Synthesis of Published Articles from Studies in Educational Evaluation, 2010-2015

Alan L. Webb, Randall E. Schumacker & Amy Tilford
University of Alabama
Alabama, U.S.A.

Abstract
Vallin, Philippoff, Pierce, and Brandon (2015) initiated the practice of cataloguing and categorizing research on evaluation articles. They categorized and classified the most recent 14 years of journal articles published in the American Journal of Evaluation on the basis of the following criteria: place of authorship, research design, data collection method, and research topic. This quartet of scholars called for other researchers to follow their lead by categorizing and classifying research on evaluation studies published in other journals. In this article we have followed their suggestion by categorizing and classifying 176 research on evaluation articles which have been published in Studies in Educational Evaluation over the past six years. We discovered that authorship was distributed mainly between Europe (57%) and North America (23%). Single case (51%), multiple case (17%) and document reviews (17%) were the most popular method of data collection. Studies devoted to teacher performance (38%) and student performance (29%) were topics which received the most attention.

Keywords: Program Evaluation; Teacher Evaluation; Student Evaluation; School-Based Evaluation; Evaluation; Research

Introduction
In this article we followed the advice of Vallin, Philippoff, Pierce, and Brandon (2015) who categorized and reported on seventeen years of research on evaluation articles, which had been published in the American Journal of Evaluation between the years of 1998 and 2014. We followed the same procedure in classifying and reporting on the research on evaluation articles (RoE) published in the international journal entitled Studies in Educational Evaluation between the years of 2010 and 2015. We utilized the definition of RoE developed by Vallin, Philippoff, Pierce, and Brandon (2015) which stated: RoE is systematic inquiry resulting in original findings or in reexaminations of existing data about the practice, methods, or profession of program evaluation...[including] case studies, reflective narratives, studies about evaluation methods, literature reviews, oral histories, bibliometric studies, metaevaluations, experiments, longitudinal studies, simulations, and time-series studies. RoE excludes evaluation textbooks, descriptions of theory, book reviews or evaluation reports even though these might discuss RoE. (p. 8) The journal Studies in Educational Evaluation is a truly international journal devoted to evaluation projects in the field of education. Located in Antwerp, Belgium the journal is edited by P. van Petegem, who is Professor of Evaluation Studies at the University of Antwerp. The Editorial Board of the journal is comprised of 26 Educational Evaluation scholars who represent 14 different countries. The journal publishes four types of articles: (a) empirical evaluation representing evaluation practices in educational systems around the world; (b) theoretical reflections and empirical studies related to issues involved in the evaluation of educational programs, educational institutions, educational personnel, and student assessment; (c) articles summarizing the state of art concerning specific topics in evaluation in general or in a particular country or group of countries; and (d) book reviews and brief abstracts of evaluation studies.
Methods and Procedures

We selected 176 evaluation articles that could be considered empirical evaluation studies, theoretical reflections of evaluation, and literature review or state of the art types of studies. We used the NVivo software program for computer data analysis, and then sorted the journal articles by key word analysis.

Based upon the findings of the NVivo taxonomy, we classified the articles by country of origin, the study’s research design, the data collection methods, and the topics addressed in the article. The next step in our procedure was to examine the abstracts, methods, topic, and data collection sections of each article. Based upon those findings we employed holistic coding (Saldaña, 2014), where we extracted a total of 169 concepts. The final step in our procedure involved the situational mapping (Clarke, 2005) of these concepts, which rendered 24 categories. The 24 categories further indicated a breakdown of ten categories related to research design, eight categories related to data collection methods, and six categories related to research topics.

Results

Figure 1 shows the number of evaluation articles reviewed by year. The most prominent year was 2014, which had 54 evaluation articles. The graph indicates that from 2013 to 2015 there had been an increase in the number of published articles.

Place of Authorship

The Studies in Educational Evaluation is an international journal. In the six years we reviewed, the journal published evaluation articles by over 200 international scholars. A total of 32 countries were represented in the journal’s publication list. Between the years of 2010 to 2015, a total of 176 articles were published in the journal. Figure 2 shows the place of authorship for the published articles. Scholars from 17 European countries accounted for 100 articles (57%). Scholars from the United States and Canada were responsible for 41 articles (23%). Scholars from the five Middle Eastern and African countries published 17 articles (10%). Scholars from six Asian countries contributed 13 articles (7%). Scholars from three Central and South American countries contributed five articles (3%) to the journal.

Research Design

The dominant research design used in the journal articles was the single case study. There were 90 studies (51%) that utilized the single case design. These studies used both quantitative and qualitative approaches in evaluating a single institution, program, or curriculum. The second most popular research design was the multiple case design. There were 30 examples (17%) of the multiple case study design. These studies employed both qualitative and quantitative methods to compare and contrast two or more institutions, programs, or curricula. The third most commonly implemented research design was devoted to some form of instrument evaluation. There were 17 studies (10%) which considered some aspect of instrumentation. These studies focused upon instrument development, instrument validation, along with determining instrument score validity and reliability. The fourth most common research design was the quasi-experimental design. There were 16 studies (9%) which utilized the quasi-experimental design. These studies predominantly utilized a pre-test and post-test in order to determine whether some type of intervention exerted a significant change upon the participants in the study. There were eight studies (5%) which summarized the state of the art in some facet of educational evaluation. These studies are best categorized as literature reviews. There were eight studies (5%) which identified themselves as using a mixed methods research design. These studies employed an explanatory sequential approach in which a quantitative strand was followed by a qualitative strand in order to explain the particulars of the findings which were discovered by the quantitative strand. There were seven other types of studies (3%), which were three narrative studies, two action research studies, one grounded theory study, and one ethnographic study. Figure 3 indicates that the single and multiple case study approach was the prominent method used in the evaluation articles published from 2010 to 2015. The prevalent mixed methods approach had low utilization in published articles. The articles mostly used qualitative and/or quantitative methods separately, and did not embrace the current use and techniques of mixed methods research.
Data Collection Methods

