

# Chapter 3

## A Professional Development School Technology Integration and Research Plan

Neal Shambaugh  
West Virginia University, USA

### EXECUTIVE SUMMARY

*Technology diffusion in public schools has varied in scale from local and state initiatives to large-scale governmental-funded programs. Teachers' use of technology, however, remains limited and still focuses on the tools rather than on learning outcomes and teaching processes. Teacher education programs face a similar challenge in having pre-service teachers integrate technology and model best practice for teachers in public schools. One model for teacher education is viewing public schools and the university-based teacher education program as Professional Development Schools (PDS) where pre-service teachers and host teachers learn alongside each other in actual teaching including technology use. In this case, a mature PDS model (20 years old) is described along with how technology has been implemented across the teacher education program and within the PDS-network member schools. This case poses for the reader two questions: (1) How can technology diffusion occur in a PDS model addressing the different agendas of university, school, and state? (2) How can a technology integration plan also include program evaluation and/or research features so that the plan is formally and systematically studied?*

DOI: 10.4018/978-1-4666-3676-7.ch003

## **ORGANIZATION BACKGROUND**

### **Historical Summary**

The overall mission of the teacher education program, referred to here as the Program, is a partnership designed to simultaneously renew teaching, learning, and the professional development of both prospective and practicing educators in 30 state public schools and a university. This commitment began in 1987 when the university joined the Holmes Group and embraced their advocacy for a new structuring using the Professional Development School in which P-12 school and university faculty engage in joint work to transform teaching, learning, schooling, and teacher education (Holmes Group, 1986, 1990).

A foundation provided financial support in 1989, and the first set of Professional Development Schools was selected in 1990. Concurrently, an education college in a university moved from a traditional four-year program to a five-year program, in which prospective teachers earned a bachelor's degree in a discipline and a master's in education. The curriculum was redesigned and entrance requirements were raised. By 1992 a comprehensive curriculum and assessment plan for the Program was developed. Additional PDSs were selected in 1994, 1997, 2002, and 2008. A total of 30 PDSs in five counties now provide elementary, middle, and high school settings in which teacher candidates (e.g., preservice teachers) spend substantial time collaborating with school and university faculty to discover how to meet the learning needs of all stakeholders. The first class graduated from the Program in 2000 and graduates teach within and beyond state borders.

By 2008 the Program, along with the other school/university partnerships in the state, advocated for and obtained an annual line item in the budget of the state legislature. This unique arrangement in the USA provided support for research, learning, and outreach that strengthened the partnership and the relationships between the schools and their communities. In addition to the state-level funding for PDS work, the five counties in the state that housed PDSs contributed funding to the Program. This funding supports professional development initiatives that feature collaboration between school and university faculty. In addition to this professional development support, the counties support the governance group meetings of the PDS teacher education coordinators.

### **Program Overview**

The program is a five-year, dual-degree program in which students simultaneously pursue a Bachelor's degree in a content specialization and a Master of Arts in Education. In Years 1 and 2 undergraduates volunteer to spend 60 hours in an approved

22 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/professional-development-school-technology-integration/75264](http://www.igi-global.com/chapter/professional-development-school-technology-integration/75264)

## Related Content

---

### Cluster Analysis for Outlier Detection

Frank Klawonn and Frank Rehm (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 214-218).

[www.irma-international.org/chapter/cluster-analysis-outlier-detection/10823](http://www.irma-international.org/chapter/cluster-analysis-outlier-detection/10823)

### Promoting Critical Thinking Disposition Through Virtual Reality Serious Games

Su Jiayuan and Jingru Zhang (2024). *Embracing Cutting-Edge Technology in Modern Educational Settings* (pp. 93-118).

[www.irma-international.org/chapter/promoting-critical-thinking-disposition-through-virtual-reality-serious-games/336192](http://www.irma-international.org/chapter/promoting-critical-thinking-disposition-through-virtual-reality-serious-games/336192)

### Preparing 21st Century Teachers: Supporting Digital Literacy and Technology Integration in P6 Classrooms

Salika A. Lawrence, Rupam Saran, Tabora Johnson and Margareth Lafontant (2020). *Participatory Literacy Practices for P-12 Classrooms in the Digital Age* (pp. 140-162).

[www.irma-international.org/chapter/preparing-21st-century-teachers/237419](http://www.irma-international.org/chapter/preparing-21st-century-teachers/237419)

### Web Mining Overview

Bamshad Mobasher (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 2085-2089).

[www.irma-international.org/chapter/web-mining-overview/11107](http://www.irma-international.org/chapter/web-mining-overview/11107)

### Learning Temporal Information from Text

Feng Pan (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 1146-1149).

[www.irma-international.org/chapter/learning-temporal-information-text/10966](http://www.irma-international.org/chapter/learning-temporal-information-text/10966)