



IMS Global Learning Consortium Learning Impact Awards Finals

Kimono: flexible, standards-based data integrations

The Challenge

The IT ecosystem in K-12 is more complicated than ever. K-12 has always had administrative systems, and most districts are adopting enterprise learning management systems, assessment systems, and digital curriculum. The average classroom now uses 30 different applications, and nearly all of them need data. Districts have come to expect applications to come bundled with an integration solution, putting the problem back on the K-12 vendors. Data models differ from app to app, some apps are in the cloud while others are on premise, and there are usually multiple data streams that need to be integrated. In the case of learning applications, the need to share student performance data with other systems has presented yet another challenge. Without a solution like Kimono, application vendors must develop and maintain point-to-point solutions for every student information system (SIS) and application they decide to support.

The Solution

Kimono enables secure sharing of student, staff, and learning data among many software applications in a school using our integration platform as a service (iPaaS). It works by continuously acquiring data from the SIS and other applications, then exchanging it over a Publish & Subscribe architecture that supports a growing number of industry-standard infrastructures, APIs, and data models, including OneRoster, LIS, ILP, and SIF. This enables Kimono to exchange data with any SIS or application on the market. It continuously acquires data, standardizes ingestion through a common pipeline, then shares it using the preferred data standard and integration method for each application. Every application connected to the Platform shares data seamlessly with other apps in exactly the format needed, without point-to-point integrations. Kimono also enables bi-directional sharing of data. This means that in addition to sharing roster data, the Platform can share student performance data.

Learning Impact Outcomes

With Kimono, application teams are free to focus on their products, as opposed to worrying about data integration. Because the Platform streamlines and standardizes the way data is collected and shared, integrations are less prone to error, and there is a lot less for application teams to manage. It allows maximum flexibility with data models, mappings, and customizations, so application teams can set up complex mappings for customers without assistance. Teams control of all their integrations in one place with diagnostics centralized in one console. As evidence of the power of this solution, during back-to-school last year, a small team at Canvas migrated hundreds of customers to the Kimono Platform, implementing automated rostering and grade passback. Without Kimono's mapping engine enabling Canvas to perform complex manipulations of data, the team would not have been able to migrate that number of customers, or offer them the ability to transfer grades back to the SIS. The grade passback capability is saving teachers up to two hours per day, as they no longer have to transcribe grades from one system to another.

Return on Investment

Teachers reported saving anywhere from 15 minutes to two hours per day using the grade passback feature in Kimono. Calculating the value of this time saved, for every dollar spent on Kimono, schools receive \$25.78* in value back in time saved by their teachers. This is just the value of the grade passback feature, and doesn't even factor in the value of automating rostering and improving data quality and security.

**Based on the average teacher salary reported by NCES for 255 working days, teachers working an average of 10 hours and 40 minutes per day, and saving 15 minutes per day with grade passback.*