



# THE CAMPBELL COLLABORATION

Preparing, maintaining and promoting the accessibility of systematic reviews of the effects of social and educational policies and practices

Methods Group Newsletter

Volume 1, Issue 1

January 2002

## *Methods Groups Provide Advice on C2 Policies to Steering Committee Input Will Be Sought at Annual Meeting*

Campbell Collaboration Policy Briefs are being prepared for the C2 Steering Committee and are meant to help the Committee establish policies relating to the C2 databases and the preparation of systematic reviews.

The broad domains to be covered by the briefs and the people who are leading the effort are as follows:

Meta-analytic statistics:

Betsy Becker, Larry Hedges, Therese Pigott

Research design/judgment of research design quality:

Will Shadish, David Myers

Qualitative research: Jennie Popay and others to be determined



Questions to be answered in the Meta-analytic Statistics Brief include:

1. When conducting a research synthesis, is it ever appropriate for a C2 synthesist to do so without

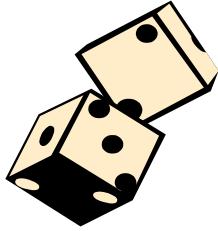
statistically integrating the results of studies? If yes, what characteristics of the literature make this permissible?

2. Should C2 have a role in advancing cross-design synthesis methods (e.g. propensity scoring and alternatives)? What must be considered if/when synthesists combine estimates of effect from randomized trials with estimates of effect based on other designs, such as surveillance systems, passive observational studies, etc?
3. When a meta-analysis is conducted, are there certain statistical procedures that should be routinely carried out? If yes, what are they?

**When conducting a research synthesis, is it ever appropriate for a C2 synthesist to do so without statistically integrating the results of studies?**

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4. When systematic reviewers consider characteristics of statistical analyses, what characteristics should routinely be coded and, if possible, examined for their impact on the outcomes of studies?
5. What should be the role of C2 SPECTR in supporting or informing the statistical research that might be done in the Campbell context?



Questions to be answered in the Research Design Brief include:

1. C2 will focus first on randomized trials and second on nonrandomized trials. What role should research that does not include random assignment of participants to conditions (e.g., epidemiological and observational studies) play in C2 databases and systematic reviews? How should this role be operationalized?
2. When systematic reviewers retrieve and code characteristics of studies, what characteristics should routinely be coded and, if possible, examined for their impact on the outcomes of studies?

**What role should research that does not include random assignment play in C2 databases and systematic reviews?**

3. Should C2 consider developing or endorsing systems for judging the quality of nonrandomized trials as to level of defensibility of their results? Can C2 SPECTR be used to explore the feasibility or appropriateness of a role for C2 in research quality judgments?

Questions to be answered in the Qualitative Research Brief include:

1. What role should qualitative research play in C2 databases and systematic reviews? Should we exploit C2 SPECTR so as to generate casebooks or electronic synopses of exemplars of implementation studies in the context of randomized trials? Can C2 play a role in routinely identifying remarkable examples of new ideas produced by qualitative/process/implementation studies that are embedded in randomized trials?
2. What are the criteria for assessing the quality of qualitative research? How should these be applied to the C2 databases and systematic reviews?
3. When systematic reviewers consider characteristics of qualitative studies, what characteristics should routinely be coded and, if possible, examined for their impact on the outcomes of studies?

**What are the criteria for assessing the quality of qualitative research?**

The process to be followed in preparing the Briefs includes the following steps:

1. Group leaders will develop a draft Policy Brief that addresses each issue.
2. A group of methodological and substantive experts will comment on the briefs.
3. Group leaders will hold discussions of the draft Briefs during the methods break out sessions at the C2 colloquium on February 21, 2002.
4. Draft Briefs will be revised after consideration of comments and submitted to the C2 Steering Committee, along with the comments, for action.

So, if you are attending the C2 Colloquium, come prepared to share your thoughts! ■



# Reports of Methods Groups' Activities

## *The Statistics Group*



**By Larry Hedges**

The statistics group was formed to provide advice on statistical methods and statistical policy, to help with training and support, to assist in quality monitoring, and as a forum for discussion of statistical issues in the Campbell Collaboration. The statistics group had its organizational meeting at the Campbell Collaboration Meeting in 2001. The group agreed to several objectives for the year. They included the preparation of a draft statement on the requirements for statistical software that might be used in Campbell Collaboration research syntheses. This project was undertaken by Michael Borenstein.

The group also discussed the development of statistical standards for Campbell Collaboration syntheses. This was deemed to be a project that would take considerable reflection and should be a long term project for the group. However the beginnings of work on this project are the development of a policy brief on statistical issues which will be submitted to the steering committee at its next meeting (see Page 1).

