OERI SPECIAL EDUCATION PROJECT SUMMARY

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Context

The Ozarks Educational Research Initiative (OERI) is a collaborative network for research, development, dissemination, and evaluation among member school districts and the Institute for School Improvement at Missouri State University. Twelve school districts enrolling approximately 61,000 K-12 students were members of OERI during 2009-10. The OERI organizational structure and procedures are specified in a multi-year Cooperative Agreement.

Project Definition

The primary vehicle for district-university collaboration is the project—actions undertaken on behalf of OERI and approved in advance by its members. In July 2009, the OERI Advisory Council, a governing board consisting of one representative from each member district and university, approved the following:

The target project for 2009-2011 will focus on OERI-sponsored activities for the continuous improvement of special education (SPED) student learning and development. Key areas for results-oriented, continuous improvement include instruction, curriculum, assessment, and leadership. Aimed at the OERI collaborative benefits identified in Article 1.1, project activities will involve teachers, principals, and district office staff in the participating districts, staff in the Institute for School Improvement, Missouri State University faculty in the College of Education and faculty in other MSU colleges as appropriate. Also, as needed, this project involves the Southwest Regional Professional Development Center and national experts in special education, differentiated instruction, response to intervention (RtI), Positive Behavior Support (PBS), and other intervention strategies. To anchor the project, a needs assessment will be completed during fall 2009 with teachers and principals within each OERI school district and then across districts. The needs assessment, using both qualitative methods (such as interviews and focus groups) and quantitative methods (such as surveys), will be designed to identify major areas of concern, gaps in performance, available resources, and promising strategies for collaborative research, development, implementation, and evaluation for the continuous improvement of SPED. Results of the needs assessment will be used to guide the development of an action plan that will begin implementation in spring 2010 and continue through spring 2011. A preliminary evaluation of results from implementation of the action plan will be completed by May 2011 and reported to the OERI Advisory Council by June 2011 for further actions.

The remainder of this summary describes the OERI SPED project activities, project evaluation results, and overall observations and implications for future activities.
SPED Project Activities

During fall 2009, a needs assessment survey was completed with each OERI district, an extensive analysis was conducted of OERI district data for SPED academic achievement assessed through Missouri Assessment Program (MAP) testing and Adequate Yearly Progress (AYP) reports, and three meetings were held for project discussions involving representatives of all OERI districts.

During spring 2010, in addition to monthly project meetings, within-district activities shifted to specific action plans for (a) concentrating on the development, implementation, and evaluation of interventions with promise for continuous improvement in SPED communication arts at the middle school level and (b) identifying common areas of need across districts for the collaborative development of core and enabling capabilities for the continuous improvement of SPED student learning and development, and (c) continuing the monthly meetings of district representatives as a cross-district learning community.

In July 2010, district representatives participated in a two-day workshop on co-teaching led by Marilyn Friend, a national expert on the subject. Also during summer 2010, Drs. Arthaud and Hulgus visited ten of the OERI districts and helped to focus and refine action plans that were crafted during spring 2010. Arrangements were made to visit the remaining two districts during fall 2010. Progress on districts’ project-related activities and plans for fall 2010 and spring 2011 was reported to the OERI Advisory Council in September 2010.

SPED project activities during fall 2010 focused on the implementation of action plans followed by the gathering and sharing of evaluation data during spring 2011. In addition to one project meeting during each of fall 2010 and spring 2011, there was an OERI conference on co-teaching models implemented for SPED action plans. A second co-teaching workshop on co-teaching led by Marilyn Friend took place in July 2011 to wrap up the two-year project.

SPED Project Evaluation Results

The completed needs assessment surveys produced useful information about current SPED programs and practices across OERI districts as well as serious concerns for improvement. Among the needs assessment survey results we found that:

