

(2) **Coursework** is designed to actively engage students in learning course material through varied instructional modes that recognize individual differences in learning style. Diverse instructional formats include: lecture, modeling, and demonstration, guided participation in whole group, small group, paired discussion and activities. Written assignments and group projects emphasize critical thinking through analysis, synthesis and appraisal of course materials. To connect theory and practice, students engage in independent and collaborative research projects and curriculum development activities using multi-media technology. Brief descriptions of the autism spectrum courses follow.

SPED 791 - Nature of Autism Spectrum Disorders (3 units) This introductory seminar provides a thorough foundation in the education of diverse learners with Autism Spectrum Disorders (ASD). The focus is on understanding and addressing the unique and complex challenges people on the autism spectrum face in their learning, development and sociocultural experiences. The course offers a cross-disciplinary perspective highlighting: historical and theoretical underpinnings; etiology; definitions; characteristics; developmental and learning profiles; assessment frameworks and procedures; current and emerging practices; individualized educational supports and service delivery models.

SPED 825 – Communication, Behavior and Instruction: Autism (3 units) This course offers preparation in the design and delivery of communication, behavior and instructional supports for diverse learners with ASD. A major focus is on identifying and applying a wide range of assessment and intervention strategies while highlighting key approaches that are grounded in empirically validated research and evidence-based practices including: data-based assessment and intervention; functional communication, AAC; environmental supports; structured teaching; differentiated instruction; ABA, cognitive, developmental and sensory-based approaches.

SPED 794 –Socialization and Imagination: Autism (3 units) This seminar provides preparation in methods to enhance socialization, communication, play and imagination in diverse learners with ASD. The course merges our theoretical understanding of the “triad of impairments” as defining features of autism with practical modes of assessment and intervention. To illustrate major concepts, the application of key research-based models and evidence-based practices will be highlighted including: social pragmatic and social-cognitive approaches; adult-directed, child-centered and peer-mediated practices; inclusion with typical peers/siblings in school, home and community settings.

SPED 796 – Partnerships and Life Issues: Autism (3 units) This seminar is designed to offer rigorous exploration and critical analysis of contemporary issues influencing the lifelong learning, development and sociocultural experiences of people on the autism spectrum. Emphasis is placed on guiding students through a reflective process while becoming well versed in translating theory and research into effective and meaningful practice. The course highlights: transitions and lifespan issues; family, school and community supports and partnerships; professional literacy and leadership as autism specialists.

(3) **Field experiences** are directly tied to each of the four autism spectrum courses (see Figure 1 for a list of specific activities). They are designed to give candidates a perspective of the

lifelong learning and development of students with autism from early diagnosis through adulthood while centering on the school age years. They explicitly support opportunities to apply theoretical constructs, conduct and interpret assessments, and design and implement curriculum and instructional practices within a variety of field contexts and inclusive settings.

Candidates conduct 100 hours of fieldwork (which is over and above the requisite 180 hours of clinical practice completed in entry-level training). Candidates who are not teaching are supported in classes and schools with a master teacher within one of our partner districts. Candidates who are teaching engage in field experiences in their own classrooms and schools. Faculty and the field supervisor/coordinator work with schools to coordinate field activities.

(4) Portfolio documentation provides evidence of each candidate's knowledge and skill. Aligned with the competencies, portfolio components are linked to course assignments and field activities (see Figure 1). These include: reflection logs, written responses to readings, a detailed case study of a student with ASD, group projects and presentations in classes, environmental inventory, assessment protocols, intervention and instructional plans, supervisor and field mentor observations (written and videotaped), and a final grade report. Portfolios are used extensively for candidates to reflect on and refine their practice. Faculty, supervisors and peers review and give feedback on portfolios in meetings and classes. Portfolios are also used extensively in evaluation activities not only of teacher practices, but also for assessing student outcomes.

Current Status of Programs

Combined Elementary and Special Education Program

Over the last five years, SFSU was selected to receive a grant from the U.S. Department of Education to develop a dual credential program at San Francisco State University to increase the number of teachers trained to work with children with disabilities in inclusive school settings. This grant provided funding to prepare 80 educators to serve students from diverse ethnic, cultural and linguistic backgrounds in diverse settings. The following objectives were established as important outcomes, (1) Develop an integrated program that allows students to earn a Level I credential in both special education and elementary education, a certificate demonstrating competence with English language learners, and a master's degree in special education, (2) Prepare 80 new teachers over a 4-year time period who can successfully teach in inclusive settings (general, special, and linguistically diverse settings), (3) Provide assistance in placing students in inclusive sites after they graduate, (4) Provide professional development through collaborative course development and collaborative teaching for SFSU faculty in general and special education so they can learn more about integrating interdisciplinary methods throughout the general education and special education curriculum, (5) Evaluate and Disseminate program model.

