Seeing is Believing CHEER Project

Research Summary Report

The Role of Education in Eye Health Initiatives in Shanxi, China

Perkins International has partnered with organizations around the world to provide support in the education of children with visual impairment and multiple disabilities. This commitment to improving educational services has spanned decades and countless initiatives. In line with Perkins International’s long history of pursuing excellence in blindness education, the *Seeing is Believing CHEER Project* has sought to increase the educational capacities of a preschool serving children with visual impairments in the Shanxi region of China. This report will detail the findings of this project, focusing on the impact of Perkins International’s trainings on teacher’s skills and behaviors.

**Methodology**

In early 2015, The SIB CHEER Project identified a China Disabled People’s Federation (PDPF) funded preschool (in Taiyuan) as a candidate for a teacher training on how to teach children with MDVI. Established in 1986, the PDPF preschool has 24 certified teachers and serves approximately 120 children with disabilities. This includes 36 children with hearing impairment, 50 with intellectual disorder, and 59 with autism spectrum disorder. In addition, many students have a visual impairment. There is a continuing need for updated vision reports to better estimate and address student needs. This diverse population of children with multiple disabilities and visual impairment (MDVI) requires educational services that address student needs at the individual level.

Project staff visited the preschool to conduct a preliminary needs assessment. This informed the creation of a training plan to be held at the PDPF preschool. In September 2015, a five-day training was held with a group of 18 teachers. The training aimed to provide an introduction to a number of topics to support teachers working with children with MDVI. The schedule for the training can be seen below in *Figure 1*.

*Figure 1.- September 2015 Training Schedule and Participant Takeaways*

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| Day of Training | Topics/Activities |
| Monday (14th) | Pre-training questionnaire, Five Big Ideas, Simulation, Observation skill development, Classroom observation |
| Tuesday (15th) | Vision loss and MDVI, Impact of vision loss on learning, Importance of assessment, Autism (and case study), Literacy |
| Wednesday (16th) | Teaching strategies for young learners, Choice-making and Calendar, Sensory Functioning, Task Analysis, Classroom Observation |
| Thursday (17th) | Communication Strategies, Environmental Considerations, Functional Vision Assessment (FVA), Classroom Observation, Early Literacy  |
| Friday (18th) | Best Practices in Orientation and Mobility, Planning next steps, Post-training questionnaire |

 On the first day, the teachers took a pre-training questionnaire to provide some basic information about their backgrounds and what they hoped to gain from the training. The trainers followed the pre-training questionnaire with the Five Big Ideas, which helped to orient the participants to some foundational approaches to educating children with MDVI. These ideas are: 1) Follow child’s lead, 2) Partnerships with families, 3) Use real objects & meaningful activities, 4) Build independence, and 5) Routines/choice-making. The Five Big Ideas acted as a cornerstone for the training, holding relevance in the many other topics and activities that came up throughout the rest of the week. Parents were invited to participate in trainings although they were not given pre/post questionnaires. Parent participation in the training clearly demonstrated the importance of partnerships with families, one of the five big ideas.

Data collection occurred throughout the teacher trainings including the use of daily evaluations (“one-minute evaluations”). This provided feedback to project staff daily including reflections on what was learned and what participants were struggling to understand after each workshop was completed. A post-training questionnaire was also given on the last day so that participants could evaluate the training.

It was not enough to have a snapshot of the teachers’ thoughts post-training. As the project is primarily interested in the skills and behaviors of the participants, it was essential to see what was happening in the classrooms months after the training took place. So, observations were scheduled to occur in March 2016 and September 2016. The teachers were also interviewed in March 2016 about the training and its impact on their practice months later. Project staff utilized observation and interview protocols to guide classroom visits. Together, these data sources help to triangulate the impact of the trainings on the teachers and their classroom practice.

**Analysis/Findings/Discussion**

The guiding question for this analysis was: What is the impact of Perkins International’s trainings on teachers’ skills and behaviors, and did the trainings result in improved educational services for children with visual impairment? Based on the available data, the analysis was largely qualitative, focusing on identifying themes that emerged from participants’ responses on the pre/post-training questionnaire and interviews (from March 2016 and September 2017). Some items on the pre/post-training questionnaire were also analyzed with descriptive statistics, primarily to look at the frequency of certain responses.

Prior to the training, the pre-training questionnaire revealed that only two out of eighteen participants had any experience working with children with MDVI, highlighting the need for support. A few themes emerged from participants’ responses across questions that focused on what they wanted or expected from the training: First, they wanted to learn about how to educate children with multiple disabilities. Teachers repeatedly answered that they wanted “strategies” or “knowledge of education” specific to working with children with multiple disabilities. Second, teachers referenced a need for a better understanding of disability, answering that they needed “knowledge of children with multiple disabilities”. This included a desire for information on etiologies (specifically, visual impairment in many instances).

