Working with Parents who have Cognitive Limitations: Teachers Supporting Student Learning - Phase I Report

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Summary

The idea behind Working with Parents Who Have Cognitive Limitations was to create a program that would help teachers involve and work effectively with parents who might have cognitive limitations.

Through a research grant from the National Institutes of Child Health and Human Development, an IRIS Media research and development team, along with expert consultants, gathered data, developed a video and print materials based on the data, and tested the effectiveness of the program.

Thirty-eight K thru 6th grade teachers participated in an evaluation of the video. Scores on a pre-post test showed that these teachers made large and statistically significant gains in their knowledge of how to work with parents with cognitive limitations. In addition, these teachers rated the video as very realistic and of high quality, and almost all (97%) said they’d be doing something different as a result of viewing the tape. Almost all of these teachers (97%) said they’d recommend the video to other teachers and endorsed the video’s utility for in-service and staff meetings.

Project Aims

Parents who have cognitive limitations often avoid being identified as having a disability, which, unfortunately, just as often means that they don’t get support and assistance that could help them provide for the health and well-being of their families. In Phase I of this project, IRIS Media developed an instructional video for elementary school teachers to raise awareness about this population of parents, and to inform about ways to develop respectful relationships, communicate effectively and promote the self-determination of parents. In addition, written materials providing a summary of the video content and handouts for parents were developed. The instructional video was tested for its efficacy in changing the knowledge, skills, and behavioral intentions of teachers. Project activities were broken down into six tasks which were completed in six months.

Tasks

- Develop a video treatment for an instructional program for training teachers on how to work with parents with cognitive limitations.
- Conduct focus groups with elementary school teachers, parents with cognitive disabilities, and expert service providers to gain feedback on the video treatment.
- Develop a video script, prepare a draft of written materials, disseminate to consultants for review, and incorporate consultant feedback.
- Produce an instructional video and related materials.
- Develop and pilot-test an assessment instrument for the outcome study to assess teacher knowledge and skills in recognizing and working with parents who have cognitive limitations.
- Conduct an evaluation of the instructional materials, using the final version of the assessment instrument, with a sample of 40 teachers from elementary schools throughout Oregon.

Develop a video treatment for an instructional program for training teachers on how to work with parents with cognitive limitations.

A development team composed of Dr. Thorin, the Principal Investigator, and Brion Marquez, the Media Developer, collaborated on the initial content development. Drawing on a review of the literature and personal experience, they developed a video treatment; a preliminary script narrative presenting program content through a sequential account of scenes that includes descriptions of characters, style, mood, and tone of the proposed program. Instructional content focused on the need for teachers to be aware that some parents of students might have cognitive limitations, to understand this reality and to develop respect for these parents. The treatment also presented skills that teachers might apply in effectively communicating with parents who have cognitive limitations.

Conduct focus groups with elementary school teachers, parents with cognitive disabilities, and expert service providers to gain feedback on the video treatment.

The Principal Investigator and the Script Developer conducted three focus groups to review content material, to generate new ideas based on experience, and to provide feedback on the relevance, accuracy, efficacy and cultural appropriateness of the material. The Phase I proposal called for recruitment of focus group participants in the Eugene-Springfield area, which is unique in that it includes programs and supports specifically for families headed by parents with cognitive limitations, as well as a group of professionals who have long-term experience working with this group of families. In responding to reviewers' suggestions, however, we decided to recruit from the Portland metropolitan area so that we might benefit from a greater diversity of viewpoints and from the participation more fathers in the parent group. Focus group participants were recruited by staff at The Arc of Multnomah County in Portland, Oregon. We encouraged the staff to recruit from various schools, organizations and parent groups in order to assure a more diverse subject pool. This approach did prove successful in recruiting a more diverse group of parents,
Focus Group A (parents who have cognitive limitations) consisted of ten parents. Among them were two couples and overall there were three fathers. The group was helpful in validating much of the content that had been developed and in supplying additional information about typical relationships with teachers. Parents voiced frustration in the way teachers tended to communicate with them: not listening, not being clear, being confrontational, not respecting disabilities. Some of the comments included: “They (the school) didn't call us when she (daughter) hurt herself.” They [teachers] think they know more about her than we do.” “The teacher doesn't call, or she calls a day later . . . to say he's being sent home on suspension.” “You don't understand ' you're just a parent and we're professionals.”” “We're not happy; they don't ask us to volunteer.” On the other hand parents liked it when teachers took an interest in their child, listened to parents, were patient in explaining things, or had a good attitude. This discussion with the parents was extremely valuable for the development team in that it provided an insight into the depth of feeling of parents with cognitive limitations when they experience being ostracized and talked down to. As a result of this focus group meeting, the developers decided to include documentary footage in the video to convey to viewers the difficulties, frustrations and challenges that parents with cognitive limitations experience on a daily basis.