This project was undertaken by Betsy Becker, Therese Pigott, and Larry Hedges. We also agreed to develop a comprehensive bibliography on statistical methods for research synthesis in the social sciences. This project has just begun.

Perhaps the most visible aspect of the statistics group's work has been its participation in protocol reviews. To date, members of the statistics group have reviewed several protocols from review groups. The experience of participating in these protocol reviews has been quite valuable to the statistics group as well as (we hope) to the review groups. Several individuals at the 2001 meeting expressed interest in helping to develop training activities in Campbell. Rebecca Maynard followed up on her suggestion that a formal graduate course on systematic research synthesis be developed. She has received a grant from the Smith Richardson Foundation to develop a training course on Research Synthesis.

The development of statistical standards for Campbell Collaboration syntheses is a project that will take considerable reflection and should be a long-term project for the group.

One aspect of our long term agenda that has received little attention so far is the use of the statistics group as a forum for discussion of statistical issues and research ideas. We hope that as more Campbell reviews get underway, they will generate problems and controversies that will lead to discussion about proper approaches and ideas for statistical research. We hope to see many of you at the meeting of the statistics group at the 2002 meeting of the Campbell Collaboration in Philadelphia.



## *The Implementation Process Methods Group*

**By Jennie Popay**

The Campbell Collaboration recognizes that findings from studies designed to evaluate the factors that influence the implementation of interventions can make an important contribution to systematic reviews of effectiveness. It therefore set up the Implementation Process Methods Group in February 2001 to work on the methodological issues this will involve. Evaluative studies of the process of implementation frequently encompass both quantitative and qualitative methods. A key methodological question is whether it is 'reasonable' to apply findings from independent process evaluation studies to the results of a systematic review of RCTs or whether only process evaluations embedded within relevant RCTs should be included. There is also a need to develop methods for identifying, recording, appraising and extracting data from process evaluation studies; for synthesizing findings from different studies and for combining these syntheses with findings on effect size. Methodological research is also required to clarify the basis on which findings can be generalized across studies undertaken in different socio-cultural conditions.

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The Implementation Process Methods Group's objectives and the progress achieved to date are briefly described here:

*Objective 1: Group meetings and disseminating information about the Group.* The inaugural meeting of the group took place in February 2001. Another meeting of the group is planned for the Campbell Colloquium in February 2002.

*Objective 2: To begin work on a bibliography of methodological work on systematic reviews of process evaluations.* Work has begun on a bibliography of relevant methodological work and the feasible scope for such a resource. Depending on the range and quality of the literature identified, this could be incorporated into the Campbell register of methodological studies.

*Objective 3: Developing frameworks for quality appraisal of process evaluations.* Members are currently identifying existing frameworks for quality appraisal of studies of implementation processes. These will be posted on the group's website which is being set up at the University of Lancaster. In the longer term these will be subjected to critical appraisal and review and recommendations would be made for use in systematic reviews. Draft guidance on the inclusion of findings from qualitative research into systematic reviews has been produced for the *Guide on the Conduct of Systematic Reviews* published by the Centre for Reviews and Dissemination at York University in the UK.  
<http://www.york.ac.uk/inst/crd/report4.htm>

*Objective 4. Develop proposals for funding for methodological research.* Funding has been obtained, jointly with Professor Helen Roberts of City University, London, from the UK Health Development Agency for some exploratory work linked to two existing systematic reviews of the effectiveness of child accident prevention interventions. Other collaborative proposals are being developed.

*Objective 5. Training.* The group, together with the ESRC funded Evidence Based Centre at Queen Mary University of London, has obtained funding from the Health Development Agency to organize an international workshop in the spring of 2002 to consider the methodological implications of different approaches to the synthesis of evidence for policy. The group also plans to organize an introductory training session at the 2003 Campbell meeting. Currently, around 20 people from five countries are active members. We are looking

for more people willing to contribute. Professor Jennie Popay and Roger Dunston are the conveners.

If you want to get involved with the work of the group or simply find out more about us then contact one of the conveners, preferably by e-mail.

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## ***Quasi-Experimental Design Group***

**By David Myers**

Ideally, many of the primary studies that will be used as part of systematic reviews prepared by members of the Campbell Collaboration will be based on high quality randomized field trials. However, much of the research in the social sciences is based on designs that use other methods such as regression analysis with naturally occurring groups or on matched comparison groups. Because of the abundance of information generated by quasi-experimental designs and because of the need to use these designs in some settings, it is critical that the consumers of this information know when such designs produce credible evidence.

