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DOES RESEARCH MATTER? AN ANALYSIS OF MEDIA OPINION ON BILINGUAL EDUCATION, 1984-1994

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Abstract

Media opinion pieces, as persuasive rhetorical devices, have recourse to the use of social science research in support of their editorial positions. This study examines the extent to which newspaper and magazine opinion pieces employed scientific research findings in making their arguments in support of or opposition to bilingual education. A content analysis was conducted on bilingual education articles published in educational research journals as well as opinion pieces--staff editorials, signed opinion pieces, and letters to the editor--on bilingual education from five national newspapers and three national news magazines over an eleven year period, 1984-1994. Major findings of the analyses were that (a) 82% of empirical studies and research reviews reported favorable findings on the effectiveness of bilingual programs; (b) only 45% of persuasive newspaper articles took a similar position favorable to bilingual education; (c) less than half of all persuasive newspaper articles made any mention of social science research, while nearly a third relied on personal or anecdotal accounts; and (d) there was no significant difference in terms of position (for or against) between those persuasive pieces which used research and those which did not. Findings are discussed in terms of the means by which academic research information is disseminated and influences on editorial opinion formation from sources outside of the social sciences.

Introduction

Many bilingual education researchers believe that their work as social scientists has the potential to help language minority (LM) children in schools in at least two ways: directly, by influencing and

changing teaching practices; and indirectly, by influencing larger policy debates on LM educational issues. While a great deal of study has been devoted to how teachers do (and do not) use research to form and change their opinions on classroom practice (e.g. Anning, 1988; Clark & Peterson, 1986), little is known about how research is disseminated and used in determining public policy on education. Weiss and Singer (1987) reported that a majority of policy makers who make decisions on social science issues use the newspaper as the primary source of information about scientific information and research. Understanding the role of the press and how it utilizes research findings in formulating its coverage and opinions about education issues is, then, a critical first step in understanding how and if research can have an impact on policy decisions which affect bilingual education.

Nearly one out of every ten children in American elementary and secondary schools now comes from a home where English is not the primary language (McArthur, 1993), and the question of how best to serve the needs of these language minority children will continue to be discussed in a variety of forums, including the nation's leading newspapers and magazines. This study examines the extent to which persuasive articles in newspapers and magazines use educational research to support positions taken on the issue of bilingual education. Before presenting the results of the analyses, the existing literature on the relationship between educational research and the news media will be reviewed, then the methodology and results of the content analyses will be presented, followed by a discussion of the findings.

Literature Review

Using Research in Editorial Writing

Despite the prevalence of editorial page and opinion pieces in American newspaper and magazines, there is little formal guidance offered in either academic or industry publications on what constitutes good journalistic practice in writing those editorials. Stonecipher (1979) presents one of the few comprehensive guides to opinion and persuasive writing in the news media. According to Stonecipher, editorials should be grounded at least in part in reliable research because the editorial reader often cares less about what the newspaper's opinion about an

event or issue is than he does about the basis of that opinion. It is important, therefore, that the editorial show the factual basis of the problem and the reasons underlying the views expressed if it is to be persuasive (p. 73).

He goes on to note that the lack of factual basis can diminish the credibility of the writer and/or the news organization. If this view of the role of research in editorial writing is a generally accepted one in the field then one would expect that research would be referred to and cited in news editorials, including those about education.

Media Coverage of Scientific Research

While several researchers and scientists have commented on and occasionally complained about the media's coverage of their field and individual work (e.g. Best, 1986; Goodfield, 1981; Hansen, 1991; Nelkin, 1985; Nelkin, 1987) or how to improve coverage of it (Adam, 1992), there have been relatively few careful studies of how research is actually represented in newspapers, magazines, and television broadcasts. Tankard and Ryan's (1974) study of news reporting on science, broadly defined to include medicine, biology, the physical and social sciences, and the environment, examined 20 daily newspapers in an attempt to determine the accuracy of press reports of scientific research. The investigators sent copies of the identified stories to the scientist who carried out the research and asked him/her to verify its accuracy. They found that news articles committed on average 6.1 "errors" per story, including omission of relevant information on results and methodology, misquotes of the researcher, and incorrect technical definitions; only 8.8% of the stories were "error-free." More than half of the 193 investigators surveyed said that most media reports on science contain factual errors, while less than a third characterized coverage as "generally accurate." A replication of the study by Pulford (1976), however, produced a considerably lower error rate, 2.1 per story, due in part to her use of a shorter list of error types presented to the scientists.

