How Educational Placements Impact Classroom Interactions: Experiences of Six Secondary Students with Mild Mental Impairment

Emily C. Bouck
College of Education, Michigan State University

ABSTRACT

Six secondary students with mild mental impairment took part in a multiple case study exploratory research project, involving full day observations, document reviews, and interviews to examine their classroom interactions. Data collection focused on the students’ interactions with peers and adults in general education and special education settings. The data and discussion raises questions regarding inclusive education. The majority of students had more overall interactions with peers in their special education settings. The students also had more interactions with adults and initiated more interactions with adults in special education settings than general education settings.

Current national impetus lies with special education students gaining access to the general education setting and curriculum, as evidenced by the language used in the President’s Commission on Excellence in Special Education, as well as the Individuals with Disabilities Education Act (IDEA, 1997, 2004) (Branstad, Acosta, Bartlett, Berdine, Butterfield, Chambers, et al 2002). In particular, Section 300.347(a)(3) of IDEA 1997 stipulated that the Individual Education Plan (IEP) of students with disabilities must:

(i) to advance appropriate progress toward attaining the annual goals
(ii) to be involved and progress in the general curriculum
(iii) to be educated and participate with disabled and non-disabled children.

While policy reflects this orientation, research does not in every respect. Little research has considered students’ interactions with peers or adults in general education settings or the converse, special education placements. Access to the general education setting or inclusion (i.e. “the education of students with disabilities side by side with nondisabled peers and friends in general education setting”) can occur in many ways (Hardman, Drew, & Egan, 2002, p. 38). Inclusive education is a spectrum, ranging from full inclusion (i.e. the philosophy that all students, regardless of the level or type of disability, should be educated entirely in the same general education classrooms as their same-age peers) to partial inclusion, where a student with a disability spends part of his/her school day in general education classes (Crawford, n.d.; Hardman et al.)

Inclusion is a heated debate in education, with both sides arguing its merits or pitfalls. The pro side in the inclusion debate has argued its social merits. Research has found that inclusive instructional environments promote increases in reciprocal friendships within the classroom for students with disabilities (Vaughn, Elbaum, & Schumm, 1996). Besides peer relationships, Vaughn and colleagues (1996) also found that inclusive classrooms positively impact special education students’ self concept. Others (e.g., Kennedy, Shukla, & Fryxell, 1997) found similar results, such that students with disabilities in inclusive classrooms had more interactions and social contacts with peers than those educated in other environments. Hansen and Boody (1998) found that students with disabilities in inclusive settings rated the general education classroom environment as high socially if not higher than their general education peers.

The opponent side to the inclusion debate has research that shows the opposite. Research exists to highlight the negative influence of inclusion on social situations; thus creating a sense that the research is equivocal. Research has suggested that students with disabilities experience social isolation in inclusive settings (Fraught, Balleweg, Crow, & van den Pol, 1983; Peterson, 1982; Sale & Carey, 1995). Students with special needs in inclusive settings have been rated lower on sociometric scales than their peers; yet, students who were likely to be eligible for special education services but not yet “labeled” were rated even lower than students already classified (Sale & Carey). At the secondary level, research has illustrated that while physical inclusion may occur, very little integration (i.e. social inclusion) may actually result for students with mild mental impairment.
How educational placements impact classroom interactions: Experiences of six secondary students with mild mental impairment

(Doré, Dion, Wagner, & Brunet, 2002). Even in naturally inclusive settings, such as the high school lunch room, little interaction has been found between students with mental impairment and their general education peers (Hughes, Rodi, Lorden, Pitkin, Derer, Hwang, et al., 1999).

Instead of just merely being ignored, research has reported that special education students feel “picked on” or are “made fun of” by their general education peers. Research by Lovitt, Plavins, and Cushing (1999) found that almost half of the high school students that were interviewed regarding curricular options and instructional environments spontaneously commented on their peers, with over half of these reporting negative interactions.

The research by Doré, Dion, Wagner, and Brunet (2002), Hughes, Rodi, Lorden, Pitkin, Derer, Hwang and colleagues (1999), and Lovitt, Plavins, and Cushing (1999) suggests that physical inclusion is not enough to facilitate social interaction or social inclusion. The results of these studies contradict the findings of Hendrickson, Shookohi-Yetka, Hamre-Nietupski, and Gable (1996), who reported that general education high school students indicated they would interact with adolescents with mental impairment, implying it was their obligation to make an effort. However, the reasons students gave for a willingness to befriend another student with a disability were more “self-serving” in nature, such as “I like to help people” or “I would feel good about myself,” as opposed to responses that focused on what peers with disabilities could add to a friendship (Hendrickson et al., p. 25).

