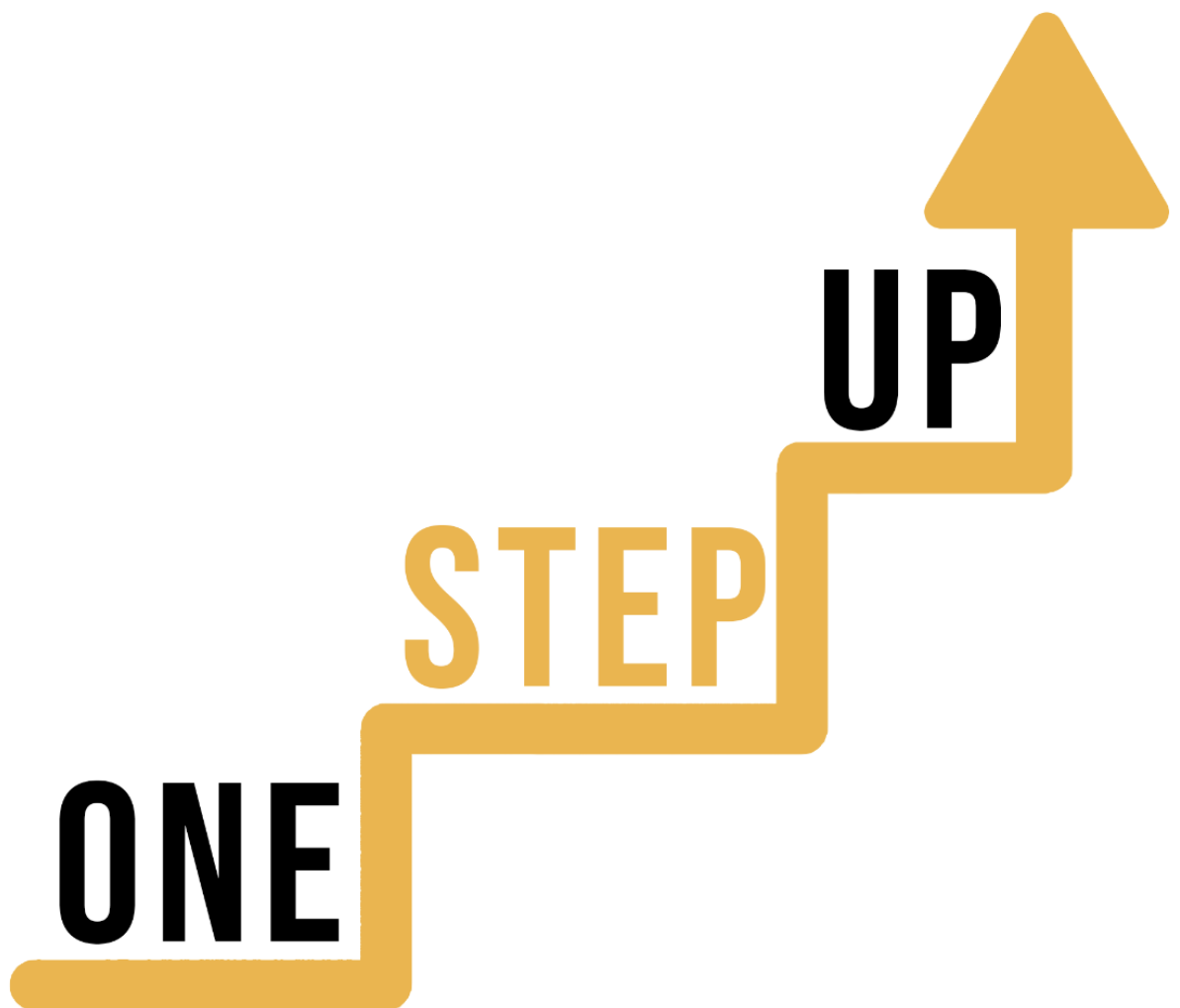


**MATHEMATICAL (STEM)
COMPETENCE AND ARTISTIC
DISCIPLINES**

LEARNER HANDOUT





MICRO-LEARNING RESOURCES TO RE-ENGAGE LOW-SKILLED ADULT LEARNERS IN EDUCATION AND TRAINING

Adult Educator Manual

The aim of this short handbook is to support you, as an experienced educator working with low-skilled and marginalised adult learners, with diverse needs, to use the video resources and the activity sheets provided in the Suite of Micro-Learning Resources to Re-Engage Low-Skilled Adult Learners in your centre and in your community. Through this short manual, we will provide you with some background information on the topic being discussed in the video resource and provide some guidance to support you to introduce and implement the accompanying activity with adult learners in your group. The activity that has been developed to accompany the video resources aims to further develop their understanding of the topic outlined in the video resource. Finally, this manual will also present you with some de-briefing questions that you can use in your group of adult learners, to assess the user-friendliness and quality of the activity you have completed with them.

The topic of this manual relates to the video resources *Building Mathematical Competencies through Art*.

INTRODUCTION TO THE TOPIC

Drawing, painting, taking pictures and above all being artistic can help low-skilled adults develop their mathematical, geometric and subsequently, STEM skills. Throughout the ONE-STEP UP resources, low-skilled adults can explore how these learning materials can positively impact their ability to work with numbers and calculations. So, whether they are practicing any kind of art or are just a “watcher” of artistic creation, they can be guided to discover how their favourite pictures, paintings or drawings can help them excel in maths and STEM.

INTRODUCTION TO THE ACTIVITY

In the Learner Handout, low-skilled adults have the opportunity to delve into the initiative done during “Mathematics Week” in Finnistère, France in 2020. This initiative offered primary school students the opportunity to discover geometry and mathematics through arts-related activities. Moreover, learners have the possibility to engage in the fun and interactive “Draw a face” activity. They will discover how drawing can improve their ability to work with mathematical instruments and learn symmetry. With this, you can inspire learners to discover how even the most unlikely activities can lead to significant improvements in their mathematical and STEM skills.

USING THIS RESOURCE WITH A GROUP

To use this resource with adult learners in your local group, we recommend that you begin by showing them the video resource to introduce the theme of *Artistic disciplines (Mathematical (STEM) Competence)*. This video will help learners to understand the topic before they begin the Learner Handout activity. Once they have gained a general knowledge of the theme, they will be able to begin the handout. For this, we recommend that you print one handout per learner to complete. All learners need for this resource is a pen to complete the learner handout and a computer to view the video. This resource will take one hour in total to complete.

DE-BRIEFING QUESTIONS

Here are some potential debriefing questions for participants to reflect on after completing the case study and activity:

- What surprises you the most about the Mathematical Week 2020 initiative in Finnistère?
- In what ways did this initiative/program go beyond just teaching math and STEM skills?

- What is one key takeaway that you will bring with you from this case study and activity? How will you apply it to your own life or work?
- What was your experience like during the “Draw a face” activity? Did you find it helpful in improving your mathematical and geometric competencies?
- How can art be incorporated into education or training programs for low-skilled adults to improve their math and STEM skills?

ONE STEP UP



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