Singer and Endreny (1993) did a more in-depth analysis of science reporting on one topic, so-called "risk" stories, including accidents, diseases, disasters, environmental hazards. In re-analyzing their raw data (Table 8.1, p. 154), we determined that similar rates of inaccuracies (2.5 per story) occurred in their sample of stories which contained mention of

identifiable research studies. Since Singer and Endreny looked at all stories on their science-related topic, it is possible to determine what percentage of science stories actually cited research, and who was quoted or cited as information sources for the story. "Research" was defined by Singer and Endreny as "systematic, scientific examination of a problem," and included identifiable as well as unidentified studies. Of the 2,228 news stories analyzed, only 28% made any reference to research, with a mere 7% mentioning identifiable published research and 7% citing a named researcher. In a smaller subsample of risk stories (n=781) which were devoted to a specific scientific topic rather than an accident or disaster, and hence perhaps more like single-focused editorial and opinion pieces, the percentage of stories mentioning research is the same, 28%, with 6.5% citing a research scientist by name. Government officials (non-scientists), on the other hand, were cited as sources in 20.1% of the topic-related stories.

Weiss and Singer (1987) concentrated on how the social sciences, including education, were covered in the media for a single year, 1982. They examined 2,701 stories in four major newspapers, three news weeklies, and the three major networks. Of the social science stories, about 4% of all newspaper stories and 3% of news magazine pieces were dedicated to education. While the investigators did not examine the number of errors per story, they did find that a high percentage (86%) of social scientists rated the accuracy of the reporting of the articles in which they appeared "satisfactory" or "mostly satisfactory." Only 34%, however, found general reporting of the social sciences to be "accurate," "mostly accurate," or "accurate considering media constraints." These findings are consistent with those of Tankard and Ryan, who found that there is general dissatisfaction among researchers with the accuracy of science reporting, even though the particular story the surveyed scientist appeared in was judged reasonably correct. Since Weiss and Singer's sample of articles was of those which mentioned social science studies, it is not possible from their data to determine the percentage of stories on a given issue which referred to or cited scientific research.

While there is relatively little on editorial treatment of education in the research literature, several studies have been done on news coverage of education generally. Simon, Fico, and Lacy (1989) discovered in a study of the 12 highest circulation U.S. daily newspapers that in stories

dealing with educational "controversy," which they defined as wrong-doing, impropriety, or policy conflicts, 21% of the stories analyzed "had no contact with one side (of the controversy) or no explanation of why" the opposing viewpoint was not presented (p. 432). This lack of balance may in part be due to the level of experience and dedication of education reporters on many daily newspapers. McQuaid (1989), an education reporter and political analyst, suggests that a high rate of turnover among education reporters is common in news organizations given that the education beat is generally seen as a stepping stone position. Schoonmaker (1985) notes that education is often "the beat that nobody wants" (p. 37), due in part to its relatively low status in the newsroom, a point echoed by career education reporter David Savage (1989).

Reporting Educational Research

There have been no published studies which systematically examine news coverage of educational research in particular. There exist some reports, however, which suggest that education coverage may rely at least in part on "facts" not based on research, and that when research is cited, writers tend to misrepresent the nature of that research, producing a negatively biased view of the condition of American education. O'Neill (1994) found, for example, that a popularly cited list comparing the top problems of public schools in the 1940s with those of the 1980s often used as evidence of the decline of education, was invented by a fundamentalist Christian activist and not based on any research as had been claimed by nationally syndicated editorial columnists such as George Will, Carl Rowan, and Anna Quindlen, and all of the major news magazines and the *New York Times*. Bracey (1995) found that inaccurate reporting of research by news media and editorial columnists was not uncommon. He cites a series of factual inaccuracies in recent newspaper and magazine articles and opinion pieces concerning poor student performance over time and as compared to students of other countries.

