The international Campbell Collaboration (C2) aims to produce, maintain, and make accessible systematic reviews of studies of the effects of social and behavioral interventions, including education programs. This is in the interest of providing information that is useful to policymakers, practitioners, and the public. The collaboration’s primary focus is on reviews of randomized controlled trials; the secondary focus is on quasi-experiments. The collaboration is named for Donald Campbell, the American social scientist who advocated an experimenting society and who championed public and professional decision making based on sound evidence.

Inaugurated in 2000, the collaboration’s structure includes substantive coordinating groups for reviews on crime and justice, education, and social welfare. Methods groups attend to cross-cutting issues on statistics, quasi-experimental design, information retrieval, and process and implementation in the context of randomized trials. C2’s internationalization and communications group coordinates the collaboration’s relationships with partner organizations that have related missions, end-user networks, Web sites, and other initiatives. This is to ensure that the information is accessible to people and intermediary organizations. An international steering group is responsible for setting policy. The secretariat, which is the collaboration’s operational center, supports all of the activity.
The Collaboration’s Potential Contribution

The potential value of the Campbell Collaboration—and that of its older sibling in health care, the Cochrane Collaboration—lies partly in its uniqueness. No other existing organization in the social, educational, and behavioral research sectors at the international level

is dedicated to systematic reviews of high-quality studies of effectiveness,
is international,
employs advanced statistical methods,
adopts transparent and uniform standards of evidence,
specifies rigorous procedures to avoid bias in the screening of studies and in producing reviews,
continuously updates reviews,
combines new technologies with conventional methods to achieve its aims,
attempts to end-user networks, and
includes people from diverse academic disciplines.

The Campbell Collaboration’s Web site (http://www.campbellcollaboration.org) provides information about its activities, procedures, policy briefs, reviews, products in development, and related organizations. The people who contribute to Campbell take time to produce reports that are published in peer-reviewed journals and books. Some of these are referenced in what follows.

Precedent for the Campbell Collaboration: Cochrane

The Campbell Collaboration is patterned partly on the Cochrane Collaboration in health care (http://www.cochrane.org). Established in 1993, the Cochrane Collaboration has produced over 1,000 systematic reviews of studies of health-related interventions, and over 800 reviews are in preparation. It has developed uniform and high standards for reviews and the studies that are reviewed. The Cochrane Collaboration has developed infrastructure for managing the production of reviews, including software, CD-ROM, and Web-based technology for delivering reviews to users. Its registry on randomized trials in health care and related topics contains over a quarter-million entries. See Chalmers (2003) and the references therein.

The Campbell Collaboration builds on the Cochrane Collaboration’s experience. Both Campbell and Cochrane cooperate to understand how to produce high-quality reviews based on excellent evidence to serve the public interest. Thus, the two collaborations are expected to deliver more holistic answers to issues raised by policymakers, practitioners, and the public. A holistic understanding of evidence is especially important in supporting learned decision making in the fields where health and social problems are intertwined.

A Scenario and the Rationale for the Campbell Collaboration

Imagine a scenario in which representatives of city’s human services department, schools, police, and the juvenile courts meet to identify problems that they will jointly focus on over the next 2 years. They select truancy as one of the severe problems to be addressed.

To learn about which truancy programs work, staff members download Campbell Collaboration systemic reviews of studies of effectiveness from C2’s Web site. The reviewers had earlier screened 3,000 documents that purported to provide evidence, sifted them to identify the several dozen studies that actually provided defensible scientific evidence, and further sifted to understand and to report on
the most trustworthy of results. The process from start to finish is peer reviewed and follows rules of evidence that are as up-to-date as possible. The review of the most reliable evidence says that some programs have negative, rather than positive, effects; other programs are found useless. The interagency city group elects to implement two programs that fit with their aims and are justified on account of evidence on positive effects.

This hypothetical scenario depends on the fact that, over the past 3 decades, the volume of research available to policymakers, practitioners, and others in the social and health sectors has increased dramatically. From crime prevention to education reforms and welfare services, one can find hundreds of studies that purport to examine the effectiveness of social policies and programs. Policymakers expect that these studies will assist in making sound decisions about which programs and policies to continue, expand, or abandon. Practitioners look to the research for prescriptions about how best to carry out their work. The public seeks evidence that public policies are having their intended effect. The scenario also depends on the assumption that evidence will be taken seriously in decisions. That evidence-based decision making is taking root in the social sector as well in the medical sector is demonstrated in welfare reform policies, job training, and criminal justice (Davies and Boruch, 2001).

