

## Chapter 2

### Preparing Special Education Teachers Through Online Instruction

*Donna Sobel*

A critical shortage of certified special educators has been a problem for more than twenty-five years (Rosenberg, Correa, Billingsley, & Westling, 2007). Increasingly, school districts have had to hire individuals on limited or emergency teaching licenses to help alleviate these shortages (Billingsley, 2004; Knapszyk, Frey, & Wall-Marencik, 2005; McLeskey, Tyler, & Flippin, 2004). These shortages are likely to increase because the special education teacher workforce is expected to grow at a faster rate than the general education teacher workforce (McRel, 2003) while at the same time, the retirement of special education teachers is expected to increase. Given the critical shortage and projected need of special education teachers across the country as well throughout the state of Colorado, school district administrators, especially those in rural areas, are looking at ways to provide unique and alternative avenues to teacher licensure in special education.

Teachers on emergency licenses are required to pursue specific credentials in order to maintain their positions. In both urban and suburban areas, commuting times to college campuses, work schedules and other life demands make enrolling in university coursework very challenging for those holding fulltime teaching positions (Johnson, 2004; Spooner, Spooner, Algozzine, & Jordan, 1998). Alternative and distance-learning teacher education programs have been identified as viable solutions to this problem (Johnson, 2004). In particular, the promising practices of web-based instruction (e.g., self-paced learning, active learning opportunities, and collaboration with students and instructors) combined with the added flexibility associated with online delivery create a credible advantage to traditional face-to-face courses (O'Neal, Jones, Miller, Campbell & Pierce, 2007).

The preparation of highly qualified special education teachers who can accomplish the missions of public education in today's world is a complex challenge. It requires a creative approach to teacher preparation that is scientifically sound, rigorous, and results in qualified teachers who have the knowledge, skills, attitudes, and dispositions to provide instructional programs to all students. While the use of web-based instruction in special education personnel preparation has grown considerably (Ludlow, 2003; Ludlow & Duff, 2003), research specific to its application has been inconsistent (Korir Bore, 2008; Mohr, 2004). The faculty at the University of Colorado Denver's School of Education and Human Development embraced the charge to develop qualified special education teachers. Given the constraints that teachers on emergency licenses are under coupled with the benefits of learning online, providing such instruction in an online format was the next logical step.

CU-Denver's Special Education program is accredited by the State of Colorado to offer a Special Education Generalist licensure, which qualifies a teacher to work with students, ages 5-21 years of age, who have been identified with special education needs. Those needs run the gamut including varying degrees of academic, intellectual, behavior, and physical disabilities. Given the demanding expectations of a Special Education Generalist, faculty felt that this new online program would be most beneficial for

educators already certified to teach in elementary or secondary general education who wished to add a special education credential. Given the shortage of special education teachers, we knew that our prospective population for this program would be individuals who held an emergency or “temporary teacher eligibility” (TTE) license and, hence were under pressure to complete a special education program in an expeditious manner. We also projected that current on-campus students would be very appreciative of having the option of taking some, if not all, of their courses online as well. These assumptions were correct; every offering of every online course in this program has been filled to capacity since its inception.

### **Collaborative Course Development Efforts**

Initially some faculty were apprehensive and doubtful that an online environment was an effective platform for students to learn special education content. A few faculty members voiced their reluctance to teach online; they felt this format did not match their own learning styles and that they were not willing to give-up their weekly face-to-face time with students. Yet despite this, support to move forward was unified.

Ten courses needed to be developed for the program to be offered online (see Table 1). Throughout the 2006-2007 academic year, seven faculty members attended group and individual workshops to learn how to design, implement, and evaluate web-based instruction. In addition to a superb training and a curriculum development stipend provided by CU Online, faculty were mentored all along the way. Our questions were answered in timely and professional ways, practical suggestions were graciously offered, and our hands were held when they needed to be. That expertise and support was critical.

In addition to the support provided by university-wide resources, program faculty also sought out additional support and expertise within the School of Education and Human Development. For instance, we were uniquely challenged with one particular course that focused on instructional strategies for students with severe needs. We felt that this content was too sensitive and difficult to deliver in an online format. Creating and delivering an evidence-based “methods” course online that effectively taught our students to respectfully work with individuals with multiple and significant disabilities seemed especially daunting. A colleague of ours, in the instructional design and technology program, however, helped us see that this could indeed be done.