Drake (1991) suggests that education coverage is often focused on the negative, a view shared by McQuaid (1989) who believes that such bias is based on the notion that "good news is no news." He cites as examples the attention given to the negative results in The Annual Gallup Poll of the Public's Attitudes Toward the Public Schools which

"turns up a great deal of good news about the public's attitudes toward U.S. education, (but) the percentage of respondents who give their schools `failing grades' garners most of the ink" (p. K2).

Savage (1989) offers some possible explanations for why educational research in particular fails to be reported or is reported inaccurately. An education editor of the *Los Angeles Times*, Savage states that education research is underfunded, rarely addresses issues with a broad view, and is written in prose inaccessible to the layperson. In addition, reporters and writers rely on a series of "media stars" or well-known education figures as experts with the implication that those areas of education lacking such spokespersons are unlikely to receive press attention. This is supported on the editorial level by Endres (1987) who found that 46% of the 92 newspaper editorial writers surveyed said that they contacted their news sources for information in writing an opinion piece. She also found that 75% of the respondents used only their news organization's in-house library, and only 18% reporting using local public or university libraries for research.

On the specific topic of bilingual education, Padilla (1992) suggests that there is a larger philosophical disposition of American society about such bilingual programs that is reflected in the writing of editorial commentators. Citing several anti-bilingual education editorials from the late 70s to the early 80s, he posits four underlying assumptions about bilingualism and public policy that lead opinion makers to oppose bilingual education. The four assumptions are that all immigrants should abandon their native culture and customs in order to adopt those of the dominant society, that language diversity is divisive for the country, that bilingual education segregates students and is ineffective, and that those who do not learn English are lazy or un-American. If Padilla is correct, it may be that the position of editorial writers on bilingual education is influenced more by larger political trends related to immigration and cultural diversity than by any empirical studies of its effectiveness.

The Present Study

From the research cited above, we know that editorial writers must support their positions with some evidence in order to be persuasive, and that news coverage of one source of such evidence, educational research,

can be for a variety of reasons imperfect and incomplete. Aside from informal observations such as those of Savage, Bracey, McQuaid, Drake, and Padilla, no careful study has examined how newspaper and magazine persuasive pieces use scientific research to convince their readers of their positions. The aim of this study, then, is to determine:

1. The extent to which authors of newspaper and magazine editorials and letters to the editor relied on educational research for their positions on bilingual education from 1984-1994;

2. How such citations of research compared to the published body of literature on bilingual education; and

3. What other sources were used in addition to or in lieu of research findings to support positions taken on bilingual education.

Knowing this information may shed light on the broader questions of how the news media use scientific research in their contributions to public policy debates, and how their positions on education are affected by research.

Methodology

It was believed that political editorials, as persuasive devices, would likely use evidence provided by academic research, particularly on empirical issues of program effectiveness as is the case with bilingual education. Both bilingual education research articles and opinion pieces were analyzed and compared according to the procedures described below (Krippendorff, 1980).

Locating bilingual research articles. In order to examine the use of research in editorial and opinion pieces, we needed first to determine what evidence was available in the bilingual education research literature. Before discussing the procedures used for identifying bilingual research articles, we should note that "bilingual education" is defined as education programs that make use of the students' primary language as a medium of instruction. The three major versions – transitional, late-exit, and two-way – are described under "coding data."

To find research articles on bilingual education, the national database ERIC was searched with the descriptors "bilingual education," "bilingual education evaluation," and "bilingual education research," as well as combinations of these terms. The articles selected fit into two categories: 1) articles reporting original research with data, and 2)

reviews of articles or meta-analyses of research studies. The search was confined to the period 1984 to September 1994 and to bilingual education programs in kindergarten through twelfth grade in the United States. A total of 39 citations were found that met the criteria.