Prior to the training, many of the teachers had expectations that were framed in terms of disability. When asked, what was the first thing one would want to know about MDVI, one participant answered, “To learn what kind of disability child has, can we help him, and how to help?” This approach foregrounds disability, making it the primary concern. A disability-centered perspective focuses on deficits and approaches to minimizing their impact. While disability plays a role in determining strategies and understanding needs, the training aimed to reveal a different way of thinking about the child with MDVI.

On the post-training questionnaire, participants gave short answers to reveal their thoughts about the training. Twelve out of 16[[1]](#footnote-0) participants mentioned the Five Big Ideas (or referred to one of the five) as one of the “most important” things that they learned during the training. In contrast, only four of the participants listed knowledge about MDVI as “most important.” Additionally, 13 of the teachers said they planned to incorporate the Five Big Ideas into their practice in the next couple of months. This underlined the importance of the Five Big Ideas during the training, as the teachers were repeatedly referencing these new concepts. The Five Big Ideas present a more child-centered teaching approach, which utilizes individual strengths and interests to build interventions. This helps to foreground the child rather than the disability.

Based on their pre/post-training questionnaire responses, participants felt that their knowledge about educating students with MDVI increased over the course of the training. Before the training, teachers self-reported that their knowledge to be “poor” or “fair”. After the training, ten of the participants rated their knowledge as “good” or “very good”, with the remaining six at “fair”. This shift can be seen below in *Figure 2*.

*Figure 2. Change in Participant’s Knowledge*

Over the course of the training week, teachers appeared to be moving away from their focus on disability, which often implies a deficit-based teaching approach. Months later, data from teacher interviews would substantiate this shift towards child-centered thinking. When asked what changes were made in the classroom, teachers cited their use of real objects, attunement to the child’s interests, and their efforts to increase independence. One teacher reported that, “Before training, I always made children follow my teaching plans and directions, now I followed children’s lead, respect their interests, the relationship with students are getting much better, they love to learn more than before.” Together, the teachers’ interview responses revealed a theme of focusing on the child (not the disability), as well as a theme of the ways that they were creating a child-friendly classroom through the use of the Five Big Ideas.

The Five Big Ideas made a lasting impact on teachers, helping them to adjust their educational paradigm. The move from a disability-centered, deficit-based style of thinking towards a child-centered approach is a first step. These changes have impacted the quality of teaching, helping the teachers to think critically about their students’ needs. Still, in the areas of challenges and need for additional training, teachers said that they sometimes struggled with implementation aspects of the Five Big Ideas. Partnering with families was most often mentioned as a challenge. The teacher observations verified this, as teachers were sometimes unable to apply the Five Big Ideas. Still, it was noted that they were trying, and the teachers who were observed a second time appeared to be improving their practice.

These improvements in education did not go unnoticed. Parents told project staff that they felt their children were more school-ready as they transitioned out of the PDPF preschool. Additionally, as a result of outstanding work, the PDPF preschool has been awarded as “Advanced Preschool” by the local government. It is apparent that these trainings positively impacted the teaching practices at the PDPF preschool. As teachers continue to use the Five Big Ideas to guide their teaching, the educational practices at the PDPF will continue to make a difference for students with MDVI.

**Recommendations**

The trainings at the PDPF preschool resulted in lasting impacts on teachers’ perspectives on educating children with MDVI. This was accomplished through the consistent presentation of a child-centered paradigm conveyed through the Five Big Ideas. The central role of the Five Big Ideas challenged teachers to think about their students in a different way.

Still, the teachers continued to need support. Subsequent visits for observation revealed that teachers had not mastered the content from the training, struggling to implement key ideas. For this reason, it is essential that future training efforts consider implementing similar protocols for school visits. During observations, project staff were able to offer insights and dialogue with teachers. This proved to be an invaluable resource, as misconceptions were revealed and staff had opportunities to provide clarity about the Five Big Ideas and troubleshoot strategies for better implementation. Mentorship, whether offered informally through observations or explicitly provided in subsequent visits, is a necessary component of effective training.

It is expected that teachers will not master new teaching techniques over the course of a week, but it should be emphasized that teachers consistently reported that partnering with families was a challenge. Of the Five Big Ideas, this is an area that teachers need the most support with. This is not unique to the PDPF preschool, as many teachers and schools struggle to find ways to increase family engagement. As a central component of the Five Big Ideas, project staff may need to consider additional training methods to increase teachers’ preparedness to navigate the complex relationships with students’ families.

Last, future trainings may benefit from more rigorous data collection. Daily field notes, including project staff reflections, are a valuable source of information. The analysis phase of the research would have been bolstered by more extensive reports from classroom visits, in-depth notes from teacher interviews, and documented encounters with parents, teachers, and administrators. Additionally, while this project focused on the impact of the trainings on teacher behaviors and skills, the impact on the school’s culture and child development was only captured secondarily. This presents other possibilities for future research questions.

1. Due to attrition, 16 of the original 18 teachers completed the post-training questionnaire. [↑](#footnote-ref-0)