# Team Teaching in an Early Childhood Interdisciplinary Program: A Decade of Lessons Learned

By: Linda L. Hestenes, Karen La Paro, Catherine Scott-Little, Swetha Chakravarthi, Joanna K. Lower, Angie Cranor, Deborah J. Cassidy, Judith Niemeyer

**This is an Author's Accepted Manuscript of an article published in**

Hestenes, L. L., LaParo, K., Scott-Little, C., Chakravarthi, S., Lower, J. K., Cranor, A., Cassidy, D. J., & Niemeyer, J. (2009). Team teaching in an early childhood interdisciplinary program: A decade of lessons learned. *Journal of Early Childhood Teacher Education, 30(2),* 172-183. doi:10.1080/10901020902886594

**as published in the *Journal of Early Childhood Teacher Education* 2009 [copyright Taylor & Francis], available online at:** http://www.tandfonline.com/10.1080/10901020902886594.

## Abstract:

Preparing students in the early childhood field to work with children both with and without disabilities and to collaborate with different professionals is an important endeavor for colleges and universities. The purpose of this paper is to articulate a unique model of program collaboration between early childhood special education and early childhood regular education that demonstrates a cohesive preservice teacher education program across two departments within one university. This unique 10-year history of interdisciplinary collaboration and team teaching provides insights into many of the benefits and challenges of this type of program. This paper presents an historical overview of the development of this collaborative program and describes the logistics of operating an interdisciplinary program at the administrative level. Information collected from faculty and students illustrates the benefits and challenges of team teaching. Finally, strategies for developing a successful program are discussed.

**Keywords:** Early Childhood | Special Education | Preservice Teachers | Team Teaching | Teacher Education

## Article:

Practicing and modeling collaboration is becoming increasingly important at all levels of education. In a changing global society, education requires the integration of diverse perspectives through interdisciplinary partnerships. According to Friend and Cook (2007), collaboration involves a “direct interaction between at least two coequal parties voluntarily engaged in shared decision making as they work toward a common goal” (p. 7). With increasing expectations for networking among university instructors, it has become critical for faculty to work effectively and collaboratively with their colleagues in teams (Benjamin, 2000).

One of the most intensive collaborative experiences is team teaching a course with one or more colleagues (Perry & Stewart, 2005). For example, Chiasson, Yearwood, and Olsen (2006) designed a preschool methods course, cotaught by faculty in early childhood education (ECE) and early childhood special education (ECSE), for undergraduate preservice teachers integrating the philosophies of inclusion and developmentally appropriate practices. This example of team teaching is significant for the early childhood field because it provides a benchmark for integrating ECE and ECSE practices. The current paper builds on this study by examining collaboration not just at a course level but also at a programmatic level. With the exception of a few published reports (e.g., Chiasson et al.), limited information exists about interdisciplinary team teaching between ECSE and ECE in the early childhood literature at the course level, and virtually nothing is available describing a model of collaboration within an overall program. The purpose of this paper is to articulate a unique model of program collaboration between ECSE and ECE that includes a series of team-taught courses in addition to incorporating collaborative decision-making at the programmatic level. This collaboration includes not just coteaching a course but also codeveloping a sustainable series of courses between two departments reflecting an inclusive philosophy throughout the early childhood preservice teacher education program. The collaboration at the teaching and programmatic levels also affords graduate students the opportunity to team teach and learn about working in an interdisciplinary program.

**Review of Collaborative Efforts Between General and Special Education**

Team teaching has been defined based on the level of collaboration involved in the teaching relationship.Martin (1975) describes a “team” as involving “a working agreement” (p. 203) between instructors that includes the responsibilities of course planning, instruction, and evaluation of student learning. In accordance, Davis (1995) explains that all team teaching efforts “include two or more faculty in some level of collaboration in the planning and delivery of a course” (p. 8). The intensity of collaboration in team teaching varies depending on the working relationship of the instructors. Subsequently, team teaching may be categorized on a continuum from minimal to high collaboration. At the minimal level of collaboration, courses are planned by a group of faculty but later taught individually by members of the group. They might plan the general content of these courses together, but deliver and evaluate the courses separately. At the highest level of collaboration, courses are planned, taught, and evaluated by a pair or group of instructors. These courses involve instructors working simultaneously in the classroom with the same group of students. In other words, all aspects of the course, including preparation and instruction time, are collaborative (Perry & Stewart, 2005).

