

Ford PAS Professional Development Philosophy and Rationale

Ford PAS recognizes that transforming teaching and learning requires effective on-going professional development to support teachers in implementing new content and teaching strategies in order to effectively help students learn the knowledge and skills needed for 21st century success.

Goals of Ford PAS Professional Development

- Experience and examine inquiry- and project-based instructional strategies and tools to prepare students for post-secondary education and the 21st century workplace
- Gain in-depth experience with the academically rigorous, interdisciplinary Ford PAS modules and the Ford PAS Learning and Teaching Pillars that underlie their design
- Learn strategies for linking classroom learning and academic content with real-world applications
- Promote reflection on current classroom practices and implementation of Ford PAS as a tool to transform teaching and learning
- Become more familiar with the Ford PAS program components and its resources.
- Become part of the Ford PAS professional learning community

Values of Ford PAS Professional Development

- Professional development embodies the teaching approaches Ford PAS advocates.
- Each professional development session works to build a professional learning community.
- Professional development recognizes, respects, addresses the diversity of participants
 —in professional and life experience, mindsets and mental models, cultural
 background, and learning styles.
- Professional development is on-going
- Professional development is designed to address particular audiences, contexts, and purposes.
- Professional development is designed to encourage participants to reflect on their own practice and move towards achieving transformational teaching and learning.
- Professional development is designed, planned and facilitated collaboratively.

Components of Ford PAS Professional Development

In the past two decades, educational institutions and scholars have increasingly conducted research on and developed guidelines for effective professional development. Foremost among these institutions are Mid-continent Research for Education and Learning (McREL), the U.S. Department of Education, the National Staff Development Council, the National Council for Accreditation of Teacher Education, and the Committee on Learning Research

and Educational Practice. Prominent researchers, including Milbrey McLaughlin, Linda Darling-Hammond, Deborah Ball, and John Bransford, among others, have contributed to the literature on professional development and teacher learning. There is growing recognition in the field that professional development includes more than just workshops. It includes a variety of learning strategies such as study groups, coaching, consultation, and action research.

Ford PAS has developed a professional development model that is based on our synthesis of this education research. The philosophy of Ford PAS professional development integrates various components—face-to-face, online, and school-based—that are most likely to positively affect teacher instruction and, ultimately, student learning. While research on the impact of professional development on student outcomes is a relatively new area of investigation, scholars and expert practitioners have come to consensus about what constitutes effective professional development, based on emerging and successful models that have had substantial influence on teachers' classroom practice and student achievement. Ford PAS professional development incorporates the following characteristics and components.

Focus on Curriculum, with Emphasis on Teaching Strategies

Ford PAS professional development is designed to engage participants in in-depth exploration of the key elements of Ford PAS by focusing on the Learning and Teaching Pillars illustrated by relevant Ford PAS module activities. Participants in professional development learn strategies embedded in the curriculum that will help them teach and assess key knowledge and skills through real-world applications.

Learning Pillars

Application of academic knowledge and skills Critical thinking Problem-solving Teamwork

Creativity and innovation

Global awareness

Communication

Teaching Pillars

Academically rigorous
Integration of academic and career-related
knowledge and skills

Inquiry-based Project-based Real-world

Performance-based Technology-rich Career-relevant

A meta-analysis of professional development studies by Darling-Hammond et al. reports that "professional development is most effective when it addresses the concrete, everyday challenges involved in teaching and learning specific academic subject matter" (2009, p. 10). A synthesis of 54 studies of standards-based professional development reports that "focus on particular content knowledge and instructional strategies [is needed] to have effects on teacher instruction and achievement" (Snow-Renner & Lauer, 2005, p. 8). An earlier longitudinal analysis of data from the Eisenhower Professional Development Program emphasized the importance of a focus on teaching strategies: "Professional development focused on specific, higher-order teaching strategies increases teachers" use of those strategies in the classroom" (Porter et al., 2000, p. 5).

Active Learning Experiences and Teacher Inquiry

A key philosophy of the Ford PAS professional development program is teacher inquiry. Teacher inquiry, also referred to as teacher research or action research, is defined as systematic, intentional study by teachers of their own classroom practice (Cochran-Smith & Lytle, 1993). Educators are encouraged to engage in inquiry about the Ford PAS curriculum and pedagogical strategies though three lenses:

Participants as students Participants as teachers/facilitators Participants as researchers

In order to support educators in learning innovative approaches to content and pedagogy, professional development offerings give participants the opportunity to engage in hands-on, experiential sessions in which they experience the Ford PAS curriculum as a student and reflect on the experience first from the student's perspective, then from the standpoint of teachers or facilitators of student learning. Teachers also examine the intentional design of the curriculum and consider how implementation of the Learning and Teaching Pillars supports students' development of essential knowledge, skills, and habits of mind..