Coding data. Individual bilingual education research articles were coded for eight factors which were thought to reveal trends in the research and have an impact on the dependent variable of press opinion. Articles were coded and checked by each of the two investigators to ensure accuracy. Not all of the variables coded at this stage of the investigation were relevant in distinguishing the use of research findings in the press pieces, and thus are not reported here. The relevant variables were:

(1) *type of bilingual education program*: transitional bilingual education (TBE), where students receive native language instruction only until they are ready to be placed in English only classes; late exit, where native language instruction is maintained beyond the point of transition to English only; two-way, where English-only and native language-only students are mixed so that each learns the other's language; or mixed, where more than one approach was used;

(2) *year of publication*;

(3) *overall results of study/review for bilingual education*: positive, negative, mixed.

Locating persuasive articles. The second set of articles analyzed were newspaper and magazine opinion pieces on bilingual education. As noted above, newspaper and magazine "editorials" are defined as signed or unsigned opinion pieces written by the staff editors or guest writers. Letters to the editor are signed opinion pieces written to the editor of the opinion desk, usually in reaction to articles and editorials that appeared in the publication.

The National Newspaper and Magazine Index was used to locate newspaper and magazine editorials and letters to the editor on bilingual education. The sources of the editorials were major national newspapers and magazines: *Los Angeles Times*, *New York Times*, *Christian Science Monitor*, *Washington Post*, *Wall Street Journal*, *Time*, *Newsweek*, and *U.S. News and World Report*. We believed that these sources would be representative of editorials and opinions expressed on the national level.

As with the research articles, the searches were limited to the period 1984 to 1994. This time period was chosen to allow for the identification of trends in editorial treatment over time, and still permit an examination of those changes in sufficient detail for the analyses to be meaningful. In addition, the lag time between the publishing of research and its treatment in editorials is unknown, and to err on the side of caution, a wide span of time was selected to allow for a long lag period.

Opinion pieces selected met all of the following criteria: 1) related directly to bilingual education, as opposed to bilingual issues or government policies (e.g. bilingual ballots, general benefits of bilingualism), and 2) dealt with the U.S. educational system (in the 50 states and Puerto Rico). A total of 87 pieces were found, 44 editorials and 43 letters to the editor. Search terms included combinations of the descriptors "bilingual education," "bilingualism," "bilingual," "letter," "opinion," and "editorial."

Immigration opinion pieces. As noted previously, Padilla (1992) suggested that the editorial positions taken on bilingual education may not be related to research but rather to broader social and political trends dealing with immigration and attitudes toward marginalized minority groups. As a rough test of this hypothesis, the number of editorials and letters to the editors on the general topic of immigration were also identified for the same time period, 1984-1994. The National Newspaper and Magazine Index was searched using the terms "immigration," "immigrants," "editorial," "opinion," and "letter." A total of 1,416 pieces were identified and coded by year of publication. No further coding was conducted with these pieces, since the purpose is to compare the attention given to the issue of immigration to that of bilingual education in terms of number of opinion pieces during the eleven year period.

Coding data. Each opinion piece was coded for ten variables which were thought to reveal trends in editorial and letter content. After examining several initial articles, it was determined that it was not possible to code for some of the variables used with the research articles due to a lack of detailed information about the research cited in the opinion pieces. The opinion piece authors rarely gave information about the scope of the program, the first language of the students, or the type of evaluation used, so these items were not included in the final analysis.

The pieces were independently coded by the investigators and any discrepancies in the coding of facts (e.g. whether research was mentioned) was discussed and reconciled. For the one variable of more subjective judgment, opinion ratings (see below), scores were averaged for each article to produce a composite score. Interrater reliability was .92 for the opinion ratings. The variables were:

(1) date of publication;

(2) length of article (by column inch);

(3) type of bilingual education program (see above);

(4) research cited: whether research is cited explicitly by mentioning specific studies or implicitly where studies are not identified (e.g. when the terms "research," "studies," or "evidence" are used without identifying the source); whether the research is cited in support of or against bilingual education, or where no clear position is taken;

(5) researcher cited: whether researchers are cited (explicitly by name or implicitly with no names mentioned, e.g. "researchers believe"); whether the researchers are cited in support of or against bilingual education, or where no clear position is taken;

(6) other people/institutions cited: whether they are cited in support of or against bilingual education: public officials (defined as local, state, or federal employees, appointed or elected, representing governmental agencies or representative bodies, but who are not civil servants working for a school district), school administrators (defined as civil servants employed or otherwise officially connected with schools or school districts, but who are not classroom teachers), institutions (defined as publicly recognized bodies such as universities and governmental agencies that are cited without reference to specific spokespersons), students, classroom teachers (kindergarten through twelfth grade), parents, and published news articles;

