# Chapter 9 The Open Source Perspective in Education Technology: A Digital Kon-Tiki Journey

#### **Martin Dow**

Open-Source Learning Academy Network, USA

#### **David Preston**

Open-Source Learning Academy Network, USA

#### **ABSTRACT**

Open source implies shared knowledge, one of the central virtues of the FOSS model. It is therefore natural that open-source technology constitutes a key resource for building accessible educational tools. Cost-effectiveness is not the only benefit brought about by the FOSS paradigm. Along with the flexibility permitted by unrestricted access to the source code, FOSS also implies public sovereignty, as community-driven development allows the society to regain control over the technology it uses and upon which it relies. Educational tools are especially critical in this context, as it directly impacts our autonomy to implement education programs free from technical, economic, or ideological biases dictated by corporate big tech. This chapter delves into this matter, exploring an illustrative case study based on the OSLAP experience. As in other application fields calling for new sustainable FOSS business models, open-source educational technology emerges as an area where fresh ideas are demanded, along with strategies for how to finance collaborative projects in the long term.

DOI: 10.4018/978-1-6684-4785-7.ch009

#### INTRODUCING TECHNOLOGY TO MEET UNMET NEEDS

The history and current landscape of education technology define both the need and the opportunity for OSLAP.

The history of technology has always been an adventurous journey. Popular accounts portray innovators and entrepreneurs as heroes in Joseph Campbell-esque monomyths, liminal figures who respond to calls that only they hear by venturing out to forge alliances and overcome obstacles so that they can share the benefits of vision and insight with the rest of us upon their return. However, our understandings and uses of technology have changed over time along with cultural norms and economic trends. Today's heavy emphasis on technology as a purchasable commodity — witness the line at the Apple Store — ignores the original concept of technology, which is rooted in the purposeful use of tools, not the tools themselves. The root of the word *technology* itself comes from the Ancient Greek word *techne*, which meant "cleverness."

Cleverness is a quality best illustrated through its strategic application. When Odysseus landed on the island of the Cyclops, he told the Cyclops that his name was Nobody. Later, when Odysseus blinded the Cyclops and the Cyclops ran around howling in pain, the other Cyclops asked who did it so they could punish the attacker. "It was Nobody! Nobody did this!" the Cyclops roared. The other Cyclops shrugged and went back to their business. There was Nobody to find, hiding in plain sight.

#### Odysseus' Strategy Exemplifies Cleverness In Practice: Techne

The spirit of techne infused the development of the internet and the World Wide Web. People took it upon themselves to learn how new tools could be used to make free long distance phone calls and communicate on screens over phone lines. They collaborated and coalesced around ideals. The members of the longest-running online community, The Well, are united by their motto, famously known as YOYOW: "You own your own words" (Well, n.d.).

The culture of Silicon Valley in the 1970s famously championed values of freedom, community, creativity, and collaboration. Stewart Brand expressed the sentiment in his seminal *Whole Earth Catalog* (1968) "A realm of intimate, personal power is developing — power of the individual to conduct his own education, find his own inspiration, shape his own environment, and share his adventure with whoever is interested."

Just five decades later, however, drastic changes in our relationship with technology have transformed our business practices, personal habits, and even our environment.

Today we have more tools than clever uses. Our inboxes are clogged with messages that hype the latest app, platform, game, or productivity software, promising revolution

# 25 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-

global.com/chapter/the-open-source-perspective-ineducation-technology/326645

#### **Related Content**

### Code Clone Detection Using Machine Learning Techniques: A Systematic Literature Review

Amandeep Kaur, Sandeep Sharmaand Munish Saini (2020). *International Journal of Open Source Software and Processes (pp. 49-75).* 

 $\frac{www.irma-international.org/article/code-clone-detection-using-machine-learning-techniques/260973$ 

#### Evaluating Maintainability of Open Source Software: A Case Study

Feras Hanandeh, Ahmad A. Saifan, Mohammed Akour, Noor Khamis Al-Husseinand Khadijah Zayed Shatnawi (2017). *International Journal of Open Source Software and Processes (pp. 1-20).* 

www.irma-international.org/article/evaluating-maintainability-of-open-source-software/190481

#### Making Knowledge Management Systems Open:

#### A.Case.Study.of.the.Role.of......Open.Source.Software

Tom Butler, Joseph Feller, Andrew Popeand Ciaran Murphy (2007). *Open Source for Knowledge and Learning Management: Strategies Beyond Tools (pp. 150-174).* www.irma-international.org/chapter/making-knowledge-management-systems-open/27811

## Designing a Framework of Ethnomedicinal Plant Knowledge Integration Using OSS

Piyali Das (2021). Research Anthology on Usage and Development of Open Source Software (pp. 466-479).

 $\underline{\text{www.irma-}international.org/chapter/designing-a-framework-of-ethnomedicinal-plant-knowledge-integration-using-oss/286589}$ 

#### Automatically Labelled Software Topic Model

Youcef Bouziane, Mustapha Kamel Abdiand Salah Sadou (2020). *International Journal of Open Source Software and Processes (pp. 57-78).* 

www.irma-international.org/article/automatically-labelled-software-topic-model/251195