Although different models of team teaching have been established (Thousand, Villa, & Nevin, 2006) historically, university settings have offered limited opportunities or incentives for faculty to plan and teach together and even fewer opportunities for cross-departmental collaboration (Duchardt, Marlow, Inman, Christensen, & Reeves, 1999). While interdisciplinary research is valued in higher education, barriers to interdisciplinary team teaching remain. This may be due to the historical competitiveness of academic institutions and the “social, logistical or ideological

differences” (Kluth & Straut, 2003, p. 203) among departments. There are also limited models of and support for mentoring graduate students from both ECE and ECSE on effective team teaching strategies. However, there is increased attention focused on creating inclusive learning environments for children and meeting the needs of diverse learners (e.g., children with severe disabilities), making collaboration among educators even more crucial.

Models of team teaching between K–12 general education and special education departments have emerged and been documented (e.g., Duchardt et al., 1999; Kluth & Straut, 2003; Thousand et al., 2006). These partnerships are critical to inclusive education because “collaboration and inclusion are inextricably linked” (Kluth & Straut, p. 238). For example, Duchardt et al. implemented a model of team teaching between general and special education instructors in response to the Individuals with Disabilities Education Act (IDEA). Upon completion of the team teaching experience, it was concluded that “integration of content ideas and expertise in pedagogy through co-planning and co-teaching teams produces teachers more capable of working with a diverse population of students” (p. 189). In a study of team teaching for students in elementary education, Hwang, Hernandez, and Konstantinos (2002) found that although students initially appeared anxious about participating in a team-taught course, their feedback after completing the course indicated that the students felt two instructors increased the knowledge they obtained. Other research also indicates positive feedback related to student satisfaction with team-taught courses (Chiasson et al., 2006;Sullivan, 1991). If the outcome of teacher education programs is to prepare teachers to respond to the diverse needs of children and their families, it is essential that they observe and internalize the necessity and effectiveness of collaboration.

While university models of team teaching are prevalent in the preparation of K–12 teachers, the same attention has not been given to preparing teachers in early childhood education. However, preparing preservice teachers to meet the diverse needs of young children and their families may be even more important since children often begin to receive services through individualized family service plans at these early ages. In fact, early intervention during the early childhood years is a critical time to enhance the development of children with special needs. Modeling collaboration for preservice teachers in early childhood education prepares them to work with the many professionals they will encounter when meeting the diverse needs of young children and their families in inclusive settings. Preservice teachers also need an understanding of how to effectively set up an appropriate environment, plan and implement activities, and coordinate daily routines for children both with and without disabilities. Chiasson et al.'s (2006) model of team teaching integrated the philosophies of ECSE and developmentally appropriate practices in a prekindergarten methods course for preservice early childhood teachers. This approach offered the early childhood preservice teachers a more holistic view of teaching young children with and without disabilities.

The current paper addresses the integration of ECE and ECSE at a programmatic level. This model has endured for 10 years and includes training future academic professionals by including

graduate students in the team teaching process. The impact of this training influences future early childhood teachers and further promotes inclusion in the early childhood field. This paper presents an historical overview of how our collaborative program was developed and describes the logistics of operating an interdisciplinary program at the administrative level. Information collected from faculty and students illustrates the benefits and challenges of team teaching. Finally, strategies for developing a successful program are discussed.

## The Interdisciplinary Birth Through Kindergarten Program

### Current Features of the Birth Through Kindergarten Program

The current undergraduate Birth through Kindergarten (BK) program at the University of North Carolina at Greensboro (UNCG) has two options: licensure and nonlicensure. There are currently over 250 students in the two options; and seven full-time equivalent (FTE) faculty as well as several adjuncts are teaching in the program. The program includes an off-campus program in Raleigh, North Carolina, where approximately 100 students participate in a hybrid distance learning initiative. The Department of Human Development and Family Studies offers an MS and PhD as well as an MEd in collaboration with the Department of Specialized Education Services that leads to a BK teaching license.

