THE NATIONAL INSTITUTE FOR LITERACY THE PARTNERSHIP FOR READING

At Risk Students, High Achieving Schools Online Library Final Report

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At Risk Students, High Achieving Schools Online Library

Final Report

This document is the final report of the National Institute for Literacy's (the Institute) At Risk Students, High Achieving Schools Online Library project performed by RMC Research Corporation. The purpose of the project was to create an online library of research studies on "At Risk Students, High Achieving Schools" in academic achievement for at-risk students in grades K-3. The reference library is intended for use by interested individuals or groups for reference and research purposes. It will be housed on the Institute website.

This systematic review of the literature identified 757 unique citations published between January 1, 2000 and the present. Careful reading of these abstracts eliminated 411 citations that fell outside the boundaries of the project, primarily because they were not about K-3 students or because the students or schools were not at-risk for failure.

RMC performed double reviews of the remaining studies for their relevance, outcome measures, and design based on a set of inclusion criteria. Of those 346 studies, 65 met the criteria for inclusion. We also assessed each of the final 65 studies to determine if the studies identified exemplar schools and had been conducted within the most recent two-year period. Seven studies identified schools; of those, two had been published within the last two years. Final products for this project are an Excel database that lists important characteristics of each of the 65 selected studies and a Word document that provides bibliographic and study information on each.

The remainder of this report summarizes the project goals, details the methodology, identifies the products, and presents options and recommendations on ways that the Institute can use those products.

I. Primary Goals of the Literature Search

The primary goals of the literature search were to:

- 1. Locate recent scientifically based research studies that identify effective classroom instruction or teaching strategies and practices.
- 2. Within the resulting collection of studies, identify "At Risk Students, High Achieving Schools" as evidenced by academic gains of K-3 at-risk students from studies that provide sufficient and replicable information about classroom practices and school wide programs that characterize the schools that beat the odds.

II. Methodology

RMC conducted a systematic and comprehensive literature search of the research base on the academic achievement of K-3 at-risk students to identify and select relevant studies for inclusion in the library.

Search Parameters

The search focused on peer-reviewed professional journals; however, we also searched non-peer-reviewed professional publications issued by professional organizations, institutions or other educational groups.

For the first goal, the search for research studies went back five years (studies published no earlier than the year 2000). The types of research studies included those that were quantitative (experimental, quasi-experimental, and correlational), qualitative, and descriptive.

For the second goal to identify specific schools that beat the odds, we limited the search for exemplar schools to studies that were no more than two years old, recognizing that schools change rapidly and that a change in administrative or teaching staff could affect classroom instruction from year to year, as could changes in the student population, state mandates, and other events. It is important that online library users who plan to visit or contact an exemplar school see the setting as it was described in the study and not one that has changed in significant ways since it was identified as exemplar.

For the purpose of the literature search, we defined "At Risk Students, High Achieving Schools" as schools with a high percentage of at-risk students that consistently show progress in student achievement, especially in reading.

Search Descriptors

RMC identified search descriptors. The descriptors were divided into three groups and included terms such as the following:

Group 1 – Student or school characteristics

- Early elementary
- K-3
- At-risk
- Disadvantaged students
- Remedial readers/students
- Low performing students

- ELL
- High performing schools
- Title 1
- High poverty

Group 2 – Program (school or instruction) characteristics (independent variables)

- Teacher quality
- Effective reading instruction
- Effective classroom instruction
- Effective teaching
- School improvement
- School reform
- School-wide programs
- Effective schools
- School wide reading improvement

Group 3 – Academic achievement (outcome variables)

- Reading achievement
- Achievement gains
- Reading gains
- · Literacy gains
- Academic achievement
- Student achievement

Search procedures

Using the above descriptors, we conducted searches of PsycINFO, ERIC, and other appropriate professional, educational, or research web sites. Hand searches of recent journal articles not yet added to the electronic databases and other appropriate sources were performed as needed. In addition, we searched the reference sections of any meta-analyses or research reviews identified through the above process.

Coding Scheme and Study Selection Process

To ensure that quality studies were identified and selected reliably, RMC developed a coding scheme for the study selection process. Coders were trained on the purpose, content, and procedures of the coding scheme, and each study was reviewed by at least two coders. The study selection process had three steps.

