which means that the answerer does neither agree nor disagree with the argument.

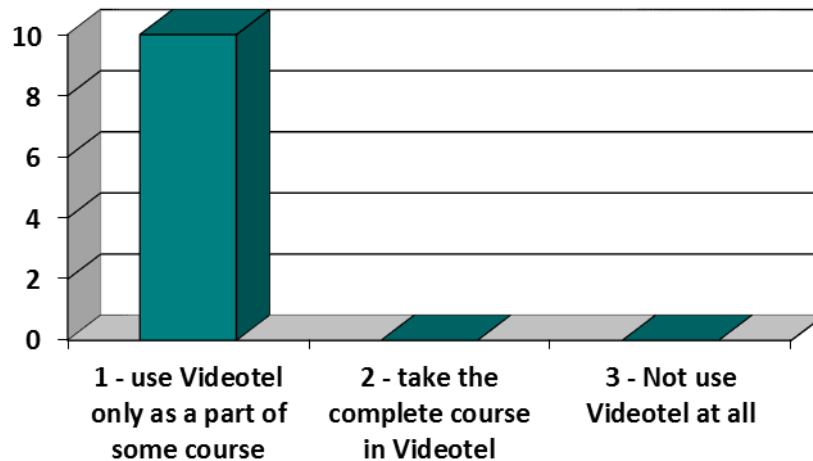
On the basis of the answers it is relatively safe to argue that if there are technical difficulties with Videotel, they will prevent its use at least on some level.

4.2.8 A complete course or a part of a course in Videotel?

This topic deals with the matter how the teachers believe Videotel is best utilized in Aboa Mare as a teaching means. There were two differently presented arguments concerning the given topic in the questionnaire but these were not subsequently presented. In this part of the thesis, nonetheless, they are introduced as a pair for clarity's sake.

In the first question the respondents were to pick the most suitable answer out of three options to accompany the following argument.

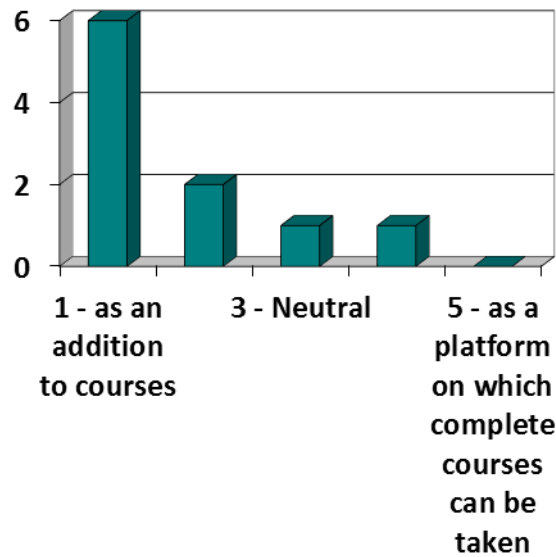
Argument 1: I believe it is best to



100% of the sample chose the answering option “1”. The bar chart illustrates how all of the respondents agreed with each other on the argument that Videotel should rather be used as an additional tool in teaching rather than as a platform where to take the whole course. As well it is remarkable that every respondent believes that Videotel should be used in Aboa Mare, since the 3rd answering option was not chosen by a single responder.

The second question under the topic handled exactly the same thing but with the difference that the possibility to choose not to use Videotel at all was excluded. The answers were distributed along 5-point Likert scale as follows:

Argument 2: Videotel should rather be used



According to the responses 80% of the respondents believe on some level (have chosen either “1” or “2”) that Videotel should rather be used as an addition to courses than do the whole course with it.

The answers of arguments 1 and 2 are in slight contradiction, since in the second argument 2/10 of the respondents claim that Videotel should not be used as an addition courses – one answerer chose the neutral “3” answer and another one picked answering option “4”.

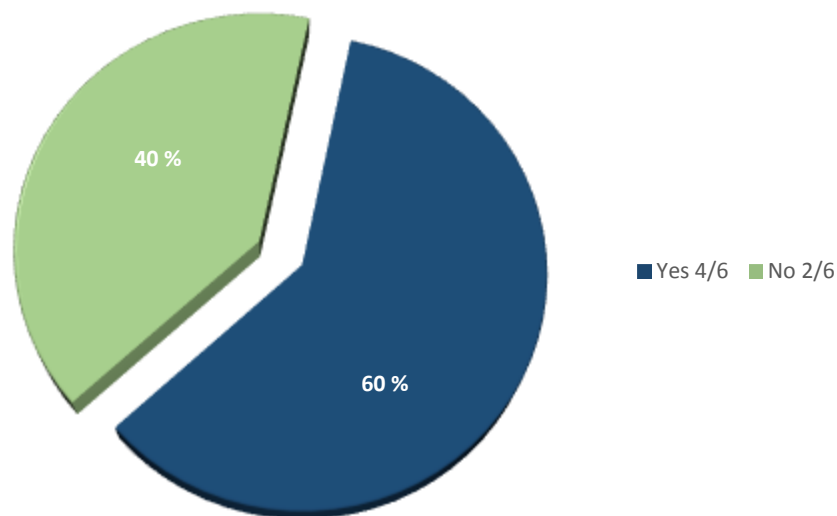
6/10 agree totally that Videotel should only be used as an addition to courses, and 2/10 somewhat agree with the argument. What is noteworthy, one respondent somewhat agrees with the argument that Videotel should rather be used as a platform on which complete courses can be taken, although in the first argument 100% thought that Videotel should only be used as a part of courses.

The incongruity in the results might or might not derive from the fact that some respondents would like to use Videotel in both ways - as an addition to courses and as the sole means. It might also be that the respondents do not know themselves what they think or have understood another of the questions in a wrong way.

4.2.9 Same course with and without Videotel

This topic was only available to those who have used Videotel as a part of at least one of their courses. The total number of these teachers were 6 as discussed in the chapter 4.2.3.

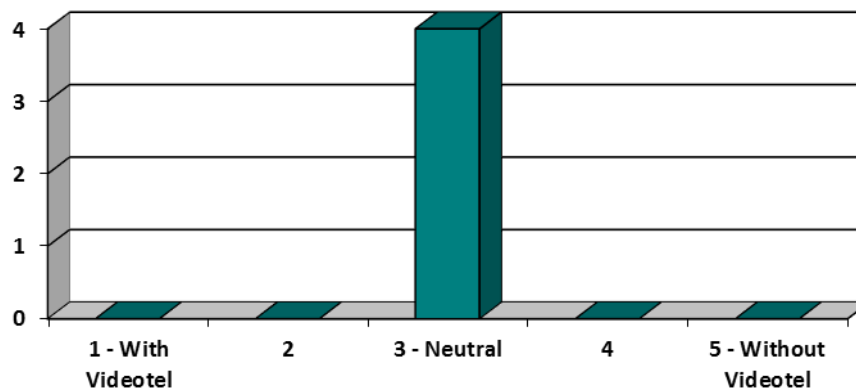
Argument: I have given the same course with and without Videotel



According to the piechart basing on the responses 2/3 of the answerers have provided the same course with and without Videotel.

