

Distance Learning Success Factors in the Resources-Processes-Results Cycle and College of Education Accreditation Standards

Dr. Cathy Cavanaugh, Department of Curriculum and Instruction, University of North Florida, USA.
ccavanau@unf.edu

Abstract (895 characters, not counting spaces)

Teacher educators designing distance education experiences can address the needs of teacher candidates using established quality guidelines and standards. The development and implementation of effective distance education happens in an iterative cycle, with three stages: (1) procurement and preparation of the resources necessary to meet the distance education goals, (2) delivery of instruction using the best practices from education, business and research, and (3) analysis of the results of distance education to gauge achievement of the goals. The success of an online teacher education module, course, or program in part relies on its adherence to quality benchmarks. This paper explores the interconnect among the established success factors incorporated into the RPR cycle and standards published by agencies accrediting teacher education programs. The standards of two accrediting bodies are examined and compared to the RPR success factors. There is variation in the degree to which the standards correspond to the RPR success factors.

Quality in Distance Education for Teacher Education

In recent years, classroom space in higher education institutions has dwindled in comparison to the demand for space by potential students, largely due to cuts in higher education funding and tuition rates that have failed to make up the gap. The nation cannot afford to add lack of classroom space to the list of causes of the shortage in quality teachers. Increasingly, teacher education programs are adding distance education courses and programs in order to serve a broader range of teacher candidates.

In its December 2000 report to Congress, the Web-Based Education Commission made high quality online educational content one of its seven critical issues. In order for a student or institution to determine whether quality has been achieved, quality must be defined. Teacher education programs with distance components must serve their institutions in meeting their goals. A central goal of teacher education is developing educators who can capably apply their knowledge, skills and dispositions in effectively teaching candidates. To ensure that distance teacher education offerings meet this goal, course and program designers must identify desired learning outcomes, instructional strategies, and evaluation methods. Quality indicates that instruction is effective and appropriate. The assessment of quality distance teacher education offerings may include quantitative elements such as completion rates, candidate performance, and candidate evaluations of the learning experience. Qualitative dimensions may include ratings of teaching-learning events, materials, learning process, pace, activities, content, usability, accessibility, and options offered to candidates. Performance in each measure of quality depends on the distance education experience being fully appropriate to all users. Several agencies have published accreditation standards that have been adopted by American teacher education programs. Two prominent agencies operate at the national level: the National Council for Accreditation of Teacher Education, and the Teacher Education Accreditation Council. The accreditation standards of these two agencies will be compared with quality guidelines for distance education.

The Quality Distance Education Cycle

The process of developing and implementing effective distance education happens in an iterative cycle. Broadly considered, the three stages in the cycle are (1) procurement and preparation of the resources necessary to meet the virtual school education goals, (2) delivery of instruction using the best practices from education, business and research, and (3) analysis of the results of distance education to gauge achievement of the goals. Each stage of the **Resources--Practices--Results (RPR)** cycle, shown in Figure 1, continually revisits lessons learned in the other stages and builds upon the successes realized in the other stages (Cavanaugh 2002). Each stage requires participation

of all stakeholders, including students, instructors, support and design professionals, administrators, and the community. The success factors included in each stage are based on decades of research and experience with learners from professions, higher education and K-12 education (Barker, 1999; Bruce, Fallon & Horton, 2000; Cavanaugh, 1999; Educational Development Associates, 1998; Fredericksen, E., Peltz, W. & Swan, K., 2000; Institute for Higher Education Policy, 2000; Mantyla, 1999). This paper explores the match among the established success factors incorporated into the RPR cycle and the teacher education accreditation standards established by the national accrediting bodies.

The Resources Phase of the RPR Cycle. The resources required to sustain a quality distance teacher education program exist to support candidates, faculty, and the program or institution toward achieving the goal of effective and appropriate learning. Responsive and flexible human resources, knowledge, skills, policies, procedures and technical infrastructure enable quality practices and contribute to quality results. Procurement, development and adaptation of resources are ongoing processes.

