Using Family Case Studies with Graduate Students through Transdisciplinary Graduate Education

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Abstract
Graduate students in early childhood special education, occupational therapy, and physical therapy at the University of Alabama at Birmingham (UAB) are educated using a transdisciplinary model in which emerging professionals and families of children with special needs work together by exchanging expertise to jointly solve problems, plan, and implement evidence-based interventions. The goal is to ensure that the early intervention/education experiences achieve desired child and family outcomes. A major component of the preparation of the graduate students is learning to work collaboratively with families. The purpose of this article is to describe the process early childhood special education, occupational therapy, and physical therapy graduate students experience through team-based problem solving with case studies of young children with delays or disabilities and their families.

Key words: transdisciplinary teams, graduate education, early intervention, families

Young children with developmental delays or disabilities from birth through age eight are served by teams of professionals who collaborate to meet the specific needs of the children and families with whom they work. In the past, teams were primarily interdisciplinary or multidisciplinary. “Multidisciplinary teams involved professionals developing and implementing their goals that were most often independent of other professional or family member input” (Kilgo, Aldridge, Vogtle, & Ronilo, 2014, p. 12). Interdisciplinary was a better model in that team members shared their plans and assessments with one another, in order to provide “services that are part of the total service plan” (Kilgo, 2006, p. 11).

Graduate students in early childhood special education, occupational therapy, and physical therapy at the University of Alabama at Birmingham (UAB) are participants in a transdisciplinary model of training. The transdisciplinary approach is different from both the multidisciplinary and interdisciplinary approaches. Using a transdisciplinary team approach, “Professionals from different disciplines work together…Each member contributes equally to team functioning, is open to exchanging existing roles and acquiring new roles, and is committed to providing cultural competent, family-based services in natural environments for children with delays or disabilities” (Kilgo, 2006, p. 12). A unique feature of the transdisciplinary graduate program at UAB is the emphasis on problem solving with case studies involving young children with disabilities and their families. The purpose of this article is to explain the process graduate students in early childhood special education, occupational therapy, and physical therapy complete through joint problem solving with case studies during their first semester of the program.

Team-Based Problem Solving

During the first semester of the transdisciplinary teaming courses, graduate students are taught how to prepare for problem solving as a member of a transdisciplinary team. First, students are presented with the K-N-L model. K-N-L stands for what do we know, what do we need to know, and what did we learn from problem solving. “In the real world, there are times when students have to learn specific information. After determining the students’ prior knowledge, you can then provide the objectives of what students NEED to know” (Goldman, Aldridge, & Worthington, 2003, p. 36). The K-N-L model is a useful approach to use when teaching team-based
problem solving because team members must understand their knowledge base and the knowledge of others, as well as what they learn from their interactions with each case study.

Transdisciplinary faculty members assess what graduate students know about family structures and functions and various types of cultural diversity that exist in early intervention/early childhood special education. Then, students are presented with resources that will help them develop what they need to know (Copple & Bredekamp, 2009; Delpit, 2006; Division of Childhood, 2014; Kilgo, 2006; Lynch & Hanson, 2011). Because of the transdisciplinary nature of this approach, graduate students learn about resources from multiple disciplines.

Before graduate students are engaged in problem solving with case studies, faculty members describe a process of how to prepare. Several major points are explained. First, a discussion of hybrid families and cultures occurs, as well as the importance of reading and researching as much as possible about cultural backgrounds of families. Students also are taught that when meeting with families that they should let the family members know that they are prepared and ready to learn from them. Students are encouraged to ask appropriate questions of families and carefully listen to families’ responses. Finally, students are taught that cultural conflicts are likely to arise. When this happens, team members must consider the nature of compromises that may be required. When cultural conflicts arise, students are encouraged to think about how much compromise is required during the problem solving process?

The faculty members prepare the graduate students before problem solving with case studies. Table 1 provides a summary of the type of preparation that the students experience.

