NEWTON D6.2

Project No.688503 EU HORIZON 2020 Project **Networked labs for training in sciences and technologies**



Deliverable D6.2 Summary

NEWTON is currently designing and developing innovative technologies inspired by new pedagogical approaches to enhance the learning of diverse types of students, with varying needs, ages, levels, capacities, etc. These technology-enhanced teaching approaches have been or will be deployed in a range of pilots, where their impact on learning can be assessed. This document is the second deliverable of WP6 – Pedagogical Assessment, and its main goal is to present the initial findings from the assessment and evaluation of the various NEWTON pilots – including small and large-scale pilots and the pre-pilots that were undertaken prior to the development and implementation of the pedagogical assessment toolkit (which is discussed in Section 2 of this document).

Based on NEWTON Project's Description of Action (DoA), it is important to clarify that this deliverable will address the results from individual pilots sequentially – the cross-analysis of pilots will not be performed in this document. It's also important to note that the timing of this deliverable makes it impossible to report on all pilots as some are currently running and will not be completed until later in the project lifecycle.

Furthermore, it should be clarified that there is a relationship between this deliverable and a later deliverable – D6.4 Evaluation of the NEWTON platform prototype and usage – which will be reported towards the end of the project. D6.4 will report more fully on the learning outcomes from all the pilots whilst reflecting further on issues of student engagement, motivation, enjoyment and the reaction of teachers to the technology. Moreover, D6.4 will present cross-analysis of different pilots based on a range of criteria and reflecting the user profile analysis that has been part of the pedagogical assessment process. The final chapter of this deliverable sets out a clear plan for D6.4 and establishes the metrics by which the cross-pilot analysis will be carried out once all pilots are finished and all data is collated. In this way, D6.2 can be seen as an 'interim' report on the impact of the NEWTON technology in advance of the 'final' report which will be delivered as D6.4 towards the end of the project.

This document also has a close relationship with the deliverable that preceded it – D6.1. D6.1 set out the approach to pedagogical assessment that was taken across all pilots. This approach is being implemented in every participating institution and the content reported on here is a reflection of that approach. Although we do not attempt to replicate D6.1 here, we do offer a summary of the approach taken to assessment as a pre-cursor to the reporting of the pilot results. This is intended to enable this document to stand alone as a reference for the impact of NEWTON on learners and teachers. However, for a full understanding of the content presented here, we recommend a review of D6.1 as this provides a more details description of the approach to evaluation.

With this in mind, this document first offers a description of the pilot planning process (which has been overseen by the PAC) and a decryption of the different types of pilots. Then, a summary of the approach



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to evaluation and assessment taken within Work Package 6 (and described in D6.1) including reference to the work of the pedagogical assessment committee (PAC) and the development of the PAC Toolkit are presented. After this, summary findings from each of the individual pilots completed to date are provided, organised according to pilot type (large-scale, small-scale and pre-pilot). And finally planning and structure for D6.4 are provided, which will form the basis for the final pilots cross-analysis evaluation to be delivered towards the end of the project.