Argos Education's Openness Position Paper

Introduction

Many educators have strong commitments to open-source software, open educational resources, open access publishing, open science, and various other types of academic and educational work that can be approached communally for the common good. We at Argos Education are aware of these often strongly held views. We are also aware that some people who hold such commitments consider them holistically under an umbrella that is sometimes referred to as "openness."

We take no position on the "best" or "correct" way to approach openness. We do, however, have our own commitments which are rooted in our values and business goals. Particularly in the education sector, business success is increasingly tied to the company's perceived alignment to its customers' values. Our openness policy is an example of how we believe that designing our strategy to lean into our values is simply good business practice.

At a high level, our open-related values are as follows:

1. We believe that knowledge that can help improve the state of education should not be proprietary but that limited exceptions can and should be made in order to advance the sustainability of efforts to improve education, particularly when the knowledge is only indirectly related to improving the state of education.
2. We distinguish between "open," by which we mean non-proprietary, and "free," by which we mean without monetary cost. While we are also committed to the value of affordability in education, we view it as separate from openness.
3. We recognize that practical tensions can arise between commitments to the sustainability of non-proprietary resources and affordability of educational resources to students. We strive to strike a practical balance between those two commitments.

We believe that businesses in the education sector win by serving educational values, partnering closely with academics and their institutions, and executing well. We also believe that this strategy yields more business value than one that leads with IP. In this context, a strategy that thoughtfully embraces openness as a means of collaboration with educators is good business in addition to being good behavior.

This document will describe our commitments to various types of openness as well as how we approach the intersection between "open" and "free."

Open-Source Software

Argos Sojourner is built on open-source software. The fact is that most modern-day software is to one degree or another. Much of the web in particular is built on open-source infrastructure. But our relationship to open source is particularly close. Sojourner would not exist had Carnegie Mellon University (CMU) not released the source code for its Open Learning Initiative (OLI) platform—a project which they have been refining for 20 years and which enables them to conduct ongoing educational research while supporting hundreds of thousands of learners every year. By tying ourselves to CMU's open-source project in the way that we have, we at Argos are not merely source users but open-source contributors and collaborators.

We commit to the following:

- We will maintain interoperability between Sojourner and the open-source project. Learning experiences—not just the content but the executable learning designs—that are built in Sojourner will run in the open-source software.
- We will contribute all of Sojourner's UI and functional enhancements to the open-source project, with some specific exceptions that are noted below.
- We will continue to work with CMU and other contributors to the open-source project to establish and participate in a governance model that rewards contribution and addresses the needs of the major stakeholders.
- We will maintain a public, current, and accessible list of the functionality that we have chosen to not to contribute to the open-source project.

Code that we will not contribute to the open-source project will be either not learning-related or additive to rather than essential to the core platform. In the latter case, our work may be subject to other commitments to openness described later in this document. While it is impossible for us to provide an exhaustive list of capabilities we develop that we will keep as proprietary, including capabilities we haven't thought of yet, our current list should be illustrative of our principles.

We do not intend to open-source the following capabilities:

- The storefront and e-commerce functionality, with the exception of the code inside the core platform that is necessary to interact with e-commerce systems
- AI and ML learning design productivity aids

Open Science

We are fortunate to be building on a heritage of a platform that was designed to help advance learning science and has continuously so for two decades. We proudly and gratefully embrace that heritage.

Once again, we believe our values align well with our business goals. We do not believe that educational products will gain durable competitive advantages through proprietary algorithms in an era when common ML/AI practices are increasingly open-source commodities. To the contrary, we believe that lack of trust by educators in these algorithms is more likely to be a market hindrance. The answer to this problem is to lean into academic credibility mechanisms by regularly conducting and publishing studies, preferably through academic, peer-reviewed journals when practical. We will keep our code proprietary in these cases to maintain a short-term competitive lead while actively promoting transparency and peer review of our methods and results.

We make the following commitments:

- Supporting educational research and improving educator literacy on evidence-based practices will be a core principle underlying the design and implementation of Sojourner.
- For ML and AI algorithms that we do not release under an open-source license, we will publish our methods.
- We will maintain a routine practice of conducting efficacy research, particularly regarding both open and proprietary features of Sojourner.
- We partner with our publishers and adopters to encourage and support their own efficacy research.

Open Educational Resources (OER)

We have designed Argos Education to advance the values of effective and affordable education. Because we take an ecosystem approach to that mission, we do not equate affordable with free. We believe it important to recognize the need to create sustainability models for well-maintained effective and affordable content. Our

primary interest in OER is the opportunity to crowd-source the effectiveness of the content while making the work involved in doing so as affordable as possible (in time investment as well as money required).

From a business perspective, we believe the network effects we can enable through ML-assisted crowd-sourcing of improvement and customization options will enable us to create a powerful and durable competitive differentiator.

We make the following commitments:

- While Sojourner is by no means exclusively focused on OER, we will promote content that is released under licenses that enable collaborative improvement and affordability.
- To support the update and continuous improvement of learning content that is released under an open license, we provide content creators with the option to collect compensation for sustainability purposes, particularly in cases where the content resource is relatively expensive to create or maintain.
- We will share with the content creators any insights that we can provide regarding the effectiveness or potential for improvement of their works as long as we can do so without violating our data privacy commitments.
- As with all creators of content within Sojourner, OER content creators to retain all rights and privileges to that they choose to retain under their preferred license. We support all such rights and privileges, including the right to publish or otherwise distribute their content elsewhere.

Open Standards

Argos is built on the thesis that educational content is moving from an economy of scarcity rooted in the print world to an economy of abundance rooted in the online world. This shift increases the value of how content, including interactive content and related functionality, are tied together into a coherent learning experience. One way to think about this shift is to think of a learning design as a carefully constructed network of experiences that learners navigate. Argos has a commercial interest in providing incentives to create educational content and applications that can be integrated into these learning design networks, which may require them to connect to Sojourner's APIs in various ways. Interoperability standards lower both the effort and the risk involved for both the developers of the integrated pieces and the adopters of the integrated whole. We believe the potential value of the network effects far exceed the potential value of proprietary APIs.

We therefore make the following commitments:

- We will use existing interoperability standards wherever possible.
- As Sojourner's APIs develop, we will continue to actively engage with interoperability standards bodies about our work.
- Whenever practical, Sojourner's APIs will adopt and extend existing interoperability standards and submit proposed extensions for potential adoption by those bodies.
- We maintain long-term goals of creating standards-based interoperability of Sojourner products, both in terms of learning and efficacy data accessible to other platforms from products on Sojourner and in terms of portability of learning designs exported from Sojourner.