The goals of the quasi-experimental design (QED) group include: (1) conducting empirical studies that help assess the performance of various research designs under different conditions, (2) providing advice to substantive review groups on the use of findings from quasi-experimental designs, and (3) to serve as a forum for discussing alternatives to the use of random assignment for estimating program impacts. The co-conveners for the QED group are David Myers, Mathematica Policy Research, and William Shadish, University of Memphis. The immediate agenda for the group includes the development of a policy brief concerning the coding of

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information about randomized studies and quasi-experiments in systematic reviews, and development of recommendations concerning the use of studies having quasi-experimental designs when conducting systematic reviews. This policy paper will be shared with members of the QED group and the Campbell Collaborations' Steering Committee. Besides preparing the policy brief, the QED has obtained indirect support through grants received by Mathematica Policy Research. The grants will be used for the conduct of two systematic reviews. The first review will focus on methodological studies in which results from randomized experiments

are compared with results from quasi-experimental designs. Examples of this line of investigation include ongoing work by Hollister, and by Agodini and Dynarski, and published work by Friedlander and Robins. The second systematic review, which will focus on a specific policy area, such as a specific education intervention, will compare results where different methods are used to examine the same or similar interventions (e.g., the use of comparison group methods and random assignment methods to estimate the impacts of class-size reduction). ■

## *Five Campbell Projects Receive Funding*



In June 2001, the Smith Richardson Foundation and in October 2001 the William and Flora Hewlett Foundation provided start-up funding for five projects to facilitate the development of the Campbell Collaboration and test the application of proposed review and synthesis methods to real-world policy questions. The Campbell Collaboration aims to (1) utilize scientific standards in conducting systematic reviews of research on social and behavioral policies and programs and (2) make the findings easily available to policy makers, practitioners, and the public. The Campbell Collaboration intends to offer its systematic reviews of evaluation evidence along with full disclosure of how it does its work, and will allow others to contribute and use the findings as they find appropriate. Also, the Collaboration's systematic reviews are intended to be updated regularly, to incorporate new evidence or respond to legitimate criticisms of methods as these may arise. The Campbell Collaboration is the social science sibling to the Cochrane Collaboration in medicine.

The five projects will develop and apply more systematic, rigorous approaches for reviewing and synthesizing the results of research on the effects of behavioral, social, and educational interventions. The activities of the projects are interdependent and collaborative. The projects share the goal of helping the development of the Campbell Collaboration and will share expertise across projects in order for their objectives to be met.

The Campbell Collaboration so far has organized around three lines of work: systematic review methods, social policy problem areas, and dissemination. The five projects will assist in the development of each organizational component.

The Campbell methods groups plan to (1) provide expertise to researchers conducting systematic reviews, (2) improve systematic review methods, (3) offer training on how to conduct reviews, and (4) facilitate the use of systematic reviews in policy making and practice, particularly as this relates to end-user's understanding of methodology and how to assess evaluations of policies and practices.

Four projects contribute directly to methods. The University of Missouri (project led by Harris Cooper) will establish a center for promoting scientific reviews and research syntheses and for ensuring the scientific credibility and consistency of methods used by the collaboration. Mathematica Policy Research, Inc. (project led by David Myers) will appraise quasi-experimental methods to help guide the collaboration's selection of scientific standards of evidence. The University of Pennsylvania (project led by Rebecca Maynard) will produce the collaboration's methods handbook and training materials. The Urban Institute (project led by Matt Stagner) will create a web site for the methods working groups.

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The Campbell social policy problem areas are (1) crime and justice, (2) education, and (3) social welfare. The areas are distinct in that they focus on different contexts for behavior (e.g., the court, the classroom, and the job-training program) and on different outcomes reflective of their context. However, all three areas attract researchers from different disciplines who bring complementary theories and interventions to the policy context, focusing on individual, group, or institutional levels of analysis.

**...all five projects will cooperate to develop a network of people and institutions dedicated to more thorough, careful, and objective procedures for assessing evidence about what works.**

Three projects also contribute to the three problem areas. The University of Pennsylvania (project led by Larry Sherman and coordinated by Anthony Petrosino) received support to facilitate the infrastructure for the Crime & Justice Group's work as well as to stimulate completion of 25 systematic reviews of crime and justice intervention programs. The University of Pennsylvania (Maynard) also will conduct three reviews in education. The Urban Institute (Stagner) received support to conduct three reviews of social welfare interventions and a review in the crime and justice policy area. All reviews will also serve to test the draft handbook of standards and procedures for conducting reviews, the training programs developed for reviewers, and the applicability of the methods across a broad range of policy evaluations.

