

Supporting CS Teachers through Local Communities: Perceptions of CSTA Chapter Leaders

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ABSTRACT

This paper reports a study of CSTA chapter leaders' perceptions of their chapter's roles in supporting computer science (CS) teachers. Intent on understanding the impact of membership in a professional organization on the development of teacher professional identity, our research revealed that in the chapter leaders' perceptions local CSTA chapters had an important role in supporting the development of their members' professional identity as a CS teacher.

CCS CONCEPTS

• Social and professional topics~Computer science education

KEYWORDS

Computer Science Teachers; Community; Teacher Identity

1. INTRODUCTION AND BACKGROUND

Computer Science (CS) teachers face unique challenges in establishing CS teaching identity. Local teacher communities have great potential to help overcome the challenges. The Computer Science Teachers Association (CSTA) is working to address these challenges by creating a network of local chapters where CS teachers can gain professional skills and connect with peers. In this preliminary study, we inquire about the support K-12 CS teachers get from local CSTA chapters by interviewing leaders of selected chapters. We asked these questions: 1) What are the benefits of chapter membership, and 2) How does your chapter promote CS teaching identity?

A teacher's professional identity provides insight into the teacher's teaching practices, career decisions, dedication and motivation [3, 4, 6]. To better understand the ways in which membership in the CSTA local chapter might affect the development of teacher identity, we employed a three-part post-structuralist frame [7] in our analysis of this data, examining the multi-faceted nature/multi-dimensionality of teacher identity [5], the idea of situatedness [1], and the concept of continued identity forming over the lifespan of a teaching career [2].

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2. METHODS / RESULTS

We conducted focus group interviews with the leaders from five chapters and coded the transcripts. We found that CSTA chapters support CS teachers' professional identity development. Specifically, we found that local chapters served as immediate professional communities for the members, where they could build connections with local CS teachers and find professional development opportunities and resources. By strengthening CS teachers' sense of being a member of a professional community, local chapters supported and affirmed their growing CS teacher identity.

We also discovered that chapter leaders recognize the importance of this identity development and view the chapter as a vehicle for the same. Chapter leaders described the inherent value of the chapter in terms of not just professional development activities and community building, but also as a place where deeper discussions about pedagogy and practice cultivates increased confidence and motivation amongst the members.

3. CONTRIBUTIONS AND FUTURE WORK

The study suggests that CSTA local chapters play an important role in CS teachers' professional identity development. As the next step, we will expand our interview base to chapter members.

REFERENCES

- [1] Connelly, F. M., & Clandinin, D. J. (Eds.). (1999). *Shaping a professional identity: Stories of educational practice*. New York, NY: Teachers College Press.
- [2] Danielewicz, J. (2001). *Teaching selves: Identity, pedagogy, and teacher education*. Albany, NY: State University of New York.
- [3] Day, C., A. Kington, G. Stobart, & P. Sammons (2006). "The Personal and Professional Selves of Teachers: Stable and Unstable Identities." *British Educational Research Journal* 32 (4): 601–616.
- [4] Hong, J.Y. (2010). "Preservice and Beginning Teachers' Professional Identity and its Relation to Dropping Out of the Profession." *Teaching and Teacher Education* 26: 1530–1543.
- [5] Tsui, A. B. M. (2007). Complexities of identity formation: A narrative inquiry of an EFL teacher. *TESOL Quarterly*, 41(4), 657–680.
- [6] Van den Berg, R. (2002). "Teachers' meanings regarding educational practice." *Review of Educational Research* 72 (4): 577–625.
- [7] Zacharias, N. (2010) "The Teacher Identity Construction of 12 Asian ES Teachers in TESOL Graduate Programs." *The Journal of Asian TEFL* 7(2):177-197.