In evaluation studies, data collection methods are notoriously complicated and difficult to categorize. Of the 176 articles reviewed, less than 10% utilized one specific method for data collection. Most of the studies utilized two, three, or even four methods of data collection. For our synthesis of the articles, we categorized the studies based upon what we considered the dominant method of data collection. By dominant we mean the data collection method which governed the major emphasis of the study. The most common method of data collection was survey with 66 articles (37%). Questionnaire usage was included in this category. The second most common method of data collection was interviews with 31 articles (17%). Focus groups were included in this category. Document review data collection method was present in 31 articles (17%).

Document review consisted of journals, feedback forms, evaluation formula, and self-reporting measures. Observation was the fourth most common method of data collection with 15 articles (9%). Database formed the fifth most common method of data collection with 14 articles (8%). Test scores were used as a primary method of data collection in ten articles (6%). Mixed methods were identified as the dominant method of data collection in only eight articles (5%). Finally, one study (1%) employed vignettes as a data collection method.

Figure 4 indicates that the predominant data collection methods were survey and document review. This finding seemed odd given the high percent of single and multiple case study approaches shown in Figure 3 (120 out of 176 articles; 68%). These findings may reflect what is termed, single shot surveys, that are used to evaluate a single school or classroom, and therefore were explained as a single or multiple case study.

Research Topic

The topics found in the 176 evaluation articles were broken down into six general categories. The most popular topic was teacher performance with 66 articles (38%). These evaluation studies included the following subtopics: on-line teaching, student evaluation of teachers, classroom management, professional development, teacher assessment of student learning, teacher preparation, pedagogy, leadership development, decision making strategies, problem solving capacities, use of technology, social networking, procuring of grants, teacher identity development, teacher perspectives on teaching, and mentoring. The second most popular topic was student performance with 51 articles (29%). The types of evaluation studies devoted to student performance included the following: student interest, student motivation, teacher assessment of students, learning styles, student satisfaction, student retention, learning climate, the learning process, test-taking strategies, academic goal formation, peer assessment, critical thinking measures, knowledge acquisition, family expectations, and skill development. The third most popular topic was evaluation procedures with 27 articles (15%). These evaluation studies included: the assessment of evaluation, perceptions of evaluators, evaluations of instruments, evaluation of an institution, evaluation of a program, evaluation of a curriculum, evaluation of a teaching method, and an evaluation of testing accuracy. The fourth most popular research topic was curriculum design with 14 articles (8%). The evaluation studies were devoted to the following topics: leadership development, effective examinations, development of critical thinking skills, curriculum contextualization, program development, special education, and curriculum design. A fifth research topic was categorized as school performance with 9 articles (5%). These evaluation studies were devoted to the following subtopics: adult education, bullying, school assessment, school inspection, internal versus external evaluation, and program implementation. There were nine (5%) articles that did not fit into any of the five major categories and were labeled as other. These articles included the following topics: five studies evaluated various standardized exams, two studies were devoted to educational standards, one study examined administrator performance, and another study investigated parental school choice.

Figure 5 shows that teacher performance and student performance were the two most prevalent topics in the published articles. Evaluation procedures were third in our analysis. Surprisingly, school performance was not a prevalent topic.
Research Topic by Year

The interest in publishing educational evaluation articles witnessed a marked increase over the past six years, progressing from 15 published articles in 2010 to 37 articles accepted for publication in 2015. Figure 6 indicates a dramatic difference in topics published over the six years. Teacher performance dominated the topic category in 2014 and 2015, which is not surprising given the federal, state, and local emphasis on teacher evaluation criteria. Articles on teacher performance showed a dramatic increase from six in 2010 to 20 in 2015. Articles on student performance increased from three in 2010 to 16 articles in 2014, decreasing to nine articles published in 2015. Articles on evaluation procedures increased from three in 2010, to a total of 10 for 2014 and 2015 combined. Articles on curriculum development and school performance had sparse interest in the six years examined in this study.

Summary and Conclusions

There are three practical lessons that can be taken away from this synthesis of evaluation articles published between the years 2010-2015 in the journal *Studies in Educational Evaluation*. The findings apply to methodological progression, dominant interests, and diversity of perspective. Methodological precision is one area in which the researchers who publish in this journal could make significant strides by expanding their use of different data collection methods. Few articles, actually only eight, identified themselves as utilizing a mixed methods approach to evaluation, and followed accepted mixed methods protocols. There could be an effort to apply mixed methods approaches in a more formal way by utilizing the recognized research designs which have been proposed by mixed methods practitioners (Creswell and Plano-Clark, 2011; Teddlie and Tashakkori, 2008). Dominant interests entail two major areas that have occupied the pages of this journal over the past six years. Those interests are teacher performance and student performance. For scholars who are looking for a literature review in these two areas, the journal *Studies in Educational Evaluation* is an excellent resource. For researchers who are looking to disseminate their research findings in these two areas, this journal should be considered as a publication outlet. Diversity of perspective is one of the major strengths of this journal. As a truly international journal with contributions from researchers around the globe, it demonstrates a multifaceted perspective on various areas of evaluation. This diversity of perspective is an advantage to all contributors and subscribers of this journal. They will discover perspectives on evaluation which are broader in focus than other evaluation journals. The cross-fertilization of research perspectives and issues create a tableau for new, innovative, and creative approaches to evaluation issues.

References

NVivo qualitative data analysis software, OSR International Pty Ltd. Version 11, 2015.