We began designing this course by identifying the central problems of practice and the related state and professional teaching standards. We subsequently developed a series of tracking forms (i.e., the *Problems-of-Practice Matrix*, the *Problems-of-Practice-Outcomes Matrix*, and the *Problems-of-Practice-Assessment Matrix*) to help us articulate how this course supports our special education program’s vision as well as the path students would take through the course (Dunlap, Sobel, & Iceman Sands, 2007). We were then able to determine if we were adequately and evenly covering each of the learning objectives. These tracking forms also helped us balance the activities over the whole course and avoid having the workload heavier in some weeks than in other weeks. Next, we knew that we wanted to design this course with particular attention to creating rich and meaningful student-to-content interactions as well as student-to-instructor interactions. A recent publication (Sobel, Iceman Sands, Dunlap, 2009) illustrates the approach we took to incorporate (a) personalization (student-to-instructor interaction), (b) meaningful engagement (student-to-content interaction), and (c) ongoing checks of student understanding (student-to-instructor and student-to-content interactions) into this course.

**Table 1. Program plan of study**

Summer #1	<p>SPED 5600: Special Education for the School Professional (3 credits)                  This course provides an extensive understanding of legal issues in special education. The course addresses special education from the perspective of federal and state legislation, federal and state rules and regulations, school policy, litigation, and as practical applications in the school.</p>
	<p>SPED 5010: Instructional Strategies for Students with Special Needs (3 credits)                  The content of the course is designed to promote the acquisition of knowledge and skill in service provision for individuals who have a range of “low incidence disabilities,” including severe and multiple disabilities. Course content and processes begin with a review of the learning characteristics and needs of students with low incidence disabilities and then address differences in special education supports and services in assessment; the intensity and/or precision of instruction; and team service provision.</p>
Fall #1	<p>SPED 5140: Advanced Assessment in Special Education (4 credits)                  This course provides the practitioner with an understanding of assessment that informs the design and implementation of individualized instruction for students with identified special needs. Students learn to develop a body of evidence including, but not limited to, response to intervention data, curriculum based assessment, district and state assessment tools and individually administered measures.</p>
	<p>SPED 5780: Literacy Intervention for Students with Special Needs (3 credits)                  This course provides in depth research based study of the cognitive, linguistic and educational reasons why some students are challenged with reading and writing proficiently. Students learn how to interpret and integrate assessment data from various sources to create a learner profile that is used to guide the decisions about interventions.</p>
	<p>SPED 5910: Special Education Internship and Seminar (2 credits)                  Professional opportunities to apply skills in natural settings are one of the most valuable components of the program. The internship/teaching experience is not only an opportunity to demonstrate basic competencies as a teacher, but also an opportunity to enlarge the scope of techniques and strategies that each teacher brings to the classroom.</p>
	<p>SPED 5151: Positive Behavior Supports (2 credits)                  Provides in-depth knowledge, skills, and dispositions for special educators and other school professionals who lead systematic school renewal efforts to promote Positive Behavioral Support (PBS).</p>
Spring #1	<p>SPED 5300: Collaboration and Consultation (3 credits)                  Focuses on the development of competencies in consultation and collaboration. The overall purpose is to encourage the development of understanding and skills that enhance a teachers ability to work and communicate effectively with school personnel, including paraprofessionals and parents.</p>
	<p>SPED 5500: Transition/Secondary Planning (2 credits)                  Provides the practitioner with an understanding of the design and implementation of transition planning that meets students' physical, affective, cognitive, and communicative needs across the contexts of school, community, family life, career and vocation, and recreation/leisure.</p>
Summer #2	<p>SPED 5320: The Use of Technology in Special Education (2 credits)                  This course provides an overview on the wide range of available technology for individuals with special needs and the specific methods and strategies for effectively using technology.</p>
	<p>SPED 5913: Special Education Internship and Seminar (2 credits)                  This second internship experience is designed to build-off of the skills developed in SPED 5910 and to ensure that the candidate demonstrates skills in working with students of varying disabilities, age and grade levels.</p>

To aid in program continuity, faculty met monthly to provide status reports on the course development progress. We also worked together in a full day retreat where each course developer discussed and illustrated key aspects of his/her course. Together staff at CU-Online and program faculty critiqued each course—offering feedback on exemplary design features, suggestions for enhancements and questions to consider. These collaborative planning sessions also highlighted issues related to student advising that we subsequently addressed in program handbooks and syllabi (see figure 1). Among other things, we developed a realistic roll-out plan to ensure ample time to deal with an array of scheduling and advising issues and the ten course (26 credits) program plan of study was made available to students (see table 1).