- More than one curricular model was used at each level in each district and, with the exception of the secondary level and the curriculum area of spelling, more than one core curriculum was used in each district for reading, writing, and mathematics.
- A large number of different types of assessments (for reading, writing, spelling, and mathematics) and differentiated instruction practices across curriculum areas were used in OERI districts, but the connection of assessment and instruction to curriculum often was not made clear.
- At least one professional learning community (PLC) was reported by each district, most reported multiple PLCs across school levels and subject areas, and common activities reported for PLCs included assessment, planning, and collaboration.
- Considering seven knowledge/skill areas, the perceived abilities of teachers and principals were described as weak to adequate for each of the three school levels, and the lowest rated abilities were for consumers of research and fidelity of assessments.
Our fall 2009 analysis of adequate yearly progress (AYP) data for SPED students over a four-year period (2006-2009) for the combined 11 OERI school districts initially participating in the collaborative effort indicated the following (Note: a 12th district was added in August 2010): (1) the largest percent of students at the “basic” and “below basic” achievement levels in both communication arts and mathematics were at the middle school (grades 6-8) level; (2) at the middle school level, the largest number and percent of SPED students at “basic” and “below basic” achievement for both communication arts and mathematics were in the category of learning disabled (LD); and (3) within the middle school LD population, achievement in communication arts was most lagging at grade 7 for non-fiction and at grade 8 for speaking and writing English, and (4) within the middle school LD population, achievement in mathematics is most lagging for all three grade levels in measurement and for Grade 7 and 8 in geometry. For these reasons, in November 2009, SPED district representatives determined in a joint meeting that significant MAP gains might be made if interventions effective for Learning Disabled (LD) students at the middle school level pertinent to communication arts could be implemented. This decision shaped the remainder of the OERI SPED Project.

From our onsite visits and project reports, we found that each of the 12 districts involved used a somewhat different intervention, with many combining a variety of approaches. These interventions with associated goals for communication arts achievement included:

- Co-teaching (with and without other imbedded interventions)
- Read 180/System 44
- Reading Recovery (with co-teaching)
- Arkansas Literacy Model
- Missouri Reading Initiative
- SRA Reading
- Wilson Reading (with Co-teaching)
- Pyramid Model

Some interventions had been pilot tested or in place prior to this investigation while others (particularly co-teaching) were, on the whole, newly implemented. Both quantitative and qualitative data for evaluating interventions were gathered from all member districts participating in the study, while MAP data was gathered from most, but not all. (See Table 1 for summary of results.)

Based on district self-reports, 82% of all stated goals for middle school LD student achievement were reached or exceeded. Outcomes from interventions were generally positive to very positive in terms of embedded measures such as curriculum-relevant tests. Standardized measures employed by each intervention revealed fairly consistently moderate to large gains in grade levels attained and/or lexile growth. With the exception of the Pyramid model (a multi-faceted, individualized intervention approach), the more structured, prescribed interventions tended to produce the most significant gains, particularly with regard to improvements in MAP communication arts scores.

The average differential between measurable MAP gains and losses (i.e., comparing the numbers of students improving in their MAP category vs. those declining in their MAP category) across these programs was 15.6 percentage points net gain. Co-teaching alone showed some
paradoxically negative results, while other programs that incorporated co-teaching with at least one other interventions fared somewhat better in their specific program outcomes (although there was some missing MAP data). Programs that incorporated co-teaching in addition to another structured approach (e.g., Read 180, SRA Corrective Reading, Wilson Reading, or Reading Recovery) produced an average of 14.8 percentage points net difference between gains and losses. Only two programs used a structured intervention without any additional interventions. Of these two, one had sufficiently large enough numbers of student to evaluate the outcomes. In this program, the observed net MAP gain for communication arts was 18.9 percentage points.

**Overall Observations and Implications for Future OERI Activities**

Structured interventions for LD students in middle school may generally provide better outcomes in terms of both MAP gains and embedded program measures or indicators (i.e., standardized tests incorporated with the intervention). Co-teaching, as implemented by the OERI districts, by itself may not be a sufficiently robust intervention for student performance in special education, although anecdotal evidence suggests that it has a salutary impact on teacher morale. It is unclear the extent to which combining co-teaching with another approach impacts student performance, but (as suggested) the impact may be through teacher morale, which in turn may be related indirectly to teacher performance and MAP performance. Continuing assessments of these and other variables, and their relationships, could result in a fuller understanding of interventions that are effective for particular students in special education.

