



# DISTANCE EDUCATION FOR TEACHER TRAINING:

## Modes, Models, and Methods

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Washington, DC

## Acknowledgments

**Thank you to the following colleagues both near and far for providing information, resources, and fact-checking on this guide.**

**Sarwat Alam**, Director of Learning Systems and Pedagogy, USAID Pre-STEP Project (2013), Pakistan

**Dr. Catherine Margaret Beukes-Amiss**, Director, Centre for Innovation in Learning and Teaching (CILT), University of Namibia, Windhoek, Namibia

**Arjana Blazic**, Teacher Trainer, and Course Designer, EduDigiCon, Zagreb, Croatia

**Alisa Buchstab**, Junior Policy Advisor in the Sector Program Education, Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), Germany

**Dr. Eduardo C. Cascallar**, University of Leuven, Belgium; Managing Director, Assessment Group International (Europe and USA)

**Will Clurman**, CEO, and co-founder, eKitabu, Nairobi, Kenya

**Valeria Cruz Gomes**, Head of Training and Support, ProFuturo, Madrid, Spain

**Dr. Robyn A. Defelice**, Learning Strategist and Consultant, Bloomsburg, Pennsylvania, USA

**Dr. Nathalia Edisherashvili**, Researcher, Institute of Education, University of Tartu, Estonia

**Concepción Gallego Garcia**, Expert on Global Partnerships and Institutional Relations, ProFuturo, Madrid, Spain

**Dr. Sophia Gorgodze**, Director National Assessment and Examinations Center, Ministry of Education and Science of Georgia

**Dr. Sara Hennessy**, Professor of Teacher Development and Pedagogical Innovation, Faculty of Education, University of Cambridge, and Research Director, EdTech Hub, Cambridge, England

**Shane Ives**, Serious gamer, solar electrician, Albuquerque, New Mexico, USA

**Eilean von Lautz-Cauzanet**, Policy Advisor in the Sector Program, Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), Germany

**Stephen McDonald**, app developer, Somerville, Massachusetts, USA

**Dr. Mary Mendenhall**, Teachers College, Columbia University, New York City, New York, USA

**Dr. Barbara Moser-Mercer**, Visiting Professor, University of Nairobi, Coordinator African Higher Education in Emergencies Network (AHEEN), Nairobi, Kenya

**Denise-Henry Orndorff**, Instructional Technology Coach, Frederick County Public Schools, Virginia, USA

**Ee-Reh Owo**, Schools Director, Justice Rising, Democratic Republic of the Congo

**Aroa Sánchez Rodríguez**, Educational Specialist, Innovation and Products, ProFuturo, Madrid, Spain

**Jodi Sansone**, Instructional designer, and eLearning specialist, Jodisansone.com, USA

**Dr. Beverly Shirley**, Academic Program Officer for University of the West Indies Open Campus British Overseas Territories, (Cayman Islands, Anguilla, British Virgin Islands, Monserrat, Turks & Caicos, Bermuda), George Town, Grand Cayman, West Indies

**Dr. Carmen Strigel**, Director, Education Technology, RTI International, North Carolina, USA

**Dr. Torrey Trust**, Associate Professor, Learning Technology, College of Education University of Massachusetts Amherst, USA

**Freda Wolfenden**, Professor of Education and International Development, School of Education, Childhood, Youth and Sports Studies, The Faculty of Wellbeing, Education and Language Studies, United Kingdom Open University, Milton Keynes, England

**Dr. Diana Woolis**, CEO, Sustainable Learning Strategies, New York City, New York, USA

**Nicole M. Zumpano**, Director of Instructional Technology Coaching, The Learning Technology Center (LTC) of Illinois, USA

## **My thanks to Education Development Center (EDC) colleagues for sharing program information and for providing resources, review, and feedback on chapters or content.**

Helen Boyle, Vice President, Director of Program Strategy

Susan Bruckner, Senior International Technical Advisor

Nancy Meaker Chervin, International Technical Advisor

Rachel Christina, Director, International Basic Education

Leslie Goodyear, Distinguished Scholar/  
Principal Evaluation Director

Nevin Katz, Web and App Developer

Stephanie Knutson, International  
Accreditors for Continuing Education  
and Training Compliance Manager

Nora Nunn, International Technical Associate

Shelley Pasnik, Senior Vice President

Gerald Sanders, Facilities Administrative Manager

Tamara Vitolo, Research Associate, Center for Children and Technology

Katherine Yasin, Principal International Technical Advisor, Director of English for Latin America.