The Campbell Collaboration and the Cochrane Collaboration assume that evidence that is sufficient for a good summary may or may not exist. It is in society’s interest to learn that the evidence on the effects of particular interventions is sparse or absent, that it is emerging, or that the evidence is of poor or good quality.

What is clear is the interest across disciplines in the production of the ingredients for trustworthy reviews and for specific decisions, notably interest in randomized trials. See, for instance, Sherman’s special issue of the Annals of the American Academy of Political and Social Science (2003), concerning social science policy. See also Farrington and Welsh’s edition for the Annals (2001) on what works in crime prevention and on the role of randomized trials and quasi-experiments in contributing to reviews that cumulate reliable evidence. Green and Gerber’s special issue of the American Behavioral Scientist (2004) concerns experimental methods in related arenas, the political sciences. At the Fifth Biennial Conference of the World Bank’s Operations Evaluation Department, several papers reviewed contemporary progress in the conduct of massive trials in the developing world (see the references in Boruch, 2004).

**The Campbell Collaboration’s Operating Principles**

The Campbell Collaboration’s operating principles, adopted at the inaugural meeting in 2000, help to make clear the values that collaborators have in joining this effort and help to shape procedures for generating systematic reviews. They also influence the development of infrastructure, notably by implying what kinds of human resources are needed to achieve C2’s aims. The Campbell Collaboration is based on the following principles:

- fostering open communication and cooperation between researchers and policymakers, practitioners, and the public;
- building on the enthusiasm of individuals by involving people of different skills and backgrounds;
- avoiding unnecessary duplication, by good management and coordination to ensure economy of effort;
- minimizing bias by maximizing scientific rigor, assuring broad participation, and avoiding conflicts of interest;
keeping up-to-date by a commitment to ensure that reviews are maintained through identification and incorporation of new evidence;

promoting reviews that use outcomes relevant to end users;

promoting access by widely disseminating the collaboration’s products and by developing strategic alliances; and

promoting continuity by ensuring that responsibility for reviews, editorial processes, and key functions is maintained and renewed.

These operating principles drive the procedures that are used to generate a major product of the collaboration: systematic reviews. They also drive the development of the raw materials that support systematic reviews, such as registries of randomized trials, editorial groups, methodological studies, and (in the future) maps of the evidential terrain.

Current and Planned Products

Many of the Campbell Collaboration’s products are given in the collaboration’s Web site library, which is updated as often as resources permit (http://www.campbellcollaboration.org). The first core product is the C2 Social, Psychological, Educational and Criminological Trials Registry (C2-SPECTR). This electronic register Web site currently contains over 12,000 entries on randomized trials and what seem to be randomized trials. Unique in the world, C2-SPECTR entries are on reports on completed randomized trials, experiments that are underway, and planned experiments. Updated frequently, its contents are part of the ingredients for the collaboration’s systematic reviews and for reviews by others. Petrosino, Boruch, Rounding, McDonald, and Chalmers (2001) describe its early development under Cochrane auspices and its transfer in 2000 to the Campbell Collaboration.

The challenge of developing and populating an international Web-based register of trials is substantial. This depends heavily on manual searches (scanning the full text) of articles in social science journals—namely, because Web-based machine searches are currently insufficient to identify a majority of the randomized trials that are published in peer-reviewed journals and that appear in unpublished reports. See Turner et al. (2003) and the references therein.

C2-SPECTR contains brief abstracts for many of the reports that it cites. These abstracts are often not uniform in content, simply because they come from a variety of sources. Resources to construct uniform and informative abstracts properly are scarce. The What Works Clearinghouse, supported by the U.S. Department of Education Institute of Education Sciences (http://w-w-c.org), has undertaken the development of uniform synopses and assessments partly with the assistance of the Campbell Collaboration. And one can expect this effort to inform the producers of abstracts that appear in journals.

Beyond this, developing such a Web-based register of randomized trials that is complete and as up-to-date as possible has implications for better reporting in journals and for better access to information on grants and contracts made by governments and foundations to do randomized trials. The collaboration is working on this challenge as well as on others that have been identified so far (Turner et al., 2003).