(7) arguments used: in *support* of bilingual education: bilingual education a) helps students learn English faster, b) enhances cognitive development, c) boosts academic achievement, and d) provides a national asset in the promotion of bilingualism; *against* bilingual education: bilingual education a) costs too much, b) causes segregation of students, c) is ineffective helping students learn English and/or in promoting academic achievement, d) is against public wishes and

opinion, e) eliminates parental choice in their child's education, and f) is un-American and/or unpatriotic;

(8) opinion rating: scores the general tone of the editorial toward bilingual education on a five-point Likert-type scale (1 = against, 2 = somewhat against, 3 = no position, 4 = somewhat in favor, 5 = in favor). The ratings were determined holistically by taking into account the people cited (e.g. teacher, administrator, researcher), the research cited, the arguments used, and the conclusions made by the author about bilingual education. "No position" editorials were those that cited balanced pro and con people and arguments and that did not conclude for or against bilingual education. Due to the small sample size, these ratings were eventually collapsed into "favor" (1 or 2), "oppose" (4 or 5), and "no position" (3) to allow for statistical analysis. As a check on the holistic scoring, post-hoc t-tests were performed on the total number of arguments in favor and against bilingual education by opinion rating. The results indicated that those pieces which were rated as being in favor of bilingual education had a significantly greater number of "pro" arguments mentioned in the piece than those rated as being opposed ($t = 7.74$, $df = 56.7$ [adjusted for unequal variances], $p < .0001$). Similarly, those pieces rated as being in opposition had a significantly higher number of "con" arguments mentioned as those rated as in favor ($t = 5.49$, $df = 83$, $p < .0001$);

(9) personal story/anecdote: whether the piece uses personal experience or recounts another's personal experience that is not part of a research study as evidence to support a position on bilingual education; and

(10) publication: newspapers – *Los Angeles Times*, *New York Times*, *Christian Science Monitor*, *Washington Post*, and *Wall Street Journal*; magazines – *Time*, *Newsweek*, and *U.S. News and World Report*.

Results

The overwhelming majority of the studies (82%) found results in favor of bilingual education. Only five of the thirty-nine articles reported negative findings, and two included mixed results over the ten-year period. The high percentage of positive findings in the published studies

is somewhat exaggerated since some of the individual studies were also included in the research reviews, affecting the review's overall conclusions. Nevertheless, a vast majority of the studies to which the press would have had access during this period was largely positive toward bilingual education.

Table 1
Summary of Variable Categories for Bilingual Education Research Articles, 1984-1994 (N = 39)

Type:*	TBE - 22	Late - 5	Two-way - 3	Mixed - 9
Results:**	Positive - 32	Negative - 5	Mixed - 2	

* $p < .05$ ** $p < .0001$

Overall, national newspapers and magazine opinion pieces were decidedly against bilingual programs when measured both by the number of pieces published and the column-inch space devoted to the issue. As indicated in Figure 1, 55% (47/87) of all opinion pieces took positions against bilingual education. When editorials and letters were examined separately, we found that 60% (36/43) of the editorials but only 45% (20/44) of the letters took positions against bilingual programs. The *Christian Science Monitor* and the *Los Angeles Times* were the most supportive of bilingual education in their editorials throughout the ten year period, with 75% (3/4) of the *Monitor's* staff and guest editorials and 70% (12/17) of the *Los Angeles Times'* pieces favoring bilingual programs. All the other major news magazines and newspapers were consistently against bilingual education in their editorials.

More space in column inches was devoted to pieces against bilingual education than those in favor, 61% against and 39% in favor (Figure 2 and Table 2 below). However, the mean length of editorials against bilingual education was more than those in favor of such programs, with the difference trending toward significance ($p = .16$), while letters in favor of bilingual education were significantly longer than those opposed (Table 3).

