

Solution to increase the self-study ability of the quality management textile and garment product subject for students

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ABSTRACT: Textile and garment product quality management is a set of activities, processes, and systems established and maintained to ensure that textile and garment products respond to established quality standards. Currently, research on teaching and learning methods for textile and garment students is not flexible, leading to a lack of interaction and practice, and students lack motivation and self-study skills. This paper presents methods for increasing students' self-study ability, such as self-study skills, information searching and processing skills, and learning through case study situations in the subject of textile and garment product quality management, to increase the quality of teaching and learning to respond to the requests of enterprises. The results showed positive changes in students after 2 years of studying at Hanoi University of Industry, the number of A scores increased from 3.3% to 16.9% and 13.7%. The B+ score increased from 8.3% to 32.9% and 42.4% in the subject of textile and garment product quality management.

Keywords: QA, QC, self-learning ability, teaching and learning methods

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I. INTRODUCTION

Textile quality management is a set of activities, processes and systems established and maintained to ensure that textile products respond to the established quality standards, as well as the requirements and expectations of customers. The ultimate goal is to provide textile products of the best quality, minimizing defects and waste, thereby enhancing customer satisfaction and the reputation of the enterprise. To achieve this, quality management in the textile industry not only focuses on the inspection of the final product but also includes the control and continuous improvement of the entire production process, from input materials to finished products. The main aspects of textile quality management:

1. Quality Assurance (QA) focuses on establishing and maintaining systems and processes to prevent errors in the first place [1]. This includes:

Setting standards: Establish clear quality standards for raw materials, production processes (cutting, sewing, dyeing, printing, finishing), and finished products. These standards can be based on TCVN, ISO, JIS...
Process Development: Propose and implement standardized manufacturing processes to ensure consistency and minimize errors.

Supplier Evaluation: Ensure that input materials (fabric, thread, accessories, etc.) respond to quality requirements before being put into production.

Employee Training: Improve the capacity and quality awareness of all employees involved in the production process.

Internal Audit: Conduct periodic assessments of the quality management system to identify areas for improvement.

2. Quality Control (QC) focuses on checking and evaluating products at different stages of the manufacturing process to detect and correct errors [2]. This includes:

Input material inspection: Checking the material, color, size, durability of fabric, and other accessories.

In-process inspection:

Cutting inspection: Accuracy of cutting details.

Sewing inspection: Quality of seams, durability, conformity to design.

Dyeing/printing inspection: Color fastness, color uniformity, no smudging, no bleeding.

Finishing inspection: Checking details such as buttons, zippers, labels, and cleaning for products.

Final product inspection: Ensuring the finished product responds to all criteria for appearance, size, quality, and packaging before delivery.

Handling of substandard products: Provide timely handling measures such as repairing, reworking or removing defective products.

In short, textile product quality management is a comprehensive process, requiring close coordination between departments, focusing on both systems and products to ensure that every product reaching consumers is of the highest quality, contributing to building reputation and competitiveness for the enterprise.

II. RESEARCH METHODS

Students' learning about textile product quality management to respond to enterprise requirements is extremely important. To promote the students' self-study process, teachers play an important role.

2.1. Teachers guide, inspire and create a favorable environment for students to discover for themselves instead of simply imparting knowledge

Instead of simply imparting knowledge, teachers need to become guides, inspire and create a favorable environment for students to discover for themselves

Here's what teachers need to do:

1. Identify and clarify learning objectives

- Set specific and clear objectives: Teachers need to help students understand the objectives of each subject, each lesson, and the larger goals are the skills and knowledge students will achieve after the course. When there are clear objectives, students will have the motivation and direction to study on their own.

- Connect to reality: Help students see the connection between the knowledge they are learning and the reality of life and work. This will increase students' interest and initiative in exploring.

2. Guide self-study methods and skills

Teach how to learn: Instead of just teaching "what", teachers need to teach "how to do". Guide students on the necessary skills for self-study such as:

- Information searching and processing skills: Guide students on how to search for documents from various sources (books, libraries, internet, academic databases), how to evaluate the reliability of information and how to synthesize knowledge.

- Reading comprehension and note-taking skills: Teach effective reading methods (skimming, deep reading, selective reading), smart note-taking (mind maps) for easy systematization and memorization.

- Time management and planning skills: Guide students on how to arrange a reasonable schedule, set small goals and monitor learning progress.

- Self-assessment and reflection skills: Encourage students to self-assess their strengths and weaknesses in the learning process, thereby adjusting their learning methods accordingly.

- Be a role model: Teachers need to demonstrate the spirit of self-study, self-discovery, and updating new knowledge to set an example for students.

3. Create a positive and supportive learning environment

- Create a lively classroom atmosphere: Encourage discussion, questioning, and healthy debate. This helps students interact, share knowledge, and learn from each other.