The second main product is the Register of Reviews of Interventions and Program Evaluations (C2-RIPE). The register will contain the detailed systematic reviews that are produced by collaborators, criticisms and comments on the review (if any), and information about the review groups that carry them out. In the best of worlds, this product will include electronic
links, where possible, to all of the original studies that are covered in each C2 review and to microdata sets that were the basis for statistical analyses in each of the studies.

Producing a systematic review of reports that is as bias-free as possible—and then screening, coding, interpreting, and summarizing such reports—is a long process and requires resources. Consequently, production of reviews has been slow. Nonetheless, interim reports that are published in peer-reviewed research journals can be useful. These can guide the improvement of final C2 reports that are published on the Web site. Indeed, some interim products have been award winners in 2003. A Pro Humanitate Award, for instance, was given to Wilson, Lipsey, and Soydan (2003) for their reviews of studies on the extent to which delinquency programs work effectively regardless of the racial or ethnic group to which they are directed. Petrosino, Turpin-Petrosino, and Finckenauer (2000) also received a Pro Humanitate Award for their screening and review of randomized trials on “Scared Straight” programs. Such programs were purported to reduce the likelihood of delinquent behavior. In fact, the best evidence that Petrosino et al. found, which is quite good relative to scientific standards, suggests the opposite effect. The Scared Straight programs hurt youth, rather than help them.

Finally, the Campbell Collaboration library is also designed to contain information on all the procedures, guidelines, and standards used in reviews and about the people responsible for developing each. This includes by-laws and continually updated plans for the C2 steering group, the secretariat, the internationalization and communications group, the methods group, and each of the substantive review groups. The plans include development of a Handbook on Systematic Reviews that will cover details for the entire review process, a glossary of methodological terms and Campbell Collaboration jargon, and contact details for review groups and other entities in the collaboration. The appendix outlines the steps in a Campbell review, the ingredients of the handbook, and each review protocol.

Because some other organizations have aims that are related to the Campbell Collaboration’s, the Campbell library either contains hyperlinks or makes reference to these organizations when resources are sufficient to do so. The U.S. Department of Education’s Institute of Education Sciences (IES), for example, has invested substantial resources in a What Works Clearinghouse (http://w-w-c.org). The Campbell Collaboration assists in this effort, under a contract from IES. It is then sensible for the C2 library to reference work produced by the clearinghouse and to reference IES products that pertain to Campbell aims.

The critically important products, however, are the systematic reviews. We consider this next.

**Systematic Reviews and Other Work**

During the 2000–2001 period, C2 coordinating groups issued invitations to select people to undertake systematic reviews of studies on various interventions. The plans for reviews, called protocols in the C2 jargon, are posted on the Web site.

The Campbell Collaboration’s crime and justice coordinating group has developed protocols and lead reviewers for systematic reviews of studies of CCTV, street lighting, boot camps, hot-spots policing, and cognitive–behavioral programs for offenders. Protocols have been negotiated for production of reviews on length of prison, restorative justice, electronic monitoring, home visitation, juvenile curfews, faith-based programs, child skills training, and treatment of psychopaths. Interim reports that are coupled to Campbell Collaboration efforts are given by Braga (2001) on hot-spots trials; MacKenzie, Wilson, and Kilder...

For the education coordinating group, there are draft protocols and lead reviewers for reviews of truancy programs, voluntary tutoring, peer-assisted learning, and second-language training. Negotiations have been undertaken to determine the feasibility of reviews on teacher induction and mentoring. The C2 review on peer-assisted learning, led by Marika Ginsburg-Block and Cynthia Rohrbeck, has been entrained in the IES What Works Clearinghouse and, on account of the resources that IES can invest, should soon see the light of day (http://www.campbellcollaboration.org). The review planned by Chad Nye and Toks Fashola on dropout prevention has been similarly entrained in the clearinghouse process.

Finally, the social welfare coordinating group has approved review groups on child welfare, learning disabilities, housing and transportation, ethnicity, and workfare. A review of multisystemic therapy trials, undertaken by Julia Littell (2003), is well underway.