Focus Group B consisted of five professionals who provided services for adults with cognitive limitations. The professionals were strongly supportive of the project's goals and were very positive about the treatment content. This group was very helpful in providing additional insights into the problems parents with cognitive limitations face, pointing out, for instance, the ways in which poverty can cause or contribute to cognitive difficulties. They stressed how parents' own, often negative, experiences as school children make them extremely protective of their own kids, and how they worry about their children being teased. They advocated against the use of the term mental retardation in the treatment and recommended instead mild cognitive disability, developmental disability, or slow learner. In general, they opposed the use of any deficit language. They suggested having teachers do a written summary of meeting points to send home with parents, encouraging the use of “people first” language, that teacher parent conferences not begin with teachers launching into problems right away and instead have meetings begin by focusing on student strengths.

Focus Group C consisted of six elementary school teachers, four experienced and two newer teachers. The teachers thought that program content was very much needed and would be helpful for both experienced and novice teachers. One of the teachers pointed out that this program could be used in teacher training since most teacher education now goes beyond curriculum design to include training on relations with parents and classroom management skills. They agreed also that this content would be useful for all school staff including administrative and support staff. The session with teachers was also valuable in framing two goals which the program would recommend for teachers: to encourage parent involvement in school activities and to support parents in providing a home environment that encourages learning. As a group, teachers are convinced that children need sleep (early bedtime), food and routines at home if the child is going to be ready to learn. They also believe from experience that it really is important to involve the parents; that their mere presence in school signals to the child that school counts. Most schools encourage parents as volunteers, and if a parent doesn't work well with students he or she can do things outside the classroom. These include joining in at playground games, making copies at the school office, escorting students to screenings (like vision), participating in safety patrol, attending open houses, and even visiting school to have lunch with their child. The group had other valuable suggestions for altering the treatment. For instance, they pointed out that the treatment's mention of a private teacher's office was not realistic. They also provided information on ways teachers schedule and inform parents about conferences, the order of business at a conference, whether or not they have some snacks available at a conference, how they typically encourage parents to address them, and how notes to parents typically are sent home. The teachers were also invaluable in relating anecdotes that were useful for script development. Finally, teachers strongly advised that the length of the video be no more than 20 minutes so that it fit the usual time available in staff meetings.

Develop a video script, prepare a draft of the written materials, disseminate these materials to consultants for review and incorporate consultant feedback.

Work on the script began immediately after the focus group information was evaluated. The development team decided to divide the script into three sections. Section 1 would employ a docudrama approach to presenting the problem that teachers often face in accepting and communicating with parents who have cognitive limitations and providing some information about the lives of these parents. Section 2 included a documentary section looking at the home life of a couple of parents and some of the challenges they face. Section 3 set out vignettes and exemplars to provide specific suggestions on how teachers could encourage parent involvement in their child's education and provide a home environment that supports learning. These suggestions include tips on using clear verbal communication, simplifying conference agendas so that parents are not overwhelmed, building on parent strengths, allowing parents to reframe agendas rather than insisting on teacher-directed ones, and recommendations for how involving parents in school activities.

The script sent to consultants for review was a shot-by-shot description of the images (moving pictures, graphics, still photos, special effects, and transitions) and the audio (narration, dialogue or interview) to be contained in the video. Project consultants were Cheryl Applegate, a Developmental Disabilities Specialist with a caseload of families headed by parents who have cognitive disabilities; Anne McRae, a Eugene School District 4j school counselor involved in parent-teacher training and 30 years experience as a middle school teacher; and Janice Aho, the Program Manager for the Families with Special Needs Program at Pearl Buck Center, which addresses the needs of families in which parents with developmental disabilities have children born with the potential for average or above-average intelligence. After the consultants had read and made written comments on the script, they met with the development team met to discuss the material. Overall reactions to the script were very positive with specific recommendations for changes in language, emphasis, or factual corrections made during a line by line analysis of the script.

