FREE TO CODE

Improving Digital and Coding Skills for Inmates

Pilot Programme Report

Programme
FREE TO CODE - *Improving Digital and Coding Skills for Inmates*

Partners
European Strategies Consulting (Romania)
APROXIMAR – Cooperativa de Solidariedade Social, Crl (Portugal)
Asturia vzw (Belgium)
Avaca Technologies Consulting, Informatics AE (Greece)
BeCode (Belgium)
Dlearn – European Digital Learning Network (Italy)
Penitenciarul Bucaresti-Jilava (Romania)

Design
Aproximar, Cooperativa de Solidariedade Social

/// Index

Introduction

This report aims to present the results of the training "Improving Digital and Coding Skills for Inmates ", as part of the project Free to Code, co-financed by the European Union's Erasmus + program. The project aimed to promote access to digital adult education, thereby reducing digital inequalities between vulnerable adult people (ex-offenders or offenders with non-custodial measures, in this case) in the knowledge and use of ICT, namely focusing on adult coding.

Initially, the training was supposed to be delivered to inmates incarcerated in Romania, Italy, Belgium, Portugal and Greece. Due to national lockdowns and restrictions that followed the coronavirus pandemic, the pilot study was delivered only in Romania as planned. In Italy, Belgium and Portugal, the pilot programme was delivered to offenders with non-custodial measures, ex-offenders or people from vulnerable groups through different community organisations. In Greece, the partner Avaca could not deliver the pilot programme due to rigid national restrictions.

In Romania, the training was delivered in Bucharest Jilava Prison, first in July 2020, then suspended because of the measures imposed by the pandemic context. In November 2020, the training was resumed, with the objective of applying the innovative Free to Code training program, starting in the basics of digital literacy up to the basics of coding. The training finished in February 2021. The learning outcomes were analysed through a balance of knowledge applied at the beginning and at the end of the training, an analysis was also made on the satisfaction of the participants, as well as the opportunities for improvement presented by them. There were 48 sessions delivered to inmates part of a therapeutic community program for former drug user.

Asturia vzw planned three pilot sessions, each of 4 hours. Due to corona restrictions, the sessions were organised in small groups because only a maximum of 10 people can be together in one room according to national rules during the pandemic. Although the participants' selection was made in the prison of Turnhout in October 2020, the training was delivered after their release in February 2021.

BeCode organised one training session on 12 February 2021 in BeCode facilities in Liège with 8 participants, two ex-offenders and 6 part of a vulnerable group.

In Italy, Dlearn organised the piloting with 10 male ex-offenders recruited from a program for social reintegration in the labour market and delivered both face-to-face and online.

In Portugal, the training was accepted by the Portuguese Prison and Probation Services to the delivered at Linhó prison. However, due to the pandemic constraints, the training was postponed and Aproximar delivered the training in December 2020 and January 2021 in "O Companheiro" facilities in Lisbon for 6 ex-offenders and offenders with non-custodial measures.

There were 44 participants (6 females and 38 males) in the pilot programme with ages between 22 and 58 years old. At the end of the pilot programme, only 37 completed the training.

This report is organised into five components:

- **Improvement recommendations**, where the recommendations, comments and suggestions presented are analysed;

- **Characterisation of the training action**, description of training and data associated with its physical execution;

- **Characterisation of the participants**, which describes the participants' profile in terms of gender (female/male), age, nationality, literacy and the current situation regarding their prison sentence and experience in the labour market;

- **Results from participants' perspective**, which analyse the results of the evaluation of the participants' satisfaction with the training, the balance of knowledge before and after the training, as well as the balance of the course, which analyses the opinions of the trainees regarding the adequacy of the themes of the course to their needs and also the tools used in the activities.

- **Results from trainer perspective**, which analyse the trainer's satisfaction evaluation with the training, and the opinions regarding the adequacy of the themes of the course to their needs and also the tools used in the activities.