4 teachers have given the same course with and without Videotel. Thus the subsequent claim with respect to giving same course with and without Videotel is only applicable for this group of 4.

Argument: The learning results have proved to be better.



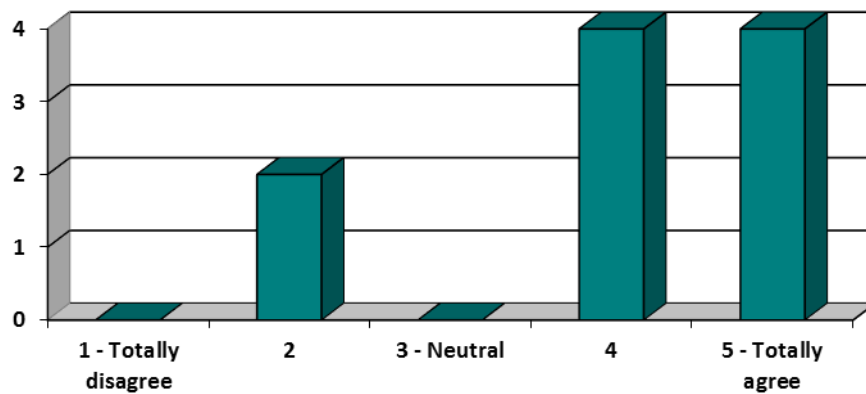
All the 4 teachers assessed the learning of the students similarly by choosing the neutral answer: 3. In other words, the teachers evaluate that learning results have been the same regardless of the fact Videotel has been used.

As a conclusion it plays no role whether Videotel is used as a part of course, if assessing the benefits in the end. The results may also suggest, that there is not enough data or not data at all to evaluate which learning results have proved to be better.

4.2.10 CBT vs. ordinary teaching

In this topic the discussion is directed to the question whether CBT and ordinary classroom lecturing compete with each other. The teachers were presented the following argument and they were asked choose the most suitable answer on Likert scale.

Argument: Computer Based Training will never replace ordinary teaching methods.

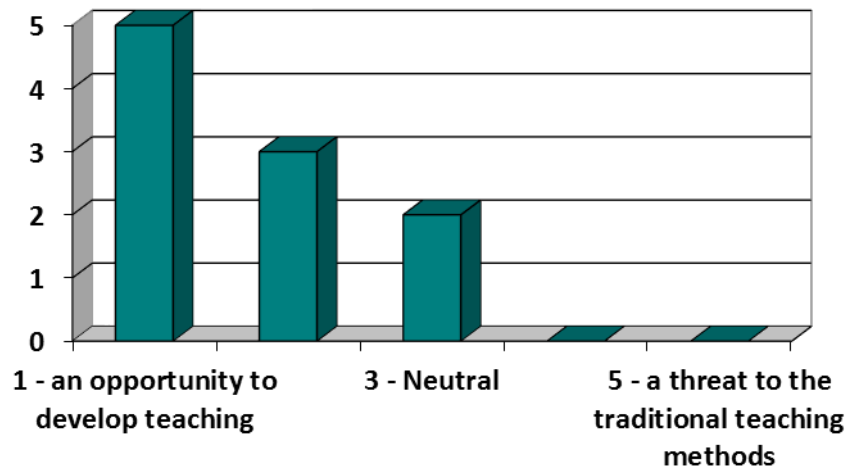


According to the illustration based on the answers of the teachers the great majority of 8/10 agree with the argument at least on some level. The opposite view is represented with 2/10 of the responses, which were under answering option “2”, meaning that the respondents do not totally disagree, only partly. It is notable that none of the teachers believe that CBT will replace the traditional teaching methods in the future.

4.2.11 Videotel - an opportunity or a threat?

In this topic the teachers were asked to pick the most suitable option concerning the opportunities and threats of CBT platforms, for example Videotel NVOD G2, on Likert scale as follows:

Argument: I consider Computer Based Training programs, e.g. Videotel, as



In respect to the distribution of the answers given by the respondents, the teachers do not see CBT programs, such as Videotel, as a threat to traditional teaching methods. Not a single answer was given in favor of the answering options “4” and “5”.

Contrariwise the presence of the CBT programs is seen as a positive opportunity to develop the ordinary teaching methods as 8/10 teachers chose answering options “1” or “2”. What is more, 5 out of 8 teachers totally agree with the argument whilst the remaining 3 agree only partially.

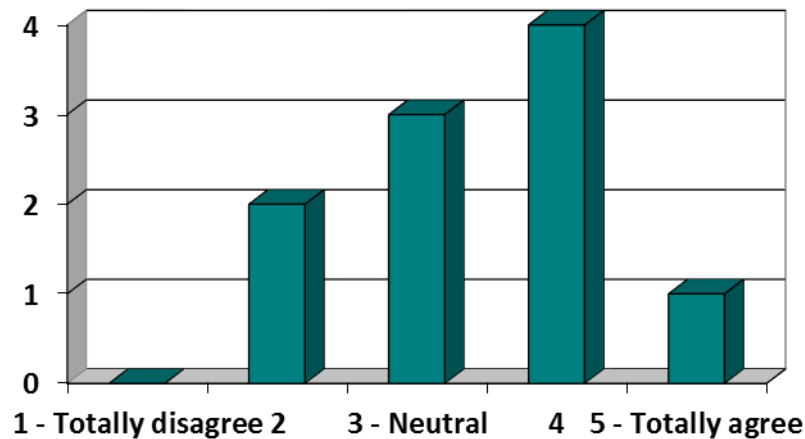
As per the answer distribution, 20% of the respondents chose the neutral “3” option, meaning that they do not either agree or disagree with the given argument.

One of the teachers made a comment to the topic underlining the fact that CBT programs help the visual learners: *”It’s always positive if you are able to use different pedagogical methods. Some things you explain can be understood by someone easier when they see it (visual learning)”*.

4.2.12 Videotel's utilization rate in Aboa Mare

In this topic the goal is to find whether the teachers believe that Videotel is utilized sufficiently in Aboa Mare or not. The respondents were given 5 alternatives from which to choose the most suitable option to the given argument.

Argument: I think Videotel should be utilized more in Aboa Mare.



