



## Literature Review on Professional Development

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### Purpose of Literature Review

- Technological changes have facilitated greater accessibility in learning and in demonstrating knowledge and skills through assessments
- Teachers may need additional training on the paradigm shift in approaches to accessibility
- It will be important to reflect the latest literature about professional development in training approaches for the paradigm shift

### Research-based Models of Professional Development

- Three models of informal learning processes that exemplify teachers' professional development are:
  - Craft model
    - Teacher professional development is a result of experiential knowledge acquired from teaching in the classroom
    - Teachers' roles are not fully defined; teachers learn by trial and error
  - Expert model
    - Teacher professional development is the result of training by other expert teachers
    - Teachers are in a passive role; teachers learn new techniques from an expert teacher
  - Interactive model
    - Teacher knowledge grows when external sources of information lead to new experiences of insight within the classroom based on student success results
    - Teachers' roles are complex; teachers learn from external sources and apply the concepts in the classroom; this model brings together personal, external, classroom practice, and student results domains
- Three models of formal professional development models are:
  - Project-Based Learning (PBL)
    - Training occurs in an applied setting of the teacher's context and is practiced in his or her classroom; teachers observe student learning responses to assess and apply new concepts before adding these concepts to their professional repertoire
    - Four domains: external--concepts that trainers and staff teach; personal--teacher's attitudes or beliefs; practice--application of concepts in the classroom; and consequence--assessment of concepts in the classroom

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- Instructional strategy in which both teachers and students learn by engaging in the problem-solving process together; problem solving must address real-life issues in the applied classroom setting
- Online courses encourage teachers to learn new concepts; then, applied experiences and an opportunity to journal about those experiences lead to better teacher and student outcomes
  
- Case-Based Instruction (CBI)
  - In CBI, like in PBL, teachers apply concepts they have learned; however, in CBI, more support and scaffolding is provided, and cases are presented as narratives that depict particular problems, reflecting the generic and situation-specific nature of a practice or a problem that parallels a real-life teaching situation; cases provide for the integration of grade-level content standards into teaching practices
  - Cases are discussed in small groups that include teachers from diverse school contexts, exposing participants to alternate viewpoints; the focus is on practicing the solving of “real-world” teaching problems, allowing participants to develop generalizable skills for the new concepts being learned
  - Collaborative strategy that brings teachers from various settings together to solve problems using different teacher viewpoints; learning occurs through engagement in the problem-solving process during group discussion
  - Online CBI has been shown to increase knowledge of instructional strategies for teachers of all experiences and backgrounds; viewing embedded video content helps teachers connect theory to practice
  
- Communities of Practice (CoP)
  - CoPs are groups of individuals with shared interests and a similar knowledge base; in education, CoPs are composed of novice and expert teachers who share experiences and work toward a common practice or enterprise
  - Key components: (a) shared agenda, discourse, knowledge, values, and goals; (b) pre-defined roles for all members; and (c) shared products or artifacts generated by the community [Note: artifacts are publications or other written products, as well as routines, sensibilities, vocabulary, or styles]
  - Teacher discussion and participatory learning group that fosters increased teacher accountability
  - Virtual Community of Practice (VCoP) is the web-based version of a CoP

### Web-based Professional Development

- Established Web-based Models of Professional Development – describes various web-based training models including Computer-Mediated Communication (CMC), Online Learning Communities (OLC), Learning Management Systems (LMS), webinars, webcasts, and forms of online coaching and mentoring
  
- Emerging Web-based Models of Professional Development – highlights additional ideas and frameworks that form new directions in teacher professional development including Webs of Enhanced Practice (WoEPs), Web 2.0, and Second Life.