_8

1. Improvement recommendations

The improvement recommendations summarised below are related to the contributions collected from the participants (during and at the end of the training) as well as from the perception of the organisers and the trainer regarding the fulfilment of the expectations and the expected objectives. They will be considered in future actions, in order to guarantee the continuous satisfaction of the participants and the fulfilment of their needs.

The Free to Code training did not meet some of the expectations and expected results – on the organisers/trainer perspective - due to the pandemic constraints, namely lockdowns throughout the partnership countries or other restrictions during the implementation of the training.

The recommendations, comments, suggestions were as follows:

• Participants liked the training, but they suggested that the course should have more interactive exercises because they liked the concept – learning by doing;

• Participants mostly enjoyed the content and the accessibility level was good - not too easy, not too hard, but were complaining about the difficulty to navigate inside the content and some additional written explanation for trainees were deemed necessary;

• The trainer suggested that the entire training would be better if the code would be written in files on the computers and then uploaded into the platform for the correction. Furthermore, he suggested that the exercises should be performed after every new piece of relevant information and that the requirements should be more specific so that the correction could be easier for the backend of the platform;

- There is a need - pointed by the trainer, organisers and participants - to create a pre-module or module 0 to introduce digital literacy that is more basic than the existing modules in order to "level out" and adapt the learning of participants who have little knowledge or who have never had contact with the digital world ("In these courses, at the beginning of each training, there should be more theoretical content for those who do not have any computer bases" Aproximar participant).

- Participants liked the training and the ideas behind the project, but were complaining about the difficulty to navigate inside the content:

    - *"needs a button to go back to readme"*

    - *"Navigation is complex"*

    - *"Design is cold"*

    - *"Needs a notification on Submit/ save"*

    - *"Auto logout means we lose our progress"*

    - *"It would be nice to have a book alongside"*

2. Characterisation of the training action

2.1. Audience

A total of 44 participants were involved in the pilot study. In case of Romania training, a group of 10 inmates participated in the training. Due to the Covid-19 pandemic, the rest of 34 participants (10 Asturia wz, 8 BeCode, 6 Aproximar, 10 Dlearn) were ex-offenders recruited in the pilot study from different community organisations.

2.2. Modality

Due to the coronavirus pandemic, the sessions could not be conducted as initially planned. The number of sessions varied between 1 (BeCode) and 48 sessions (Jilava Prison and European Strategies Consulting) and were conducted individually and in groups, face-to-face and online.

2.3. Form of organisation

The training was developed in different formats considering the pandemic context's measures, locally and nationally. There were:

- face to face activities in the classroom, with all participants and trainers, while respecting social distancing;

- online activities through meeting platforms, with the trainers in their offices and the participants in the classroom;

- face to face activities in the classroom, with two or three participants, when the regulation stated that inmates could be in the same classroom only if they are from the same room (in this situation, the same training session was held four times, in order for all the participants to be present);

- activities in their room, using worksheets;

- face to face clarification discussions, mostly individual.

2.4. Objectives

The Free to Code training was designed to help promote access to digital adult education, thereby reducing digital inequalities between vulnerable adult people improving the knowledge and use of ICT, namely focusing on digital literacy basics and basic coding.

The objectives to be achieved with the participants are:

- applying the methodology of the European recommendations - to validate the non-formal and informal learning to adult education into social assistance fields;

- promote coding education - has a package of skills such as digital skills (i.e., computational thinking), transversal skills (i.e., creativity, innovation);

- improve their job opportunities and for successful reentry through business and technology training.

2.4.1. Organization of action

The Free to Code training was initially scheduled to take place starting the second half of 2020, but due to the pandemic constraints, the training sessions mostly took place at the end of 2020- the beginning of 2021.