Negotiations are underway to identify specific topics that merit systematic review in other areas. The award-winning work by people who contribute to the Campbell Collaboration, on the effects of delinquency program on youth from different racial and ethnic groups, is under expedited review (Wilson, Lipsey, Soydan, 2003).

**Related Work Underway on Randomized Trials**

The Campbell Collaboration has become a locus for people who are interested in the design and execution of studies that produce less equivocal evidence about the effects of interventions than is commonly available. As a practical matter, the collaboration engages people who know about when and how to design and run randomized trials and who want to learn when nonrandomized trials (quasi-experiments and observational studies) produce results that approximate the results of the randomized trials. They want to generate evidence that will permit causal inferences.

The C2 methods group, for instance, has developed policy briefs that attend to the issue of whether and when nonrandomized trials can contribute good evidence (Shadish and Myers, 2001). The Campbell test-bed work included a substantial project that compares empirical estimates from the nonrandomized trials against the estimates of the effects of interventions that are based on the randomized trials (Glazerman, Levy, & Myers, 2002, 2003).

During 2002 and 2003, with the support of the Rockefeller Foundation, Campbell’s secretariat organized meetings in Italy and the United States on “place randomized trials.” Such trials involve the random allocation of entire villages, police hot spots, hospital units, and schools to different interventions, to learn about which interventions work best and when. The work transcends the boundaries of academic disciplines and geopolitical jurisdictions. See Boruch et al. (2004) for background, and see the Web site for the agendas and papers produced for these meetings.

**C2’s Organization**

The Campbell Collaboration was developed by people who volunteered their efforts during exploratory meetings in 1999 and 2000 in London, Stockholm, Paris, Philadelphia, Oslo, Copenhagen, and Helsinki. People from the Cochrane Collaboration who substantially helped included: Sir Iain Chalmers, a physician (United Kingdom); Andrew Oxman, an epidemiologist (Norway); Geraldine Macdonald, who has contributed substantially to the social welfare research area (United Kingdom); and others.

The C2’s organization currently comprises the secretariat and the C2 nonprofit corporation;
steering group; methods group; the internationalization and communications group; and, most important, coordinating groups on crime and justice, social welfare, and education. In addition, Campbell centers with specialized geographical focuses have begun to evolve.

The original steering group was elected at the C2 working inaugural meeting in 2000. The current group includes people from five countries who cover at least a dozen academic disciplines and organizational interests. The group is responsible for developing the collaboration’s policies, for overseeing general operations, and for approving guiding principles for various working groups. Its members represent different substantive areas covered by the collaboration—notably, crime and justice, social welfare, and education; public policy, communications, and infrastructure. Haluk Soydan (Sweden), for instance, is cochair of the steering group with Robert Boruch (United States). Soydan’s expertise lies in the social welfare arena and sociology; Boruch’s expertise lies in statistics and research policy.

The C2’s secretariat, located in Philadelphia and under the direction of Dorothy de Moya, is C2’s operations office. It has been responsible for coordinating C2 activities, organizing the C2 annual meetings and steering group meetings over 2000–2004, developing the C2 Web site, and developing electronic registries of studies that fall within the collaboration’s ambit, such as C2-SPECTR. The secretariat was also responsible for coordinating the U.S. Internal Revenue Service’s approval of the Campbell Collaboration as a nontaxable legal entity incorporated—technically, a 501(c)3 nonprofit corporation in the Commonwealth of Pennsylvania in the United States. The secretariat maintains e-mail lists, other communications vehicles for C2, the C2 Web site, and the Web-based registers of randomized trials.

Under the overall direction of Harris Cooper, four C2 methods groups have been approved since 2001. These methods groups are responsible for guidance and research on methods and for assisting the collaboration to ensure that C2 reviews are of the highest quality. They focus on statistics (chaired by Larry Hedges, United States), quasi-experiments (David Myers, United States), information retrieval (Hannah Rothstein, United States), and process–implementation studies in trials (Jenny Popay, United Kingdom). Each of these groups has developed mission statements and auxiliary information, but they have advanced at differing paces. The Glazerman et al. (2003) interim report, on comparing the results of randomized trials against those based on nonrandomized data, has been remarkable in generating considerable interest in randomized trials as a source of less-biased estimates of program effect. The C2 methods group members also serve as editorial advisors on reviews undertaken by all other C2 review groups.