In general the answers to the argument suggest that 50% of the teachers believe that Videotel should be utilized more in Aboa Mare. However, of these 5 respondents who agree on some level, meaning that they have chosen either option “4” or option “5”, only one totally agrees with the given argument.

On the contrary, nobody totally disagrees with argument, but 2/10 still somewhat disagree. This means that 20% want less Videotel teaching to Aboa Mare or think the rate of utilization is already sufficient.

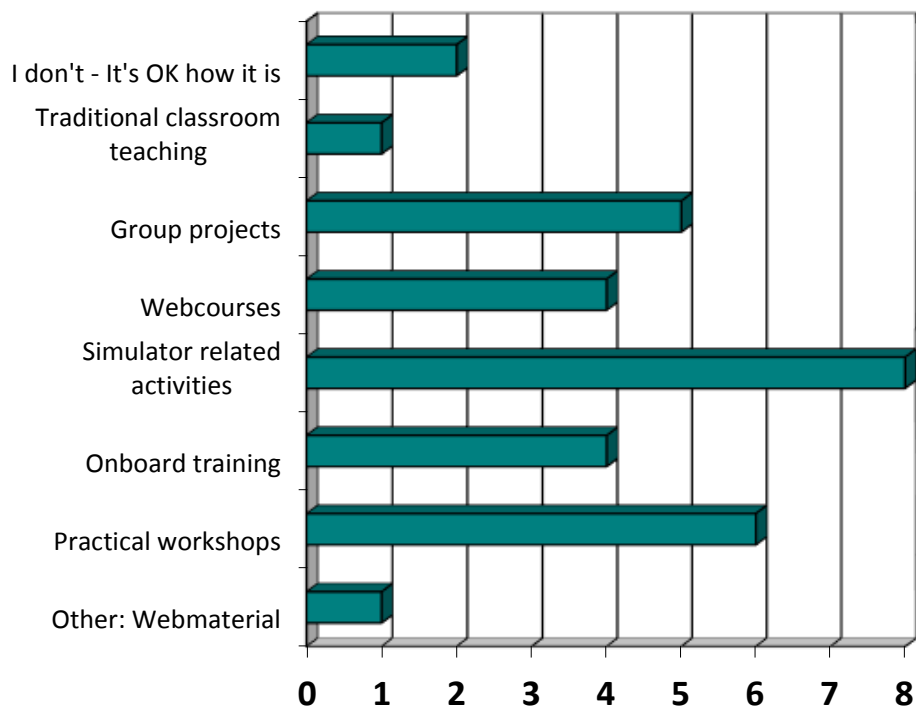
The total number of neutral answers given was 3. It is problematic to state if these neutral answers, which mean that the 30% of respondents do not either agree or disagree with the argument, suggest that this part of the teachers are satisfied with the current utilization rate but it might, nonetheless, do so.

One of the teachers comments to the topic: *“Passive watching is not so efficient...”*, believing that some other means of instructing the students would probably be better.

4.2.13 Teaching methods in Aboa Mare

This topic deals with the variety of available pedagogical methods that could, for example, be used as a tool of instruction as a part of maritime studies in Aboa Mare. The teachers were able to choose as many methods as they thought would best serve the purpose. If they did not choose a particular method, it could be interpreted so that they believe that the amount of that is currently at a sufficient stage.

Argument: I think Aboa Mare should provide more with some other means of teaching and learning (than Videotel), what?



According to the answers, the distribution of which is presented in the accompanying diagram, 80% of the teachers think that the use of some teaching methods should be added and only 20% are satisfied with the current situation. Generally the teachers seem to wish more of those teaching methods which do not require teacher's physical presence amongst the students.

Almost all of the respondents (80%) think that simulators should be more utilized in Aboa Mare. Practical workshops are also highly anticipated (60%) as well as Group projects (50%).

40% of the respondents believe that the amount of Onboard training and Webcourses should be increased. On the opposite, 60% suppose that they are already offered enough. The amount of traditional classroom teaching is seen satisfactory by 9/10, since only 10% wish to add it.

4.2.14 Videotel NVOD G2 freely listed positive and negative sides according to the teachers

Positive:

- *Additional training and information to courses that supports learning.*
- *Some movie clips are OK.*

Negative:

- *Old information*
- *Passivating*

4.3 Differences between teachers' and students' answers

This chapter highlights the differences between the responses of the respondent groups in a selection of research topics. Some of the results of the topics are comparable, some are not applicable and hence excluded. Some topics are not included although being comparable in principal, due to their irrelevance to the study.

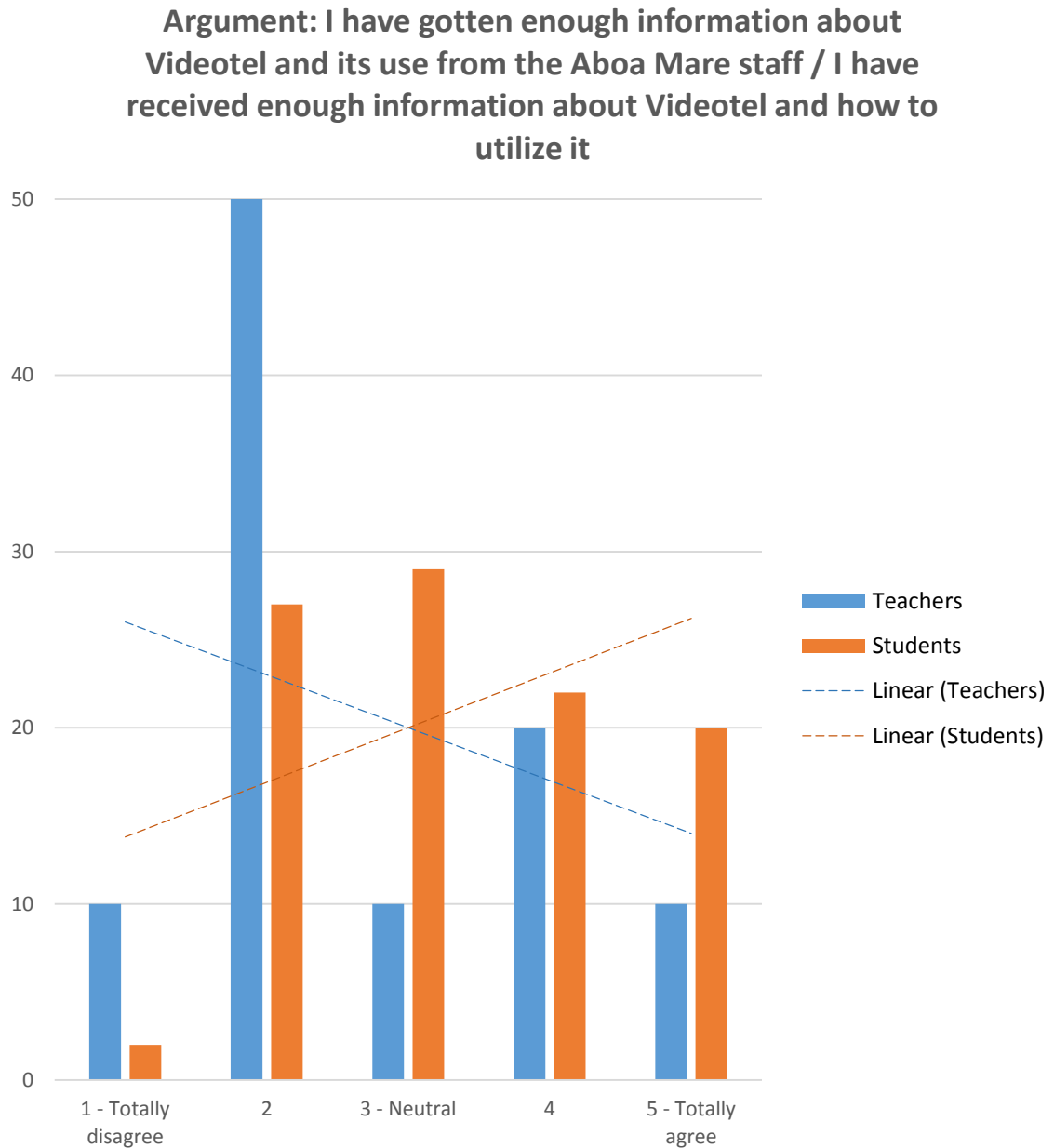
As a clarification, it is impossible to ask the students if they have taken the same course with and without Videotel, since they obviously take one course only once whereas the teachers per se have different base for answering. Some of the teachers lead the same course year after another.