Success factors for the Resources phase:

- School policy that values distance education
- Strategic plan for delivering distance education to students
- Stakeholder analysis to determine needs of graduates
- Financial commitment that gives the direction regarding program implementation
- Team support for distance educators and students
- Appropriate technology infrastructure
- Program standards to guide course design and delivery
- Program review to ensure that all components of the program meet standards and to ensure that the standards contribute to program goals
- Effective communication of policies and expectations to students
- Student services: information, advising, orientation, and security
- Information privacy
- Qualified, experienced staff and faculty
- Community involvement in the program's goals, policies, and outcomes
- Information provided to faculty about teaching in the distance learning environment
- Instructor release time for course development
- Instructor training in distance education pedagogy and technology
- Course design and delivery assistance
- Well-designed and appropriate learning materials
- Student orientation and training
- Student access to learning resources and instructors
- Technical support for instructors and students
- Technology plan to communicate goals to all users

The Practices Phase of the RPR Cycle. With the right resources in place, the stage is set for dramatic teacher education learning performance. At this point the spotlight shifts from the institution to the instructor. Quality distance teaching begins with the careful design of courses, materials and learning activities. Next, the instructional practices employed during instruction will aim at developing independent learners with the ability to transfer their learning to novel situations. Throughout the course, effective communication and community building are essential foundations for all events.

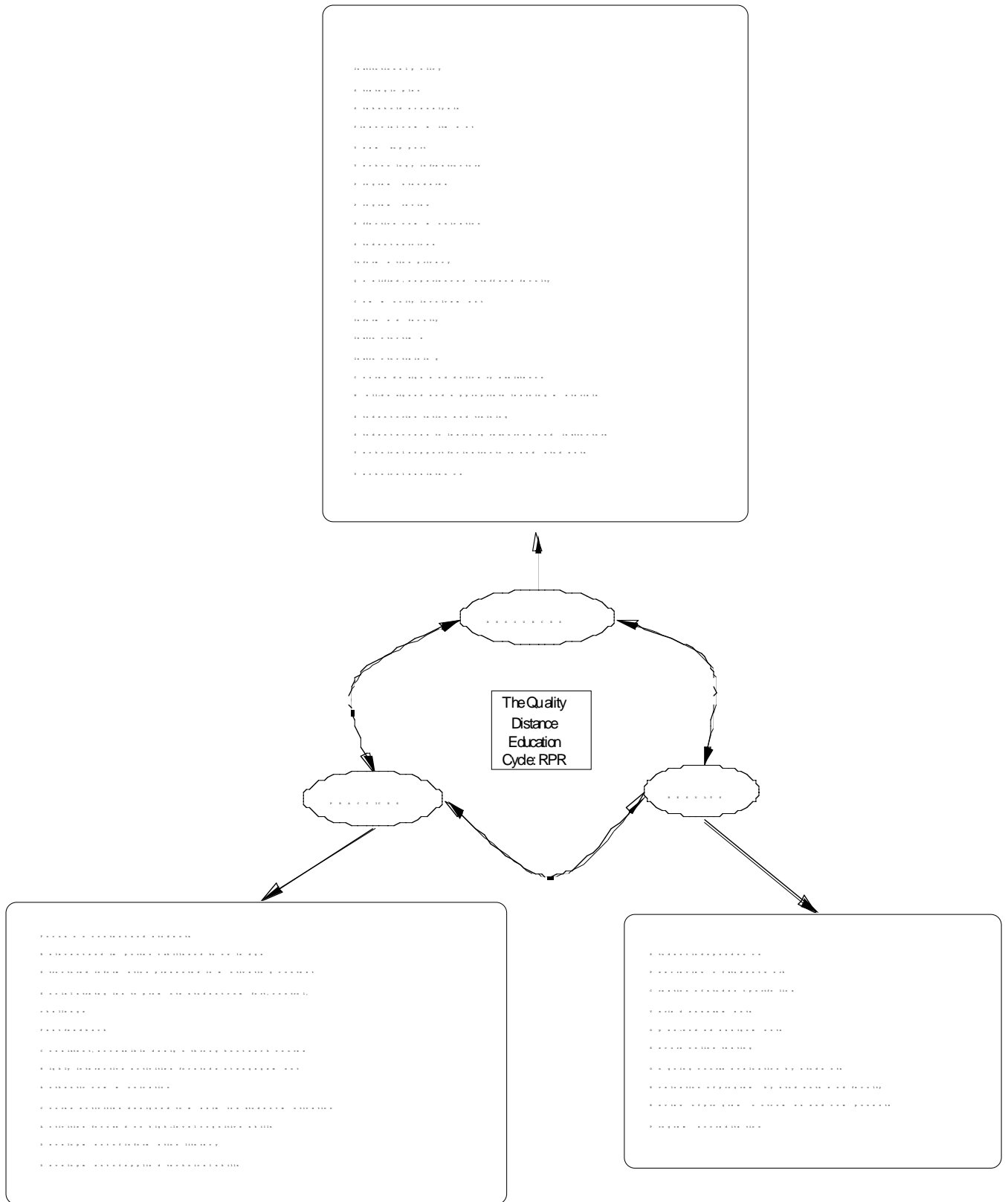


Figure 1. Distance learning success factors

Success factors for the Practices phase:

- Focus on content and students
- Relevant and important skills and knowledge addressed in courses
- Structured information presented in motivating context
- Social strategies to promote student comfort, control, challenge
- Fast feedback from instructors to students
- Consistent and accessible design throughout each course
- Highly interactive activities for student engagement
- Authentic communication among students, instructors and experts
- Course activities designed to maximize student motivation
- Activities focused on high-level cognitive skills
- Development of information literacy
- Development of applied technical skills

The Results Phase of the RPR Cycle. The only way to know whether a distance education program has achieved quality is to compare the program results to established quality benchmarks. Measures of quality are tied to program goals, and respond to the specific context of the program. To maintain success, a distance program evaluation must account for institutional and instructional factors as well as candidate factors. Evaluation of course and program results is a continual process that involves all stakeholders and requires a wide range of tools. Success is evaluated by through assessment of candidate learning, program review, and program accreditation.

Success factors for the Results phase:

- Student independence developed through opportunities for self-assessment
- Peer review of student work as a professional experience
- Creation of student portfolios to showcase accomplishments
- Varied assessments for an accurate view of student abilities
- Open-ended assignments to increase thinking skills and reduce cheating
- Secure online testing
- Ongoing course evaluation by students
- Evaluation of program by students and faculty
- Review of program outcomes and components by all stakeholders
- Program accreditation

Accreditation Standards

In the U.S., teacher education accreditation takes several forms. The websites of the 759 teacher education programs listed by the Title II reporting website as having over 50 completers in 2002 were examined in fall 2003 to determine whether the programs were accredited, and if so, by which agencies. The National Council for Accreditation of Teacher Education (NCATE) accredits 422 of the programs reviewed, and Teacher Education Accreditation Council (TEAC) accredits one of the NCATE accredited programs and one additional program. The remaining programs are accredited by regional accrediting bodies such as Commission on Colleges of the Southern Association of Colleges and Schools or North Central Association of Colleges and Schools, or they were approved by the state board of education.

Accrediting agency	Web address	Number of teacher education programs accredited of the 759 examined
National Council for Accreditation of Teacher Education (NCATE)	http://www.ncate.org	422
Teacher Education Accreditation Council (TEAC)	http://www.teac.org	2

Table 1. Teacher education program accreditation standards

The standards of the two national accrediting agencies were compared to the distance education quality success factors of the Resources—Practices—Results cycle. The comparison involved matching text between the agencies published standards for teacher education programs with the text of the RPR success factors.

The National Council for Accreditation of Teacher Education (NCATE), a coalition of 33 professional organizations, is recognized by the US Department of Education and the Council for Higher Education Accreditation as an accrediting body for teacher preparation.

NCATE is the profession's mechanism to help establish high quality teacher preparation. Through the process of professional accreditation of schools, colleges and departments of education, NCATE works to make a difference in the quality of teaching and teacher preparation today, tomorrow, and for the next century. NCATE's performance-based system of accreditation fosters competent classroom teachers and other educators who work to improve the education of all P-12 students. NCATE believes every student deserves a caring, competent, and highly qualified teacher (NCATE 2003).

NCATE adopted its unit standards in 2000, and updated them in 2002. The standards are organized into six areas with detailed supporting explanation and descriptions of acceptable achievement of each standard competency. The six areas are:

1. Candidate knowledge, skills and dispositions
2. Assessment system and unit evaluation
3. Field experience and clinical practice
4. Diversity
5. Faculty qualifications, performance and development
6. Unit governance and resources

The RPR cycle has 22 success factors in the Resources phase, ten of which were addressed in full or in part by NCATE standards. Those not addressed related specifically to distance education policy, planning, support, and materials. Seven of the twelve success factors in the Practices phase were addressed by the NCATE standards, and they were the more general practices. The Practices not addressed by the standards related to specific teaching methods. Seven of the ten Results success factors were addressed by the NCATE standards, mainly the ones related to program-level concerns and assessment methods. Overall, the NCATE standards addressed 24 of the 44 RPR success factors, more than the TEAC, and incidentally the same number as the Distance Education and Training Council's standards meet. The factors not addressed were those specifying course-level practices.

The Teacher Education Accreditation Council (TEAC) is a new system of accrediting professional education programs through an academic audit.