Dates of the pilot programme:

- Asturia wzv – February 2021

- Aproximar- 21-23 and 28-29 December 2020; 13 January 2021

- BeCode- 13 January 2021

- Dlearn- from October 2020 to mid-January 2021

- Jilava Prison- July 2020, November 2020 to February 2021

2.5. Results of physical execution

At Jilava Prison, Romania, eighteen inmates filled in the initial evaluation questionnaire, ten participants were selected for the training, and only eighth finished the training because two were released before the end of the pilot programme.

For Aproximar, 6 participants signed up for the training, all six participated in the training and delivered the satisfaction assessment sheets for the training. At BeCode, 8 participants signed up for the training, all eight participated in the training and delivered the satisfaction assessment sheets for the training. At Asturia vzw, 10 participants sign up for the training, but only 5 completed the final session. For Italy, Dlearn delivered all the training sessions to all 10 participants signed up.
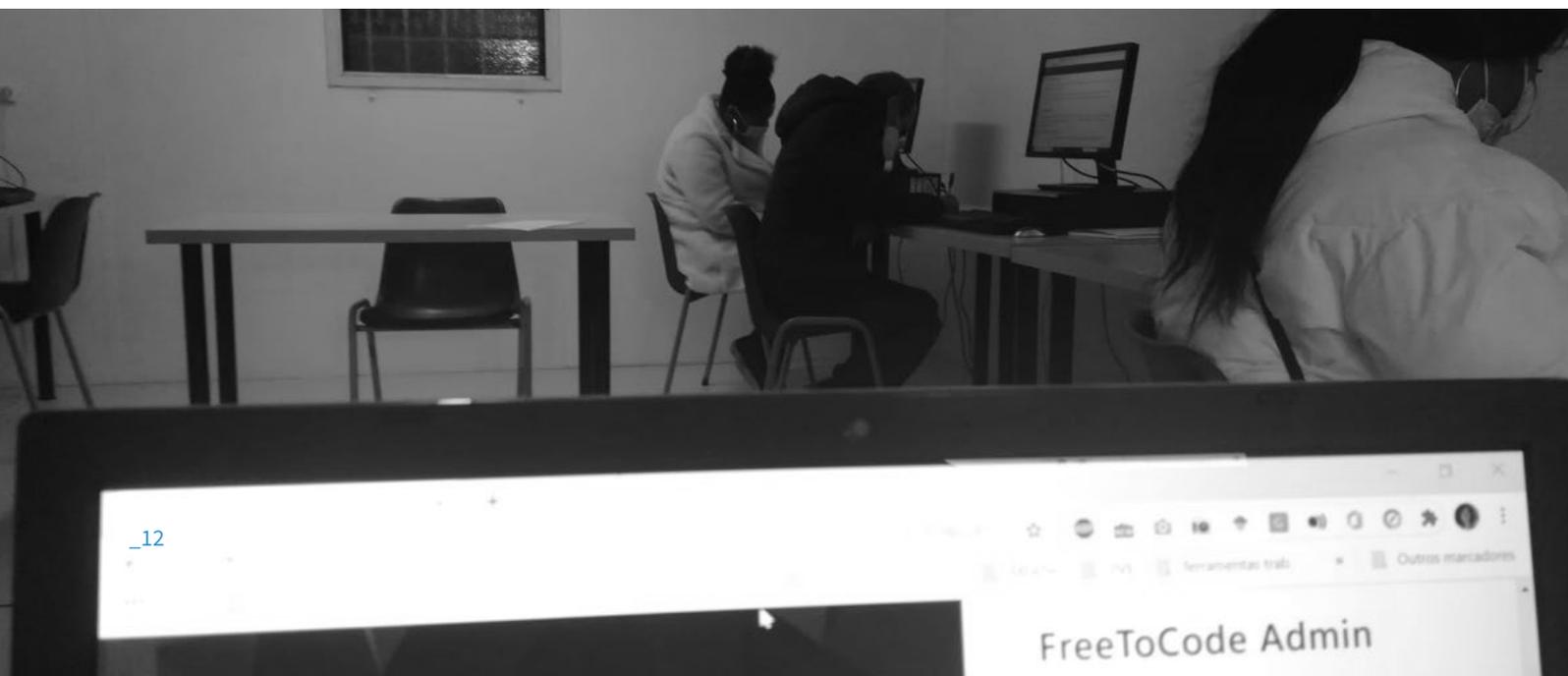
3. Characterisation of the participants

