



Piloting Report (D 4.1) including Piloting Evaluation Report (D 5.2)

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KVALIFIKACIJŲ IR PROFESINIO
MOKYMO PLĒTROS CENTRAS



INSTITUT SUPÉRIEUR
DE PLASTURGIE
D'ALENÇON



TAMPERE VOCATIONAL COLLEGE



MUOVITEOLLISUUS RY
Finnish Plastics Industries Federation

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VERSION RECORD

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V2	12/01/2021	APRC, Polyvia	Document sent to the partners. There were no comments from partners.
V3	15/01/2021	APRC, Polyvia	Document was presented at the SC
V4	15/01/2021	APRC, Polyvia	Document approved by SC

APPROVALS

Author/s	Reviewers
APRC – Živilė Štienė	
Polyvia - Aurélie Bruder	
	LINPRA – Gražina Žardalevičienė
	APRC – Živilė Štienė
	VPM – Gintautas Dervinis
	EuPC – Marjan Ranogajec
	Polyvia - Aurélie Bruder
	Polyvia - Marc Manguin
	TREDU – Sirkka-Helena Ilveskoski, Ritva Haveri
	FIPIF – Pirjo Pietikäinen



INTRODUCTION

The ability of the European plastics industry to remain competitive and to innovate depends on their ability to recruit talented, qualified people. Taken together with economic and demographic trends, as well as a current skills gap, sourcing the right competence has become a pressing challenge for many companies in the plastics industry. The project proposal addresses the skills mismatch in the sector, referring to the two-fold problem the companies face: digital skills shortages of the plastics machine operators, and the overall lack of highly competent and motivated work force.

The Erasmus+ project "Actions Upward: The Skills for the Digital Future of Plastics Factories)" is a multi-national forward-looking collaboration for the enhancement and creating of plastics machine conductors vocational training as well and continued education.

The aim of the project is to respond to the plastics sector-specific labour market needs by designing, piloting and implementing an innovative vocational training programme for plastics machine conductors with specific emphasis on digital and green skills, and entrepreneurial competencies.

Project goal and activities: Qualifications & Curricula Research, EQF-based model VET curriculum, comprehensive training material for students and teachers, no less than 50 learners and 20 trainers trained, and Final Conference in Brussels. The project deliverables produced in English and 3 national languages. The project enhance the quality of vocational training, improve competence of VET teachers and plastics machine conductors and make VET curriculum more relevant to the labour market.

Piloting activities goal is to pilot the outcomes developed in WP2 and WP3.

The pilot activity took place in two phases. The first took place in February 2020 in VET providers in Lithuania, the second stage in September - December 2020 in VET providers in Lithuania, France and Finland.

FRAMEWORK, ORGANIZATION AND IMPLEMENTATION

Prior to the piloting phase the WP4 Lead partner APRC, prepared the project partners Piloting instruction, providing in it basic information on the objectives and steps of the piloting activity. WP4 Lead partner prepared the main templates and forms of piloting activity documents (certificate template, list of participants, report, training plan, test questions) and presented them to the project partners.

THE TARGET GROUPS

The target groups consisted of different participants in different partner's countries representing vocational school teacher's in-company trainers from plastic area and students/ learners from VET institutions, employees at plastic converting companies.

Project structure of piloting groups: target group:

- Teachers: (i) trainers/instructors from VET institutions and (ii) in-company trainers.
- Students: (i) learners from VET institutions, (ii) employees at plastic converting companies, (iii) unemployed, adults seeking requalification, people from the Labour Exchange.

Project task, to select no less than 20 trainers and 50 learners in all participating countries. No less than 70 qualification certificates issued.

Number and distribution of participants, who participated in piloting.

Successfully finished the training and got certificates

	Tredu	Ispa	VPM	APRC	Total	Project task
Teachers/Trainers	6	5	11	10	32	20
Students/Learners	53	68	14	15	150	50

THE METHODS OF GETTING FEEDBACK

For getting feedback different methods were used:

- Piloting questionnaire for trainers and trainees.
- Feedback collected through group discussions.

During the teaching, different teaching methods were used, the purpose of which is to help the student to actively learn, control, structure, develop, and deepen the understanding about plastics machine conductor's job. Learning encouraged students to work together so that they could take responsibility for their own and others' learning, learning with each other's help, deepening understanding by retelling the information or ideas in their own words, discussing and using the information provided in the links. Tables and graphic images, of which there are many in the student's and teachers books, helped the students to structure the learning material. Surveys were conducted to evaluate the training material as objectively as possible.