### History and Philosophical Basis

During the development of the undergraduate program in BK at UNCG (1992–1993), a steering committee delineated a variety of goals. First, the committee was committed to developing an interdisciplinary program that was comprehensive and provided students the ability to integrate information and skills within an inclusive model. In addition, a number of other goals were identified: a) preparing students to work with children of varying abilities (with and without disabilities) and diverse backgrounds, b) creating opportunities for students to develop positive relationships with families, c) basing knowledge and skills on evidence-based practices, and d) maintaining a quality program with high expectations.

The resulting program is currently composed of a set of interdisciplinary courses in areas including special education, child development, family studies, nursing, exercise and sports science, curriculum and instruction, cultural studies, and social work. Individual instructors teach the interdisciplinary courses and coteachers teach the core methods courses. A committee of faculty from ECE and ECSE meet monthly to coordinate the program, and faculty from all the interdisciplinary courses meet annually to review changes and provide feedback on the program. Graduates receive an inclusive license in early childhood and early childhood special education (birth through kindergarten). This means that they can teach in a variety of settings, including itinerant early intervention programs, public pre-K classrooms, and kindergarten classrooms. The BK license was instituted in North Carolina in 1993, and UNCG's was one of the first approved programs in the state.

Because of the desired theoretical and philosophical orientation, the program committee highlighted the importance of team teaching the core methods courses. This decision was based on several premises. First, in an interdisciplinary program, undergraduates might have difficulty integrating information from two different perspectives, that is, child development/early childhood education and early childhood special education. Second, by integrating the methodologies of early childhood and early childhood special education, students would be able to see firsthand how inclusion was possible. If faculty modeled for students how an inclusive model might be implemented, students would be more likely to be successful as teachers in inclusive classrooms. Although faculty members representing different disciplines were considered experts in their respective areas, they did not have in-depth knowledge of each other's professional knowledge base. For example, in the methods course for preschool and kindergarten curriculum, the two instructors quickly realized they were teaching students how to implement curriculum using two different modes of instruction. As a result, they developed an integrated curriculum model that was responsive to both children with disabilities as well as those who were typically developing. Third, the BK teaching license in North Carolina is an inclusive license; therefore students need to be prepared to work with children with and without disabilities in the same classrooms. It is logical that practices and methodology should also be integrated. Team teaching by the faculty models integration and collaboration. Finally, the inclusion initiative has been the focus of recommended practice as well as legislative mandate for several decades but has not been successfully implemented in classrooms or other settings. If the BK program courses were team taught, students would have the opportunity to observe and understand how professionals problem-solve issues related to inclusion and how to effectively implement an inclusive classroom.

One of our newest strategies is to mentor our graduate students into the team teaching experience. For the past 2 years, we have invited our PhD students who are nearing the end of the program to team teach with an established team. This process requires that three instructors (instead of just two) work together on all aspects of the course. The reason for expanding our model to include graduate students is to mentor them in the team teaching process and to teach them the fundamentals of interdisciplinary collaboration. This gives them valuable experience with team teaching and exposes them to an interdisciplinary approach to teacher preparation, combining principles of ECE and ECSE. Subsequently, it prepares them for their future role as faculty in teacher education programs where they will be prepared to practice and advocate for interdisciplinary collaboration.

**Administrative Issues**

While the steering committee recommended a team teaching model for the BK program's three methods courses, many challenges evolved at the administrative level that had to be addressed. Initially, the definition or what actually constituted team teaching became a topic of discussion with Department Chairs and the Provost. This created a dialogue about the distribution of students and how they would be counted as FTEs with two course instructors. FTEs for students

is important because it is the basis of credit allocation to the two academic departments; in other words, FTE generation translates into funding for the departments. Other issues included scheduling courses to accommodate different faculty schedules, and coordinating the time and location of the two sections of the course. One resolution to the above issues was to initially schedule each section of the course from the two departments on the same day at the same time in classrooms that were side by side or very near to allow the two instructors to bring the students together for some topics and teach other topics separately. This arrangement allowed each faculty member to receive credit for the section he/she taught. Although this was a beginning point that satisfied department chairs and deans, eventually the class became one course with two sections that were taught in the same classroom with two instructors who were actually team teaching with a high level of collaboration. Both instructors were present for each class, shared instructional activities (i.e., lectures, PowerPoint slides, small group activities, case discussions), developed rubrics for grading assignments while coordinated for reliability, met with students outside of class together, and planned together.