The Campbell Collaboration dissemination efforts will include developing and coordinating information about Campbell reviews for distribution to policy makers, practitioners, and the public. The key vehicle for dissemination will be a comprehensive web site, including the Campbell Libraries. End-users will be encouraged to help identify priorities for systematic reviews of evidence about what works.

All five projects will contribute to helping Campbell develop its communication and dissemination strategy. The Urban Institute will assess with others the effectiveness of the review process and products. This will be accomplished by obtaining feedback at every stage of development from policy makers on Campbell reviews. The Penn effort on crime and justice has an

operating web site ([www.aic.gov.au/campbellc.j](http://www.aic.gov.au/campbellc.j)) and numerous reviews in process.

These will provide the first test of the Campbell dissemination system. Most importantly, all five projects will cooperate to develop a network of people and institutions dedicated to more thorough, careful, and objective procedures for assessing evidence about what works. These people will provide critical feedback, as well as support, that will shape the development of the Collaboration.

## ***Informal Workgroups Tackling Methodological Issues and Policy Relevance in Education and Social Welfare***

**By Rebecca Maynard and Matthew Stagner**

Several informal workgroups have been looking into issues of selecting highly policy-relevant topics for systematic reviews in education and social welfare and improving methods within such reviews. These groups hope to identify and shape policy-relevant topics so that Campbell Collaboration reviews will best meet current information needs of policy audiences. They are encouraging researchers to develop rigorous data collection and analysis plans and embark on reviews following the C2 review template. These groups are informal, have overlapping membership, and are open to broader involvement.

Through active engagement with policy makers, we have identified a number of topics of immediate policy relevance. At these meetings we also discussed with policy makers strategies for formatting and disseminating reviews for maximum usefulness in policy decision-making.

We have initiated reviews on three topics-- teen pregnancy prevention initiatives (Lauren Scher, U. of Pennsylvania: [laurenscher@yahoo.com](mailto:laurenscher@yahoo.com); the influence of welfare reform on family formation and household structure (Jennifer Ehrle, The Urban Institute: [jehrl@ui.urban.org](mailto:jehrl@ui.urban.org); and strategies for improving mathematics skills in the early grades (Sherri Lauver, U. of Pennsylvania: [sherril@dolphin.upenn.edu](mailto:sherril@dolphin.upenn.edu)). In each case, our intent is to ground the reviews in the context of the current public policy environment and to

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continually engage our policy advisors in major design, analysis, and dissemination strategies as we work through these reviews. In addition, we have established informal working relationships with two other review teams, one working on a review of tutoring programs (Gary Ritter, University of Arkansas: [GaryR@mail.uark.edu](mailto:GaryR@mail.uark.edu)) and one looking at teacher induction and mentoring (Richard Ingersoll, University of Pennsylvania: [rmi@gse.upenn.edu](mailto:rmi@gse.upenn.edu)). Through these formal and informal partnerships, we hope to strengthen the number and quality of reviews on important issues and establish strong templates for future policy-focused review efforts.

We also have formed informal workgroups to support researchers involved in the actual conduct of reviews. At the core of these efforts is a semester-long graduate training workshop being conducted at the University of Pennsylvania. Through the workshop, graduate students conducting reviews for their own research or in collaboration with faculty are provided with formal instruction and technical support. More importantly, they are forming peer support networks and opening communication with and among faculty engaged in or supervising reviews. Harris Cooper and Jeff Valentine of the University of Missouri have been an integral part of the planning and support team for the training workshop. Among the workshop participants are three graduate students actively working on C2 reviews—one on teacher induction and mentoring programs (Jeff Kralik: [jkralik@dolphin.upenn.edu](mailto:jkralik@dolphin.upenn.edu)), one on truancy prevention initiatives (Heather Cohen: [rouseh@dolphin.upenn.edu](mailto:rouseh@dolphin.upenn.edu)); and one on after school programs in collaboration with faculty advisors/mentors (Susan Zief: [zief@dolphin.upenn.edu](mailto:zief@dolphin.upenn.edu)). In all of our efforts, the intent is to build on the strong foundations for review methods laid by efforts such as the *Handbook of Research Synthesis* (Cooper and Hedges), the C2 review protocol recently approved by the Secretariat, and existing highly influential reviews outside the C2 context, such as those conducted by the Packard Foundation's Center for the Future of Children ([www.futureofchildren.org](http://www.futureofchildren.org)).

