Social Skills of Mainstream Students in Full-Time, Online Public Schools:

How They Compare to Traditional Public School Students

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Online schooling—also referred to as virtual schools, cyber schools, e-learning, and distance learning—is a growing phenomenon in U.S. public school systems. A majority of states and school districts within the United States are offering some form of online public schooling (Watson, Gemin, & Ryan, 2008).

Online public schools provide a variety of benefits to administrators, teachers, parents and students, including flexibility, personalized learning situations, and opportunities for greater involvement on the part of parents in their child's education—in a *public* school context that provides a structured learning environment, the guidance of certified teachers, and adherence to state mandates related to enrollment, operation, health, assessment, and accountability. However, some concern has been expressed that students who are enrolled full-time in online public schools may suffer from a lack of opportunities for socialization, and consequently may fail to develop important social skills. This paper reports on a 2008 research study involving more than 250 students that represents the first significant research effort to directly address this concern.[1]

Overall, results from this study were highly positive, suggesting that typical, mainstream students enrolled in full-time, online public schools are *either superior to or not significantly different than* students enrolled in traditional public schools with respect to their socialization. [2] More specifically:

- In most categories measured, social skills of students enrolled in full-time, online public schools were *either significantly higher or not significantly different* when compared to national norms.

- Students enrolled in full-time, online public schools were *highly engaged in activities* outside of the school day, with *frequency of student engagement in these activities correlating positively* to students' social skills.

- Across all categories measured, problem behaviors of students enrolled in full-time, online public schools were *either significantly lower or not significantly different* when compared to national norms.

- Parents' most common reasons for choosing online public schools were about *achieving positive outcomes related to parent/family involvement in learning*, as opposed to "fixing" problems with either the child or the school system—although a sizeable minority identified concerns related to differentiating instruction to meet specific student needs.

- Parents' perceptions of their families' experiences with full-time, online public schools were *overwhelmingly positive*—including the impact of online public schools on a variety of academic, personal, and interpersonal outcomes.

These findings are described in more detail below.

How the Research Was Conducted

During February through August 2008, Interactive Educational Systems Design (IESD), Inc., in collaboration with staff from The Center for Research in Educational Policy (CREP) at the University of Memphis (TN), conducted an evaluation research study[3] involving more than 250 students in grades 2, 4, and 6 that were enrolled in four full-time, online public schools:

- Arizona Virtual Academy (AZVA)
- California Virtual Academy (CAVA)/San Diego
- Idaho Virtual Academy (IDVA)
- Ohio Virtual Academy (OHVA)

Parents, teachers, and students completed evaluations of students' social skills and problem behaviors, using the *Social Skills Rating System* (*SSRS*), published by Pearson Assessments (Gresham & Elliot, 1990)—an evaluation instrument that has been widely used in numerous studies and described as the most comprehensive instrument of its kind because of its multi-source approach (Demaray et al., 1995; Merrell, 2001).[4] These evaluations were then compared to national norms for the *SSRS*, including both norms across the elementary grades and norms for specific grade/gender categories (e.g., grade 2 females).[5]

The study also collected information from parents (via a survey) about reasons for choosing a full-time, online public school; students' involvement in activities outside of school; and parents' perspectives on the impact of online public schooling.

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[1] This paper summarizes information from a comprehensive research technical report titled *Evaluation of the Social Skills of Full-Time, Online Public School Students.* To view the comprehensive report, go to www.K12.com/socialization-study.

[2] The focus of the study was on students without the kinds of special needs that might result in pulling them out of regular public school classrooms. No claims are made in this study regarding the appropriateness of full-time, online public schooling for students with these kinds of special needs.

Social Skills

Social skills—as defined by the *SSRS*—includes four components, each of which corresponds to an *SSRS* social skills subscale:

- **Responsibility**—behaviors that indicate the ability to communicate with adults and regard for propriety of work
- **Self-Control**—behaviors that emerge in conflict situations, such as responding appropriately to teasing, and in non-conflict situations that require taking turns and compromising
- **Assertion**—initiating behaviors, such as asking others for information and introducing oneself and responding to the actions of others
- **Cooperation**—behaviors such as helping others, sharing materials, and complying with rules and directions

Results across all *SSRS* measures indicated that in most categories, social skills of students enrolled in full-time, online public schools were *either significantly higher or not significantly different* when compared to national norms. As measured on the *SSRS*, compared to students in a national sample, students in full-time, online public schools—

- Scored *significantly higher* or *not significantly different* on 3 out of 3 measures of *total social skills* across the elementary grades (parent ratings, student self-ratings, and teacher ratings)
- Scored *significantly higher* or *not significantly different* on 11 out of 12 measures of *social skills subscales* across the elementary grades (parent ratings, student self-ratings, and teacher ratings)[6]
- Scored *significantly higher* in 10 out of 10 grade/gender categories on *total social skills* (parent ratings and student self-ratings)
- Scored *significantly higher* or *not significantly different* in 35 out of 40 grade/gender categories on *social skills subscales* (parent ratings and student self-ratings)[7]

In short, the study found that on the whole, students enrolled full-time in online public schools possessed social skills that were at least as developed as those of their peers in traditional public schools, and according to some of the measures were better developed.