Logistical issues that appear to have been addressed, periodically surface again. For example, administrators have difficulty limiting enrollment in the two sections because each department receives credit for only half of the enrolled students. However, the instructors see the full contingent of students in their course and are teaching double the number on their "official roll." In addition, faculty are from two different departments in two different schools and their respective enrollment caps may not be the same. Each of these administrative challenges had to be worked through with respective department curriculum committees, department chairs, and deans. Open lines of communication have allowed this to work. Over the past decade, our program has adapted and evolved into a system with clear benefits but also some identifiable challenges.

## Faculty Perspectives on the Benefits and Challenges

In order to formally identify the benefits and challenges of our interdisciplinary program and team teaching in particular, the coauthors of this paper, along with colleagues who have cotaught courses in our program, made lists of the advantages and disadvantages of team teaching early childhood methods courses. The key issues related to benefits and challenges are summarized below.

### Benefits

Instructors cite several benefits from their experiences team teaching, including the opportunity to share varied perspectives with students in a course that is team taught. Instructors with different educational backgrounds and areas of expertise can cover topics in more depth and offer a greater variety of examples than an individual instructor. For example, in a methods course taught by one instructor with a background in early childhood education and another instructor with experience in early childhood special education, both areas will get equal

attention. Students also benefit from hearing a unified message on the importance of inclusion and examples from both fields.

Instructors listed the benefit of sharing responsibilities in team-taught courses. Instructors can "share the load" of developing lectures, finding relevant and current readings, developing class activities, and grading. Furthermore, instructors bring different teaching styles and experiences to the course, so not only do the students benefit from varied presentations of information and activities, but the instructors learn from one another. Many times during planning meetings or conferences, instructors learn a new teaching strategy from the other instructor. Also, when challenges or unusual circumstances arise, two instructors can work together to assess the situation and develop a workable solution. Having another instructor equally involved in the course provides two perspectives and "two minds" to work out solutions to challenges and problems.

**Challenges**

Some of these benefits carry with them challenges as well. The sharing of responsibilities in team teaching often adds to the time instructors spend planning, grading, and responding to students. Instructors have to organize mutually convenient meeting times to develop the syllabus, class lectures, and activities. Students also may experience longer delays in response time when two instructors coordinate their efforts to respond to students' issues, particularly if the instructors choose to meet together with the student.

Related to sharing the responsibilities is the difficulty of implementing a "shared course". Sometimes instructors find it challenging to present a coordinated class lecture that provides information in a manner that is integrated and coherent for students. To address this challenge, instructors have used different strategies for team teaching. Some instructors choose to share lectures and take turns interjecting comments and subject matter; some divide out specific time periods within the class between the instructors; and some alternate class sessions. The challenge is to present course information in a way that helps students understand different perspectives and philosophies as well as acquire a general sense of the topic.

Individual differences in educational and philosophical backgrounds can effect how well the team teaching arrangement works. For instance, the qualifications of the two instructors may differ greatly. One instructor may have a doctorate with a strong theoretical, research focus and the other a master's with an applied approach. While these types of differences in professional preparation can mean that the instructors compliment each other, differences can also produce divergence on important issues, and differing perspectives on teaching preservice students. Instructors with differing educational backgrounds must consciously seek to ensure that their strengths compliment one another rather than result in conflict and confusion for students.

Another challenge is specific to an interdisciplinary program in which students receive a license to work with children both with and without disabilities in inclusive settings. One instructor may

feel that all children can be equally included in preschool classrooms, while the other one may have the perspective that only children with mild disabilities can be included. In addition, instructors may differ in their level of experience in working with children with disabilities. In order for the team teaching method to work effectively to model an inclusive approach, at least one of the instructors should have a strong background in working with children with disabilities. This increases the team's credibility with students and helps them better understand the inclusion model. However, it is equally important that the instructor with less experience in the field of special education have some experiences working with children with disabilities so that students do not perceive that the course is divided between the “special education instructor” and the “regular education instructor.” In order to present an integrated model, both instructors should have some background related to typically and atypically developing children and a core knowledge of developmentally appropriate practice.

The final challenge is not unique to team teaching, but spans any group situation in which professionals work with others and in teams. Personality and communication differences may present difficulties in any group endeavor. In our program, the instructors may differ in how they typically communicate with students and the types of relationships they develop with students. These differences in style can present issues because students gravitate toward one instructor more than the other, creating a classroom dynamic that may not be productive. In addition, depending on the rank or status of the instructors, one instructor may have greater real or perceived power. This hierarchy may not only affect the planning of the course and decisions made regarding lectures and assignments by the instructors, but students may become aware of the power differential and play one instructor against the other. We have found that faculty involved in team teaching experience a number of challenges but that the benefits outweigh the challenges.