The 10 inmates from Jilava Prison, Romania were all male participants, with ages between 22 and 37 years old and they all had a medium level of education. Participants were inmates assigned to the open and semi-open regime, former drug users, convicted of crimes such as theft or robbery. Participants were part of a therapeutic community program for former drug users, which prepares them for the post-release period. The Therapeutic Community for Drug Users (CT) is currently a treatment system with a residential structure that provides a safe, protected, structured environment conducive to patients' beneficial change. CT is organised similar to a functional family, in which the ranking of residents reflects the different degrees of taking responsibility for change and favours achieving progress during treatment.

From Aproximar, Portugal there were 6 participants from the association O Companheiro. They are either ex-offenders or offenders with non-custodial measures. In terms of gender, there were two female and four male participants, with ages between 31 and 58 years old. Of those four are Portuguese and 2 are Cape Verdeans. From 6 participants, 5 are unemployed and 1 is employed.

From BeCode, Belgium 8 participants were enlisted: 2 ex-offenders and 6 from a vulnerable group. In terms of gender there were 4 female and 4 male participants, with ages between 31 and 58 years old. Of those 7 are Belgians and one is Chinese.

From *Asturia vzw*, Belgium there were 10 male ex-offenders participants and from *Dlearn*, Italy 10 male ex-offenders recruited from a program for social reintegration in the labour market.

4. Results from participants' perspective

This training had 2 moments of evaluation where we tried to capture 2 types of evaluation: evaluation of the trainees' competences and evaluation of the trainees' satisfaction. In this point 4, we analyse the participants' satisfaction results in order to understand the impact created on the participants. There were 36 participants that answered the questionnaire.

The participants' satisfaction assessment aims to perceive the degree of adequacy of the event to organisations and participants' needs in the training considering several parameters: training organisation, training content, trainers, training action nature, and recommendation or not of the training action.

The questionnaire had closed and open questions and the participants had the chance to express their plans after graduating this course. From their point of view, the *duration* of sessions and the allocated time for the exercises were adequate (most of the participants scored this aspect three of five points), and the *trainers* received 'very good' and 'excellent' for their way of teaching and explaining.

Regarding the *organisational* aspect of this course, most of the participants scored it four of five, mainly due to the fact that the training had limitations due to pandemic constraints imposed by the rise of people infected.

Regarding the inmates from Jilava Prison, asked 'What would you change?', 80% stated that they would prefer an individual laptop; it is worth mentioning that the online activities were challenging for one of the participants and preferred that all the session had a face-to-face format. The inmates think that the coding abilities developed during this course will be useful during the post-release period: 'I know how to make a website so I can get a job', 'I will spear some money and create my own website', 'I will find a job in IT'.

The *recommendation* made by the participants can be found in Improvement *recommendation* section of the report.

For the final assessment, the trainees were asked to self-assess some skills, knowledge and attitudes related to digital skills and overall experience.

The training's overall experience is mainly evaluated as 'good' and 'very good'. Some participants evaluate the training as 'average' because the training had limitations due to pandemic constraints.
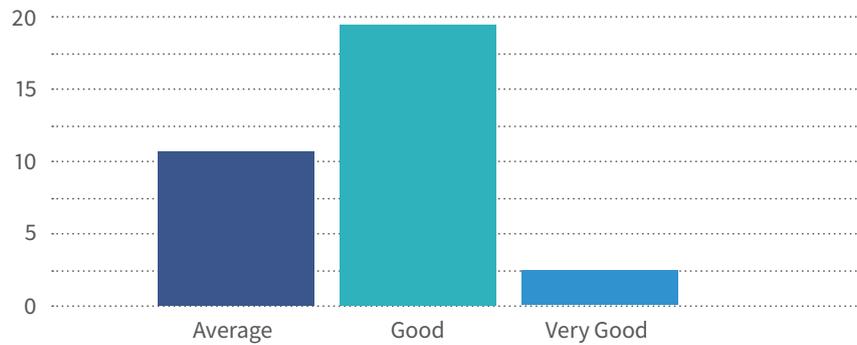
Figure 1. Overall experience of participants