Time Enrolled in Full-Time, Online Public Schools

In addition to comparisons to the national *SSRS* norms, an analysis was performed to see whether parent ratings of students' social skills were different based on the amount of time students had been enrolled in full-time, online public schools.

Comparing students who had been enrolled for a year or less with those who had been enrolled for more than one year, there were *no significant differences*—with the single exception of the Self-Control subscale, which was significantly *higher* for students who had been enrolled longer. In other words, spending a longer time enrolled in full-time, online public schools was *not* associated with lower social skills.

Student Activities Outside the School Day

As part of the research, information was collected about how frequently full-time, online public school students engaged in a broad range of activities outside of school —including both activities involving peer interaction and those not involving peer interaction.

Parents reported that their children who were enrolled in full-time, online public schools were *highly engaged in activities outside of the school day*. Of these students:

- A majority participated in one or more activities involving peer interaction at least once a week.
- A majority also engaged in one or more activities *not* involving peer interaction at least once a week.

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[3] Schools in this study utilized curriculum and technology resources from K12, which sponsored the study. However, the study findings and conclusions were the result of independent analysis of the collected data by IESD and CREP.

[4] Parent evaluations were completed for the entire group of students. Student self-evaluations were completed by students in grades 4 and 6 for social skills only, since the *SSRS* did not include self-evaluations forms for problem behaviors or for students in grade 2. Teacher evaluations were completed for a smaller sample of students (58 total) for comparison purposes.

[5] Total scores across the elementary grades were compared to *SSRS* national norms that included non-handicapped students only. Scores for specific grade/gender categories were compared to *SSRS* national norms that included both handicapped and non-handicapped students, since *SSRS* norms that included only non-handicapped students were not available at this level of specificity. Comparisons by grade/gender category were completed only for the parent and student self-evaluations, because of the small number of teacher evaluations in each grade/gender category.

[6] The single exception was student self-ratings for Self-Control, which were significantly lower than the national norms. However, Self-Control was rated significantly *higher* than the national norms by parents and teachers.

[7] Exceptions included 4th and 6th grade male and female student self-ratings for Self-Control and 6th grade male parent ratings for Assertion, all of which were significantly lower than the national norms.

Specific activities involving peer interaction that were engaged in at least once a week by at least 50% of the students included the following:

- Children's clubs and organizations (e.g., Boy/Girl Scouts, 4H, church groups)
- Sports that involve other children (e.g., team sports, competitions)
- Classes or lessons with other children (e.g., dance, art, martial arts, group tutoring)
- Playing with other children at someone's home
- Religious/cultural classes or schools

Correlation to Social Skills

An additional analysis was conducted to see if there was a relationship between students' social skills (as measured on the *SSRS*) and how frequently they engaged in out-of-school activities. The analysis found that:

- There was a *statistically significant correlation* between frequency of student participation in activities involving peer interaction and student scores on both the Total Social Skills Scale and all of the Social Skills subscales.

- There was also a *statistically significant correlation* between frequency of student participation in activities *not* involving peer interaction and student scores on both the Total Social Skills Scale and three out of four of the Social Skills subscales (Responsibility, Assertion, and Cooperation, but not Self-Control).

In general, as the frequency of outside activities increased, the Social Skills ratings increased. This finding suggests that involvement in activities outside the school day—both involving peers and not involving peers—may be associated with students' positive social skills.

Problem Behaviors

Problem behaviors—as defined by the *SSRS*—includes three components, each of which corresponds to an *SSRS* problem behaviors subscale:

- **Externalizing**—inappropriate behaviors involving verbal and physical aggression toward others, poor control of temper, and arguing

- **Internalizing**—behaviors indicating anxiety, sadness, loneliness, and poor self-esteem

- **Hyperactivity**—behaviors involving excessive movement, fidgeting, and impulsive reactions

Results across all *SSRS* measures found that in all categories, problem behaviors of students enrolled in full-time, online public schools were either *significantly lower or not significantly different* when compared to national norms. As measured on the *SSRS*, compared to students in a national sample, students in full-time, online public schools—

- Scored *significantly lower* on 2 out of 2 measures of *total problem behaviors* across the elementary grades (parent ratings and teacher ratings)

- Scored *significantly lower* on 6 out of 6 measures of *problem behaviors subscales* across the elementary grades (parent ratings and teacher ratings)

- Scored *significantly lower* or *not significantly different* in 6 out of 6 grade/gender categories on *total problem behaviors* (parent ratings)

- Scored *significantly lower* or *not significantly different* in 18 out of 18 grade/gender categories on *problem behaviors subscales* (parent ratings)

In short, the study found that with respect to problem behaviors, students enrolled full-time in online public schools were better than or similar to their peers in traditional public schools.