Many education scholars endorse the idea of teachers inquiring into their own practice. Darling-Hammond & Ball state that "an inquiry orientation to knowledge provides an avenue for improving the quality and impact of professional development" (1999, p. 4). Snow-Renner & Lauer report that "important qualities of professional development are aspects of active learning, in which teachers participate in the same types of sense-making that their students would, in a reform-oriented standards-based classroom" (2005, p. 10).

Collaborative, with Multiple Opportunities for Sharing and Ongoing Dialogue

A central goal of the Ford PAS professional development program is to foster a professional community in which educators are united around a shared responsibility for teaching. Discussions during professional development sessions enable Ford PAS educators to learn from one another, share experiences, and connect new ideas to their own unique contexts. Structured and facilitated discussions using a variety of approaches, promote safe spaces for exploration of key topics and issues. By fostering a culture of learning and inquiry, Ford PAS professional development enables new and experienced educators from diverse schools nationwide to gain insight into best practices. Through the Ford PAS Web site and in regional events, participants are encouraged to continue to share ideas and experiences after the event and throughout the year.

Research over the past 20 years has consistently shown the importance of collaboration for teachers' professional learning. According to the Committee on Learning Research and Educational Practice, "practicing teachers continue to learn about teaching in many ways, including from their own practice, through their interactions with other teachers, from teacher educators or staff developers in different settings, or in a graduate or continuing education program" (Bransford et al., 2000, p. 191). McLaughlin and Talbert argue that teachers need to take part "in a professional community that discusses new teacher materials and strategies and that supports the risk taking and struggle entailed in transforming practice" (as cited in Putnam & Borko, 2000, p. 8). Moreover, Darling-Hammond et al. report that teacher collaboration

within a school can lead to "greater consistency of instruction, more willingness to share practices and try new ways of teaching, and more success in solving problems of practice" (2009, p. 11).

An Ongoing and Long-Term Approach

Research indicates that changes in teacher instruction take time. The Ford PAS professional development program therefore takes a sustained approach.

On a national level, professional development activities include theme and regional institutes and workshops, online courses, and an online forum for continuous sharing and support. Ford PAS teachers have an opportunity to engage in face-to-face workshops and institutes and online courses during which they explore the Learning and Teaching Pillars of Ford PAS in depth in the context of the Ford PAS modules.

On a regional level, Ford PAS has developed regional capacity through the creation of Ford PAS Regional Collaboratives (Hubs) with certified Ford PAS Professional Development Providers (PDP), who have completed a 2 year certification process. These certified PDPs support regional ongoing professional development, providing educators with spaces to reflect, share experiences, and gain new ideas over time, which can ultimately contribute to their professional growth. Regional efforts include cross-school events and on-site support.

According to Snow-Renner and Lauer, "overall, the data suggest that deep changes in teacher instruction, like those required by reformers, take considerable time. Often, this may entail initial participation in a summer training institute and then follow-up throughout the school year . . . to encourage teacher reflection and facilitate instructional change" (2005, p. 6). Yoon et al. (2007) in their study of over 100 studies, found nine that examined the link between professional development and student achievement. They report that teachers who receive substantial professional development—an average of 49 hours in these studies—can boost student achievement by about 21 percentile points.

Reflective Practice

Effective professional development provides activities for educators that challenge them to confront their own ideas about the nature of teaching and learning. Ford PAS supports this process by encouraging educators to engage in ongoing reflection about their practice. During professional development sessions, both in-person and online, participants engage in reflective practice by writing and sharing their thoughts in both protocol-guided and open-ended formats. Participants are encouraged to continue this practice throughout the year. Ongoing reflection enables educators to make sense of and learn from their experiences as they explore ideas or concerns and consider different perspectives they have encountered. It can also help educators make links between theory and practice and integrate new knowledge with previous knowledge.

Research has shown that effective professional development programs help teachers reflect on and improve their practice. For example, Harris points out that "research on effective teaching over the past two decades has shown that effective practice is linked to inquiry, reflection, and continued professional growth" (as cited in Ferraro, 2000, p. 4). In addition, "suggestions for reflection help teachers focus on aspects of their teaching that they might otherwise have failed to notice" (Bransford et al., 2000, p. 197).