In another example, it is not convenient to compare how often the teachers meet technical difficulties in relation to the students. Most likely they meet them approximately as often since they use same kind of computers across the same internal network. If and when there would be some slight variations in the responses anyhow, they would hypothetically not be interesting from the thesis' point-of-view.

The numeric values presented in the bar diagrams and pie charts in chapters 4.1 and 4.2 are converted into percentages in order to make the comparisons applicable. Moreover, the reader must bear in mind that the sample size of the teachers was significantly smaller than that of the students, 10 vs. 49 respectively. Therefore the starting datum for comparisons is not ideal. A response from a teacher is unfortunately more eminent than that from a student.

4.3.1 Comparison: Amount of received information about Videotel

The results were introduced in detail in chapters 4.1.1 and 4.2.2.



The diagram displays that the amount of received information varies greatly between the students as a respondent group, and the teachers as a respondent group, as explained in more detail in the chapters 4.1.1 and 4.2.2.

The uneven distribution of responses does not enable comparing the two respondent groups with each other directly since the students have answered quite evenly between the options “2”, “3”, “4”, and “5” and the teachers, in turn, have chosen the option “2” most often (50% of responses) but otherwise the answers distribute somewhat evenly.

The trend lines in the illustration, which cross at coordinates “3”; 20 %, suggest that the teachers’ trend is decreasing whereas the students’ is increasing. It can be interpreted so that in theory an increasing number of the students agree with argument that they have received sufficiently information about the program. On the other hand, teachers mainly disagree with the argument as the trend descends.

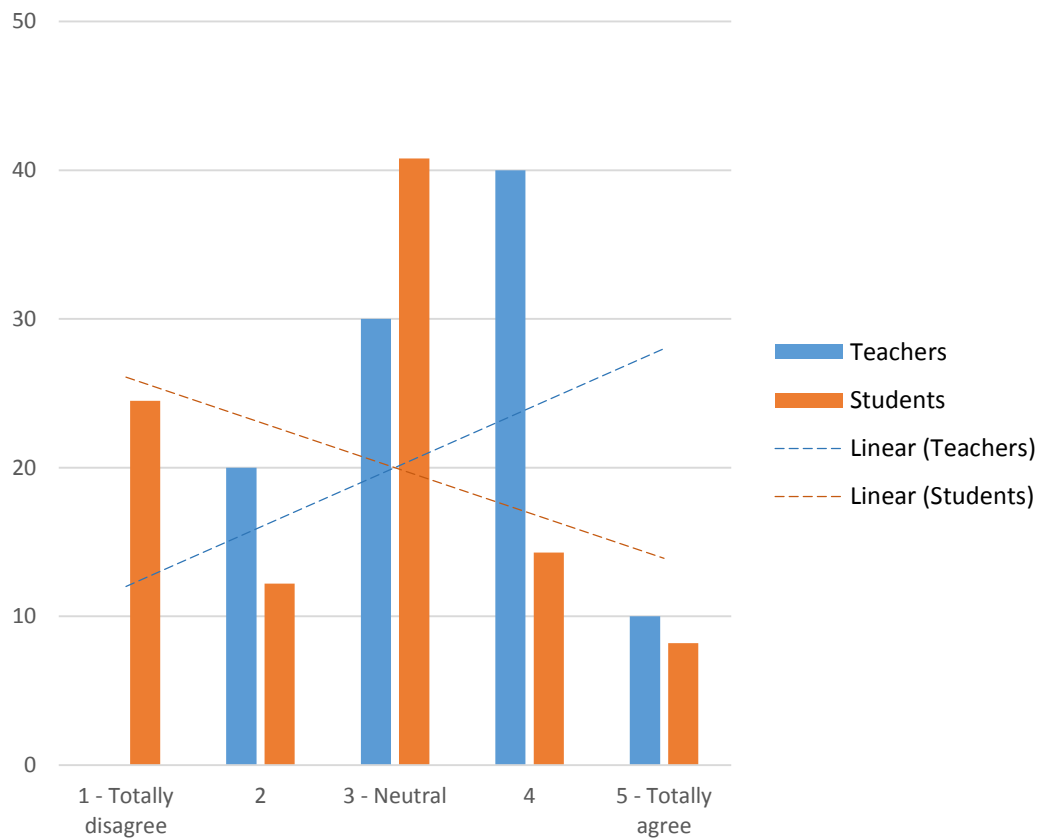
It is quite clear that there has not been any formal instruction to use Videotel, at least not to everybody, as the answers are not in line with each other. It is possible that the amount and quality of instruction has not been the same for everybody.

As a conclusion, the teachers do not evaluate to be as well informed about Videotel as the students, who are not very well informed either. For some reason, there is a difference in the way the respondent groups have been informed about the use of Videotel in Aboa Mare. Sharing information should be uniformed in order to guarantee equal possibilities for every user.

4.3.2 Comparison: Videotel's utilization rate

The results were first introduced in chapters 4.1.9 and 4.2.12.