For the last few years, the staff of the Combined Credential Program has focused on collecting qualitative data on students' experiences in the program. The staff has modified the curriculum and changed course sequence a number of times based on this formative data.

When the first cohort graduated, that group will be asked to complete an exit survey that is given to all students in the California State University system. Scores on that survey will be compared

to scores on surveys from other universities, as well as from other programs at SFSU, to determine whether students feel prepared to teach special needs students.

The program staff has also developed a professional content knowledge test that is given to mild to moderate special education students when they enter the program and also when they leave the program. Gain scores will be calculated to determine whether the students experience significant increases in professional content knowledge. These gains will be compared with increases from other special education programs in the mild to moderate program at SFSU to determine whether the dual credential program ultimately prepares students as well, if not better, than other programs at SFSU.

Finally, students from the Combined Credential Program will also be followed out into the schools for two years and observed in their teaching jobs. Qualitative and quantitative observations will be collected to determine whether teachers are putting research-based strategies into practice in their classrooms in order to positively affect children's learning.

Preliminary Results of the first three cohorts

In the first two cohorts, 39 of 42 students admitted to the program graduated and 38 of the 39 student have gotten jobs in teaching. Of the 38 students who are now teaching, 35 students have gotten jobs in special education, which was more than expected. The 3rd cohort will be graduating in May of 2009. In the 3rd cohort, 11 students were admitted and all 11 are still in the program. In the 4th cohort we admitted 29 students. Overall, we have 79 students who will be graduating by 2010.

So far we have had positive results in that all of the students who have earned a dual credential have stated that earning both credentials made them feel prepared to meet the challenges of children with special needs in inclusive settings. Many stated that they could not imagine working in a special education setting without general education content or working in a general education setting without special education content. Both were important.

Autism Spectrum Graduate Program

In Fall 2006, SFSU was selected to receive a four-year grant from the U.S. Department of Education to train teachers who will work with the increasing number of students in Northern California being identified with Autism Spectrum Disorders (ASD). This program, known as Project Mosaic, will financially support, prepare and graduate 80 educators to serve students with ASD from diverse ethnic, cultural and linguistic backgrounds in diverse settings. The following objectives will assist in meeting these goals while guiding project activities: (1) Establish and maintain school, family and community partnerships with the university to support project activities; (2) Recruit and retain 80 candidates with disabilities and/or from diverse ethnic, cultural and language backgrounds; (3) Develop specialized research-based curricula and pedagogy that allows 20 candidates each project year to provide high quality services and instruction to students with autism; (4) Prepare candidates with knowledge and skill through integrated coursework and supervised field experiences over 3 semesters to address the specialized needs of students with autism; (5) Evaluate project activities, candidate knowledge and skill, and associated outcomes for the students with autism, and disseminate the program model at the local, state and national level.

To date, we have successfully recruited and retained top quality advanced credential and Master's level candidates who are in various phases of completing program requirements. We are currently evaluating candidate performance and mastery across professional competency areas. Thus far, candidates have produced high quality portfolio documentation, which provides evidence of their knowledge and skill within and across these areas of competence. The majority of graduating candidates are now fulfilling their service agreement working with students on the autism spectrum in diverse educational and therapeutic settings.

In our grant, we stated that we would implement a comprehensive evaluation plan of project objectives, candidate knowledge and skill, and associated student outcomes. We are in the process of collecting and compiling qualitative and quantitative data as we complete our third project year. We have secured the services of an external evaluator to assist us in implementing a multi-faceted evaluation of project activities and the program's progress. We have developed formative and summative evaluation tools to gain insight into the impact of the program on candidates, faculty, and project partners (school, family, community members) and ultimately, on student outcomes once our graduates complete the program. We are gathering data on candidate knowledge and skill, faculty and project partner responses to working in a collaborative model, as well as information that has been a part of the institutional change that has occurred during our first year. Data collection has included interviews with program graduates, exit surveys, candidate coursework, and student progress reports.

Both programs have extensive evaluation procedures built into their program designs to determine whether the program models will help recruit diverse teachers and assist in job placement in inclusive settings, make teachers feel confident to teach special needs learners and learn professional content knowledge, and teach them to put research-based strategies into practice that will ultimately affect children's learning.

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