Produce an instructional video and related materials.
Post-production was carried out by the Editor and Producer at IRIS Media's studio. The program was edited on a digital editing system, consisting of a networked Pentium II NT workstation with FAST Silver C5R 601 editing system and serial digital interface (SDI). First, we created a digital offline version, which the Principal Investigator and other members of the project team were able to view to suggest revisions to the program. The Graphic Designer developed graphics and animations using a variety of programs including Adobe Photoshop, Illustrator and AfterEffects, Ultimatte, and Boris FX. Using the ProTools audio system, the Media Producer recorded voice narration, which was then mixed and sweetened with other audio tracks including music and sound effects. We employed a professional voice narrator for narrated sections. We contracted original music that was used as a program introduction and finale and for segues in the program. Finally, a master tape was developed and sent to a professional duplicator to have VHS copies made for use in the study.

Develop and pilot-test an assessment instrument for the outcome study to assess teacher knowledge and skills in recognizing and working with parents who have cognitive limitations.

Due to the fact that this topic has not been addressed before, project staff were required to develop the outcome measure. Extensive pilot testing of the measure was necessary to a) assure face validity of the items, b) develop items sensitive to change, and c) establish test-retest reliability. Project staff generated 38 Likert-type items, and five teachers who would not take part in any further evaluation activities were recruited to participate in a two-hour meeting for an examination of face validity of the items. The teachers first completed the questionnaire, and then participated in a discussion of the items providing feedback on the appropriateness and clarity of language used in the test items. Teachers were paid $50 for their time on this activity. Based on information gathered from the face validity group, significant changes were made to questions prior to the item difficulty test. The answer options were changed from Likert-type scales to forced choice, True/False. In addition, 14 of the original questions were eliminated and four new multiple choice questions and eight open-ended questions were written.

Several recruitment strategies were used in order to recruit as diverse a sample as possible of 70 regular elementary education teachers for the on-line administrations of item difficulty, test-retest reliability and program evaluation (Task 6). Notices about participation in the activities were placed in the Oregon Education Association newsletter that reaches all teachers in the state. A similar notice was mailed to 1000 Oregon elementary teachers from a list purchased from Market Data Retrieval. Project staff also mailed flyers to local schools requesting that these be posted on teacher bulletin boards. Interested teachers were asked to contact IRIS Media, either by phone or email. Due to the heavy time demands teachers face, a low response rate was anticipated. Teachers who responded were screened to eliminate any but elementary educators since the program was intended for this group. Use of these methods resulted in 89 recruited teachers, and after attrition we ended up with 66 of the 70 we had originally proposed.

Fifteen teachers participated in an online test of item difficulty and were paid for their participation in this phase of the evaluation. Frequency distributions were examined to determine which questions to retain. Any item on which 50% or more of the teachers had a correct answer was dropped. As a result of these analyses, we retained 10 true/false questions, all four multiple choice questions, and 7 open-ended questions for the test-retest administration.

Thirteen teachers participated in an online (via email) test/retest administration of the instrument with approximately 5 days between the two administrations, and were paid for their time. The correlation between Time 1 and Time 2 total scores was .89. A paired t-test, however, revealed a significant change in this score from Time 1 to Time 2 (t = -4.68, p = .000). To determine the source of that difference, we inspected correlation matrices and paired t-tests for the scores from the numeric section (True/False and multiple choice) and the open-ended questions section.

Conduct an evaluation of the instructional materials, using the final version of the assessment instrument, with a sample of 40 teachers from elementary schools throughout Oregon.
Forty one elementary school teachers were recruited to take part in the evaluation study. Three completed the baseline assessment but dropped out without completing the final assessment; the final N for the evaluation was 38. Almost all were female (92%) and Caucasian (92%). Half of the sample taught grades kindergarten through 2nd; the remainder taught grades 3 through 6. The majority (87%) had taught for 5 years or more; the least amount of teaching experience was 2 years. Teachers were paid $100.00 for their participation in the field test.