**Figure 1. Student advising information**

<p><b>Online Instruction</b></p> <p>Within the Special Education program, we are offering a number of online courses. Please note, every course that is offered in an online format is also offered in a traditional face-to-face format. If you are considering an online format, please think about the following characteristics of the successful on-line student:</p> <ul style="list-style-type: none"><li>✓ Self-directed, independent learner.</li><li>✓ Does not need face-to-face contact (with either the professor or peers) for success.</li><li>✓ Reads and comprehends written instructions well.</li><li>✓ Consistently demonstrates the ability to advocate for self whenever there is a question, concern or frustration.</li><li>✓ Strong long range planning skills.</li><li>✓ Effective time management skills.</li><li>✓ Does not procrastinate.</li><li>✓ Committed to reading the materials without the weekly accountability of an on-campus class.</li><li>✓ Competent skill level with computer technology – or willing to seek out sources of information to learn.</li><li>✓ Has consistent, dependable access to a computer with on-line capability.</li></ul> <p>Does this describe you as a student and compliment your learning style? If you answered yes, then you may want to plan to take courses online. As with any university course, the time expectation for outside work is two hours for every hour spent in class. In a traditional on-campus 3 credit course the student attends a three hour lecture once per week and then is expected to spend at least six hours (2 hours for each of those 3 hours in class) working on assignments. An online class has similar expectations. Students in the on-line course have assignments designed to take the place of the three hours spent in class with class discussion, small group activities, etc. The major assignments are the same. For a 3 credit on-line class, you should expect to spend approximately nine hours per week. In other words, the expectations for time for the online section are the same (it just looks a bit different).</p>
---

### **Discussion and Recommendations**

The design and implementation of the online Special Education license program has been a very successful effort on several fronts. Faculty in the Special Education program saw the process as a meaningful professional development opportunity. We learned new skills and know that our face-to-face courses have been enhanced because of what we learned in developing the online courses. Several faculty, who are committed

to integrating their teaching and research, capitalized on the course development phase of this project by investigating the process from their own perspective as well as that of their students. Faculty documented and shared that professional journey through publications and presentations. Students in the Special Education program continually express appreciation for the ability to complete this program online. Professionals across the state are taking advantage of this program and most importantly, students are reporting that the impact of technology and interaction has provided them with quality learning.

## References

- Billingsley, B.S. (2004). Special education teacher retention and attrition: A critical analysis of the research literature. *The Journal of Special Education, 38*(1), 39-55.
- Dunlap, J.C., Sobel, D.M., & Iceman-Sands, D. (2007). Supporting students' cognitive processing in online courses: Designing for deep and meaningful student-to-content interactions. *TechTrends, 51*(4), 20-31.
- Johnson, L.R. (2004). Research-based online course development for special education teachers preparation. *Teacher Education and Special Education, 27*(1), 207-223.
- Korir Bore, J.C. (2008). Perceptions of graduate students on the use of web-based instruction in special education personnel preparation. *Teacher Education and Special Education, 31*(1), 1-11.
- Knapszyk, D.R., Frey, T.J., & Wall-Marencik, W. (2005). An evaluation of web conferencing in online teacher preparation. *Teacher Education and Special Education, 28*(2), 114-124.
- Ludlow, B.L. (2003). An international outreach model for preparing early interventionists and early childhood special educators. *Infants and Young Children, 16*, 238-248.
- Ludlow, B.L., & Duff, M. C. (2003). *Live broadcasting Web-based: Interactive training for rural special educators* (Report No. RC 024 061). Morgantown, WV: West Virginia University. (ERIC Document Reproduction Service No. ED 476 216)
- McLeskey, J., Tyler, N.C., & Flippen, S.S. (2004). The supply of and demand for special education teachers: A review of research regarding the chronic shortage of special education teacher. *The Journal of Special Education, 28*(1), 5-21.
- Mid-continent Research for Education and Learning (McREL). (2003). *Teacher supply and demand in the State of Colorado*. Retrieved from <http://www.mcrel.org/topics/products/131/>
- Mohr, D. (2004). Technology-mediated distance education used to prepare special education personnel (Doctoral dissertation, University of North Texas, 2004). *Dissertation Abstracts International, 65*, 2951.
- O'Neal, K., Jones, W.P., Miller, S.P., Campbell, P., & Pierce T. (2007). Comparing web-based to traditional instruction for teaching special education content. *Teacher Education and Special Education, 30*(1), 34-41.
- Rosenberg, M., Correa, V., Billingsley, B., & Westling, D. (2007). *Supply and demand for special education teachers: The next 10 years*. Paper presented at the annual conference of the Teacher Education Division, Milwaukee, WI.
- Sobel, D.M., Iceman-Sands, D., & Dunlap, J. (2009). Teaching intricate content online: It can be done and one well. *Action in Teacher Education, 30*(4), 28-44.
- Spooner, F., Spooner, M., Algozzine, B., & Jordan, L. (1998). Distance education and special education: Promises, practices and potential pitfalls. *Teacher Education and Special Education, 21*, 121-131.

**Bio**

Dr. Donna Sobel is an associate professor in the School of Education & Human Development's Special Education program at the University of Colorado Denver. Dr. Sobel teaches general and special education teacher candidates in methods courses on-campus and provides on-site professional development for pre-service and inservice teachers in schools across the Denver metropolitan area. Dr. Sobel's concerns about the attitudes that teachers hold regarding issues of responsive teaching practices has led to a series of investigations examining the developing pedagogical understanding of teachers to meet the educational needs of learners from diverse backgrounds and with diverse needs.