With all the national attention on inclusive education, there is a continual need to understand how students with disabilities participate in schooling. In particular, given the equivocalness of the research regarding the social influence of inclusion, it is important to study students with disabilities’ interactions in both general education and special education settings. This particular study chose to focus on secondary students with mild mental impairment, as there is a lack of research on this population (see Bouck, 2004b; Schumaker, Deshler, Bulgren, Davis, Lenz, & Grossen, 2002). Only a limited amount of previous research has already begun to explore the topic of inclusion and secondary students with mild mental impairment (see Doré, Dion, Wagner, & Brunet, 2002; Hughes, Rodi, Lorden, Pitkin, Derer, Hwang, et al., 1999).

Using observations and interviews, this exploratory study analyzed the interactions of secondary students with mild mental impairment with peers and adults in special education and general education settings. The specific research questions this study attempted to answer included: (1) what is the nature of interactions between special education students and general education students in general education and special education settings, and (2) what is the nature of interactions between special education students and adults in the general education and special education settings?

METHOD

Participants

Six secondary students with mild mental impairment participated in this research study. Mild mental impairment was defined following the state’s guidelines – an individual with IQ two to three standard deviations below the mean and exhibiting significant difficulties in two or more areas of adaptive functioning (Hardman, Drew, & Egan, 2002). Students were selected based on teacher recommendation among students in each school identified as mildly mentally impaired (Note: For the two smallest schools only two students were certified as mildly mentally impaired). These students were educated in three districts in the state of Michigan, in which districts were purposively selected. Four of the six students were female and two were male. The IQ of the students ranged from 58 to 73. Two-thirds of the students were sophomores at the time of the study, one was in her junior year, and the other was in his last year of school (i.e. senior). All the students were relatively close in age; the youngest participant being 16 and the oldest 18 (see Table 1).
Teacher interviews indicated that the class schedules (i.e. educational placements) of the students in the study were reflective of the typical educational programming for students with mild mental impairment in each of the three schools. The teachers stated that the majority of instructional environments for students with mild mental impairment in their school involved self-contained settings.

**Setting**

The three schools were all centrally located within Michigan. All schools were within 60 miles of the state capital and the researcher’s university. Approximately the same amount of time was spent at each school (three days per student with two students per school). Two of the three schools operated on hourly schedules (i.e. 55 minute class periods) and students had six classes a day. The third school, however, was on block scheduling and students had four 85 minute classes, with one 35 minute homeroom period.

The three schools were not selected due to their unique or exceptionally-noted programs. The schools were selected based on two criteria. One was that each school represented a different size classification, as determined by the state High School Athletic Association (2003) (three of the four sizes were represented, with the smallest omitted due to the low probability of having enough students to select two with mild mental impairment). Secondly, the schools were selected based on their responses to a survey of the curriculum and instructional environments for students with mild mental impairment (Bouck, 2004a). The schools chosen each reported a different combination of the most utilized curriculum and instructional environment for this population. For example, the largest school in the sample reported the most utilized instructional environment as a self-contained setting, with a lower grade level curriculum as the most utilized option; the second largest school reported a self-contained setting with a general education curriculum; and the smallest school reported a resource room setting with a functional curriculum. The two instructional environments (self-contained and resource room settings) reflected within the three schools represented the top two instructional environments across the state for this population, whereas the three curriculum models represented the top three curricular choices selected for this population (see Bouck).

**Researcher’s Role**

In this study, the researcher assumed a more participant role on the participant-observer continuum (Bogdan & Biklen, 2003). However, the researcher’s role depended on each student and how much interaction s/he initiated. The observer attended all the students’ classes with him/her and wherever else s/he may have gone that day. The

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Table 1
Demographics of the Students

