



THE WHAT WORKS CLEARINGHOUSE

www.w-w-c.org

By Edith Gummer

The What Works Clearinghouse (WWC) was established in 2002 by the U.S. Department of Education's Institute of Education Sciences. It addresses the need educators, policymakers, researchers, and the public have for scientific evidence of what works in educational interventions so that they can make informed decisions about what and how to teach.

The intent of the clearinghouse is to provide these stakeholders with an independent evaluative summary about existing research on the effectiveness of a number of curricular and instructional interventions that have wide impact on schools and schooling.

The clearinghouse, which is in development, will conduct comprehensive research reviews of interventions in these areas:

- Beginning readers
- Mathematics curriculum
- High school dropout prevention
- Peer-assisted learning in elementary schools
- Adult literacy
- Safe schools
- English language learners

The clearinghouse is centrally involved in the determination of what counts as “scientifically based research in education,” and that effort is not without controversy. The clearinghouse emphasizes the connection between research design and the nature of the question under investigation.

Figuring out “what works” has a specific focus on effectiveness. The current consensus of the U.S. Department of Education is that the best way to determine cause and effect is through experimental studies that develop evidence based on designs that involve random assignment of interventions to treatment and control groups.

A second, less preferred alternative involves quasi-experimental research designs that also involve treatment and control groups without the random assignment.

Some educational organizations, including the American Educational Research Association and the American Evaluation Association, have objected to the identification of randomized control trials as being the sole research design that demonstrates causal relationships. Position statements from these organizations point to the use of correlational studies in medicine, such as those that have examined the relationship between smoking and cancer, as providing conclusive evidence about cause and effect.

Additionally, these organizations are concerned about ethical issues surrounding the use of experimental methods in schools, as well as the scarcity of experimental studies on topics of significant relevance to schools.

Another, and not unrelated, difficulty that is inherent in the process of determining what works is the nature of the educational research literature base from which studies are identified. The clearinghouse has not targeted only studies produced in peer-reviewed journals. There is a “gray” research literature base of papers that have been presented at meetings or published as chapters in books. This gray research may contain the only reports of certain research studies. The appellation of “gray” to this research refers to the difficulty of obtaining this fugitive research because it is often not published in easily accessible forms.

HOW IT'S DONE

From its Web site and professional network, the clearinghouse solicits suggestions for topics from various stakeholders and identifies hot topics from reviews of existing research and policy directives. The clearinghouse is concerned about the effectiveness of curricular and instructional interventions in a wide range of topics, from “technology,” to “models of curriculum,” to “formats of professional development.”

A topic is defined by the type of intervention (e.g., use of modeling software), an intended outcome (e.g., increasing mathematical literacy), and the population that receives the intervention (e.g., middle school students). A topic is chosen based on its relevance to improving student achievement, the demand from researchers and practitioners for summaries of research on that topic, and the likelihood that there is sufficient high-quality research available on the topic.

An evidence team, including content and methodology experts, and a group of reviewers select high-quality research reports from the available literature on a particular intervention. The team then evaluates the strength of the cumulative evidence the reports indicate about the effectiveness of the intervention.

The team's report is then reviewed and approved by a technical advisory group, peer reviewers, and the U.S. Department of Education. Finally, reports are posted to the What Works Clearinghouse online searchable database for use by those who need information to make decisions about curriculum, instruction, and educational policy.

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