Time Enrolled in Full-Time, Online Public Schools

In addition to comparisons to the national *SSRS* norms, an analysis was performed to see whether parent ratings of students' problem behaviors were different based on the amount of time students had been enrolled in full-time, online public schools.

Comparing students who had been enrolled for a year or less with those who had been enrolled for more than one year, there were *no significant differences*. In other words, spending a longer time enrolled in full-time, online public schools was *not* associated with a higher level of problem behaviors.

Family Experiences with Online Public Schools

Parent Reasons for Enrollment in Full-Time, Online Public Schools

As part of the research, parents were asked about their reasons for choosing full-time, online public schools for their children.

In general, the most frequently identified parent reasons for choosing online public schools were about *achieving positive outcomes related to parent/family involvement in learning*, as opposed to "fixing" problems with either the child or the school system. Each of the following reasons was chosen from a list by more than 60% of the responding parents:

- A home-based environment, but with the active support and structure of the public school system (e.g., books and materials, certified teachers)
- A learning environment consistent with our family values
- More involvement in our child's education

However, a sizeable minority—more than one-third of the responding parents—expressed child-focused concerns related to differentiating instruction to meet specific student needs. Each of the following child concerns was chosen from a list by at least one-third of the parents:

- Needs a more challenging/higher quality curriculum
- Does better with a more self-directed approach to learning
- Needs an individualized approach

Perceived Outcomes from Full-Time, Online Public Schools

Parents were asked whether, in their view, outcomes in a variety of academic, personal, and interpersonal areas had gotten better, shown no change, or gotten worse since their child started the online public school program.

A majority of parents described *improvement in most of the categories listed*. Of the 14 categories of outcomes that parents were asked about:

- More than three-fourths of the parents noted improvement related to *skill in using technology, balanced development of skills across many areas of learning,* and *academic progress in subject areas.*
- A majority of the parents perceived improvement in another 8 categories: *self-esteem; regular, helpful communication between home and school; attitude toward school and schoolwork; relationship with parents; performance on state tests; daily school attendance; finishing schoolwork on time;* and *relationship with teachers and other adults.*
- In the 3 remaining categories (*child's behavior at home, behavior with other children,* and *ability to make friends*), more than 35% of the parents perceived that their children's situation had "gotten better," while 49.8% or more perceived "no change" in their children's situation.
- In contrast, the percentage of parents who perceived negative change related to these 14 outcome categories was very small, ranging from 0% to 6.2%.

Findings from Narrative Responses

Parents were also asked to share "any stories, anecdotes, or thoughts about your family's experience with your online public school," particularly any that had proved surprising to them.

A categorical analysis of parent responses to identify common themes showed a *preponderance of themes related to benefits and positive outcomes* from full-time, online public schools. Specific themes that were mentioned by more than 10% of the respondents included the following:

- Good/strong curriculum, "better education," good supplies, being challenged, strong history/art/science lessons (37%)
- Faster learning, students learning at their own pace, flexible schedule (21%)
- Child is self-motivated, good attitude, confident (16%)
- More time together as family or for other activities; learned things about child that parents would not have otherwise known (13%)
- Interacts well with all age groups; social (11%)
- Teacher support/good relationship with teacher (10%)

Conclusion

Results of this evaluation provide substantial evidence supporting the conclusion that typical, mainstream students enrolled in full-time, online public schools are at least as well socialized as equivalent students enrolled in traditional public schools with respect to social skills and problem behaviors.[8] There is also preliminary evidence suggesting that students enrolled in full-time, online public schools might have an advantage in their social skills development if they are highly engaged in activities outside of the school day—including both activities involving peer interaction and activities not involving peer interaction. Additionally, parents of students in full-time, online public schools perceive a variety of important benefits to such schooling, related both to academics and to other aspects of their children's education.

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[8] Note, however, that because this study did not include random assignment of subjects to treatment and comparison groups and did not include pretesting as well as posttesting, the results cannot be used to draw conclusions about causality. In other words, while these data do establish that the social skills of students in full-time, online public schools are not inferior to those of students in face-to-face schools, this study does not help to explain *why* this is the case.

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