



Template for the description of context and requirements – Task 4.1

“Context and Requirements for LA - Approach”

“ILEDA”

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1 Context Description and constraints

[In this section you should describe the context where the LA is carried out and the main constraints]

1.1 Technological systems employed

[Describe the technological institutional systems used.

Explanation: Referred to the LMS, educational tools, communication tools that are available for both the teachers and the students. Especially important in this sense is if the tools are not interconnected between them.]

1.2 LA tools currently available

[Describe the LA tools currently available for the teachers and institutions managers.

Explanation: Depending on the application level and technological educational ecosystem is it possible to have different tools such as dashboards, reporting tools, query tools, etc. It is very important to know what is or is not available in the context].

1.3 The institutional LA policy

[Describe the institutional LA policy, if any.

Explanation: If the institution has defined a protocol to track students’ progress, teachers’ activities, content use and so on. If LA is going to be applied, it is good to know how the university is supporting this or if they are supporting it at all. For instance, we could have an interesting tool to exploit and present the students logs, but if the university does not allow the installation of those tools, it is something we could not apply.]

1.4 Data access policy

[Describe how data is accessed.

Explanation: The data should be accessible to later possible analysis, so it is necessary to know the data protection law that is going to be applied, what part of the students’ and teachers’ activities can be stored and how much of that data will be accessible for further analysis, if some data must be analyzed in an anonymous way or not, etc. This policy can be defined at different levels, from the university to European laws passing through local, regional, or national laws. If external apps were used during the LA application, it is interesting to know if the data of those contexts can be analyzed from the institutional one.]

1.5 Application Scope

[Describe the application scope of your possible LA approach.

Explanation: As in the methodological part, the LA application requires to know at what level it is going to be applied, from an institutional level the learning analytics aims could not be the same as at a course or an activity level. This could be needed for looking at other metrics or to explore metrics in order ways. For an institution it could be interesting to check the first-year students pass

rate, while for the first-year teachers, they could be interested in how this rate is related with the hours spent in the platform.]

1.6 Ethical policy.

[Describe your ethical policy if any.

Explanation: Sometimes, it is not considered ethical to use students’ information or track what they are doing. This used to be defined at an institutional level. If some of the data could not be used because of ethical reasons this should be considered, specially at the beginning of the application of LA.]

1.7 Expert support.

[Describe if you have expert support both for the access or the analysis of data.

Explanation: It is convenient to know if there is some technical team that can support the teacher in accessing the data, generating reports, or installing LA tools. In addition, it is desirable to have a team with a data science background that can help the teachers to understand or to better explore the data.]

2 Metrics

[Something essential in LA, once we have defined our aims and the application level is to establish which metrics we are going to attend to. This depends on the previous factors and could be related to other metrics. In order to fulfil this section we recommend to answer the following questions:

- 1. What we would like to assess?*
- 2. What information is available to do this?*
- 3. What tools or algorithms can be used to analyze the data I have?*
- 4. How can we represent the metrics?*

For instance, we could decide to assess students’ progress, first is to define what we understand by students’ progress, later on to check what data do I have available. With the data we can decide the kind of analysis to carry out, but it would be necessary to check in the literature how effectively to track students’ progress. With this clear metrics are almost defined, but the representation is also a relevant issue. We should be able to check the students’ progress with simple graphs and if possible, at a glance

Once we have the metrics defined, if they do not work properly we can refine them].

3 Possible technical solution

[Describe in your opinion and taking into account your context features which could be the best technical solution. Please keep in mind that it should be as open as possible as we would like to use it as common approach for all the project partners.