We invite active dialogue with and participation by any interested in education and social policy issues, whether as a potential reviewer or as an end consumer. In addition to providing collegial support, in some cases, we may be able to provide more active support to extend the bounds of a review or to explore new or different distribution outlets. Rebecca Maynard ([rmaynard@gse.upenn.edu](mailto:rmaynard@gse.upenn.edu))  
Matthew Stagner ([mstagner@ui.urban.org](mailto:mstagner@ui.urban.org))

## Thanks Are Extended to Methods Critiquers

*Merci*

Every protocol submitted to the Campbell Collaboration undergoes a critique that focuses on methodology. During the period Aug. 1, 2001 to Dec. 31, 2002, the Methods Editorial Group provided Review Group Advisors with eleven reviews of protocols. These protocols were titled:

Intervention Programs for Reducing School Truancy  
The Effectiveness of Problem Based Learning  
Learner training for students of English as a second or foreign language  
Peer Assisted Learning in Elementary School Settings  
Review of the Evidence on the Effectiveness of Volunteer Tutoring Programs  
Effects of Correctional Boot Camps on Offending  
Effects of Closed Circuit Television on Crime  
Effects of Cognitive-Behavioral Programs for Offenders  
Electronic Monitoring's Impact on Reoffending  
Effects of Focused Police Interventions on Crime Hot Spots  
Effects of Street Lighting on Crime

Thanks are extended to the following methods group members for providing critiques:

Larry Hedges	Blair Johnson
Mark Lipsey	Therese Pigott
Will Shadish	Jeff Valentine
Jack Vevea	Betsy Becker
David Wilson	Harris Cooper

If you would like to serve as a methods critiquer, please let us know.



Who wants to be a methods critiquer?

## New Methods Groups Forming

Efforts are under way to form C2 Methods groups in the areas of:

- \*Information Retrieval (incl. publication bias)
- \*Place-based Study Designs
- \*Study Coding
- \*Policy Translation
- \*Training
- \*Econometrics

If you have an interest in helping form these groups, please contact us.



**CONDENSED AGENDA\***  
**THE SECOND ANNUAL CAMPBELL COLLABORATION COLLOQUIUM**

*"Joining the Disciplines to Improve Public Policy:  
The Role of Research and Systematic Reviews"*

University of Pennsylvania, Philadelphia, PA  
February 21-22, 2002

\*To view full agenda, including presenter's names, please visit: [http://campbell.gse.upenn.edu/c2-colloquium/tentative\\_agenda.doc](http://campbell.gse.upenn.edu/c2-colloquium/tentative_agenda.doc)

**PRE-COLLOQUIUM MEETINGS: WEDNESDAY, FEBRUARY 20, 2002**

2:00 - 5:30    **Pre-Colloquium Plenary Session**  
5:30 - 7:00    **Cash Bar** (Living Room, Inn at Penn)  
**Dinner on your own**

**DAY 1: THURSDAY, FEBRUARY 21, 2002**

Morning Sessions

7:30 - 8:40    **Registration and Continental Breakfast** (Regents/St.Mark)  
8:45 - 10:10   **PLENARY I: A Year of C2 Progress** (Woodlands Ballroom)  
10:10 -10:30   **Break**  
10:30 -12:30   **PLENARY II: Truancy Across the Disciplines** (Woodlands Ballroom)  
12:30 -1:30    **Lunch**



Afternoon Sessions

1:30 - 3:00    **Break Out: Coordinating Groups**  
**Communication and Dissemination** (Chancellor Room)  
**Crime and Justice** (Woodlands C)  
**Education** (Woodlands A)  
**Social Welfare** (Woodlands B)  
3:00 - 3:15    **Break**  
3:15 - 4:30    **Break Out: Coordinating Groups continue**  
5:00 - 7:15    **Jerry Lee Lecture and Reception** (Thomas Cook, Northwestern University)  
7:30 - 9:30    **Dinner** (Woodlands Ballroom, Inn at Penn)

**DAY 2: FRIDAY, FEBRUARY 22, 2002**

Morning Sessions

7:30 - 8:55    **Continental Breakfast** (Regents/St. Mark)  
9:00 - 10:15   **PLENARY III: The Campbell Review Process** (Woodlands Ballroom)  
10:15 - 10:30   **Break**  
10:30 - 12:30   **PLENARY IV: Sound Evidence In Decision-Making** (Woodlands)  
12:30 -1:30    **Lunch**



Afternoon Sessions

1:30 - 3:00    **Topical Group Discussions across Disciplines** (TBA)  
3:00 - 3:20    **Break**  
3:20 - 4:00    **PLENARY V: Coordinating Group Reports:** (Woodlands Ballroom)  
4:00 - 4:15    **Wrap Up, And Where Do We Go From Here?**