Special thanks to Bronwyn Taggart for her careful editing.

My deepest gratitude to Mary Hooker, International Technical Advisor, Education Development Center, for review, feedback, and wonderful insights on multiple chapters in Section II of this guide.

My final thanks to those who fund, develop, research, evaluate, design, teach and participate in distance learning programs for teachers across the globe. This guide draws on your work. Thank you as well to EDC's Digital Design Group.

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## **Preferred Citation**

Burns, M. (2023). *Distance Education for Teacher Training: Modes, Models and Methods*. (2nd Edition). Washington, DC: Education Development Center.



## Section II. Chapter 8

# DEVELOPING "GOOD" TEACHERS

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**Best Practice:** To be worth their investment, distance education programs related to teacher education must have as their core mission the development of “good” teachers and “good” teaching.

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## 8.1 Overview

“Good teachers matter.”

This declaration, “good teachers matter,” is uttered so frequently that it risks becoming a cliché.

Yet high-quality teachers are the single most important educational factor in a child’s education (Reid & Kleinhenz, 2015, p. 8). Decades of rigorous research have consistently shown that the difference between having a good teacher and a bad teacher can exceed one grade level in annual achievement growth and accounts for almost a quarter of the variation in student test scores (Hanushek, 1992, 2011; Rockoff, 2004).

Good teachers matter in the Global North. In research conducted in the United States, Chetty et al. (2014) estimate that a one-standard deviation increase in teacher quality in a single grade improves a student’s future earnings by 1% per year by the age of 28. Students assigned to these teachers also are more likely to attend college and save for retirement and less likely to have children while teenagers.

Good teachers matter for poor students in these wealthy countries. Lower-achieving students are the most likely to benefit from increases in teacher effectiveness. In 2010, the *Los Angeles Times* conducted a groundbreaking investigation into why many poor Latino students performed well academically in Los Angeles public schools while many others failed. The investigation concluded that the difference between success and failure was not a function of income, intelligence, family, or any

other factor. It had to do with the quality of the child’s teacher (Felch et al., 2010). These quality effects are cumulative over time and long lasting. Even in their late 20s, “the significant trace of their early schooling is quite discernible” for students whose teachers were rated as “good” in their evaluations (Hanushek, 2012).

But good teachers *really* matter for students in the Global South. As readers well know, students in poor countries tend to have poorly qualified teachers, and as discussed in Chapters 2 and 3, rural students within the Global South are particularly susceptible to poor teacher quality (Akiba et al., 2007). In a cross-sectional study of 46 countries, researchers estimated that in 13 Sub-Saharan African countries, a higher percentage of students in rural areas were more likely than urban students to be taught by teachers with limited experience and poor grades in content area coursework. Not surprisingly, the students of these teachers performed worse in tests of mathematics ability (Akiba et al., 2007).

Going from a low-performing teacher to a high-performing teacher increases learning dramatically for students in the Global South. This effect has been measured from more than 0.2 standard deviations in Ecuador to more than 0.9 standard deviations in India—the equivalent of multiple years of schooling. These effective teachers also have a substantial impact on the long-term well-being of students, affecting not only their academic achievement but their educational attainment and income as well (Beteille & Evans, 2021, p. 4).

## 8.2 What Makes a Good Teacher?

Coming to consensus on the qualities that make a good teacher is imperative for distance programs—and the research largely agrees on the qualities that constitute a good teacher. While there may be more qualities than those listed here (e.g., teaching experience, classroom management skills), and the process of developing good teachers is not as straightforward as simply blending these ingredients together, the following five attributes of “good” teachers continually recur throughout the research (Darling-Hammond & Bransford, 2005; Organisation for Economic Co-operation and Development (OECD), 2009). Each is discussed below.