- Use a variety of teaching methods: Combine many forms such as presentations, group discussions, project learning, case studies, practice, etc. to stimulate students' initiative and creativity.

- Encourage teamwork: Assign group projects and collaborative exercises so that students learn how to assign tasks, coordinate, and support each other in the process of self-study.

- Integrate technology: Guide students to use online learning tools and research support software to expand their resources and learning methods.

- Provide constructive feedback: Give specific, useful comments to help students recognize areas for improvement and motivate them to progress.

- Personal support: Spend time consulting, answering questions and providing guidance to each student, especially those who have difficulty in self-study.

4. Assign tasks that encourage initiative

- Open-ended, thought-provoking assignments: Instead of assigning assignments with fixed answers, teachers should assign research topics, projects, or problems that require students to research, analyze, and come up with solutions.

- Require students to prepare lessons in advance: Require students to read materials, prepare lesson content before coming to class, and test regularly (e.g., short 5-minute tests) to promote self-study habits.

- Turn students into "experts": Give students a piece of content to research and present to the class. This helps students deepen their knowledge and increase their confidence.

2.2. Assessing the learning process according to the learning outcome

Assessing the process, not just the results

Assessing the self-study process: In addition to grading the results, teachers should have ways to assess the process of students' self-discovery, research, level of initiative, and ability to apply knowledge. - Encouraging the spirit of continuous learning: Helping students realize that learning is a long-term, continuous, and never-ending process, even after graduating from university.

III. RESULTS AND DISCUSSION

3.1. Results of guidance, inspiration and creating a favorable environment for students to self-discover and find solutions

To achieve progressive changes every year, the following solutions are needed for teaching and learning:

Lecturers:

+ Use a variety of teaching methods: Combine many forms such as presentations, group discussions, project learning, case studies, practice... to stimulate students' initiative and creativity.

+ Learning through case studies: Provide real-life situations about quality issues in the textile industry for students to analyze, discuss and propose solutions. This helps develop critical thinking and problem-solving skills.

+ Practice and internship at enterprises: Create conditions for students to intern at textile factories to directly interact with quality control processes, quality management systems and testing equipment. This practical experience will consolidate theoretical knowledge and promote curiosity and discovery.

+ Lab experiments and practice: Increase lab practice sessions for students to become familiar with testing methods for the quality of textile materials, garment products, etc.

+ Create motivation and passion: Share real stories and successes in the industry to inspire students' love and passion for learning.

Students:

+ Information searching and processing skills: Guide students on how to search for documents from various sources (books, libraries, internet, academic databases), how to evaluate the reliability of information and how to synthesize knowledge

Reading comprehension and note-taking skills: Teach effective reading methods (skimming, deep reading, selective reading), smart note-taking (mind maps) for easy organization and memorization.

+ Time management and planning skills: Guide students on how to arrange a reasonable schedule, set small goals and monitor learning progress.

+ Self-assessment and critical thinking skills: Encourage students to self-assess their strengths and weaknesses in the learning process, thereby adjusting their learning methods accordingly.

3.2. Evaluation results according to learning outcome

After applying methods to increase the self-study ability of textile students over the years at Hanoi University of Industry, the following results have been obtained:

Table 1. 2022-2023 year score statistics [3]

Numerical order	Grade level	Number of students	Proportion
1	Number of students achieving A (8.5- 10)	2	3.3 %
2	Number of students achieving B+ (7.7 – 8.4)	5	8.3%
3	Number of students achieving B (7.0- 7.6)	6	10 %
4	Number of students achieving C+ (6.2- 6.9)	17	28.3 %
5	Number of students achieving C (5.5- 6.1)	17	28.3 %
6	Number of students achieving D+ (4.7 – 5.4)	2	3.3%
7	Number of students achieving D (4.0 – 4.6)	8	12.3%
8	Number of students achieving F (below 4)	3	5%
9	Not eligible for evaluation	0	0%

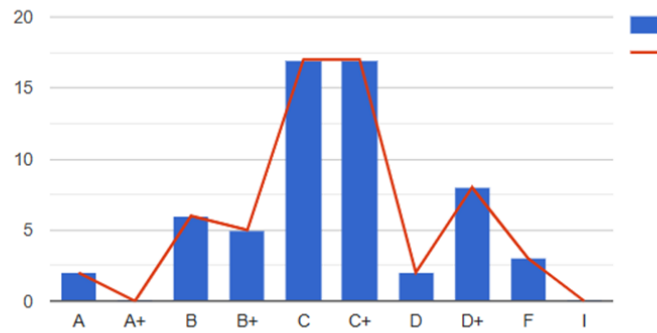


Figure 1. 2022-2023 year score statistics [3]