Table 1

<table>
<thead>
<tr>
<th>Steps in the Process:</th>
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<tbody>
<tr>
<td>1. Explanation of “hybrid” families and cultures (Aldridge, Kilgo, &amp; Bruton, in-press).</td>
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<tr>
<td>2. Discussion of reading and research necessary for understanding cultural backgrounds of families.</td>
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<tr>
<td>3. Description of how students must be ready to learn from families.</td>
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<td>4. Discussion of how to ask families appropriate questions and really listen to their responses.</td>
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<td>5. Explanation of the nature of compromise and consideration of how much compromise is required.</td>
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Problem Solving with Case Studies

After preparing the students for problem solving, graduate students in early childhood special education, occupational therapy, and physical therapy are divided into groups with four to six students in each group. Each group is given the same challenging family case study to engage in transdisciplinary problem solving. Every group is composed of students from each discipline. The group selects a recorder and reporter. The recorder’s job is to write down everything the group discusses. The reporter’s job is to explain the group’s suggestions for
working the case study to the rest of the class. Table 2 is a summary of the steps each group is given to follow during problems solving sessions using the family case studies.

Table 2

<table>
<thead>
<tr>
<th>Problem Solving Process with Case Studies</th>
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<tr>
<td><strong>Steps in the Process:</strong></td>
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<tr>
<td>1. Select a recorder. The recorder’s role is to write down everything group members suggest regarding the family case study.</td>
</tr>
<tr>
<td>2. Select a reporter. The reporter’s job is to explain the group’s suggestions for solving the case study dilemma to the rest of the class.</td>
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<tr>
<td>3. Report your group’s suggestions to the rest of the class when called upon to do so.</td>
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<tr>
<td>4. Do no repeat other group’s responses but report additional suggestions not provided by previous groups.</td>
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<tr>
<td>5. Agree or disagree with previous groups’ suggestions, explaining why.</td>
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Examples of Cases Used for Initial Group Practice

During the initial phase of case study practice, brief excerpts from case studies are used, which are divided into three categories that include (a) family diversity, (b) religious diversity, and (c) ethnic diversity. While families may exhibit all three of these forms of diversity, students are first taught to consider each form of diversity separately. During the second semester of the transdisciplinary teaming courses, graduate students practice with more complex case studies involving all three of these as well as other forms of diversity. Examples of these three types of brief case studies are presented in the sections that follow.

Family Diversity

*Your team is working with a family who has joint custody of their child. The father has the child for one week and the mother has him for the next week. Their goals for the child are contradictory and each parent does not want the team to work on the goals of the other parent. What would your team do in this situation and why?*

Religious Diversity

*Your team is working with a two-year-old whose family members are practicing Christina Scientists. The team is concerned that the child, who has cerebral palsy, has contractures that are negatively influencing his motor development. The parents do not believe in traditional medicine and do not want to take the child to a pediatrician or medical doctor. What would your team do and why?*

Ethnic Diversity

*Your team is working with a child whose family recently moved to the United States from Kenya. Often when team members are on a home visit, the grandmother will open team members’ purses and take things out.*
Why does the grandmother do this? What would your team do if this occurred with your team members and why?

Discussion

At the end of the first semester, graduate students report experiencing three phenomena related to problem solving with simple case studies. These include (a) dissonance, (b) expectations, and (c) tentative conclusions. Each of these will be described briefly.

Graduate students experience dissonance during and after the problem solving experience. Students often need additional information related to the cases provided for problem solving. This leads to a discussion of how to find the missing data and how to use that once they have found it. Most often, the use of selected case studies produces more questions from the students than the answers for which they had hoped. This leads to a dialogue concerning expectations.

Students often want or expect to receive a “cook book approach” or “correct answer” related to how each problem presented in the case studies should be solved. Discourse concerning each case study leads students to ask, “So, what is the correct answer?” There are no exact or correct answers. Students are taught that there often are several possibilities for solving the case studies and they must work as a team to invent the best, professionally-informed decisions for the dilemmas presented in every case study. Hopefully, this leads students to make several conclusions concerning problem solving.

When the teams of students realize there is no right answer and that the faculty members will not resolve dilemmas for them, they must come to their own conclusions. The primary desired conclusion is that the teams of students learn that they must make difficult, informed decisions about every case study through collaboration and informed, reflective decision making. These students are well prepared in a team-based problem solving approach using simple cases studies that can be generalized to more complex case studies the following semester. Ultimately the graduate students will use this approach when they work as members of teams serving young children with disabilities and their families in early intervention/early childhood special education programs upon graduation.

References