The next section refers to the pilot programme's content assessment regarding the content of *Introduction* session, *HTML* and *CSS* modules and exercises.

The Introduction Session content was evaluated as 'average, 'good' and 'very good' for most participants. The HTML module content and exercises (Figure 2) was evaluated as 'good' and 'very good'.
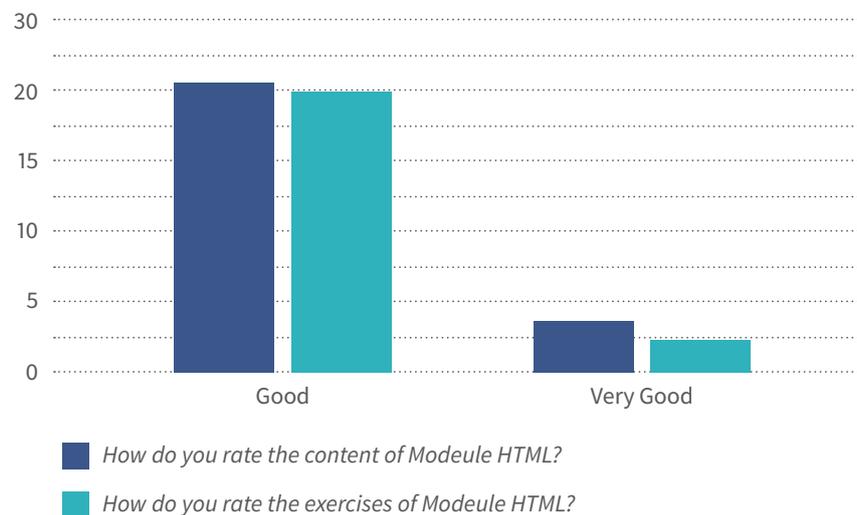
Figure 2. HTML Module evaluation

CCS Module content and exercises have a lower evaluation score than *HTML Module*. Overall, the module was assessed as 'average and 'good' for most participants.
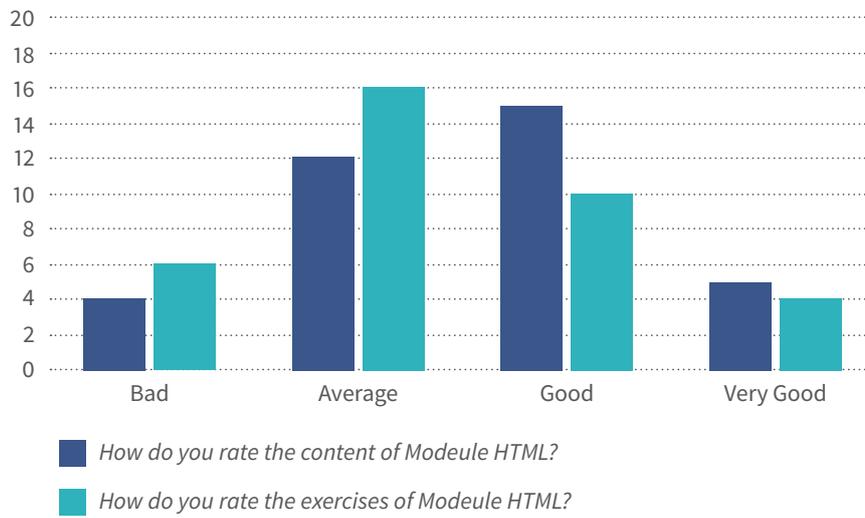
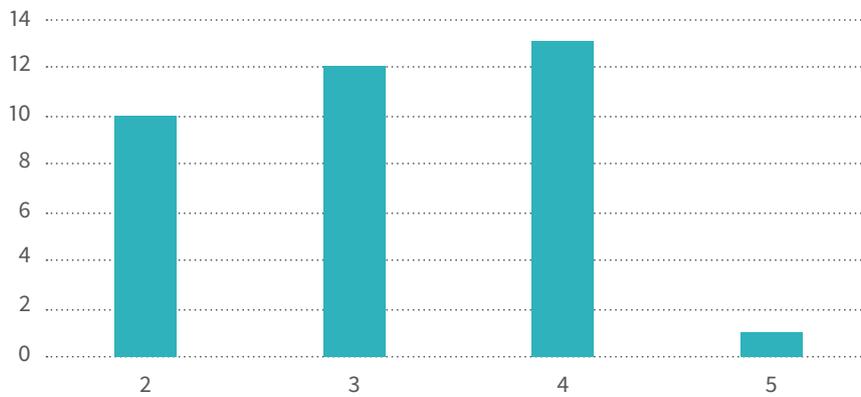Figure 3. CSS Module Evaluation