**Graduate Student Team Teaching Experience**

Graduate student instructors also participated in assessing the team teaching experience. They noted similar benefits and challenges to the process as the faculty. Additionally they experienced some unique benefits associated with being a part of an already established team. They were able to observe how the ECE and ECSE philosophies were integrated within the program and modeled in the courses. They were also able to gain firsthand experience on the logistics of team teaching and the challenges that sometimes arise. And, they learned key strategies that promote successful interdisciplinary collaboration. This opportunity provided a foundation in which to understand the dynamics of team teaching and the importance of interdisciplinary collaboration among ECE and ECSE philosophies in teacher preparation programs that they can take with them to future academic settings.

**Student Perspectives**

Student perspectives of the effectiveness of team teaching are a critical factor in the success of team teaching. To determine the attitudes of the students within our program, information was collected from students in courses that were being offered in a team teaching format. Some of that information is summarized below.

The team-taught courses were delivered to students in three early childhood education methods courses (each with one instructor from ECE and one from ECSE). Students attending the classes were primarily juniors and seniors in the Birth through Kindergarten licensure program. Feedback was obtained through an anonymous survey given at the end of the course. The questions were selected based on a previous survey given to students in the program taking the same methods courses in 1997. Students completed open-ended questions regarding the benefits and challenges of team teaching and rated nine items on a survey (using a 5-point Likert scale from ‘agree’ to ‘disagree’). The items included:

1. Team teaching facilitates a clearer understanding.

2. Team teaching facilitates learning.

3. Team teaching provides the opportunity for viewing differing opinions.

4. Team teaching enhances my understanding of the course content.

5. Team teaching has been a positive experience for me.

6. I would like to see two separate courses.

7. It is clear that instructors work closely together.

8. I get different responses from instructors on questions about assignments.

9. When faculty team teach they are modeling inclusion.

Mean ratings for each item are listed in Table 1. Overall, feedback from students was positive with averages ranging from 4.23 to 4.74 on the 5-point scale. The two items that examine the challenging aspects of team teaching: “I would like to see two separate courses” (item 6) and “I get different responses from instructors on questions about assignments” (item 8) received relatively lower scores at 2.0 and 2.14 respectively.

**Table 1 Mean ratings of student responses in 1997 and 2007**

| | **Mean 2007** | **Mean 1997** |
|---|---|---|
| Team teaching facilitates a clearer understanding. | 4.47 | 3.60 |
| Team teaching facilitates learning. | 4.58 | 3.57 |
| Team teaching provides the opportunity for viewing differing opinions. | 4.74 | 4.36 |
| Team teaching enhances my understanding of the course content. | 4.47 | 3.74 |
| Team teaching has been a positive experience for me. | 4.45 | 3.70 |
| I would like to see two separate courses. | 2.00 | 1.74 |
| It is clear that instructors work closely together. | 4.64 | 3.91 |
| I get different responses from instructors on questions about assignments. | 2.14 | 2.13 |
| When faculty team teach they are modeling inclusion. | 4.23 | 3.82 |

The students' specific comments also correlated with the quantitative results. When examining the strengths of team teaching, the most common response from students was related to exposure to different perspectives and experiences. Students overwhelmingly appreciated the benefits of having faculty from different fields collaborating together. One student commented, “Diverse ideas, experiences, examples and transitions make class more interesting and involved”. Another noted, “I liked hearing of different experiences in our field”. Finally, one said, “Different perspectives, experiences, methods, and insights help me learn more”. Students also felt that collaboration enabled instructors to cover subject matter more thoroughly and in more detail. Additionally, feedback indicated that students felt that having two instructors made the course more interesting.