Meaningful Uses of Artifacts and Cases

Ford PAS professional development supports critical inquiry through the use of artifacts and cases, in both face-to-face and online settings. Educators work collaboratively to closely examine the student thinking and learning evident in artifacts, which may include videotapes of classrooms, student work samples, and teacher and student interviews. Through this process, educators can gain insight into the types of difficulties students may have with the subject matter and the teaching strategies or interventions that are likely to be helpful. The use of artifacts or cases in professional development settings has gained considerable momentum in the past decade. However, it is important to note that these artifacts serve as tools for learning and that their effectiveness depends on the use of frameworks that provide teachers with explicit guidelines for analysis and discussion (Ball & Cohen, 1999; Nikula et al., 2006).

"An important way that teacher educators help new teachers understand and appreciate some of the complex factors at play in teaching and learning is to engage prospective teachers in the analysis of teaching and learning . . . Teachers can examine videotapes of teachers, student work samples, assessments, and other materials from classrooms to help them attend more closely to the nature, focus, and character of the learning they demonstrate" (Bransford et al., 2000, p. 79). Case-based teaching provides an effective approach that fosters teacher learning (Miller & Kantrov, 1998; Merseth & Lacey, 1993). "Some proponents suggest that cases have several advantages over other activities used in preservice and inservice teacher education. As with actual classroom experiences, they allow teachers to explore the richness and complexity of genuine pedagogical problems. Cases, however, provide shared experiences for teachers to examine together, using multiple perspectives and frameworks" (Putnam, 2000, p. 8).

Opportunities for Teaching Planning and Practice

During Ford PAS workshops and institutes, educators are encouraged to plan ways to integrate the Ford PAS approach (modules, Learning and Teaching Pillars) into their practice. Institutes and online courses provide time for implementation planning to support educators in taking ownership of the Ford PAS curriculum in ways that are meaningful to their own contexts. Participants are given guidelines and templates to help them review the curriculum, explore their professional development needs, and develop plans for obtaining school, district, and local business and community support.

In many professional development sessions, including online courses, educators prepare and teach a lesson from the Ford PAS curriculum, either individually or with a partner. Following each teaching practice session, teachers reflect on their experiences, challenges and successes, with their peers. The goals of teaching practice are threefold: participants gain insight into various pedagogical approaches; they put into practice and reflect on ways to develop students' skills in critical thinking, problem-solving, communication, and teamwork; and they gain a better understanding of their own teaching practice. Teachers are encouraged to continue peer observation and feedback as they work with Ford PAS materials.

The study of the Eisenhower Professional Development Program indicated that "opportunities for active learning can take a number of forms, including observing teachers, being observed teaching, planning how new curriculum materials and new teaching methods will be used in the classroom . . . and the opportunity to lead discussions and engage in written work" (Garet et al., 1999, p. 323). Another "core feature of professional development concerns the opportunities

provided for teachers to become actively engaged in meaningful discussions, planning, and practice as part of the professional development activity" (Garet et al., 1999, p. 323).

Bridging Research and Practice

Ford PAS helps educators bridge research and practice in two overlapping ways. First, Ford PAS professional development provides opportunities for educators to review the latest scholarship on relevant topics related to content and pedagogy, such as inquiry-based learning. Readings offer a framework for educators to engage in ongoing dialogue on how research in a particular area connects to their teaching practice. Second, Ford PAS works with selected sites to implement practitioner research as a form of professional development. By supporting educators in bridging research and practice, Ford PAS aims to help educators examine their beliefs and understandings in order to strengthen their knowledge of teaching and learning.

"The more [teachers] learn about teaching and learning, the more accurately they can reflect on what they are doing well and on what needs to be improved" (Darling-Hammond & Bransford, 2005, p. 376). Moreover, "active engagement in research on teaching and learning also helps set the stage for understanding the implications of new theories of how people learn" (Bransford et al., 2000, p. 199).

Developing a Cadre of Ford PAS Professional Development Providers

Good professional development provides opportunities for educators to serve as leaders, knowledge resources, and on-site mentors. Experienced educators who have participated in a Ford PAS professional development institute have an opportunity to take on other roles, including institute/workshop facilitator, online discussion moderator, school-based mentor, and reviewer of new curricular modules. Professional development providers learn and practice effective design and facilitation skills. In addition, they learn to conduct classroom observations, collaboratively examine student work, provide constructive feedback, and develop other effective mentoring skills. Ford PAS promotes professionalism and helps build capacity nationwide and within regions and districts by giving educators an active role in the Ford PAS community.

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