

# Let's Find Suitable Word Using LAD

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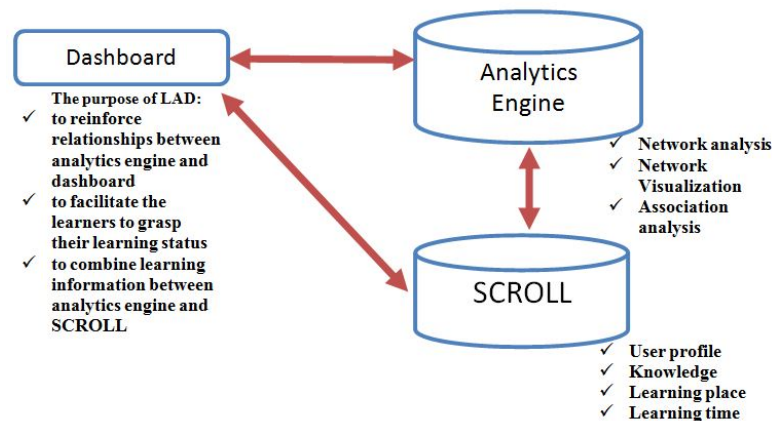
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## 1. Introduction

In the past decade, the enhancement of mobile technology offered an opportunity to provide study ways anytime and anywhere. It allows learners for immediate access to data online wherever they are such as at home, library or on the road. SCROLL has been developed in order to support learners to record information, to recall them, to share and to reuse them in future learning (Ogata et al., 2011). Each recorded object is called ubiquitous learning log object (ULLO). The vocabulary of a learner increase highly by learning many words everyday and sharing them with others. It creates a demand to analyze the ULLO to provide learners with suitable learning logs in accordance with their learning habits, context, time and location. Therefore we propose a dashboard that is one of the learning analytics tool called Learner's Assistant Dashboard (LAD). Siemens et al. proposed an approach for reinforcing relationship between analytics engine and dashboard (Siemens et al., 2011). Therefore we consider dashboard approach for reinforcing relationships between analytics engine of SCROLL and LAD. That way, learners and teachers can grasp easily their learning status and links among them. Our former version of L2D, standing for Learning Log Dashboard, enables learners to reflect on their own activity. Detailed introduction can be found in (Lkhagvasuren et al., 2014).

## 2. Learner's Assistant Dashboard

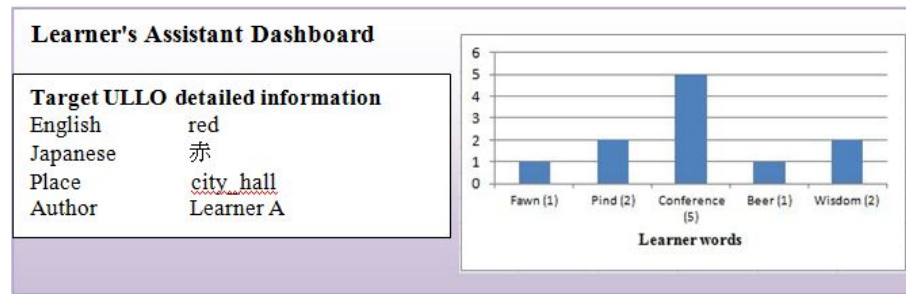
LAD enables learners to reinforce what they have learned by themselves and from each other by understandable and visualized graph representation. Besides LAD supports learning information moving between analysis engine and SCROLL by combining roles as shown in Figure 1. It presents LAD model and its role. Moreover LAD combines SCROLL and an analytics engine.



**Figure 1.** How learner's assistant dashboard (LAD) works.

"Social network analysis is a typical example of an idea that can be applied in many fields" (Evelien et al., 2002). For instance, Shane et al. elicited relationships between the citation and the papers which were published in the first three editions of the international conference of LAK (Shane et al., 2014). Mouri et al. reveal relationships among learners, ULLO, place and time using network graph

and network analysis (Mouri et al., 2015). LAD will give learners an easy way to find suitable words and to increase their motivation. If a learner clicks a node on network graph, LAD will display its learning status and links among them. For example, if learner A clicks a word "Red" (See Figure 2), LAD will present its translation and the author there of. So if the learner finds a useful word, then the learner will be able to save it to his/her own vocabulary. LAD also shows the learner's target words via column graph. Besides it, the number of the word added (by other users) to the SCROLL system is shown in this graph. This number will indicate how actively the users learn the words. LAD also facilitates the learners to understand their learning status.



**Figure 2.** The image of the designed LAD.

### 3. Conclusion and future work

This paper aims to describe the role of Learner's Assistant Dashboard System interface design in SCROLL. The main goal of LAD is to recommend suitable learning logs for learners. Therefore LAD can help learners to discover related, important learning resources. Furthermore it is essential to conduct depth researches and experiments on evaluation of LAD's efficiency. In future experiment, two questions will be evaluated. Is this proposal system helpful for learners' L2 learning in context? Is the number of logs added by LAD can be more than current normal SCROLL?

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