<table>
<thead>
<tr>
<th>Cover Name*</th>
<th>School</th>
<th>Age</th>
<th>Grade</th>
<th>IQ (WISC-III)</th>
<th>IQ (WIAT)</th>
<th># of classes in gen.ed.</th>
<th># of classes in sp.ed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marc</td>
<td>Cedar1</td>
<td>18</td>
<td>12th</td>
<td>73</td>
<td></td>
<td>2 (out of 6)</td>
<td>4 (out of 6)</td>
</tr>
<tr>
<td>Missy</td>
<td>Cedar2</td>
<td>16</td>
<td>10th</td>
<td>58</td>
<td></td>
<td>0 (out of 6)</td>
<td>6 (out of 6)</td>
</tr>
<tr>
<td>Emma</td>
<td>Pine2</td>
<td>16</td>
<td>11th</td>
<td>74</td>
<td>67</td>
<td>0 (out of 4)*</td>
<td>3 (out of 4)*</td>
</tr>
<tr>
<td>Amy</td>
<td>Pine3</td>
<td>16</td>
<td>10th</td>
<td>66</td>
<td></td>
<td>2 (out of 4)</td>
<td>2 (out of 4)</td>
</tr>
<tr>
<td>Sarah</td>
<td>Oak3</td>
<td>16</td>
<td>10th</td>
<td>56</td>
<td></td>
<td>1 (out of 6)</td>
<td>4 (out of 6)*</td>
</tr>
<tr>
<td>Brent</td>
<td>Oak4</td>
<td>16</td>
<td>10th</td>
<td>16</td>
<td></td>
<td>1 (out of 6)</td>
<td>5 (out of 6)</td>
</tr>
</tbody>
</table>

*Cover names, or pseudonyms are used to protect the confidentiality of the students.

1-2-3 Names of Schools have been changed to protect the confidentiality of students and teachers involved in the research project.

1 The largest school district in the project
2 The second largest school district in the project
3 The smallest school district in the project

*The missing class period represents a work/vocational placement.

1 Time was controlled for in this results section when discussed interactions per class period and interactions were determined per time rather than each course being counted as a single unit.
The researcher followed each student three times for an entire school day, attending the students’ classes, lunchtime, and any other activities scheduled as part of their regular course of the day. In addition to conducting three days of classroom and school observations for each of the six participants, an analysis of each participant’s education files was completed, with a focus on educational programming information. Finally, each student and his/her primary special education teacher individually participated in a semi-structured interview to ascertain both stakeholders’ perspectives as to interactions in different educational contexts for students with mild mental impairment. The student interviews consisted of six semi-open-ended questions and 17 prompts to help focus students on the questions (see Appendix A). Each student interview lasted approximately twenty minutes. The teacher interviews (see Appendix B) consisted of seven semi-open-ended questions and 15 prompts and lasted about thirty to forty minutes.

During the course of the classroom observations, written fieldnotes of interactions were taken, as well as a classroom observation form that was completed regarding the number and kind of interactions of the student being observed with peers and adults (see Appendix C). A single form was used for each class period of the day and tallies were used to record the number of interactions as well as other information gathered on students. Both fieldnotes and the form were completed simultaneously by a single participant observer. The observation form was created by the researcher.

### Data Analysis

Data from the classroom observation form used to record interactions were placed into a spreadsheet. Means were calculated on the interaction data in both general education and special education settings. The data were examined with respect to total interactions for peers and adults, student-initiated interactions with peers and adults, and peer or adult initiated interactions. The qualitative data from observations and interviews were analyzed for themes and patterns relative to interactions within instructional environments.

### RESULTS

#### Instructional Setting

With six student case studies, 32 classes were observed. Of the 32 classes observed, six were in the general education setting (18.75% of the classes). Of the six classes that did occur in general education settings, four were elective courses (66.7%), including creative or industrial arts. The majority of the other twenty-six classes could be classified as self-contained settings, as the teacher was responsible for teaching content to all special education students in a pull-out setting. Two of the 26 classes were work-related sites, enabling the students to access vocational skills while still in school. Classes within the general education setting ranged from zero to two among the six different students. Two of the six students observed each had two general education classes, two others each had one, and finally two students had no general education classes. Observations, record reviews, and teacher interviews indicated that the distribution of general education courses was not dependent on students, but rather scheduling issues, what particular courses students needed and/or requested, and what each school offered. The teachers commented that each course schedule observed was typical of a student with mild mental impairment in their respective schools.

#### Interactions

Overall the six students had fewer interactions in general education settings (including the classroom, hallways, and the lunchroom) than in special education settings (see Table 2). Across the six students, the average number of interactions per class period with peers and adults in general education settings was 9.59 as compared to 13.97 in special education settings. The range of interactions across students in the general education setting was from a low of 6.70 to a high of 19 per class period, while the range in special education settings was from 9.67 to 18 interactions.