Drawing on the collective experiences in the SPED project, developing a collaborative network for studying and improving student learning (both within and across school districts) is a worthwhile but highly challenging endeavor. We were fortunate in the SPED project to have not only the support of the school superintendents but also the active involvement of SPED directors and staff as well as principals and teachers at the school level. We have come to appreciate at even a deeper level the complexities of learning, teaching, and factors that influence both. In undertaking the SPED project, we understood that continuous improvement of learning in special education, as well as other facets of K-12 education, cannot be accomplished through a one-shot, two-year project. In summary, by building on these SPED project activities and findings, and by continuing our collaborative research and professional learning communities through OERI projects, we are more likely to approach our goal of continuous improvement than if these opportunities were not present.
Table 1. District Interventions and Results

(Level of structure in curricular program is identified as “high” vs. “low” based on presence or absence of stringent guidelines for implementation of instructional procedures provided by the commercial/research-based program.)

<table>
<thead>
<tr>
<th>DISTRICT/INTERVENTION</th>
<th>LEVEL OF STRUCTURE</th>
<th>DISTRICT ASSESSMENT GAINS NOTED</th>
<th>MAP GAINS NOTED*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aurora/Pyramid of Prevention (Individualized Programming)</td>
<td>Individualized</td>
<td>Yearly Progress Pro: 275% Pre-/Post</td>
<td>MAP Gains: 50% Improvement Overall</td>
</tr>
<tr>
<td>Branson/Arkansas Literature Model (with Co-Teaching)</td>
<td>Low</td>
<td>NWEA: Average RIT Gain = 6.6 points (52% Met Goals)</td>
<td>77.8% Basic – Advanced 22.2% Below Basic (Pre-2011 data not available)</td>
</tr>
<tr>
<td>Bolivar/Missouri Reading Initiative (with &amp; without co-teaching)</td>
<td>Low</td>
<td>Acuity: +15.33 Traditional Acuity: +5.0 CO-Teaching</td>
<td>MAP data not provided</td>
</tr>
<tr>
<td>Lebanon/Co-Teaching Only</td>
<td>Low</td>
<td>Acuity (6th gr.): -0.36 pts. Scantron (7-8th): -133.3pts.</td>
<td>MAP: Overall more losses than gains; No level drops</td>
</tr>
<tr>
<td>Marshfield/Wilson Reading (with Co-Teaching and/or pull-out)</td>
<td>High</td>
<td>Basic Reading Inventory: 1.79 Reading Level Gain</td>
<td>MAP: Overall equal gains &amp; losses in performance</td>
</tr>
<tr>
<td>Monett/Read 180 + System 44 (Co-Teaching with “Push-ins”)</td>
<td>High</td>
<td>DRA and/or SRI: +111 Lexile Average Gain</td>
<td>MAP: 17.4% Gains vs. 4.3% Losses</td>
</tr>
<tr>
<td>Nixa/Reading Recovery (with Co-Teaching)</td>
<td>Moderate</td>
<td>SRI: +131 Lexile Average Gain</td>
<td>MAP: 18.1% Gains vs. 5.6% Losses</td>
</tr>
<tr>
<td>Ozark/Reading Recovery (with Co-Teaching)</td>
<td>Moderate</td>
<td>Scantron: +103.8 Lexile Average Gain</td>
<td>MAP: 27.3% Gains vs. 6.1% Losses</td>
</tr>
<tr>
<td>Logan-Rogersville/SRA Corrective Reading (without Co-Teaching)</td>
<td>High</td>
<td>Informal Reading Inventory: +1.82 Reading Level Gain</td>
<td>MAP: Gains outstripped Losses 2:1</td>
</tr>
<tr>
<td>Springfield/Read 180 + System 44 (without Co-Teaching)</td>
<td>High</td>
<td>SRI: +144 Lexile Average Gain (+2.1 Grade Level Gain)</td>
<td>MAP: 27.0% Gains vs. 8.1% Losses</td>
</tr>
<tr>
<td>Willard/Read 180 + System 44 OR Missouri Reading Initiative (with Co-teaching)</td>
<td>High</td>
<td>SRI (7th &amp; 8th): = +94.6 Lexiles or +1.36 grade levels</td>
<td>MAP: 25.0% Gains vs. 12.5% Losses</td>
</tr>
</tbody>
</table>

* Gains noted compare FY2011 Missouri Assessment Program to FY2010 data.