Although we had no quantitative items specific to assessment procedures, grading was the most frequently cited issue in the open-ended comments on challenges. Students felt that at times the assignment instructions, as well as the grades they received, varied based on which instructor provided feedback. The comments from one student seemed to represent what many students felt: “Each teacher grades work different and that is hard because we can get better grades just depending on who grades our work”. Another student echoed this idea with the statement, “Sometimes I wonder what grade I would have gotten on an assignment had one of the other

members of the team graded it". Other concerns with grading centered around knowing which team member had graded certain items or with whom they needed to communicate regarding assignments. As one student expressed, "Sometimes I wasn't sure who was grading my assignments or who I should address e-mail to". Although grading issues were the primary concern expressed by students, other students cited grading procedures as a positive aspect of the team teaching approach. The benefits of having multiple perspectives both to determine a grade and to receive feedback on an assignment were expressed as strengths. One student felt it was "great because they both grade assignments and come to a mutual agreement about the grade". Students also felt that this approach allowed them to get assignments returned in a timelier manner.

When compared to students who completed the survey 10 years earlier, student responses on the quantitative items indicated higher positive reports of team teaching in 2007. As Table 1 shows, the mean ratings for all items related to positive outcomes were higher in 2007. The most striking difference between the 1997 and 2007 responses was on students' ratings of the extent to which team-taught courses facilitate learning (3.57 in 1997 compared with 4.58 in 2007). Although the overall quantitative student ratings were higher after 10 years of implementing the program, the qualitative comments remained essentially consistent. The strengths and challenges expressed by both groups of students centered on the same topics.

Overall, students provided feedback that indicated they both enjoyed and received educational benefits from having a team-taught course. They appreciated the advantages of having instructors with different perspectives and backgrounds and felt that many other areas of the course were strengthened as well. Although there were some areas noted by the students as challenges (especially grading issues), students appeared to have a positive attitude towards team teaching. Additionally, it appeared that students demonstrated more positive appraisals of team teaching over the last 10 years. These results were consistent with previous research that illustrates positive student opinions of team teaching (Chiasson, et al., 2006; McDaniel & Colarulli, 1997). Hwang et al. (2002) found consistently that the majority of students were positive about what they had learned and the cooperative approach; however, they were negative or neutral about matters surrounding course evaluation. The current feedback from students provides valuable information on continuing practices that students perceive as beneficial, and their comments suggested that grading may be an area for improvement.

**What We Have Learned and Thoughts on the Future**

There are multiple benefits to team teaching articulated both in previous literature as well as in our experiences over the past 10 years. From our perspective, the advantages far outweigh the disadvantages of utilizing a team teaching approach in early childhood coursework. The disadvantages can be significantly minimized through careful planning and ongoing communication and evaluation.

## Program Development Suggestions

One of the primary strategies for setting up a program or curriculum which supports team teaching is to bring together all the stakeholders and decision-makers both at the department level (faculty, director[s] of undergraduate programs, department chair[s]) and beyond (Dean[s], curriculum committee chair[s], Provost). If two or more departments are seeking to develop team-taught courses within an interdisciplinary program, then appropriate members from each department must be part of the initial meetings. The developers of the curriculum who are advocating for team teaching must have their rationale clearly written and articulated in order to convince administrators of the value of this approach. There are many potential roadblocks as noted above (e.g., which department or school receives the 'credit hours' for the students, how many students must be enrolled in order to have two instructors, how the classrooms and schedules will be set up). Therefore, the more thoroughly these challenges are addressed in the written documentation, the better the chances that team teaching will be accepted and valued. It is vital that communication is ongoing and comprehensive. Administrators need to feel confident that the allocation of resources (both in terms of time and money) is equitable and clearly understood by all parties involved.

## Team Teaching Suggestions

As with the development of the program, each decision about team teaching needs to be carefully examined before classes begin. Team teaching proceeds more smoothly when each instructor understands his/her role, meets regularly both before and during the course, and communicates effectively throughout the semester. Team teachers need to be flexible and willing to value the expertise and strengths of the other instructor. Instructors who are not willing to relinquish control or instructors who are highly passive in their approach will not likely have a successful team teaching experience. We have found that the best team teachers are those instructors who are team players and who value collaboration. Each decision about the course needs to be made jointly (e.g., setting up the syllabus, establishing the assignments, grading, dealing with students' challenges). Each decision requires communication and feedback. We have found that regularly scheduled meetings between instructors each week is a necessity. These meetings may take several hours, particularly when assignments are being developed, lectures are being finalized, or students' assignments are being graded. Our most recent student feedback suggests we need to continue to work on refining our grading procedures to ensure consistency across instructors. This is an ongoing challenge which must be addressed every semester for all instructors.