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2 One student requested that her mother no consent to her participation in an interview, stating, in her words, “I don’t like being harassed with questions one-on-one.”
per hour, hence less variability.

The lower amount of interactions with peers and adults in general education settings than special education settings were discussed in interviews as well. One teacher commented that her students often struggle with how to participate and get involved in general education courses. This suggests that the teachers as well as the students were aware that students were interacting less frequently in this particular setting than in the pull-out classes.

One of the high interacting students Sarah\(^3\), who averaged 19 interactions in the general education setting an hour, was in one general education class and had friends in this class. However, she was not placed with “friends” during her special education classes. The data illustrate that she initiated more interactions in her special education classes than in her general education classes (16.83 vs. 8 respectively); hence suggesting it was her peers that were initiating with her in the general education setting. This lack of peer initiation in the special education setting, which was rare across students and resulted in more total interactions in the general education setting, may be explained by that her peers were primarily males in her special education classes. Sarah’s teacher commented about the role of peers during her interview. The teacher, Mrs. Smith, noted that things were different at this school and special education, and hence special education students, were more accepted. Mrs. Smith, indicated that the placement of the special education classrooms in the middle of the hallway as opposed to being tucked away, demonstrated that the students were the same and all accepted. The high amount of overall acceptance at the school for special education students, as reported by the teacher, may have contributed to an increased amount of interaction in the general education setting.

With peers. Across the six students, the average number of initiated interactions with peers was greater in special education settings than general education settings (15.61 as compared to 7.31) (see Table 2). The range in initiated interactions in special education settings was smaller than the range in general education settings (5.78 as compared to 9.89); hence there was less variability across students in special education classes. Peers also initiated fewer interactions with the six students with mild mental impairment in general education settings than special education settings (5.98 as compared to 6.28, respectively). The range across the six students in terms of received interactions from peers was 7.1 in special education settings and 15.5 in general education settings, again with less variability in special education classes.

Amy, who had two general education classes, also

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### Table 2

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<th></th>
<th></th>
</tr>
</thead>
<tbody>
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<td>5.5</td>
<td>10.45</td>
<td>10.59</td>
<td>5.33</td>
<td>13.45</td>
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<td>3.64</td>
<td></td>
</tr>
<tr>
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<td>17.67</td>
<td>19.11</td>
<td>n/a</td>
<td>19.11</td>
<td>7.17</td>
<td>n/a</td>
<td></td>
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<tr>
<td>Emma(^4)</td>
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<td>.67</td>
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<td>13.25</td>
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<td>16.44</td>
<td>6.68</td>
<td>0.77</td>
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</tr>
<tr>
<td>Amy(^4)</td>
<td>13.86</td>
<td>15.78</td>
<td>11</td>
<td>13.47</td>
<td>13.56</td>
<td>13.33</td>
<td>6.27</td>
<td>7.88</td>
<td></td>
</tr>
<tr>
<td>Sarah</td>
<td>17.5</td>
<td>19</td>
<td>17</td>
<td>14.63</td>
<td>8</td>
<td>16.83</td>
<td>11.5</td>
<td>15.5</td>
<td></td>
</tr>
<tr>
<td>Brent</td>
<td>8</td>
<td>7</td>
<td>9.67</td>
<td>11</td>
<td>14.5</td>
<td>3.56</td>
<td>3.5</td>
<td>3.56</td>
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</tr>
<tr>
<td>Avg</td>
<td>13.16</td>
<td>9.59</td>
<td>13.97</td>
<td>13.68</td>
<td>7.31</td>
<td>15.61</td>
<td>6.27</td>
<td>5.98</td>
<td></td>
</tr>
</tbody>
</table>

\(^*\) Includes initiations to adults. Initiations to peers and adults were not separated out in the data collection.

\(^4\) Amy’s data is unique. First, a lot of interactions came during her first block, which was art and there was a lot of free time and time for talking. Secondly, in Amy’s second block, which was general education science, all of her interactions with peers were between her and her student helper – whether initiated or received.