1. <u>Preliminary screening of studies.</u> A total of 757 abstracts of studies published between January 1, 2000 and the present were identified through a search of ERIC

and PsycINFO, were printed, and then further screened for relevance to the purpose of this study. Preliminary screening criteria included the following:

- Focused on K-3 at risk students, but under certain circumstances could include studies involving K-6 or K-12 students when reporting on a K-3 intervention
- Published in professional journals; published in other professional, educational, or research publications; or available through web-based professional, educational, or research resources (e.g., professional and research organization web sites, dissertation abstracts, etc.)
- Published between January 1, 2000 and the present
- Must be "studies," including those that are quantitative (experimental, quasiexperimental, and correlational), qualitative, and descriptive.
- Quantitative studies must include outcome measures/data of reading and/or other academic achievement; qualitative and descriptive studies must include data focused on an academic area such as reading or math

In addition, the search identified references and abstracts of secondary analyses of school data or student data, such as a meta-analysis or a best evidence synthesis or a literature review, so their references could be examined for potential studies or reports.

Of the original 757 abstracts, this step identified 346 possible studies that fit the initial inclusion criteria and were continued on to the next step.

2. Selecting and reviewing studies for Goal 1. This step involved obtaining, reading, and analyzing the 346 studies to select those studies or reports that met the first goal. We obtained and reviewed the full report for each of the studies on the list of studies/reports that met the screening criteria for inclusion in the online library. This included the full reports of secondary analyses such as meta-analysis that were examined primarily for potential studies listed in their bibliography.

We reviewed the studies for their relevance, outcome measures, and design quality based on the following set of inclusion criteria:

- A majority of the students in the study must be at-risk or low-performing children in grades K-3. Studies including at-risk or low-performing students in grades K-6 will be included if one of the following two conditions is met:
 - 1. The data are presented and reported separately for students in K-3; or
 - 2. If the data are combined and presented across grade levels, the majority of the students must be K-3 students.

- Students must be from schools with one of the following risk conditions:
 - 1. A minimum of 40 percent of student population on free- or reduced-price lunch,
 - 2. A minimum of 40 percent of student population identified as ELL, or
 - 3. The school or students are described as at-risk in one or more academic areas.
- Study design and methods must be described in sufficient detail to allow judgments about their quality (e.g., rigor of design, appropriateness of methods for data collection and analysis)
- There must be clear description of the school/classroom programs or interventions, with sufficient detail for replicability or transportability, if applicable.
- For quantitative studies, academic outcomes must be measured and reported, and the measures for the outcomes must be described in sufficient detail (e.g., type of assessment, reliability/validity, etc.)
- For descriptive, ethnographic, and case studies, there must be sufficient
 information regarding the process for data collection and analysis to allow
 judgment of their quality.

Of the 346 studies we obtained, read, and reviewed, 65 met the above criteria for inclusion in the library.

- 3. Identifying exemplar schools for Goal 2. This step involved selecting studies to identify exemplar schools. Studies or reports that were selected for the first goal were further screened for this purpose. Criteria included:
 - The studies must provide sufficient information to identify the schools.
 - The studies must report positive findings for the program/intervention.
 - The studies must meet all the criteria established for goal 1.
 - The studies must be no more than two years old.

Of the 65 studies that met the goal 1 criteria, 2 studies met all of the goal 2 criteria.¹

¹ In assessing why this number was low relative to all 65 studies considered, we recognized that five additional studies met every goal 2 criteria except for currency (they were between two and five years old). The other 58 studies simply did not identify the schools involved. From RMC's experience inviting schools to participate in large federal projects that would produce the types of reports identified in this literature search, we know that most schools and districts participate somewhat reluctantly. A common condition negotiated by schools for their participation is anonymity for the school. This reflects the reality that most schools are simply not willing to put their reputation on the line and have the (possibly less than favorable) results publicly identify their school.

Database

Once studies that met the selection criteria were identified we created a new database with the complete reference information including the abstract for each study. This database was designed to include all studies that met the criteria for goal 1 and those that also met the criteria for goal 2.

III. Final Products

There are two final products: an Excel database and a Word document. The Excel database contains a list of the important characteristics of each of the 65 research studies identified through the literature search as meeting all criteria. The database includes the following information about each study:

- Author
- Publication year
- Publication title
- Publisher source
- ERIC or PyscInfo ID number
- Number of pages
- ERIC or PyscInfo availability of full text version
- Abstract
- Level of study rigor
- Content area(s)
- Number of pages
- ERIC or PyscInfo availability of full text version
- Whether study met criteria for goal 2

The Word document includes (a) a reference list of all 65 documents in standard bibliography format and (b) a single page entry for each study that provides all information for that study, including the abstract.