1. **Content knowledge.** Good teachers have strong knowledge of their subject matter. Measures of teacher preparation and certification are by far the strongest correlates of student achievement in reading and mathematics. Student achievement is significantly related to whether teachers hold subject-specific certification in the field in which they teach (Akbari, 2007; Bold et al., 2017). Research demonstrates that the amount of university-level coursework teachers have taken in their content areas is positively related to student achievement gains (Darling-Hammond, 2000). Teachers’ courses in content area and scores on subject-matter tests correlate strongly with student achievement, although the former (content area courses) shows more frequent positive effects than the latter (test scores) (Darling-Hammond & Bransford, 2005; Hanushek & Rivkin, 2010; OECD, 2009).
2. **Structured instructional approach.** Good teachers adopt a structured, planned approach to instruction. This can be a traditional, more direct, “teacher-centered” approach, such as the use of whole-group teaching and direct teaching models. Or it can be student-child or learner-centered, or an “active learning” approach employing more cognitive and social models of teaching and learning (see Figure 8.1). Chapter 10 discusses both of these approaches in greater detail.

### Figure 8.1 Models of Teaching and Learning

Research and practice suggest that learner attainment can be enhanced by the consistent use of specific teaching and learning models. Teachers have always employed an array of instructional models in their repertoire. Three of the more common ones are noted here. While some teachers may rely on one model, many employ all three at various points in a learning unit or across multiple lessons.

1. **Direct teaching models** are often used to help learners master skills and procedures and acquire academic knowledge. Examples include lecture, demonstration, modeling, and whole group instruction.
2. **Cognitive teaching and learning models** are often employed to help learners process information, build concepts, generate, and test hypotheses, and think creatively. Examples include inquiry, inductive learning, metacognitive strategies, and teaching through analogy.
3. **Social models of teaching and learning** require learners to collaborate and co-construct new knowledge and concepts. These models include learner-centered instructional strategies, such as reciprocal instruction, project-based learning, and group problem solving.

In terms of which approach is *better* for student achievement, both traditional and learner-centered approaches have been shown to contribute almost equally as well to student learning (Bernard et al., 2019; Stockard et al., 2018). In terms of which to use, research suggests the efficacy of engaging students in a comprehensive educational approach in which different teaching styles be adopted as the teaching context—the phase of presentation of the subject matter or the types of students—requires (Bernard et al., 2019).

The research does point to additional advantages of learner-centered instruction. In many cases students are better able to acquire complex thinking skills when their teachers help them understand the underlying

concepts and patterns that tie together the ideas they are studying; provide models for how to approach learning tasks and reason through problems; allow for hands-on learning; provide scaffolds or structured steps that support the learning process; coach students as they apply their knowledge to real-world tasks; and help students learn to evaluate and regulate their own learning (OECD, 2009).

### Figure 8.2 Examples of National Teacher Standards

Every country has its own conception of what constitutes “good teaching,” typically codified in its national teaching standards. Standards set clear and measurable goals for performance and instantiate a country’s vision for what good teaching should be and do. Several somewhat geographically diverse examples of national teacher standards are listed here for purposes of exploration. Distance education programs may wish to familiarize themselves with the national teaching standards of the countries in which they operate and design courses that are aligned with such standards.

1. **Australia:** [Professional Standards for Teachers](#)
2. **Ghana:** [National Teacher Standards](#)
3. **International:** [Education International and UNESCO’s Global Framework of Professional Teaching Standards](#)
4. **Nigeria:** [Professional Teaching Standards for Nigerian Teachers](#)
5. **Singapore:** [A Teacher Education Model for the 21st Century](#) (This is a framework.)
6. **United Kingdom:** [Teachers’ Standards: Guidance for School Leaders, School Staff and Governing Bodies](#)
7. **United States:** [Interstate Teacher Assessment and Support Consortium \(InTASC\)](#)

The importance of standards in every facet of distance instruction will be a through line in the remainder of this guide.

**3. Pedagogical content knowledge.** Teachers’ preparation in content and pedagogy is associated with their teaching practices, which in turn influence student achievement.

Good teachers have strong pedagogical content knowledge—that is, they know their content and specific strategies for teaching it. Some of the key elements of pedagogical content knowledge are listed below.

- Knowing how to select topics, useful forms of presentation, analogies, illustrations, examples, explanations, and demonstrations
- Understanding what makes learning specific topics easy or hard for students (including knowledge about the conceptions and misconceptions students bring to the subject)
- Acquiring deep knowledge about content and structure of the subject matter
- Being aware of the appropriate teaching materials, technology, and media, and have strategic knowledge in the application of teaching strategies
- Teaching specific topics or skills by making clear the context in the broader fundamental structure of a field of knowledge (Shulman, 1986)

**4. Knowledge of how students learn.** Teachers with a good understanding of child and adolescent development and learning are more likely to be effective in the classroom. Teachers who have completed coursework in learning and development are more likely to stay in teaching, and teachers who understand how learning occurs are better able to select and develop a curriculum that supports, rather than undermines, the learning process (Darling-Hammond & Bransford, 2005).