All assessment activities were conducted via email. At baseline, teachers were sent a demographics questionnaire and the test questions in an email document. They completed the questionnaires by using the reply function in their email software. Upon receipt of the baseline assessment, they were mailed a video tape containing "Supporting Parents with Cognitive Limitations". After one week, they were sent the exit assessment, consisting of the test questions and consumer satisfaction questions, via email.

Results.

Because of findings from the test-retest examination of our outcome measure, three scores were computed from the test: an Overall Total Score, a score on the numeric questions and a score on the open-ended questions. Each score was computed as the sum of correct answers. Answers to the open-ended questions were first scored individually by the primary investigator and the research methodologist with any differences resolved by consensus. There is a ceiling of 32 possible points on the overall test, 14 from the numeric section and 18 from the open-ended questions.

Paired sample t-tests were conducted to analyze differences on the total score and the two sub scores. Teachers demonstrated large and statistically significant gains on all three scores. Table 1 presents the means and standard deviations on the pre and post test scores.

Table 1

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<tr>
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<th>Total Score</th>
<th>Numeric questions</th>
<th>Open-ended questions</th>
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<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>s.d.</td>
<td>Mean</td>
</tr>
<tr>
<td>Pre Test</td>
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<td>3.32</td>
<td>6.89</td>
</tr>
<tr>
<td>Post Test</td>
<td>24.46</td>
<td>3.14(a)</td>
<td>9.71</td>
</tr>
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a.) $t(36) = -8.91$, $p<.001$

b.) $t(36) = -7.79$, $p<.001$

c.) $t(36) = -5.37$, $p<.001$

Consumer Satisfaction.

Teachers were asked to rate the video (using a 5 point Likert-type scale; 1=lowest rating, 5=highest rating) on how much it helped them to generally understand parents with cognitive limitations, how to communicate with and involve these parents in their children's education and how to work with these parents in general. They were also asked whether they'd changed any preconceived ideas after watching the video. In addition, they rated the video on realism and overall quality. Open-ended questions solicited general thoughts and reactions and what, specifically, teachers thought they'd do differently after seeing the video.

75% gave the video one of the two highest ratings on realism (mean=4.12, s.d. .80), and 87% rated it as high or very high on overall quality (mean=4.29, s.d. .87). A clear majority also reported that the video did quite a bit or a lot to help them understand parents with cognitive limitations (76%), how to communicate with these parents (71%), how to involve them in their children's education (60%), and how to work with these parents in general (63%). Most (74%) said that some to quite a bit of the information was new to them and that it definitely changed some of their preconceived ideas (76%). Almost all (97%) said they'd be doing something different after seeing the video. When asked what, answers ranged from the general ("Be more sensitive to making sure they feel less intimidated", "Try harder to be more empathetic in my dealings") to the specific ("Provide more visual information", "Follow up more often with phone calls", "I want to listen more to the parent's agenda"). Additionally, almost all of these teachers (97%) said they'd recommend the video to other teachers and endorsed the video's utility for in-service and staff meetings.

"This video would actually be a valuable in-service, unlike the many others that are a waste of time."

"I was surprised that I learned and enjoyed the video. I felt a compassion for those parents in a way that surprised me, as I feel I am a very compassionate person. It's hard to explain, but it made a positive impact on me, and I tend to think "I know it all already" or at least want to believe I do, cuz (sic) to do less is to be cheating my students. So, it was very valuable. I liked the length - perfect for getting the points across without overdoing it."

"Very good information: very sensitive and well done. Much food for thought. We have alerted our principal to this video and its possible use for our staff."

"I'm actually going to give the video to my principal to watch... I'm thinking she may want to show it at a staff meeting."

Discussion.

The product developed and tested in Phase I had a significant positive effect, increasing teachers' knowledge about how to work with and support parents with cognitive limitations. In addition, the product was well-received by this group of professionals. These results are striking, considering that almost all the teachers who evaluated this product were quite experienced; 87% had taught for 5 or more years. This outcome demonstrates that the lack of knowledge about parents with cognitive limitations in professionals who interact with parents can be overcome with appropriate training materials. We believe the materials proposed in Phase II will be equally as successful with nurses and social workers.

References used in the research for this program


**Related Principal Investigators**

.. Elizabeth Thorin, Ph.D.