

Professional Learning Networks

Torrey Trust, Jeffrey P. Carpenter, & Daniel G. Krutka

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Pre-service Teacher

Professional Development

In-service Teachers

Teacher Learning

Self-directed Learning

Professional learning networks (PLNs) are uniquely crafted and dynamic learning ecosystems, consisting of people, spaces, and tools that meet an educator's professional needs, interests, and goals (Trust et al., 2016). They serve as a means through which people grow in aspects of their professions. The people within a PLN are individuals who provide career-based feedback, advice, ideas, emotional support, and/or mentoring (Krutka et al., 2017; Trust et al., 2016). The spaces within a PLN are physical, digital, and hybrid places that support or enable professional knowledge building with and from others, such as conferences, workshops, webinars, Twitter chats, unconferences, Reddit forums, and massive open online courses (Trust & Prestridge, 2021). The tools within a PLN are physical resources (e.g., books, curriculum materials) and digital technologies (e.g., Internet search databases, social bookmarking tools, blogs) that are used to access, curate, construct, and disseminate professional knowledge (Trust et al., 2018). Taken together, the people, spaces, and tools within a PLN can support ongoing professional learning and growth for individuals in any academic or organizational context.

The concept of building a network of people, spaces, and tools that supports career-based learning is not new. More than two decades ago, Tobin (1998) wrote about the importance of building a "personal learning network," to support continual, everyday, on-the-job learning. While the terms *personal* learning network and *professional* learning network are often used interchangeably and share the same acronym (PLN), *personal* learning networks can alternatively refer to systems of support for personal interests and hobbies (Fair, 2021). Therefore, the term *professional learning network* is often preferred when referring to career-based learning.

Beyond debates regarding personal vs. professional, the meaning of PLNs has not been consistently defined in the literature. Some scholars have used the term to describe educator use of a single social media platform (e.g., King, 2017; Trust, 2012), while others have differentiated between online PLNs and in-person PLNs (e.g., Kearney et al., 2019). However, educators are unlikely to limit their learning to a single space or modality (Trust et al., 2016). In the digital age, educators often turn to multiple *spaces* (e.g., Professional Learning Communities, conferences, Facebook, Instagram, TikTok), many different groups of *people* (e.g., colleagues, students, people at conferences and social media), and various *tools* (e.g., Internet search databases, blogs, YouTube) for professional learning (Kearney et al., 2019; Staudt

Willet & Carpenter, 2020). Therefore, a broader conceptualization of PLNs as multifaceted ecosystems of support for ongoing career-based learning aligns well with contemporary hybrid learning experiences.

The learning that happens with PLNs has been described as "informal," "self-directed," and even "serendipitous" (Kop, 2012; Prestridge, 2019). In contrast to traditional professional development, which often consists of formal training on predetermined topics presented by external experts, learning with a PLN can be organic, individualized, self-directed, and interest-driven, and it can happen anytime and from anywhere (Beach, 2017; Tour, 2017). Educators can choose which people, spaces, and tools support their own unique needs, interests, and goals. They can decide when and where they would like to learn, how much time to spend learning, and how they would like to engage (Greenhalgh & Koehler, 2017; Krutka et al., 2017; Trust & Prestridge, 2021). Educators can shift and evolve their PLNs, as well as their PLN actions and engagement, over time based on changing professional needs, interests, goals, professional communities, relationships, confidence, time, technologies, and broader contexts (Carpenter et al., 2021; Trust & Prestridge, 2021).

Because PLNs involve social learning that is situated in practice and distributed across people, spaces, and tools, they offer several benefits. Specifically, PLNs can support educators' affective, cognitive, identity, and social growth (Trust et al. 2016). Affective growth refers to changes in emotions, dispositions, and attitudes. For example, educators might feel more invigorated after participating in a Twitter chat or become more willing to try new teaching practices based on inspiration from a keynote speech. Cognitive growth is the development of professional knowledge and skills that occurs when educators come across new information, ideas, and resources from their PLNs and when they critically reflect on their practice. Identity growth consists of shifts in how educators see themselves and their roles, like when individuals shift from being leaders in their classrooms to also being a leader in their school, university, or professional communities. Social growth includes an increased sense of connectedness with others, reduced feelings of isolation, and exposure to diverse people and communities.