\(^3\) All names where changed to protect the confidentiality of students, teachers, and schools involved in this research project.
illustrated that one’s social community matters, as did the previous example of Sarah. Amy did not engage in interaction in her general education science class (either initiated or responded) with any other peer, aside from a student helper assigned to her. However, in her art class (a general education elective course) she engaged in frequent interactions with peers, but with only the female students at her table. Furthermore, when the peer that she primarily interacted with in art class was absent, the frequency of interactions significantly reduced (10 as compared to 53, in an 85 minute period). This is compared to interactions with peers in her general education science class (an average of 13.7, versus 33.7 in art), yet all in science were directed to or received from her student helper (i.e. an older general education who was assigned to assist her in the general education science class). In her homeroom class, a 35 minute class in the middle of the day which occurred in a general education setting with general education peers, Amy averaged zero interactions with peers.

With adults. The range of interactions with adults across students was between 5.73 to 11.78 with an average interaction of 8.9 per class period (see Table 3). All students had more student-initiated interactions with adults per class period in special education settings than general education settings, an average of 10.07 as compared to 4.96. In addition, all students experienced more adult-initiated interactions in special education settings than general education settings, an average of 5.62 interactions per class period in special education as compared to 2.2 interactions per class period in general education.

Initiated versus received. The six special education students in this project initiated more interactions with both their peers and the adults (teachers, paraprofessionals, etc.) in their classes, either special education or general education, than either peers or adults initiated with them. Students initiated an average of 13.68 interactions per class period to peers and received an average of 6.27 initiations per class period from peers. Similarly, the students initiated 10.07 interactions with adults per class period and received an average of 4.6 interactions per class period from adults. Other initiated interactions with these students with mild mental impairment occurred at approximately half the rate of their initiated interactions.

DISCUSSION

Overall the data indicated that secondary students with mild mental impairment initiated more interactions with adults and peers than they received, and this finding went across educational settings (average 11.85 initiated interactions with adults and peers across settings versus 5.44 received across settings). The data also indicated that special education students had a greater amount of interactions with others (peers and adults) in special education settings than general education settings (an average of 13.97 in special education settings versus 9.59 in general education

<table>
<thead>
<tr>
<th>Student</th>
<th>Average Student-Adult Interaction</th>
<th>Average Student-Adult Interaction in Gen Ed</th>
<th>Average Student-Adult Interaction in Sp Ed</th>
<th>Average Adult Initiated Interaction</th>
<th>Average Adult Initiated Interaction in Gen Ed</th>
<th>Average Adult Initiated Interaction in Sp Ed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marc</td>
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<td>8.91</td>
<td>6.41</td>
<td>4.17</td>
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<td>5.42</td>
<td>3.33</td>
<td>6.11</td>
</tr>
<tr>
<td>Amy</td>
<td>5.73</td>
<td>3.67</td>
<td>8.83</td>
<td>3.07</td>
<td>1</td>
<td>6.17</td>
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<tr>
<td>Sarah</td>
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<td>9.88</td>
<td>3.9</td>
<td>.5</td>
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<tr>
<td>Brent</td>
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<td>11.14</td>
<td>2.89</td>
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<td>3.14</td>
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<tr>
<td>Avg</td>
<td>8.9</td>
<td>4.96</td>
<td>10.07</td>
<td>4.6</td>
<td>2.2</td>
<td>5.62</td>
</tr>
</tbody>
</table>
settings). Across all six students, they initiated interactions more with peers (15.61 vs. 7.31) and received more interaction from peers in special education settings (6.28 vs. 5.98) than general education settings. Similarly, these students initiated interacted more with adults (10.07 vs. 4.96) and received more interaction from adults (5.62 vs. 2.2) in special education than general education settings.

While the quality of the interactions with the adults is unknown, differences in frequency per setting as well as self versus other-initiated call into question responsive pedagogy. Specifically students with mild mental impairment need opportunities for responsive instruction and scaffolding from teachers (Stone, 1998). These practices have been shown to be effective; yet with so few interactions occurring between adults and the secondary students with mild mental impairment in this study in general education settings, particularly adult initiated interactions, it raises questions as to how responsive were the adults being and how much scaffolding of instruction and social situations were students receiving. Therefore, while inclusive education is possible for secondary students with mild mental impairment, merely placing students in general education classes without social support is not inclusion. True inclusion in secondary general education classes and schools requires that students interact, and interact appropriately with peers and adults, and feel as though they are contributing members of the community.

