



Thriving in the Wild



LEARNING SCIENCES GRADUATE STUDENT CONFERENCE 2023

THRIVING IN THE WILDS

HOST: University of Iowa, College of Education



Learning Sciences Graduate Student Conference 2023

Thriving in the Wilds

October 14 - 15, 2023,

Iowa City, IA

University of Iowa

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Pedagogy Scientists: Designing academic literacy spaces for primary education teachers

Andréia Maria de Lima Assunção

Paulo Freire's Initiative (Teachers College, Columbia University), University of São Paulo, Brazil
(Funding: CAPES and CNPq), amlassuncao@gmail.com

Mariana Lederman Edelstein

Paulo Freire's Initiative, TLTLab, Teachers College, Columbia University,
ml4794@tc.columbia.edu

Daniela Andrade Cordeiro

Paulo Freire's Initiative, Teachers College, Columbia University, da3037@tc.columbia.edu

Tomás Gallo Aquino

Paulo Freire's Initiative, Postdoctoral Scholar, Biomedical Engineering, Columbia University,
tg2863@columbia.edu

Keywords: Academic Literacy; Teacher Training; Primary Education.

Abstract:

This abstract describes the implementation of Cientistas da Pedagogia (Pedagogy Scientists), an on-going program for professional development of Brazilian teachers promoted by Brazilian graduate students based in the United States and Brazil. This project aimed to develop mentoring activities for academic literacy [1], tailored to primary education teachers. We followed the constructionist principle of learning-by-making [2] and encouraged teachers to develop a research paper, which served as an object to think with [2,3] to enhance their teaching practices. Ultimately, we seek that primary education teachers in Brazil organize their experiences and thrive by sharing their work with the international scientific community and become part of the Learning Science field.

Early childhood and elementary school educators feel undervalued [4] due to low social prestige and remuneration [5]. These workers mainly belong to disadvantaged social classes and have adopted teacher professionalization as a form of insertion into the formal job market [5,6]. While Brazilian governmental policies promote graduate level qualification to enhance primary education careers [7], one of the hurdles to access graduate courses is having published papers [8,9].

Therefore, educators require opportunities to share their knowledge with a broader audience. We hypothesized that enabling Brazilian primary educators to access academic literacy projects would allow them to thrive in specialized conferences and teacher training institutions. Importantly, this work highlights the academic production of historically marginalized non-native English speakers and encourages the international science education community to increase diversity in educational practices [10].

As a first edition, we developed 30 hours of mentoring activities for five educators in early childhood and elementary education, to structure teachers' publications utilizing the backward

design theory [11] and prior-knowledge consideration [12]. We conducted tutoring activities minding participants' zone of proximal development [13] and personalized plans to promote academic literacy [1]. This happened in mentees' first language (Portuguese) and mentors translated the papers to English. We implemented the project in four phases. First, encouraging mentees to share their previous documentation, data, and artifacts. Second, reviewing constructionist literature, while promoting group work to organize relationships between theory and classroom experiences. Third, writing the papers with mentor guidance. Fourth, translating, receiving feedback from senior academic researchers, and reviewing the papers.

In interviews and observant participation [14], mentees reported that these activities led them to a process of reflecting [15] on their teaching methods, pedagogical decisions, and awareness [13] of their theoretical-practical mastery. These deliberations resulted in the emergence of novel research ideas and demonstrated to educators the potency of their work. Two educators also decided to submit one of their projects to a local journal. Mentees achieved our goal of critically promoting intentionality and depth in their own practice, while disseminating their research findings, and studying constructionist theory.

In conclusion, data suggests that Cientistas da Pedagogia contributes to the literature on inclusive practices within the academic literacy framework, exploring a constructionist approach, enhancing the design of educational opportunities for educators. This project highlights the significance of applying theoretical concepts to classroom practices more systematically, facilitating the professional development of educators.

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