The C2 internationalization and communications group’s remit is to develop national and international partnerships and strategic planning for dissemination and use of C2 products in cooperation with the C2 secretariat. This includes guiding C2’s Web site development and adoption of related technologies. The group is chaired by Dennis Cheek (United States) of the Templeton Foundation. Amanda Sowden (United Kingdom) contributes as a member of the steering group. Its mission includes understanding how to cooperate and develop relationships with intermediary organizations, to understand how to direct C2 products to particular target audiences.

Because C2 is still young, a formal user-network group has not yet been created as of this writing. On the steering group, Phil Davies, of the U.K. Cabinet Office, represents policymakers’ interests in this quarter.

The C2 crime and justice coordinating group focuses on studies of the effectiveness of interventions in the juvenile and adult arenas,
the prevention and control of civil and criminal offences, and the courts. David Weisburd (Israel) and Anthony Petrosino (United States) have primary responsibility for this group, which has been supported ably by its coordinator, Petrosino, whose award-winning work was cited earlier. Farrington and Petrosino (2001) reported on the crime and justice group’s early development. More recent progress is reported at the Campbell Collaboration’s annual colloquiums (http://www.campbellcollaboration.org).

The C2 social welfare coordinating group attends to studies on the effectiveness of interventions in welfare, including employment and training of populations that are at economic risk; housing and transportation; and social services including those pertaining to child abuse and neglect, minority populations including immigrants, and other topics. This group’s responsibilities include identifying review topics and people who can help in producing excellent reviews and identifying end users. The group’s leadership had depended partly on Geraldine Macdonald (United Kingdom) and Arild Bjørndal (Norway), who serve on the C2 steering group. It lies especially with the people who have developed systematic reviews under the group’s remit, such as Julia Littell (2003), who is the collaboration’s liaison with the Society for Social Work and Research and a steering group member.

The C2 education coordinating group covers studies of the effects of interventions in preschool; early childhood; elementary and secondary school; college and professional education, including medical and health professions education and continuing distance education. Chad Nye took leadership in 2001 as coordinator of the group. Brian Cobb (United States), Bob Bernard (Canada), and Phil Abrami (Canada) replaced the earlier chair of the group and brought resources to it. Nye’s work in Campbell led to this project’s entrainment in the IES clearinghouse effort to review randomized trials mounted to understand whether school-based programs that engage families actually work (http://www.campbellcollaboration.org and http://w-w-c.org).

Each substantive coordinating group has similar aims—to identify topics for review, to engage able people in producing systematic reviews that meet C2 standards, and to assist in the dissemination of reviews through links with end users. Each depends on the infrastructure support of the C2 secretariat, steering group, methods groups, and internationalization and communications group. Cooperation among the substantive area coordinating groups is expected, although not always operationalized neatly, to ensure that C2 transcends conventional disciplinary boundaries.

Each of the coordinating groups in crime and justice, social welfare, and education engages in activities that are the same across groups—namely, understanding how to produce high-quality systematic reviews of evidence. The sameness is a value added by the secretariat, the methods groups, the internationalization and communications group, and the common aim of the people who contribute to the collaboration’s efforts. The differences among the C2 substantive coordinating groups help to keep the collaboration open to new ways of doing things.

Specialized Campbell Collaboration centers are evolving to serve training, production, and communication needs—in particular, to geographic and regional areas. The Center for Systematic Review Methodology at the University of Missouri has provided methodological support to all C2 review groups, C2 regional and substantive centers, and C2 collaborators. As of 2004, this center is likely to move to Duke University, under Harris Cooper’s direction. Its products will include training, communication, and reference database management.

To support regional C2 activity, the Danish Ministry of Social Affairs created a C2 Nordic
Center in Copenhagen. Headed by Mereta Konnerup and directed first toward the social services area, this center can potentially serve as a geographic node for Sweden, Denmark, Norway, Finland, and Iceland. Further, a review and methodology unit has been created at the Universidad de Murcia, in Spain. One of its principals, Sanchez-Meca (2001), contributes to C2, and this center may serve as a locus for C2 methods activity in the Mediterranean region.