While PLNs can offer multiple benefits, there are also several challenges—many of which are specifically related to the use of social media for cultivating and expanding PLNs. On social media, efforts at learning are not guaranteed to succeed and can even lead to miseducation when sources are of low quality, are inaccurate, or advance oppressive systems (Greenhalgh et al., 2021). Social media platforms can distract educators from focused endeavors (Levy, 2016), contribute to an erosion of boundaries for work that intensifies their labor (Fox & Bird, 2017; Selwyn et al., 2017), and may point teachers toward content of dubious quality, as online teacherpreneurs frequently use platforms such as Instagram and Pinterest to advertise their products in online education resource marketplaces such as TeachersPayTeachers.com (Shelton et al., 2022). The quantity of content and people on social media can also prove overwhelming as educators must critically assess what and whom to trust (Staudt Willet, 2019), and self-promotional, commercial, and spam content can make it difficult for educators to find the content and people that would be most helpful to them (Krutka & Greenhalgh, 2021; Shelton et al., 2022). Educators must also manage the risks associated with social media use, such as context collapse where their PLN social media activities may be taken out of context and scrutinized by unintended audiences (boyd, 2014). With the self-directed nature of PLNs and how social media algorithms work, educators may develop PLNs that lack diversity of perspectives and become echo chambers or sustain exclusionary ideologies (Carpenter et al., 2021). Social media platforms also present ethical dilemmas as educators must consider the tradeoffs associated with patronizing these for-profit services and their problematic business practices and models (Carpenter et al., 2021). With these challenges, educators must learn to critically reflect upon their PLNs, the information that is exchanged, and the way their PLNs influence them. Such reflection can be scaffolded by tools such as the PLN Enrichment Framework (Krutka et al., 2016)—a heuristic that supports a deep, critical interrogation of the people, spaces, and tools within a PLN.

Related Terms

Personal learning network

Informal learning

Personal learning environment

Self-directed learning

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Community Artifacts



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Torrey Trust

University of Massachusetts Amherst

Torrey Trust, Ph.D. is a Professor of Learning Technology in the Department of Teacher Education and Curriculum Studies in the College of Education at the University of Massachusetts Amherst. Her work centers on the critical examination of the relationship between teaching, learning, and technology; and how technology can enhance teacher and student learning. Specifically, Dr. Trust studies how educators engage with digitally enhanced professional learning networks (PLNs), how emerging pedagogical tools (e.g., HyperDocs), practices (e.g., Making) and technologies (e.g., 3D printers, augmented reality, ChatGPT, generative AI tools) influence learning, how to design and use open educational resources (OERs), and how to find, critically evaluate, and teach with digital tools and apps. Dr. Trust served as a professional learning network leader for the International Society for Technology in Education (ISTE) for five years, including a two-year term as the President of the Teacher Education Network from 2016 to 2018.

Dr. Trust's research, teaching, and service in the field of educational technology has received noticeable recognition, including the 2016 ISTE Online Learning Network Award, 2017 *Journal of Digital Learning in Teacher Education* Outstanding Research Paper Award, 2017 American Educational Research Association (AERA) Instructional Technology SIG Best Paper Award, 2017 ISTE Emerging Leader Award, 2019 AERA Technology as an Agent of Change for Teaching & Learning SIG Early Career Scholar Award, 2020 University of Massachusetts Amherst College of Education Outstanding Teaching Award, 2020 AECT Annual Achievement Award, 2023 MERLOT Classics Award, and the 2023 University of Massachusetts Amherst Distinguished Teaching Award. In 2018, Dr. Trust was selected as one of the recipients for the ISTE Making IT Happen Award, which "honors outstanding educators and leaders who demonstrate extraordinary commitment, leadership, courage and persistence in improving digital learning opportunities for students."

www.torreytrust.com



Jeffrey P. Carpenter

Elon University

I study educators' self-directed professional learning experiences via social media and have published on educators' uses of Instagram, Twitter, Pinterest, and Reddit. I have multiple research projects in various stages of development and can include students at different stages of the research process and in different kinds of analyses (qualitative or quantitative).



Daniel G. Krutka

University of North Texas

Daniel G. Krutka, Ph.D. is a human and citizen whose job is Associate Professor of Social Studies Education at the University of North Texas. He researches intersections of technology, democracy, and education. He hosts the Visions of Education podcast (VisionsOfEd.com) and advocates for walkable, accessible, and equitable cities.

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