Similarly, the quality of interactions with peers is unknown. However, the differences in frequency across settings illustrate that just placing students with mild mental impairment in inclusive settings does not result in friendships, let along interaction between special education and general education peers. Both groups of students need support and encouragement with interactions. Schools could benefit from a reculturing whereas they redefine what acceptable and expected behavior towards peers is as well as promote tolerance and diversity. Perhaps the field of education should focus on creating secondary programs that encourage and create an inclusive society, rather than merely an inclusive school or classroom.

During their interviews, students in this project did not indicate that they were either unhappy in their current programs or that they desired to have more general education classes. This supports previous findings by Klingner, Vaughn, Schumm, Cohen, and Forgan (1998), who found that more children selected a pull-out model as their educational preference. A teacher in this current study even stated that one student was nervous about having more classes outside of the self-contained program, either in a resource room program or in general education classes. Other teachers in their interviews suggested the difficulty in placing their students with mild mental impairment in general education classes. Some indicated that they needed to hand-pick classes for their students, due to the resistance of some general education teachers or their unwillingness to fully work with this population.

Teachers and students both discussed the multiple perspectives regarding inclusive versus pull-out classes for these students with mild mental impairment. One teacher commented in the interview that she knew her “students do not like to be in special education classes all the time”, but that it was hard to place them in the general education classes and often they struggled with how to be involved and participate in those classes once in there. Another teacher commented that students’ acceptance by others was not a result of their placement in special education courses, but rather how socially acceptable they acted, or in other words, the amount of social skills the particular student demonstrated. This suggests that perhaps students with greater social skills interacted more with peers and adults, and in return, received more interactions from peers and adults in the general education settings. If true, providing students with social skills training and education at the secondary level and before would be a crucial component to their education and success in general education and special education settings, as well as in life.

Implications

What information do these six case studies provide about the education of secondary students with mild mental impairment, particularly in regards to interactions with peers and adults across special education and general education settings? For the majority of students included in this project a greater number of peer and adult interactions were occurring in special education settings than general education settings. It also suggests that the field must continue to examine students’ needs, both academically and socially, when making decisions regarding instructional environments. As a field, we cannot remain “hung-up” on the endless debate of inclusion (see Kavale & Forness, 2000), but must focus on the outcomes student want and need, as well as what they, their parents, and teachers feel is best both academically and socially. As one student stated, “the best part of the school day is seeing my friends,” and she reported that her friends are in her classes (all special education) and her after-school activities (i.e. Special Olympics).

Another implication involves providing training for general education teachers on educating students with
disabilities. Teacher awareness regarding their interactions with students with disabilities could result in a change. Perhaps if teachers were aware of their interaction patterns, they would make conscious efforts to interact with these students as well as encourage students with disabilities to interact with peers and adults in these classes. Similarly, students with disabilities need to be provided with the social support in general education classes to encourage, and perhaps facilitate, appropriate interactions with peers and adults. Self-contained secondary special education programs remain in a catch-22. Students need to see positive peer models regarding interactions with peers and adults in general education settings, but their lack of interactions and skills suggest a possible continued placement in pull-out settings, which often lack the positive modeling.

**Limitations and Future Directions**

The most obvious limitation of this study is the small sample size, namely six, and its related limitations of generalizability both to other students in similar situations within this state, as well as to other states. The number of observations that were conducted for each student (i.e. three) might be considered a limitation. However, the researcher did note the high degree of consistency across the days for each of the students. Another limitation is that missing data exists. For example, one student felt uncomfortable being interviewed by the researcher and requested that her mother not consent to that portion of the research. While interviews were conducted with the other students, overall the interviews did not reveal a lot of information. It is unclear if the self-report data from the secondary students with mild mental impairment reflects their true perceptions and opinions. It is possible that the questions were at a level higher than the comprehension of the students. Along similar lines, students’ comfortableness with the researcher may have had an impact on students’ interactions with peers and adults in both types of settings. Finally, researcher bias is a limitation for this study. Both the qualitative data as well as the quantitative data for tallying interactions was subject to potential bias on behalf of the one researcher.

Future research should continue to explore the social inclusion of secondary students with mild mental impairment, particularly as the educational climate leans towards inclusion. Understanding the nuances of physical inclusion is insufficient; social integration must also be understood. Future research should examine the quality of interactions between special education students with peers and adults. This exploratory study illuminated clear differences in the number of interactions between these groups in the general education and special education settings, but future research is needed to analyze the quality of the social mediation. In addition, this study should be replicated on a larger scale to see if patterns hold when more students and schools are included. Finally, a direction for future research involves examining the interactions between general education students in general education settings with their peers and the adults. This could be conducted at each of the schools from this study to better understand the data on special education students and to enable comparisons in terms of number and type of interactions.