Research on successful teacher education programs in the United States has found that many of them have particularly strong coursework in child and adolescent development that is tightly linked to clinical observation and analysis of learning—both in school and out of school (Darling-Hammond & Bransford, 2005).

**5. Efficacy.** Many studies have found a positive relationship between teachers’ beliefs about their own efficacy and student achievement in core academic outcomes (OECD, 2009; 2019, 2019b).



Efficacy is a broad term that deals with attitudes, beliefs, and perceptions, and it underlies the importance of motivation in teachers' work.

Teachers with strong *self-efficacy* believe that they can be successful; teachers with strong *efficacy* beliefs are confident in their *students'* ability to be successful (Bandura, 1997). They are better able to motivate students because they set exacting standards and believe that they can teach their students what they need to know to attain these standards. They persist until students achieve mastery over the subject at hand (Schleicher, 2020). Teachers with strong efficacy beliefs also demonstrate caring and respectful behaviors toward students and provide a safe learning environment. An added benefit is that teacher efficacy appears to generate a virtuous circle. It is strongly connected to teacher collaboration and participation in professional learning opportunities. This in turn can improve teachers' content knowledge and help teachers cultivate new skills, thus raising their personal competence and efficacy levels (OECD, 2020, p. 19).

### 8.2.1 From Good to Great

Good teaching is both science, as outlined above, and art—a blend of intangible, ineffable skills that move a teacher from a cultivator of knowledge and skills to a more transformative role as guide, mentor, and inspiration. It is the *art* of teaching that in large part moves teachers from good to great—and undergirding all of this is care and passion. Great teachers and great teaching involve holding students to high standards, having empathy, caring deeply about students as learners and as human beings, and communicating this care to students (Dobbie & Fryer, Jr., 2013; Noddings, 2012). Great teachers are passionate about the content they teach. They are passionate about teaching and learning. Above all, they are passionate about their students (Burns, in press).

Placing good teachers in the classroom is only half the battle. The other half is making sure that they teach well. Good teaching is often situationally and contextually defined (Bartanen et al., 2022).

To teach well, teachers need time to plan and to work with students. They need materials and resources with which to instruct children. They need reasonable class sizes and leadership that both understands effective instructional practices and empowers teachers to enact such practices. They need a curriculum and assessment system that facilitates rather than thwarts students' true academic potential. And they need ongoing learning and professional development in current best or innovative practices throughout their entire teaching careers. Without such supports, even the best teachers are likely to languish.

### 8.3 Conclusion

Within education, we often are quite good at identifying and analyzing the problems associated with poor instruction. We are much less adept, however, at identifying the factors that contribute to good teaching and to implementing systems to develop the skills necessary to be good teachers. Therefore, we need to understand the dispositions and behaviors that constitute good teaching so that we design and enact within distance-education programs the practices that cultivate the attributes that contribute to good teaching.

As discussed in this chapter, good teaching involves an interplay of complex behaviors, dispositions, and values. Teachers must know their content and be fluent in numerous instructional approaches. They must know how to cultivate content mastery in their students through a variety of activities and experiences. They must understand how children and adolescents learn and have a value system rooted in the belief that all children and adolescents can learn. They must be educators, counselors, parents, social workers, disciplinarians, and mentors to hundreds of children who enter classrooms with different personalities, learning needs, socioeconomic backgrounds, levels of wellbeing, family situations, tribal affiliations, religions, castes, classes, abilities/disabilities, and life experiences.



Creating an effective distance education system—or indeed any system—for teacher pre-service and in-service training means inculcating and cultivating this set of knowledge, skills, and beliefs in those who are, and those who wish to be, teachers. It also means immersing pre-service teachers and in-service teachers in high-quality

distance learning experiences with instructors who themselves embody the characteristics of good teaching. The following chapters discuss the practices that best support the development of good teachers, particularly as they pertain to distance learning environments.

Citation: Burns, M. (2023). Developing "Good" Teachers. In *Distance Education for Teacher Training: Modes, Models and Methods*. (2nd Edition). Washington, DC: Education Development Center.

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