Contract No. 2020-1-FR01-KA202-080105 (2020-2023)

**IO1-A3b & A4**

Didactic tools for the professionalization of site managers and team leaders for building renovation sites, designed in relation to work situations.

**Methodology used to carry out observations of work situations on the renovation site:**

**Tests of grids 1 and 2 in Spain (Principado de Asturias)**

To carry out this experimentation, we established contact with the Asturian Construction Confederation, who provided us with the name of the company available to collaborate and which was carrying out a rehabilitation work for the envelope isolation of a high-rise building located in the center of Gijón, which seemed ideal to implement the use of Grid 1 and Grid 2, since it met a very common type of work in our region.

The experimentation was carried out by a technician and a trainer from the FLC training area.

1. **PREPARATION OF THE VISIT**

On 21 June 2022 the manager of the company is contacted to ask for his collaboration in this experimentation and a meeting is arranged with her to explain the details of the collaboration. The meeting takes place in her office the following day on 22 June 2022 and during this first contact she is informed about:

* The RenovUp Project (objectives, partners, phases...)
* The nature and purpose of the observation, number of visits to be made and estimated time of each visit.
* The characteristics of the work situations and profiles we intended to visit and the reason for this choice.
* Our intention to interfere as little as possible in the development of the work on site.

The manager is receptive to the collaboration, although she is concerned that the presence of two people outsiders may affect the safety of the work. She contacts the safety coordinator to inform him of our presence and after his approval, she calls the site manager to agree with him on a date for the visit.

It is agreed that the site will be visited the following day, on 23 June 2022, to observe two work situations: the rehabilitation of the north façade (profile to be observed: site manager) and the rehabilitation of the roof (profile to be observed: team leader).

1. **DEVELOPMENT OF THE VISIT**

**Observation of the site manager**

The site manager was already waiting for our visit at the agreed time. He had sufficient information about the purpose of our presence and was very helpful.

Before starting the observation, we held a talk with him to obtain information on the status of the work: the workers present that day, work to be done that day, expected completion date, problems that had arisen since the start of the work.

The observation took place while the person in charge was carrying out the waterproofing application execution control and we had the opportunity to check the excellent communication skills of this professional with his team: how he was able to correct the work method without generating conflict among the workers.

In total, the observation lasted another 2 hours.

**Observation of the team leader**

This observation was the more complex due to the fact that:

* Neither the manager nor the site manager had informed the team leader in advance of the visit, which initially generated in the worker a certain reservation.
* When we arrive the team leader was going to access the roof to inspect its condition and place lifelines. He was concerned about the appropriateness of two outsiders without specific training in working at heights accessing a space reserved exclusively for qualified workers.

After an adequate introduction of the object of our visit, we managed to gain the trust of the worker and carry out the observation from a safe position on the roof (at the access point to the roof, inside the building).

After the observation, we spend a few minutes gathering information on the status of the work: work in progress, available staff, problems and stressful situations that have arisen, documentation handled, etc.

In total we stayed with the team leader for about an hour and a half.

Data collection during both visits was carried out by direct notes in a notebook.

**AFTER THE VISIT**

Grid 1 and Grid 2 were completed off-site, in the afternoon immediately following the visits.

With the help of the annotations the process of covering the Grids was straightforward. It was done more quickly in the second one, since we were more familiar with the tool. This is why we believe that proper "training" of the observer is key before the visits take place.

1. **STRENGTHS AND WEAKNESSES OBSERVED DURING THE EXPERIMENTATION WITH THE TOOL**
* **Strengths**
* Both Grids require a structured (categorized) observation that makes it easier for the observer to recognize all aspects of real work situations: environment, documents, methods, equipment and human resources.
* They provide insight into work procedures that would never be detected with other tools (interview, survey).
* **Weaknesses**
* The complexity of Grid 1 and Grid 2 requires a trained observer to use them.
* The size of the grid cells is very small, which makes it necessary to be brief in the description of the observation, causing potential loss of information or difficulty in describing the situations observed.
* There is a danger of making incorrect generalizations from partial observations.
* The mere presence of the observer (an outsider) can influence the way in which activities are carried out: workers have a tendency to hide problematic situations to prevent the observer from recording negative procedures.
* Difficulties in carrying out the observation at the time of the development of hazardous work (work on roofs, asbestos removal or confined spaces may be some examples).
1. **RECOMMENDATIONS**
* Always contact directly with the workers to be observed to avoid reluctance to the visit by "catching them by surprise".
* If it is not possible to fill in the Grid directly during the visit, do so immediately afterwards so as not to forget the details observed.
* The observer should stay as far away as possible so as not to alter the observed situation
* Facilitate "observer training", e.g., by providing them with videos/recordings on which they can observe and how these observations are used to complete the Grids.