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“It is what the situation demands.”

How Communities of Practice Create Value for CS Teachers in the Time of Covid

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ABSTRACT

The recent pandemic has resulted in challenges to the prioritization of CS curriculum and strained the structures that support and grow the professional development and identity building of the teachers who implement it. In this poster we examine how local chapters of a national CS teacher advocacy organization (the CSTA) support their members during a time of transition and change. Using focus group data collected from an ongoing multi-year longitudinal research project, we tried to better understand the challenges that these entities faced as their normal structures of communication and outreach were closed off, and how such challenges might affect the perceptions of the role that local chapters play in supporting the continued development of their members, including their identity as CS teachers.

CCS CONCEPTS

• Computing Education • K-12 Education

KEYWORDS

Teacher Identity, Communities of Practice

1 Introduction

While engaged in a multi-year longitudinal research project investigating the contributions of professional learning communities to the development of CS teacher identity, we had the opportunity to observe the effect of a disruption to classroom and professional learning community structures as a result of the Covid-19 pandemic. We used this opportunity to capture data on the ways in which teachers and school systems adjusted to these changes, and to better understand how these changes were further interpreted, understood, and managed by the communities of practice that support the professional identity development of these teachers.

2 Background

Much work has been done in the field of teacher professional identity [1,2], communities of practice [3,4], and the intertwined relationship of the two [4]. We grounded our work in these

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integrated theories as they examine the nature of learning and identity as socially constructed phenomena that are contextually valued based on the experience of the individual, and constantly evolving as the interpretation of the experience of the individual evolves.

3 Overview

In total, we conducted two sets of focus groups with five sets of chapter leaders in the summers of 2020 and 2021. We also conducted 21 individual member interviews in the spring of 2021. We made the following inquiries: (1) How does participation in the local CSTA chapter influence perceptions of teacher professional identity? And, (2) How did the organizational and communication challenges of the pandemic affect the relationship of members to their communities of practice? Our findings may be grouped into three categories. 1) That professional learning communities can flexibly respond to and support the development of teacher identity in a time of great transition. 2) That the “mutually defining” and evolutionary characteristics of communities of practice as described by Wenger [4] were present, as members communicated freely and clearly, while self-guiding the priorities of their interactions, and 3), that the teachers and chapter leaders that we spoke to as a part of this inquiry expressed an overwhelming level of commitment to their own work in this field, despite the pedagogical and curricular challenges that the pandemic put in front of them.

4 Contributions and Future Work

This study shows how teachers draw their identity from multiple sources (classroom, communities of practice, etc.) and how those sources can provide different kinds of support in different circumstances. These findings will add to the body of work in the field by providing more clarity about the ways in which CS teacher professional identity is developed and supported.

REFERENCES

- [1] Gee, J.P. 2001. Identity as an analytical lens for research in education. *Review of Research in Education*, 25, 99-125.
- [2] Beijjaard, D., Meijer, P.C. & Verloop, N., 2004. Reconsidering research on teachers' professional identity, *Teaching and Teacher Education*, 20(2), 107-128.
- [3] Beauchamp, C. & Thomas, L. 2009. Understanding teacher identity: an overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education*, 39(2), 175-189.
- [4] Wenger, E. 1998. *Communities of Practice: Learning, meaning and identity*. Cambridge, UK: New York, NY: Cambridge University Press.