Argument: I wish more Videotel education to Aboa Mare / I think Videotel should be utilized more in Aboa Mare



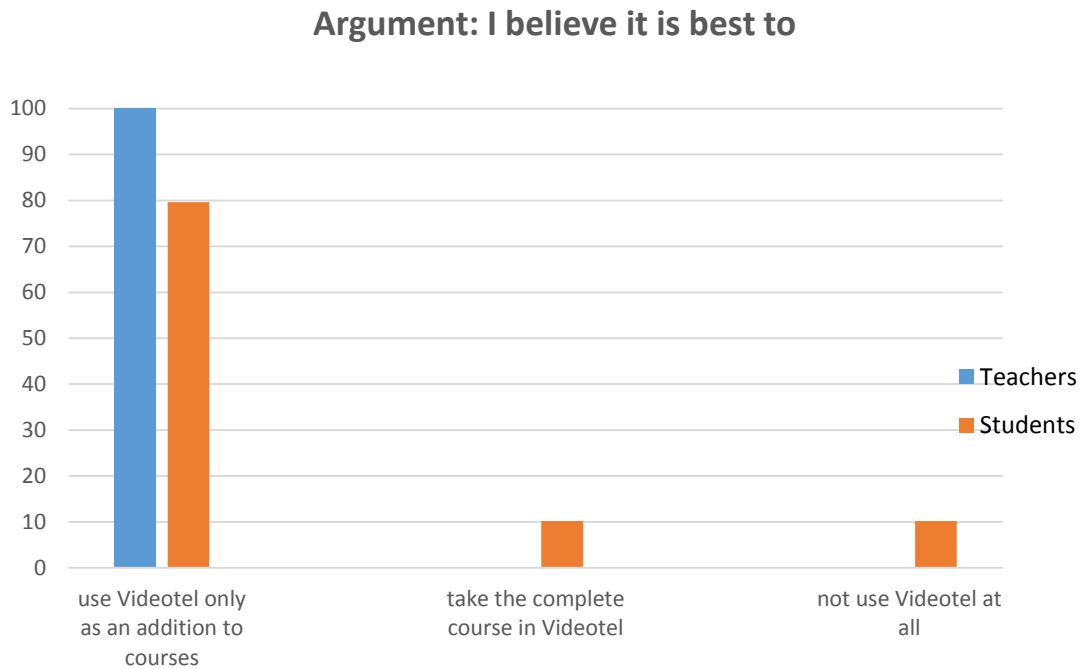
The diagram displays that the trend line of the teachers is increasing while that of the students is decreasing. There is a noteworthy difference in the attitudes.

It must be born in mind that the answering option “3” could mean that the respondents are satisfied with the current level of Videotel education and utilization in Aboa Mare.

The reason behind the descending trend for students may derive from the fact discussed in chapter 4.1.8, according to which the students would like to access Videotel also from other locations than school via Internet.

4.3.3 Comparison: A complete course or a part of a course in Videotel?

The diagram below showcases the results interpreted in chapters 4.1.7 and 4.2.8.



According to the results the respondent groups agree strongly with each other. Both the majority of the students and all of the teachers suggest that Videotel should only be utilised as an additional instruction method to Aboa Mare's maritime courses. On the basis of the responses it is exceptionally safe to argue that Videotel should be used in Aboa Mare.

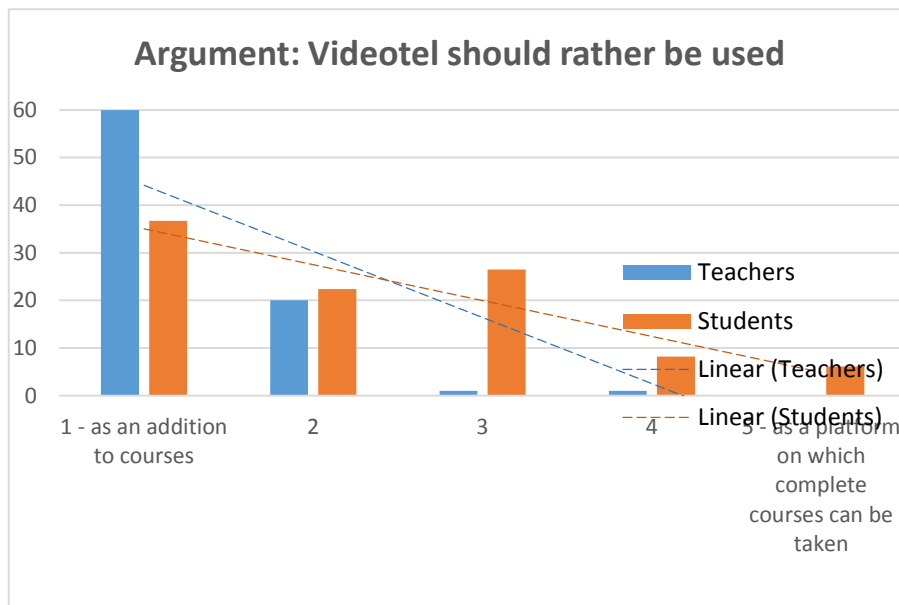
None of the teachers reckon that Videotel should replace any other means of teaching. 10.2% of the students, however, disagree and believe that Videotel is best exploited when complete courses are taken with it.

100% of the teacher respondent group thinks that Videotel should be used in the first place. A fraction of 10.2% of the group of students suppose that Videotel should not be used as a part of Aboa Mare's maritime education.

4.3.3.1 Comparison: How should Videotel be used?

Basing on the responses in the previous research topic, Videotel should be used in Aboa Mare. The results were originally introduced in chapters 4.1.7 and 4.2.8.

The idea behind the research topic was to spot differing responses within the respondent groups to see whether the groups would answer similarly to same type of questions. If the answers would be in line with each other, this would bring more credibility to the study and confirm the findings. By issuing analogous problems the possibility of misunderstanding the question is reduced as well.



