

# Chapter 31

## Creating Coherent Incidental Learning Journeys on Smartphones Using Feedback and Progress Indicators: The SCAMP Framework

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### ABSTRACT

*Although the motivating role of feedback and progress indicators is understood in formal learning, their role in supporting incidental mobile learning is less well understood. In this paper we argue that well-designed feedback and progress indicators (FPIs) offer guidance and structure that may encourage mobile app users to move from fragmented learning episodes towards a longer term, reflective learning journey. Drawing from relevant literature we consider how FPIs can be used in the EU-funded MASELTOV project which explores how a suite of smartphone apps can support recent immigrants to Europe to become integrated in their new cities. These apps allow learning episodes to be part of daily activities and interactions. The authors discuss what kinds of FPIs should be provided and introduce the SCAMP model which emphasises five types of FPIs- Social, Cognitive, Affective, Motivational and Progress. Finally, the authors provide examples of FPIs that will be used in the MASELTOV project.*

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## INTRODUCTION

Mobile learning creates opportunities for providing feedback and assessing or reflecting on learner progress. It also presents challenges in doing so effectively, particularly in incidental learning which occurs outside formal structured learning environments. In these settings, mobile participants make use of their surroundings and interactions with other people as part of an informal learning journey, which may be individual or socially constructed with other learners. The participant we have in mind here is a relatively new immigrant to a large European city, who needs to learn and find out about their new city and its culture, and to get help with everyday problems and challenges. Their journey can be a literal journey through a city, where they use smartphone apps to help them find their way around, interpret signs and information that are not in their native language, find out about places of interest, and access information about health and employment. However, there is a danger that the use of such apps may be isolated episodes that help them with tasks such as finding the right bus or translating signs at a hospital, but which do not accumulate into anything more enduring. Therefore, we are also interested in supporting participants to engage in a more sustained and reflective *learning journey*, which would give learners “a sense of distance travelled” (Ofsted, 2010). In this paper we consider the role of feedback and progress indicators in supporting and motivating incidental mobile learning. We explore this issue in the context of the MASELTOV project.

The EU FP7 funded MASELTOV consortium (<http://www.maseltov.eu>) is exploring how incidental learning, which has been defined as “unintentional or unplanned learning that results from other activities” (Kerka, 2000, p.1), may support language learning and social inclusion when delivered via mobile devices (specifically, Android smartphones). It is building a number of integrated services, under a single app (the MApp) that our

target audience, recent immigrants to Europe, can use in their daily activities. The aim is to both resolve their immediate needs and also to enable reflection and further planning of learning goals to help them to become integrated into their new home and work environments, particularly urban localities. As our target audience are likely to have work and family commitments, attending formal educational classes is often difficult (Kluzer, Ferrari & Centeno, 2011). However, a smartphone based app which can be accessed anywhere and which uses the lived environment as a contextual resource is particularly suited to this group. The MApp includes:

- **Language Learning:** activities focused around key challenges for recent immigrants such as employment, healthcare, and negotiating bureaucracy
- **Translation Tool:** converts images taken with the phone’s camera to text, and translates them using a third party translation tool or onboard dictionary
- **Navigation:** tools to enable public transport planning and a ‘pedestrian sat-nav’
- **Help Radar:** finds nearby volunteers who can help the user solve immediate problems
- **Places of Interest:** a service that lists places of interest in the city
- A serious game providing playful learning about cultural differences
- **Information:** about services in the new city e.g. health, employment
- **Social Tools:** to enable contact with other learners, and sharing knowledge
- **Context Awareness Service:** to interpret users’ location and current modes of activity to enable appropriate resources to be recommended to users at an appropriate time (a user’s preference may vary depending on whether they are waiting at a bus stop or relaxing at home in the evening)

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