Figure 4. Training accessibility

When asked about the accessibility (Figure 4) of this training, most participants rated it as a 4 of five points. Regarding the interactivity (Figure 5) of this training, the participants gave a low score, the main reason was the measures that had to be taken to prevent the infection with COVID-19.
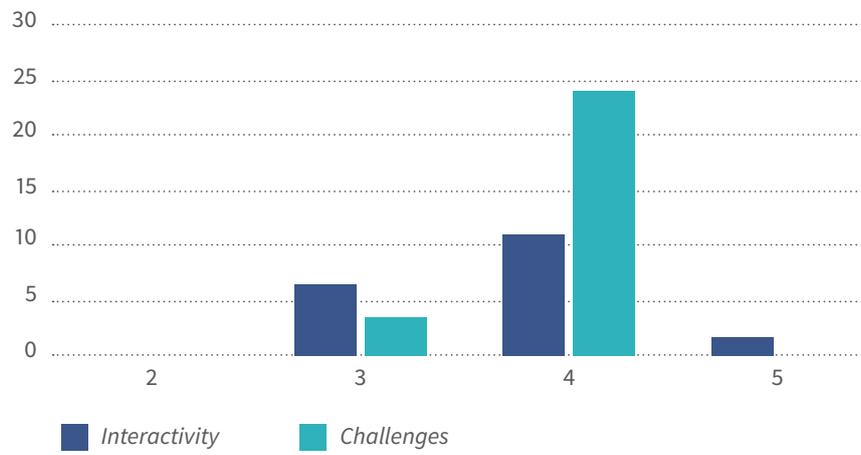
Figure 5. Training interactivity and challenges

_18

5. Results from trainer' perspective

The trainer's perspective was described using an internal Observation & Feedback template delivered by project partners. This survey consists of 5 questions: general atmosphere, modules/lessons that worked well and not so well, student recommendations and trainer recommendations.

We leave here the most relevant conclusions:

- The work sessions were enthusiastic and dynamic,

- The modules should contain more interactive games,

- The first modules were a little harder to understand for the participants,

- Some students needed some guidance such as for the use of the tools of the games,

- It is not always clear how to get to a next part on the platform and how you move around,

- The solutions disappear when you leave the page so you can't go back to check your answers in the past.

Annex

Figure 6. Jilava Prison, Romania- Individual online session

Figure 7. Jilava Prison, Romania- Face to face working session

Figure 8. BeCode Training, Belgium

Figure 9. Aproximar Training, Portugal

Figure 10. Asturia Training, Belgium

FREE TO
CODE