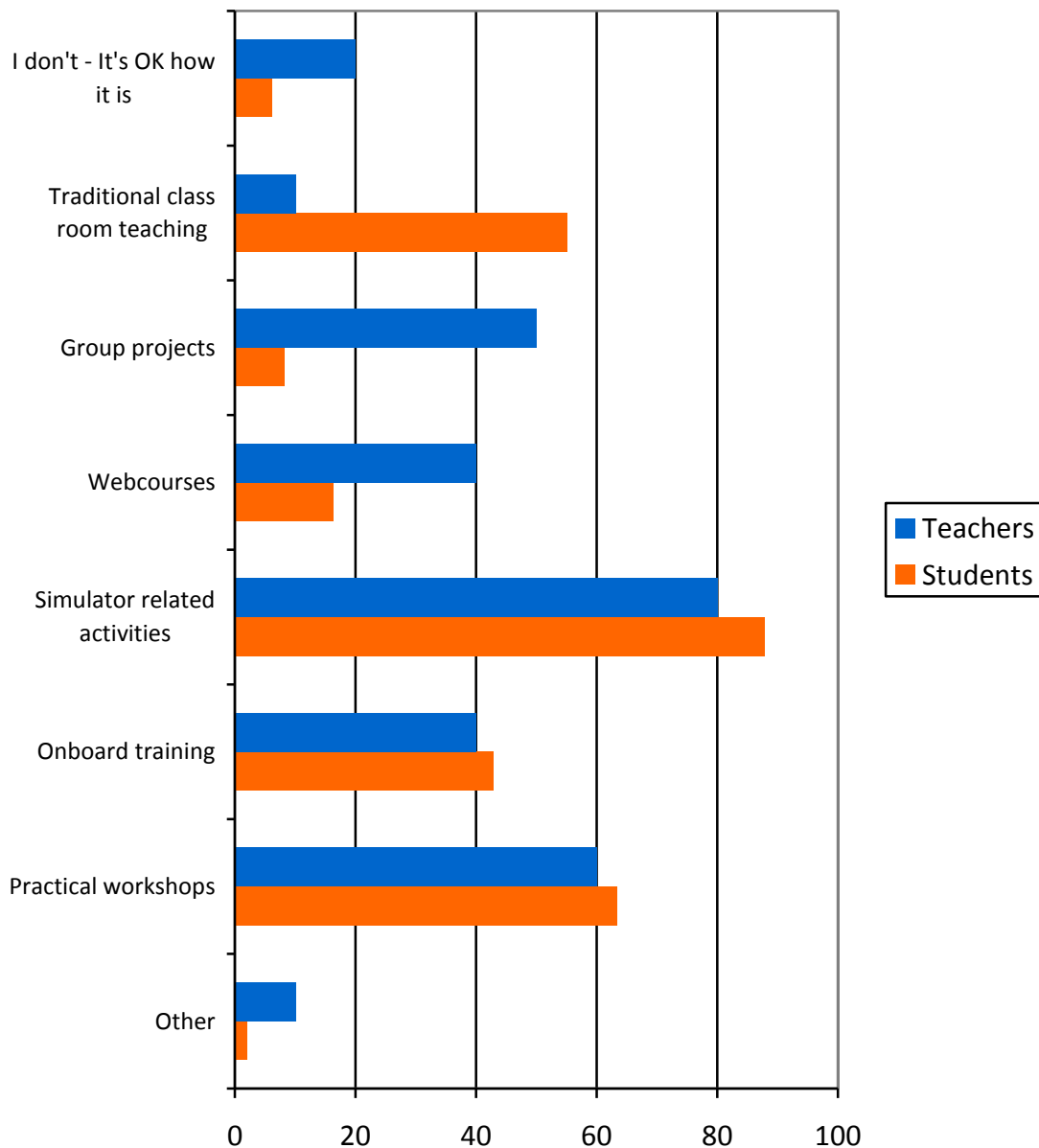
Basically the respondent groups share the opinion that Videotel should rather be used as an additional means of instruction to courses than as a platform on which complete courses can be taken. The trend lines are both descending with no significant differences in angles.

The answers to this correspond with the findings represented in the previous argument in chapter 4.3.2, even though not so clearly as possible.

4.3.4 Comparison: Teaching methods in Aboa Mare

The bar diagram showcases the results interpreted in chapters 4.1.7 and 4.2.8. The option to choose CBT or Videotel was excluded, since the previous research topics already charted the will of the respondent groups to use Videotel in Aboa Mare.

Argument: I think Aboa Mare should provide more with some other means of teaching and learning (than Videotel), what?



As seen from the illustration, the respondent groups both agree and disagree with each other depending on the investigated instruction method. In general, the teachers are more satisfied with the current methods of teaching than the students as only 20% of the teachers suppose that "It's OK how it is" whilst only 6.1% of the students is contented with the actual means of instruction.

The amount of traditional classroom teaching is seen unsatisfactory low by more than 50% of the students, which is quite alarming, since only 10% of the teachers agree. On the contrary this means that 90% of the teachers see that the amount of classroom lecturing is at a satisfying level.

The opinions vary greatly also when it comes to the amount of Group projects. Half of the teachers (50%) believe that there should be more group projects whereas less than 10% of the students concur to this.

Same goes with Webcourses: less than 20% of the students would like to have more webcourses, while in turn, 40% of the teachers suggest that the amount of web based studies should be increased. Essentially it is clear that the teachers wish more means of instruction where their presence is not required.

The beliefs concerning the amounts of Simulator related activities, Onboard training, and Practical workshops are similar. Both of the respondent groups wish more of those instructional methods to Aboa Mare. More Simulator related activities are wished by 80-88% of the respondents, more Practical workshops by 60-63% and more OBT by 40-43%.

5 Summary

As specified in chapter “1.2 Problem formulation” the research questions of the thesis are:

- Should Videotel be used in Aboa Mare? If so, how?
- What are the internal strengths and weaknesses of Videotel NVOD G2 software?
- What are the external opportunities and threats for the use of Videotel NVOD G2 in Aboa Mare?
- Which means of instruction should Aboa Mare offer to its students?

According to the data received from the questionnaires, it is clear that there is a demand for Videotel NVOD G2 training delivery system in Aboa Mare and it is an exceptionally useful instrument supporting students’ independent learning. In general both the students and the teachers believe that the software should be utilized as a part of Aboa Mare’s maritime education.

Nevertheless, there is also requirement for improvement. The use of the program should support the learning process in a more active and efficient way.

The strengths, weaknesses, opportunities and threats can be found listed in the SWOT table on the following page. More detailed analysis over the use of the Videotel NVOD G2 in Aboa Mare accompanies in the Conclusion and recommendations chapter. The recommendations are drawn from the SWOT table which was constructed in accordance with the results of the online questionnaires.