We have found that when selecting instructors for the team-taught courses, it is helpful to consider a variety of aspects. Is this person a team player? Does he/she have the flexibility and collaboration skills to work through challenging situations? Does each instructor bring a different type or level of expertise that will contribute to students gaining the knowledge they need in this course? Has this person team taught in the past? Selecting one instructor with experience in team

teaching and pairing him/her with a new team teacher has been an effective strategy in our program. It is far more difficult to team teach with two instructors who are new to this approach.

As with all types of teaching, it is critical to regularly evaluate the effectiveness of each individual instructor as well as to evaluate the program overall. We have found that midsemester evaluations of team teaching are important, particularly for new teams. Slight modifications to lectures, discussions, assignments, or grading procedures can greatly help students in the learning process. Final evaluations should also be carefully reviewed and adjustments made before the course is taught again. Because course evaluations are completed on individual instructors, this allows us to identify issues that are specific to one person as well as those related to the teaching team. Having students complete both multiple-choice evaluations as well as focus groups or feedback sessions with multiple students are effective strategies. We also meet regularly with faculty from the entire BK program to discuss curriculum changes and to evaluate the effectiveness of the graduates of our program. The ongoing communication between individual instructors, program faculty, and administrators has allowed us to maintain a quality interdisciplinary program and to develop innovative strategies.

Mentoring graduate students in the team teaching model adds to some of the logistical and communication challenges. However, we have found it to be a worthwhile endeavor for our students as they prepare to teach in early childhood regular or special education programs at the collegiate level. Students are able to learn from our challenges and therefore move forward in their careers with better strategies and approaches to use in team teaching in the future.

## Conclusions

It is clear from the literature and from our experiences that there are considerable benefits to preservice student learning in an interdisciplinary program that also models team teaching. The benefits of team teaching across regular and special education programs have been documented here and elsewhere (e.g., Chiasson et al., 2006;Duchardt et al., 1999; Kluth & Straut, 2003; Thousand et al., 2006). The challenge for the future, as scholarship and pedagogy continue to emphasize the importance of interdisciplinary collaboration, is to refine philosophies and strategies of team teaching within individual courses and to consider how the courses fit within larger programs of study.

## References

**1.** Benjamin, J. 2000. The scholarship of teaching in teams: What does it look like in practice?. *Higher Education Research & Development*, 19: 191–204.

**2.** Chiasson, K., Yearwood, J. and Olsen, G. 2006. The best of both worlds: Combining ECE and ECSE philosophies and best practices through a co-teaching model. *Journal of Early Childhood Teacher Education*, 27: 303–312.

**3.** Davis, J. R. 1995. *Interdisciplinary courses and team teaching: New arrangements for learning*, Phoenix, AZ: American Council on Education and Oryx Press.

**4.** Duchardt, B., Marlow, L., Inman, D., Christensen, P. and Reeves, M. 1999. Collaboration and co-teaching: General and special education faculty. *The Clearing House*, 72: 186–190.

**5.** Friend, M. and Cook, L. 2007. *Interactions: Collaboration skills for school professionals*, Boston: Allyn and Bacon.

**6.** Hwang, Y., Hernandez, J. and Konstantinos, V. 2002. Elementary teacher education students' perceptions of team teaching. *Education*, 123: 246–254.

**7.** Kluth, P. and Straut, D. 2003. Do as we say and as we do: Teaching and modeling collaborative practice in the university classroom. *Journal of Teacher Education*, 54: 228–240.

**8.** Martin, W. 1975. The negotiated order of teachers in team teaching situation. *Sociology of Education*, 48: 202–222.

**9.** McDaniel, E. A. and Colarulli, G. C. 1997. Collaborative teaching in the face of productivity concerns: The dispersed team model. *Innovative Higher Education*, 22(1): 19–36.

**10.** Perry, B. and Stewart, T. 2005. Insights into effective partnership in interdisciplinary team teaching. *System*, 33: 563–573.

**11.** Sullivan, S. E. 1991. Are two heads better than one? An empirical examination of team teaching. *College Student Journal*, 25: 308–315.

**12.** Thousand, J. S., Villa, R. A. and Nevin, A. I. 2006. The many faces of collaborative planning and teaching. *Theory Into Practice*, 45: 393–395.