The response of the teacher and learners (feedback) was understood not as a hasty confirmation of

“right” / “wrong”, but as a purposeful questioning, inviting to rethink, clarify, explain in more detail the concepts, processes, decisions made, conclusions made.

The feedback was relevant to each partner, so for generalization we can draw conclusions from the position of each partner, but not in general. At the same time, it should be mentioned that one of the goals was to adapt the WP2 and WP3 for each partner according to their needs.

Also, during the piloting, the Partners used the training material developed during the project to test the possibility of using it to train plastics machine conductors and teachers. The training tools developed in the project (VET programme, student and teacher books) can be used as a main training tool for training plastics machine conductors, and can also be combined with existing training tools. During the piloting process of the partners, the use of the training tools developed during the project and other available tools did not result in negative evaluations due to their incompatibility, and a great opportunity was found to combine and apply them in the training process.

THEORETICAL, PRACTICAL TRAINING PART

All training material for students and teachers was piloted (all Units). There was used theoretical, practical and self- study learning model.

For theoretical training was selected in the main fields of material created in the project:

- VET programme;
- Student and teacher books;

During the practical training the participants were working by plastics machines and the work was organized providing individual and group approach as the participant’s level of knowledge and skills was rather different.

The training of the practical part of the piloting activity took place in companies or/and practical training bases where the presentation of the project material was very useful.

It is disappointing, that due to the global pandemia students in classrooms got very little practical view. Part of the piloting activities was online in learning platforms due to the global pandemic situation.

Training material for pilot participation was available:

- On the virtual platform (MOODLE).
- The teacher showed the units on a screen with a video projector and used the unit in a paper

format for himself only.

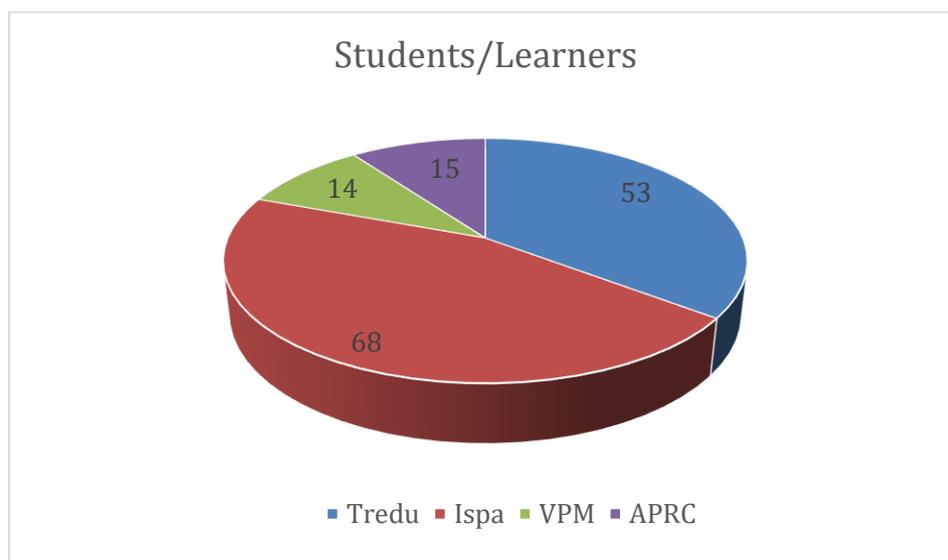
- The student had access to the contents of the units with their personal tablets.
- Paper copies.