Council (TEAC) is a nonprofit organization of institutions of higher education and other groups and individuals devoted to the improvement of academic degree programs for professional educators. The Council's primary work is providing the public with assurance about the quality of these professional programs. It does this by the accreditation of programs through a system that examines and verifies the evidence institutions of higher education have for the claim that they prepare competent, caring, and qualified professional educators (TEAC 2003).

TEAC has developed 33 standards organized into four Quality Principles:

1. Evidence of student learning
2. Valid assessment of student learning
3. Institutional learning
4. Standards for capacity for program quality: Curriculum, Faculty, Facilities, Fiscal and Administrative, Student Support, Student Complaints, and Recruiting, Admissions, Calendar, Catalog, Publications, Grading and Advertising

The TEAC standards addressed six of the 22 Resources success factors, those concerned with institution or program issues rather than those concerned with technical, distance learning or course issues. The standards corresponded with four of the 12 Practices success factors, and three of the ten Results success factors. The standards addressed the factors that focused on broad issues and practices rather than those focused on specific course and teaching practices. Thirteen of the 44 success factors were addressed by TEAC standards.

Accrediting agency	Number of standards	Number of standards corresponding to RPR success factors
National Council for Accreditation of Teacher Education (NCATE)	33	18
Teacher Education Accreditation Council (TEAC)	6	6

Table 2. Correspondence of accreditation standards to success factors

Because the NCATE organization recognizes distance learning as a teaching method, the agency’s website lists issues for reviewers to consider when evaluating a teacher education unit where distance learning is used. Therefore it would be expected that NCATE standards would address more of the accepted success factors related to distance education than would standards designed by an agency that so far does not account for distance delivery in the program it accredits. Even so, the NCATE standards addressed only 54 percent of the success factors. The success factors of the RPR cycle include practices at the instruction, program, and instructor levels. Together, the accreditation standards and the success factors identified in the literature provide a comprehensive instructional resource for teacher education programs that make use of distance learning. Instructional developers and instructors are encouraged to continue to review the literature to add their own standards of practice to the standards provided by accrediting agencies. Implemented in tandem, the RPR success factors and the accreditation standards provide a comprehensive set of design and implementation guidelines for teacher education programs.

Conclusion

A strength of distance education is its potential to focus the learning process on the student, regardless of the student’s unique needs and abilities. Teacher education programs that emphasize their focus on the candidate’s strengths and needs will succeed in attracting students. In order to build their reputations and retain students, teacher education programs must reach quality goals. With increased need for new career skills and improvement in delivery technology, distance education students will demand full accessibility and evidence of quality and authenticity in distance courses. It is imperative that distance education developers implement and review quality benchmarks regarding Resources-Practices-Results success factors and accreditation standards in response to the needs of students, employers and the community. Teacher education programs must continue to develop and maintain standards, and they must clearly communicate those standards to the public. When students benefit from an education program that meets their needs, the community benefits as well.

References

Barker, K. (1999). *Quality guidelines for technology-assisted distance education*. Washington, DC: U.S. Department of Education Office of Learning Technologies.

Bruce, B., Fallon, C., & Horton, W. (2000). *Getting started with online learning*. Macromedia, Inc. Online at http://www.macromedia.com/learning/online_learning_guide.pdf

Cavanaugh, C. (2001). The Effectiveness of Interactive Distance Education Technologies in K-12 Learning: A Meta-Analysis, *International Journal of Educational Telecommunications* 7(1), 73-88.

Cavanaugh, C. (2002). Distance Education Quality: Success Factors for Resources, Practices and Results in *The Design and Management of Effective Distance Learning Programs*. Discenza, R., Howard, C. & Schenk, K., Eds. Hershey, PA: Idea Group Press.

Educational Development Associates. (1998). What quality distance learning courses for an institution? Las Cruces, MN: Author.

Fredericksen, E., Peltz, W. & Swan, K. (2000). Student satisfaction and perceived learning with online courses: principles and examples from the SUNY learning network. *Journal of Asynchronous Learning Networks*, 4 (2).

Institute for Higher Education Policy. (2000). Quality on the line: benchmarks for success in internet-based distance education. Washington, DC: Author.

Mantyla, K. (1999). Interactive distance learning exercises that really work. Alexandria, VA: American Society for Training and Development.

National Council for Accreditation of Teacher Education (NCATE). (2003). Unit standards. Online at http://www.ncate.org/2000/unit_stnds_2002.pdf . Last accessed 10/13/03.

Teacher Education Accreditation Council (TEAC). (2003). Accreditation goals and principles. Online at <http://teac.org/accreditation/goals/index.asp>. Last accessed 10/13/03.