5.1 The fruit of the work – The Videotel NVOD G2 use in Aboa Mare SWOT Analysis

Helpful

Harmful

<p style="text-align: center;">Strengths</p> <ul style="list-style-type: none"> ▪ Freedom and self-paced used ▪ Informative modules and videos ▪ Wide range of modules and videos ▪ Wide range of available languages ▪ Works on any school computer, not only one (NVOD vs. VOD) ▪ Simple interface ▪ Constantly under updating ▪ Supports visual learning 	<p style="text-align: center;">Weaknesses</p> <ul style="list-style-type: none"> ▪ Passivating system ▪ Works only in Aboa Mare network (CBT vs. WBT) ▪ Some videos are outdated ▪ Technical difficulties ▪ Tests do not serve their purpose ▪ No possibility for Q&A
<p style="text-align: center;">Opportunities</p> <ul style="list-style-type: none"> ▪ Utilization as an addition to existing courses ▪ Access from any location, from home as well ▪ Voluntary use ▪ Development of tests ▪ Development of Elective courses 	<p style="text-align: center;">Threats</p> <ul style="list-style-type: none"> ▪ Replaces existing courses ▪ Possibility to cheat ▪ Lack of information about the use ▪ Limited access to computers ▪ Environment affects concentration

Internal factors,
the product's
aspect

External factors,
Aboa Mare's
aspect

The table bases on the opinions and beliefs of the Aboa Mare students and teachers and are formed from the grounds of the questionnaires. Videotel Company's own information has also been consulted, but the greatest value has been given to empiric research, since as a profit seeking enterprise the Videotel Company naturally advertises their product subjectively.

Strengths and weaknesses are the platforms own measures that can be controlled only by Videotel. They are the features of the program to which Aboa Mare has no say since it does not possess the power to make alterations to the program itself. Aboa Mare can only impact is the platform is used in the first place, and if it is, how it is used. Therefore the external elements in the table can be affected by Aboa Mare.

5.2 Conclusion and recommendations

The utilization of the program is not at sufficient stage – the program should be exploited in a wider sense in order to make it support behaviouristic learning process more efficiently. The teachers should find ways to contain Videotel modules as building blocks in their courses, if only applicable taken into consideration their respective natures.

The SWOT table functions as a decision-making tool. From the grounds of the table Aboa Mare can affect to the opportunities and the threats by determining how the program shall be exploited most efficiently to support learning. Aboa Mare cannot affect the program's internal strengths and weaknesses.

In order to receive the greatest benefit from the program, Aboa Mare should:

Take advantage of the opportunities

- Increase the use of the program, but only as an addition to courses. The amount of Videotel instruction should be increased but it shall not replace existing courses which include traditional classroom lecturing.
- Promote voluntary use. The students must be made more aware of the possibility to use Videotel outside of compulsion. Voluntary use could be given value to, for example, when determining a grade for the course completion.

- Develop Elective courses and outsource convenient entities to Videotel. The Elective courses are one of the stumbling blocks in Aboa Mare, since the institute offers so few of them and at quite random intervals, and as a consequence the students have trouble getting enough Elective course credits.
- Consider the subscription of the product “VOD Online” rather than “NVOD G2” to allow Videotel’s usage from locations other than school. Investigate the price of the product in comparison with the current product and evaluate would it fit better in Aboa Mare.
- Develop Videotel’s tests. Rather than taking the test in Videotel, the teachers could write their own tests from the basis of the Videotel videos. This would support learning effectively.

Take action against the threats

- Share more information about the use of the program and how it can be utilised. The information sharing should be standardized so that everybody would receive same high-quality instruction. This could be done, for example, by developing and printing out Videotel NVOD G2 booklets to users, sharing information through e-mail or by giving instructional lessons in for new students and teachers. At the moment some of the students do not even know they are able to go to Videotel.
- An end should be put to cheating. The students must understand that education is a journey rather than a destination.
- Aboa Mare could intervene by developing tests to measure the students’ knowledge. These could be essays or other tests that are written from the basis of the Videotel modules.
- The computers must be fixed to allow the use of Videotel in the first place. Aboa Mare staff should ensure that all the newest updates are installed and Videotel runs on every computer at all times.
- Underline that the computer classes are silent working spaces. Peaceful working environments must be available at all times to students so that they can concentrate on the videos and training modules.

Listen to the teachers and the students opinions

- Referring to the diagram in chapter 4.3.3, increase the amount of Simulator related activities, Onboard training and Practical workshops. The amount of these instructional methods is considered unsatisfactory low by both the Aboa Mare teachers and the students.

5.3 Critical assessment of the work

5.3.1 The objective

The objectives of the work, which were to assess how well Videotel NVOD G2 suits as an instrument in Aboa Mare's learning environment, and evaluate the usefulness of the program, were successfully achieved. The research proves that the Videotel CBT platform should be used in Aboa Mare on the side of traditional teaching methods and it is a valuable instrument that supports students' independent learning. Both respondent groups believe that Videotel should be utilized in Aboa Mare, and the teachers suppose it should be used even more than currently.

5.3.2 The problem with the SWOT analysis

The SWOT tool does not perfectly comply with the goal of the work since it is developed for strategic planning purposes for organizations in the first place, not for evaluating a products use in a certain environment which was the case with Videotel and Aboa Mare in this particular work.

The SWOT measure was, however, considered the most convenient due to its simplicity and straightforwardness: It functions as the datum for strategic planning and in that sense performs its part well as a tool in the thesis. The concept of the SWOT analysis was stretched to suit this particular work, in which it succeeded superbly with no room for animadversion.

References

1. International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers including 2010 Manila Amendments (2011 Edition) page 5
2. International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers including 2010 Manila Amendments (2011 Edition) pages 13-14
3. International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers including 2010 Manila Amendments (2011 Edition) pages 15
4. International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers including 2010 Manila Amendments (2011 Edition) pages 75
5. International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers including 2010 Manila Amendments (2011 Edition) pages 21-33
6. International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers including 2010 Manila Amendments (2011 Edition) pages 99-131
7. Aboa Mare Kvalitetshandboken för Sjöfatutbildningen i Åbo vid YH Novia och Axxell 19.08.2010 – Kvalitetspolicy. Available on Aboa Mare's intranet.
8. Videotel STCW Maritime Catalogue 2013-2014 page
9. Aboa Mare website. Date and author unknown. Link confirmed to work on 28.10.2015.
<http://www.aboamare.fi/about/>
10. Aboa Mare website. Date and author unknown. Retrieved 28.10.2015.
<http://www.aboamare.fi/about/history/>
11. E-mail Interview with Aboa Mare Student Secretary Greta von Wendt 23.09.2015
12. Aboa Mare website. Date and author unknown. Retrieved 28.10.2015.
<http://www.aboamare.fi/training-centre/>
13. Aboa Mare website. Date and author unknown. Retrieved 28.10.2015.
<http://training.aboamare.fi/en/>

14. Aboa Mare website. Date and author unknown. Retrieved 30.10.2015.

<http://www.aboamare.fi/simulators/>

15. Aboa Mare Kvalitetshandboken för Sjöfatutbildningen i Åbo vid YH Novia och Axxell 19.08.2010 – Undervisning och inläring. Available on Aboa Mare's intranet.