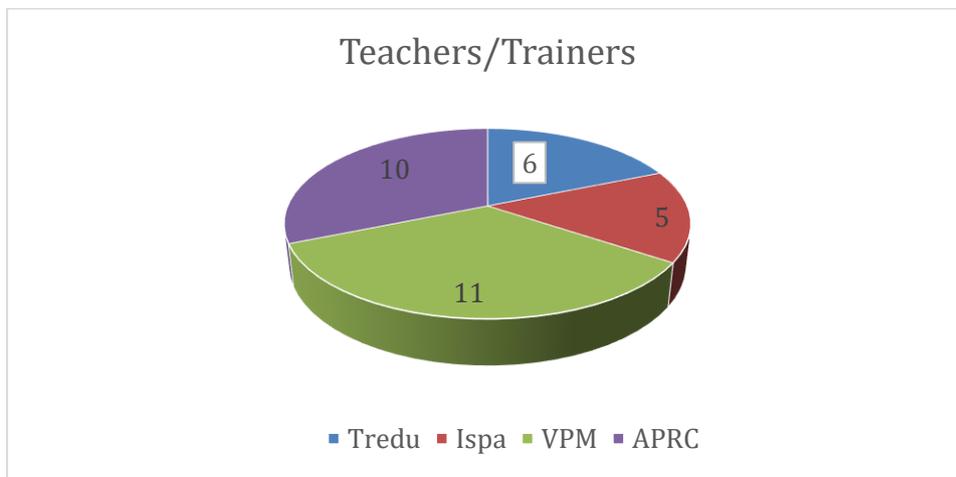
QUALIFICATION CERTIFICATE

Knowledge evaluation tests were developed for each Unit. After the piloting of a unit, the student had to do the knowledge evaluation (test). Students, who received a score at least equal to 50 % at the evaluation, received certificates of achievement.

182 participants (32 trainers and 150 students) received qualification certificates - they successfully finished piloting work package.

The distribution of successful pilot participants among the project partners is shown in the diagrams below.





PARTICIPANTS FEEDBACK

The objective of the deliverable was to collect feedback - information from the participants in order to improve the quality of teaching and educational material created by the partners involved in the Upskill project.

The questionnaires made it possible to evaluate one, several or all of the units and the corresponding teaching materials.

89 responses were received. Almost 90% of the responses concerned the evaluation of one or more units of the project. The average satisfaction rate or better for training units is 86%.

The questionnaire was built on the basis of a Likert scale. Respondents had the choice between 4 possibilities:

- Strongly agree;
- Agree;
- Disagree;
- Strongly disagree

The questionnaire was applied to the two components of the project, namely the training units as well as the training materials.

The questionnaire was a questionnaire only digitized and posted on the internet platform [surveymonkey.com](https://www.surveymonkey.com)

The questionnaire was opened from September 1 to December 21, 2020.

As we can see from the survey, the majority of the participants were completely satisfied with the piloting: theoretical and practical training parts, acknowledging that the training was detailed, informative and useful.

General summary of the pilot material:

We may easily integrate materials for our use and these materials could be also used as a part in individual/optional learning materials and when needed modified for local facilities also for the industry use.

The participants stressed that there are various ways how the material can be used in their situation on individual level for trainers and learners for self-development to upgrade their own knowledge.

As a big benefit the participants mentioned the structure of the material- it is divided into Unit that can be easily found and used in the classroom in various themes and subjects.

For teachers and students, it is a good material to prepare for classes, especially in Lithuania, because there is not much material on the themes that are connected with plastics machine conductor speciality

The material is suitable for people with different level of prior knowledge.

The participants pointed out the logical organization of the contents.

Very important that there are visual materials both in the book that help to grasp the knowledge in a much easier way.

The piloting participants pointed out the importance of basic competencies (Lean manufacturing, teamwork, Green skills e.c.t) in training process, which are essential in educating a skilled future worker.

THE SUMMARY OF PILOTING TARGET GROUPS

1. There are layout problems in the student and teacher books. Graphic images should be arranged, the format should be harmonized. To give a professional, seamless structure of the books and obtain a uniform structure of the units.
2. In a student's book - to unify addressing in the book user, because the reader is addressed differently

as an employee of the company and elsewhere as a student (class participant).

3. Make all online links active and, check their usage rights.

4. Deficiencies observed during piloting activities are given in Annex 1. There were no significant comments on the content of the training material.

CONCLUSIONS

- The piloting of the developed products has shown that they are sufficiently comprehensible to consumers, informative, enriching and therefore suitable for use in the training of plastic professionals. This indicates that the relevant project results have been implemented to the appropriate extent and are of a sufficient level of quality.
- The developed products are suitable and sufficient for the training of plastic industry specialists in different countries. However, it is understood that the prepared basic material can and must be further developed to become maximally adapted to the situation of each country.
- The project has developed a universal training material for plastic specialists, but it can easily be better adapted to the needs of different stakeholders (vocational training institutions, business associations, business enterprises, etc.) and engineering specialists. Depending on the specific situation, the prepared material may be purposefully improved and refined, perhaps even narrowed.
- The "width" and "depth" of the prepared material can also be individually adapted to plastic professionals with different levels of preparation. From the available material, it is possible to prepare suitable kits for plastic workers, their team leaders, work quality controllers, even company managers, etc.
- All the above observations are discussed by all partners as well as it is agreed that the material prepared during the project can and will be further developed in each country, considering the specific situation and existing needs. This will also ensure the continuity of the project and further cooperation between the partners, potentially influencing the emergence of new joint initiatives.



Added: Annex 1.