Appendix B

Whose Future Is It? and Self-Determination Research

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Introduction

Although promoting self-determination is considered a best practice in transition services, research has found that students' Individualized Education Programs (IEPs) frequently do not contain goals related to teaching abilities that promote self-determination (Agran, Snow, & Swaner, 1999; Mason, Field, & Sawilowsky, 2004; Wehmeyer, Agran, & Hughes, 2000). Therefore, preparing students to be involved in the development and implementation of their IEPs, including being meaningfully engaged in their IEP meeting and in monitoring their IEP goal attainment, is a strategy that has potential for significantly affecting student self-determination and self-advocacy skills, leading to more positive adult outcomes. Izzo and Lamb (2002) suggested that school districts seeking to encourage self-determination and positive school outcomes for students with disabilities should facilitate student-centered IEP meetings and self-directed learning models. Similarly, the National Center on Secondary Education and Transition (2004) recommended promoting and supporting student-centered and student-run IEP meetings.

While the authors have conducted decades of research in self-determination, three studies in particular exemplify the success that students have experienced using **Whose Future Is It?:**

1. A randomized-trial, placebo control group with 493 students in middle school, high school, and transition (Wehmeyer, M.L., Palmer, S.B., Lee, Y., Williams-Diehm, K, Shogren, K. 2011).
2. A pre- and post-measure design with 168 middle school students who were assigned to an experimental and control group, with the experimental group using technology (Lee, Y., Wehmeyer, M.L., Palmer, S.B., Williams-Diehm, K, Davies, D.K., Stock, S.E., 2011).
3. A field study with 53 students across three high schools using a pretest posttest measure of self-efficacy and outcome expectancy (Wehmeyer, M. and Lawrence, M, 1995).

1. Randomized Trial

In the randomized-trial, placebo control group study, 493 students across middle school, high school, and transition participated in the study (Wehmeyer, M.L., et al., 2011). The participating students received special education services across multiple disability categories in school districts across six states. The majority of the students received services under the categorical area of an intellectual disability or learning disabilities.

The study was one component of a longitudinal study examining the effect of interventions to promote self-determination, where students were randomly assigned to a treatment group or a control group. Implementation fidelity was monitored by three types of fidelity measures: context, compliance, and competence. Data were collected about self-determination using two measures, The ARC's Self-Determination Scale (SDS) (Wehmeyer & Kelchner, 1995), and the AIR Self-Determination Scale (Wolman, Campeau, DuBois, Mithaug & Stolarski, 1994). SDS is a 72-item, self-report measure that provides data about self-determination through the measurement of four essential characteristics: behavioral autonomy, self-regulation, psychological empowerment, and self-realization. The AIR student assessment measures student capacity to act in a self-determined manner.

The results indicate that all students showed gains in self-determination over time; however, the students in the Whose Future Is It? group scored significantly more positively on AIR than students in the placebo control group. The result of the study showed that intervention with the Whose Future Is It? curriculum had a causal, positive effect on student self-determination, and that students showed improved self-determination knowledge and transition knowledge. This effect was present across the middle school, high school, and transition populations.

2. Pre- and Post-measure Design in Middle School with Technology

In the middle school study, 168 students from 12 campuses across six school districts in the Midwestern part of the United States participated (Lee, Y., et al., 2011). Students were ages 12 to 16, enrolled in junior high or middle schools receiving special education services, and identified by educators as requiring supports in reading. The randomized trial included a control group with a pretest and posttest design. Selected sessions were presented to the students, including the content in "Getting to Know You," the decision-making and goals sections of "Decisions and Goals," and the first three chapters in "Your IEP Meeting." An accessible audio reader was also included in this study for the intervention group.

The effectiveness of the student-directed transition planning instruction was measured by four instruments: The ARC's Self-Determination Scale (Wehmeyer & Kelchner, 1995), the AIR Self-Determination Scale (SDS) (Wolman, Campeau, DuBois, Mithaug & Stolarski, 1994), the Whose Future Knowledge Scale, and the Self-Efficacy and Outcome Expectancy for Educational Planning Scale. Instructional fidelity for the intervention group

was monitored for context, compliance, and competence. Participating teachers in the intervention group reported that they completed an average of 7.2 out of the 10 lessons. Control group teachers reported that they completed an average of 7.4 lessons.

Students in this study demonstrated enhanced self-determination, transition planning knowledge, and self-efficacy and outcome expectations for educational planning as a result of using the Whose Future Is It? curriculum. It is important to note that both the control and experimental group received instruction on Whose Future Is It?, with the experimental group also receiving instruction via the accessible audio reader technology. Students using the technology-based reading support benefited even more than their peers who did not receive that support on measures within the SDS assessment. This finding concludes that students who used the technology benefited more from instruction to self-direct planning than did students who did not use the technology.

Furthermore, most teachers participating in this study indicated that this curriculum influenced their students' IEP preparation. One teacher reported that she liked this curriculum because her students became more aware of what their IEPs contained, and how to verbalize their preferences and interests so that they were empowered to effectively participate in their IEP meetings.

3. Field Study Pretest Posttest

Field testing of the Whose Future Is It? curriculum was conducted with 53 high school students across three high schools in an urban school district (Wehmeyer, M. and Lawrence, M., 1995). Students ranged from 15 to 21 years of age, and were identified as having a learning disability or mild cognitive disability. They were selected from the population of all students receiving special education and involved in vocational preparation courses. Students were served in a variety of instructional settings including regular education classrooms, resources rooms, and separate classrooms. Instruction began early in the school year and continued until the spring of that school year, when all student educational planning meetings were scheduled. Students received instruction for approximately one hour per week for the duration of the school year. Pre- and post-intervention data on student self-determination were collected using The ARC's Self-Determination Scale (Wehmeyer & Kelchner, 1995), a student's self-report measure of self-determination.

Field test results, using both empirical and anecdotal information, support the efficacy of involving students in the transition planning process. There were significant changes in students' scores on self-efficacy and outcome expectancy for educational planning. These scores indicate that students believed they had gained more of the skills needed to participate in their planning meeting, and felt that preferred outcomes related to their involvement in the meeting would occur. These changes were particularly prevalent among young women with disabilities. Anecdotal information from students suggested that they did enjoy, as well as benefit from, the process. In addition to the gains in self-efficacy and outcome expectancy scores, students were able to participate in a meaningful manner, as illustrated by the following examples (Wehmeyer, M. and Lawrence, M., 1995, p. 81):

- In one meeting the student was quite animated, bringing up her ideas for discussion. Her efforts were acknowledged and her input taken seriously;
- In another meeting, a young woman participated and expressed her ideas and opinions regarding her placement and graduation. After the meeting, the student's teacher stated that the meeting was the first at which the young woman had not cried and had to leave;
- One student stated that she was going to be in the work study program next year, but she did not believe that this would have happened if she had not spoken up during her meeting and stated her preference;
- A student who was unhappy with the classes she had been assigned to during the past year spoke up, disagreeing with her father's preference and convincing him to change his mind because she was able to verbalize the reasons for her viewpoint.

This study provides evidence that student involvement in transition planning is both beneficial and achievable.

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