16. Edutech Wiki: Computer-based training 08.08.2009. Author unknown. Retrieved 30.10.2015.

http://edutechwiki.unige.ch/en/Computer-based_training

17. Edutech Wiki: Pedagogic strategy 19.05.2015. Author unknown. Retrieved 30.10.2015.

http://edutechwiki.unige.ch/en/Pedagogic_strategy

18. Learn.org: How Does Computer-Based Training Work? Date and author unknown. Retrieved 30.10.2015.

http://learn.org/articles/How_Does_Computer-Based_Training_Work.html


19. Videotel STCW Training Catalogue 2013-2014 pages 4-11

20. Videotel STCW Training Catalogue 2013-2014 pages 140-145

21. Christophe Speth: SWOT ANALYSIS (2015), ISBN 978-2-8062-6583-8

Appendices

Appendix I - Videotel Questionnaire for Aboa Mare Students 2015



**YRKESHÖGSKOLAN
NOVIA**

axxell
WWW.AXXELL.FI

Videotel Questionnaire for Aboa Mare Students 2015

Aboa Mare listens to its students.

Here you find a group of arguments and questions regarding the use of Videotel in Aboa Mare. You are friendly asked to choose the best options and answers.

You may also comment the matters freely whenever there is a "Free comment box". These comments will be quoted in the final work and are exceptionally valuable. You may use the language that suits you the best.

Answering is anonymous.

* Required

Please, choose your curriculum *

- MM14 / YH14
- MM13 / YH13 or older
- Axxell students, all curricula

Continue »

I have used Videotel

I have gotten enough information about Videotel and its use from the Aboa Mare staff *

1 2 3 4 5

Totally disagree Totally agree

Free comment

I have used Videotel voluntarily outside of the Aboa Mare courses *

In other words: I have watched the videos because I have been interested in their relevant subjects, not because I must take a particular course

Free comment

I think the tests / examinations at the end of Videotel modules are *

1 2 3 4 5

extremely hard extremely easy

Free comment

I have cheated in Videotel in order to pass *

Free comment

« Back

Continue »

I have taken a course where Videotel is used as a part of studies *

I have done a complete course in Videotel *

I believe it is best to *

- use Videotel only as a part of some course
- take the complete course in Videotel
- not use Videotel at all

Free comment

If Videotel is used as a part of a course, I would rather use it *

- on a school computer at my own pace
- in the class from the big screen with the teacher and other students
- at home when I want to
- Other:

« Back

Continue »

I have met technical difficulties with Videotel *

Free comment

Editor's note – Only if the student answered “Yes” this follow-up question accompanied:

These technical difficulties have prevented my intentions to use Videotel totally *

1 2 3 4 5

Totally disagree Totally agree

Free comment

I wish more Videotel education to Aboa Mare *

1 2 3 4 5

Totally disagree Totally agree

I wish more of some other means of teaching and learning to Aboa Mare, what? *

- I don't - I'm satisfied right how it is
- Traditional class room teaching
- Group projects
- Webcourses / computer based distance studies
- Simulator related activities
- Onboard training
- Practical workshops
- Other:

Free comment

Videotel should rather be used *

1 2 3 4 5

as an addition to as a platform on which complete courses can be
courses taken

« Back

Continue »

Ending

On this final page you have free hands to list some good and bad points about Videotel. Thank you!

Videotel's positive sides

Videotel's negatives sides

Free comments or questions regarding Videotel or this questionnaire

[« Back](#)[Submit](#)

Never submit passwords through Google Forms.

Appendix II - Videotel Questionnaire for Aboa Mare Teachers 2015



Videotel Questionnaire for Aboa Mare Teachers 2015

Here you find a group of arguments and questions regarding the use of Videotel in Aboa Mare. You are friendly asked to choose the best options and answers.

You may also comment the matters freely whenever there is a "Free comment box". These comments will be quoted in the final work and are exceptionally valuable.

Answering is anonymous.

* Required

Please, choose your field of expertise *

- Navigation
- Electrical, electronic & control engineering
- Maintenance & repairs
- Emergency, occupational safety, medical care and survival
- Marine engineering
- Mathematics / Physics / Chemistry
- Radio communications
- Cargo handling & stowage
- Other subject areas

I am familiar with Videotel and in principal know how the program is used *

1 2 3 4 5

Totally disagree Totally agree

Free comment

I have received enough information about Videotel and how to utilize it *

1 2 3 4 5

Totally disagree Totally agree

Free comment

I have used Videotel as a part of my course or courses *

Continue »

I have given the same course with and without Videotel *

« Back

Continue »

Editor's note – Only if the teacher answered “Yes” this follow-up question accompanied:

The learning results have proved to be better *

1 2 3 4 5

With Videotel Without Videotel

Free comment

« Back

Continue »

If there is a test involved in the Videotel module, I ensure that the students have passed the test *

In other words, I check the results

1 2 3 4 5

Never Always

Free comment

« Back

Continue »

I believe that the students voluntarily use Videotel outside of the courses in order to get additional information *

1 2 3 4 5

Totally disagree Totally agree

Free comment

I'm aware that the students are able to cheat in Videotel *

1 2 3 4 5

Totally disagree Totally agree

Free comment

The possibility to cheat is *

1 2 3 4 5

worrying not worrying

« Back

Continue »

Computer Based Training will never replace ordinary teaching methods *

1 2 3 4 5

Totally disagree Totally agree

Free comment

I consider Computer Based Training programs, e.g. Videotel, as *

1 2 3 4 5

an opportunity to develop teaching as a threat to the traditional teaching methods

Free comment

I believe it is best to *

- use Videotel only as a part of some course
- take the complete course in Videotel
- not use Videotel at all

Free comment

« Back

Continue »

I have met technical difficulties with Videotel *

Free comment

Editor's note – Only if the teacher answered “Yes” this follow-up question accompanied:

These technical difficulties have prevented my intentions to use Videotel totally *

1 2 3 4 5

Totally disagree Totally agree

Free comment

I think Videotel should be utilized more in Aboa Mare *

1 2 3 4 5

Totally disagree Totally agree**I think Aboa Mare should provide more with some other means of teaching and learning, what? ***

- I don't - I think Aboa Mare is already offering enough of everything
- Traditional class room teaching
- Group projects
- Webcourses / computer based distance studies
- Simulator related activities
- Onboard training
- Practical workshops
- Other:

Free comment

Videotel should rather be used *

1 2 3 4 5

as an addition to as a platform on which complete courses can be
courses taken

« Back

Continue »

Ending

On this final page you have free hands to list some good and bad points about Videotel. Thank you!

Videotel's positive sides

Videotel's negative sides

Free comments or questions regarding Videotel or this questionnaire

[« Back](#)

[Submit](#)

Never submit passwords through Google Forms.