

# Future Work: LTI Integration

Steven Endres

steven.endres@gatech.edu

Marissa McHugh

mmchugh9@gatech.edu

**Abstract**—An executive skills coaching application for college students should ideally be integrated with an institutional learning management system. We leave this integration as future work but provide resources that should prove useful when implementing this integration.

## 1 INTRODUCTION

Educational institutions typically use a Learning Management System (LMS) as an online platform for instruction. Many of these platforms support the Learning Tools Interoperability (LTI) industry standard, which connects the LMS to external tools, enabling new features and capabilities not present in the core LMS. An executive skills coaching application for college students should ideally be integrated with an institutional learning management system for access to current academic data. We leave LTI integration as future work but offer the following resources as a starting point toward this goal.

## 2 LTI 1.3 PHP LIBRARY

The current LTI release is version 1.3; all other versions (including the earlier but seemingly later version 2.0) are officially deprecated. 1EdTech, the standards body behind the LTI specification, has created code libraries in several programming languages to facilitate integration. The code in our project `web` folder is written in PHP with the intent of LMS integration using the 1EdTech library.

[LTI 1.3 PHP Library](#)

## 3 LTI 1.3 TUTORIAL VIDEOS

Edtech vendor Unicon, Inc., published a series of YouTube videos demonstrating how to use the LTI 1.3 PHP Library. In these videos, Martin Lenord from Turnitin

demonstrates the process of adapting an existing, standalone PHP application for integration with the LMS. The series consists of five episodes:

[LTI Spotlight: Build A Tool With Martin Lenord —Part 1 - LTI 1.3 Launch](#)

[LTI Spotlight: Build A Tool With Martin Lenord —Part 2 - Deep Linking Capabilities](#)

[LTI Spotlight: Build A Tool With Martin Lenord —Part 3 - Assignment & Grades Service](#)

[LTI Spotlight: Build A Tool With Martin Lenord —Part 4 - Names & Roles Provisioning Service](#)

[LTI Spotlight: Build A Tool With Martin Lenord —Part 5 - Group Service](#)