Table 2. 2023 - 2024 year score statistics [4]

Numerical order	Grade level	Number of students	Proportion%
1	Number of students achieving A (8.5- 10)	10	13.7%
2	Number of students achieving B+ (7.7 – 8.4)	24	32.9%
3	Number of students achieving B (7.0- 7.6)	17	23.3%
4	Number of students achieving C+ (6.2- 6.9)	12	16.4%
5	Number of students achieving C (5.5- 6.1)	6	8.2%
6	Number of students achieving D+ (4.7 – 5.4)	4	5.5%
7	Number of students achieving D (4.0 – 4.6)	0	0%
8	Number of students achieving F (below 4)	0	0%
9	Not eligible for evaluation	0	0%

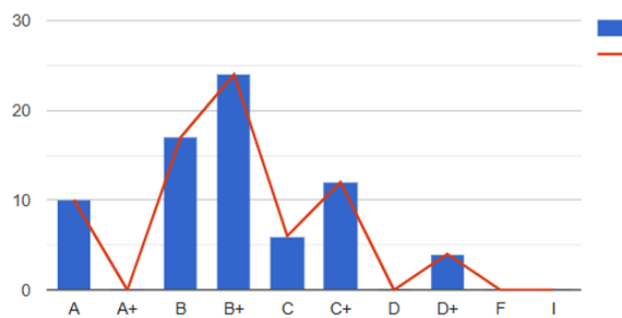


Figure 2. 2023 - 2024 year score statistics [4]

Table 3. 2024-2025 year score statistics [5]

Numerical order	Grade level	Number of students	Proportions
1	Number of students achieving A (8.5- 10)	10	16.9%
2	Number of students achieving B+ (7.7 – 8.4)	25	42.4%
3	Number of students achieving B (7.0- 7.6)	13	22%
4	Number of students achieving C+ (6.2- 6.9)	8	13.6%
5	Number of students achieving C (5.5- 6.1)	2	3.4%
6	Number of students achieving D+ (4.7 – 5.4)	0	0%
7	Number of students achieving D (4.0 – 4.6)	1	1.7%
8	Number of students achieving F (below 4)	0	0%
9	Not eligible for evaluation	0	0%

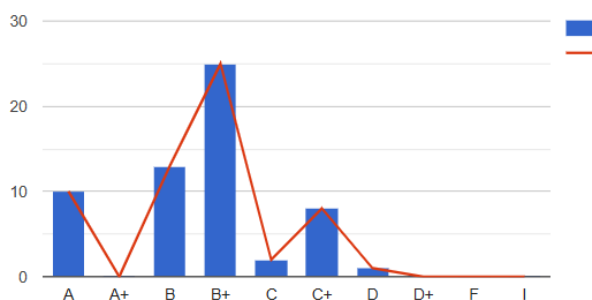


Figure 3. 2024-2025 year score statistics [5]

IV. CONCLUSION

Textile product quality management is a comprehensive process, requiring close coordination between departments, focusing on both systems and products to ensure that every product reaching consumers is of the highest quality, contributing to building reputation and competitiveness for the enterprise. Not only to have good learning results and to respond to the job requirements of the enterprise, teaching and learning need to promote the self-study process of students, teachers need to change their role from knowledge transmitter to instructor, consultant and motivator. When students are fully equipped with skills and have an ideal learning environment, they will maximize their self-study ability.

Students' learning results after applying the self-study ability of learners, the number of A scores increased from 3.3% to 16.9% and 13.7%. B+ scores increased from 8.3% to 32.9% and 42.4%.

REFERENCES

- [1]. Chương trình nâng cao năng suất và chất lượng sản phẩm hàng hóa của doanh nghiệp Việt Nam đến năm 2020. Quản lý chất lượng toàn diện (Total Quality Management – TQM) Nội dung cơ bản và hướng dẫn áp dụng, Nhà xuất bản Hồng Đức
- [2]. Nguyễn Thanh Tùng, giáo trình Quản lý chất lượng trang phục, NXB Thanh niên, 2022
- [3]. <https://gv.hau.edu.vn/totalreport/detailreportmodulescdio/thong-ke-ket-qua-hoc-tap-cdio.htm?classid=178534&h=6c0c84624a8976b4d9d5c0d116ad7042f8f54e4f>
- [4]. <https://gv.hau.edu.vn/totalreport/detailreportmodulescdio/thong-ke-ket-qua-hoc-tap-cdio.htm?classid=197084&h=fa7da38e440f34d1df2ec762e72d589873dbc07d>
- [5]. <https://gv.hau.edu.vn/totalreport/detailreportmodulescdio/thong-ke-ket-qua-hoc-tap-cdio.htm?classid=214941&h=52f755d5ec2173539576fbd2af92a4b0f66405ae>