Acknowledgements

For the perspectives described in this article, we are indebted to the past and present members of the Campbell Collaboration international steering group. Work on the Campbell Collaboration has been supported by the National Board of Health and Welfare in Sweden, by the Rockefeller Foundation, and by the Knight Foundation in the United States. None of these organizations necessarily agree with the statements made in this paper. This article is based on thinking and contributions of the members of the international steering group of the Campbell Collaboration: Arild Bjørndal, Dennis Cheek, Bob Bernard, Brian Cobb, Harris Cooper, Phil Davies, David Farrington, Geraldine Macdonald, Joan McCord, Hannah Rothstein, Amanda Sowden, Peter Tugwell, Kathie Clarke, Anthony Petrosino, David Weisburd, Julia Littell, and others—such as Sir Iain Chalmers.

Appendix: Steps in Conducting a Systematic Review

1. Formulate review questions
2. Define inclusion and exclusion criteria
   Participants
3. Locate studies. Develop search strategy considering the following sources:
   Campbell Controlled Trials Register (C2-SPECTR)
   Electronic databases and trials registers not covered by C2 SPECTR
   Checking of reference lists
   Hand searching of key journals
   Personal communication with experts in the field
4. Select studies
   Have eligibility checked by more than one observer
   Develop strategy to resolve disagreements
   Keep log of excluded studies, with reasons for exclusions
5. Assess study quality
   Consider assessment by more than one observer
   Use simple checklists rather than quality scales
   Handling of attrition
   Assess randomization and power
6. Extract data
   Design and pilot data extraction form
   Consider data extraction by more than one extractor
   Consider blinding of extractors to authors, institutions and journals
7. Analyze and present results
   Tabulate results from individual studies

---

1Taken from Cooper and Campbell Collaboration Methods Group (2000) and Cooper and Campbell Collaboration Methods Group/Steering Group (2000). Points 1–7 should be addressed in the review protocol.
Examine plots
Explore possible sources of heterogeneity
Consider meta-analysis of all trials
or subgroups of trials
Perform sensitivity analyses, examine
funnel plots
Make list of excluded studies available
to interested readers
Examine Process/Implementation of
Interventions

8. Interpret results
Consider limitations, including
publication and related biases
Consider strength of evidence
Consider applicability
Consider statistical power
Consider economic implications
Consider implications for future research

References

Boruch, R. F. (2004). Discussant remarks:
Randomized experiments and the way forward.
Proceedings of the Fifth Biennial Conference on
Evaluation: The Way Forward. Washington, DC:
World Bank Operations Evaluation Department.
(In press).
Boruch, R. F., May, H., Turner, H., Lavenberg, J.,
Estimating the effects of interventions that are
deployed in many places. American Behavioral
Scientist, 47(5), 608–633.
Braga, A. A. (2001). The effects of hot spots
policing on crime. Annals of the American
Academy of Political and Social Science, 578,
104–125.
Chalmers, I. (2003). Trying to do more good than
harm in policy and practice: The role of
rigorous, transparent, and up to date
evaluations. Annals of the American Academy of
Political and Social Science, 589, 22–40.
Cooper, H., & Campbell Collaboration Methods
Columbia: University of Missouri. Retrieved
from http://www.campbellcollaboration.org/
Fraguidelines.html
Cooper, H., & Campbell Collaboration Methods
preparing C2 protocols for systematic reviews.
campbellcollaboration.org/Fraguidelines.html
based policy. British Medical Journal, 323,
294–295.
Systematic reviews of criminological
interventions: The Campbell Collaboration
Crime and Justice Group. International Annals of
Criminology, 38, 49–66.
Campbell Collaboration protocol for a systematic
review. Non-experimental and experimental
estimates compared. Retrieved from the Campbell
Collaboration Web site: http://
www.campbellcollaboration.org/doc-pdf/
qedprot.pdf
Nonexperimental versus experimental estimates
of earnings impacts. Annals of the American
Academy of Political and Social Sciences, 589,
63–93.
Experimental methods in the political sciences
[Special issue]. American Behavioral Scientist, 47(5).
Lipsey, M. W., Chapman, G. L., & Landenberger,
offenders. Annals of the American Academy of
Political and Social Science, 578, 144–157.
treatment (MST) for preventing placement in
foster care. Presented at the Conference on the
Campbell Collaboration (C2) Test Bed Project,
St. Michaels, MD.
(2001). Effects of correctional boot camps on