Please address all correspondence to the author at A-719 Wells Hall, Michigan State University, East Lansing, Michigan 48824, (517) 432-2870 or boucke@msu.edu
REFERENCES


Appendix A

Student Interview Questions

The interview is to be semi-structured in nature. These questions are to provide a guideline of the type of questions to be asked. Interviewers can and should deviate to go with what the interviewee presents.

1. Tell me about your education program.
   a. What is school like for you?
   b. What is the best part of the day?
   c. What is the worst part of the day?

2. Tell me about your classes.
   a. What do you like about them?
   b. What don’t you like about them?
   c. Which class(es) do you like the best? The least?

3. If you could change anything about school, what would it be?

4. Who do you interact with at school?
   a. Who do you eat lunch with?
   b. Do you get together with your friends outside of school?
      i. If so, what do you do together?

5. What are your future goals?
   a. Where do you want to be living?
   b. What kind of job do you want to have?
   c. Do you want to go to college or a vocational school or get further training?
      i. If so, where?
   d. What kind of activities do you want to participate in?

6. How do you think your school has helped you to work towards your future goals?
   a. Do you have any vocational classes?
   b. Do you receive any career guidance?
   c. Have you met with anyone from Michigan Rehabilitation services?

Appendix B

Teacher Interview Questions

The interview is to be semi-structured in nature. These questions are to provide a guideline of the type of questions to be asked. Interviewers can and should deviate to go with what the interviewee presents.

1. Describe the typical educational program for secondary special education students at your school.
   a. Please highlight any differences you see for students with:
      i. Mild mental impairment
      ii. Learning disabilities
      iii. Emotional impairment

2. How would you describe the curriculum you use to educate students:
   a. All students
   b. Students with special needs

3. In what ways does the educational programming at your school support the attainment of future goals by special education students?
   a. Does your school provide career counseling?
   b. Does your school have vocational education?
      i. If so, where? (Is it through separate vocational classes offered at the school? Built into existing core classes? Or does it occur outside the school, such as through programs offered by the ISD?)
      ii. If so, how much to special education students have access to it?
   c. What kind of relationship does your school have with community agencies that provide services for special education students?

4. If you could improve the educational programming at your school, what would you do?

5. In your opinion, what is daily school life like for special
education students at your school?
   a. Please consider and refer to:
      i. Social interactions
         1. With peers
         2. With staff
   6. What courses do special education students usually take?
      a. What is their typical schedule?
      b. Do they have electives, and if so, what courses?

7. Please give your perceptions of the student’s social skills.

Appendix C

### Period 1: ____________  
Start time: ____________  
End time: ____________  
Pseudo-Name: ____________  
Teacher: ____________

<table>
<thead>
<tr>
<th>Curriculum</th>
<th>Inst. Env.</th>
<th>Independent work</th>
<th>Lecture/class work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gen Ed</td>
<td>Inclusion</td>
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<td></td>
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<tr>
<td>Spec Ed</td>
<td>Res. Room</td>
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<td>Functional</td>
<td>Self-contained</td>
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<td>Co-taught</td>
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<td>Worksite</td>
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### Social

<table>
<thead>
<tr>
<th>Number of Friends</th>
<th>Initiated interactions</th>
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</thead>
<tbody>
<tr>
<td>Number of Peer-to-peer interactions</td>
<td>Interactions initiated by peers</td>
</tr>
<tr>
<td>Number of Peer-to-adult interactions</td>
<td>Interactions initiated by adults</td>
</tr>
<tr>
<td>Number of interactions to class (out-loud)</td>
<td>Number of times individuals responded to comments</td>
</tr>
<tr>
<td>Number of times not responded to</td>
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### Opportunity in class

<table>
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<tr>
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<tr>
<td>To read</td>
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<tr>
<td>To discuss</td>
</tr>
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<td></td>
</tr>
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</table>

### Material Review

- 20-25 min
- 25-30 min
- 30-35 min
- 35-40 min
- 40-45 min
- 45-50 min
- 50-55 min
- 55-60 min

### Accommodations and adaptations

- Interactions in what setting: Special Education General Ed.
- Tyne
- What for?