Table 2

Total Length in Column Inches, Editorial Position, and Total Number of Editorials and Letters on Bilingual Education by Publication, 1984-1994

Publication	Length For	Length: Against	Total Length	# For	# Agnst	Total # of Pieces
*Los Angeles Times**	460.48	289.98	771.34	17	11	29 (33%)
New York Times	206.30	270.65	476.95	14	12	26 (29%)
Christian Science Monitor	113.84	58.76	172.60	3	3	6 (7%)
Washington Post	76.03	499.08	575.11	14	7	21 (24%)
Wall Street Journal	0.00	43.75	43.75	0	1	1 (1%)
Time	0.00	0.00	0	0	0	0
Newsweek	0.00	50.02	50.02	0	1	1 (1%)
U.S. News & World Report	0.00	134.23	134.23	0	3	3 (3%)
Total	856.65 (39%)	1346.50 (61%)	2224.00	39 (45%)	47 (54%)	87

* = One editorial took no position, length = 20.88. It is not listed on the table but is included in the "Total Length" and "Total # of Pieces" columns.

Note: Percentages are of all pieces (n=87)

Table 3

Mean Length in Column Inches of Editorials and Letters

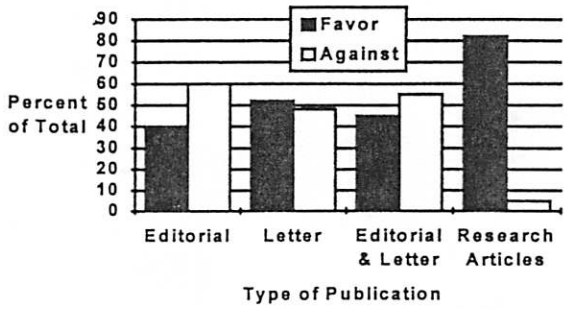
Type of Opinion Piece	For	Against
Editorial*	33.15 (18.45)	43.22 (27.65)
Letter**	14.19 (5.41)	10.60 (5.49)

Standard deviations in parentheses

* $t = 1.42$, $df = 39.7$, $p = .16$

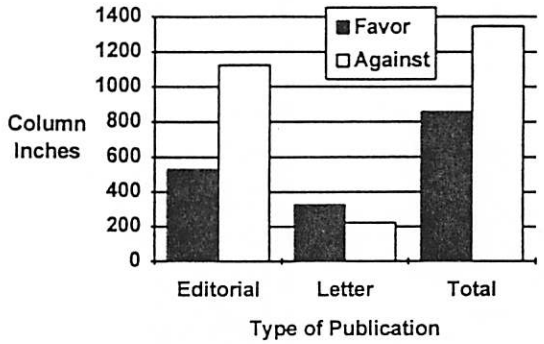
** $t = 2.18$, $df = 42$, $p < .05$

Figure 1: *Percentage of Editorials, Letters, and Research Articles by Position on Bilingual Education, 1984-1994*



Note: "Editorial & Letter" versus "Research Articles": Chi-square = 49.56, Yates correction for continuity applied, df = 1, p < .0001

Figure 2: *Total Length in Column Inches of Editorials and Letters by Position on Bilingual Education, 1984-1994*



Government officials, other media reports, and institutional representatives were the most frequently cited sources of information used to support positions taken on bilingual education. Table 4 reports the people and institutions cited in editorials and letters by position. The results show that those opposed to bilingual education relied mostly on government officials and other media reports, while those in favor of bilingual programs cited universities or other institutions most frequently. Neither side relied much on researchers, with only 7% of those in favor and 5% of those opposed referring to social scientists in buttressing their arguments. Administrators and the students themselves ranked at the bottom of the list of sources for information and support.

Less than half of all opinion pieces referred to educational research, with nearly a third relying on personal experience and anecdote to justify their positions. Figure 3 compares whether there was any difference in the opinion positions taken and their use of research. Less than half of the editorials and letters (45%, n=39) cited any research at all. There was no statistically significant difference in terms of position on bilingual education between those that cited research and those that did not. There were very few opinion pieces that referred to studies in such a way that they could be identified as a published research article, and hardly any mentioned specific program types (e.g. transitional bilingual education versus two-way immersion). On the other hand, almost a third of all pieces referred to personal experience or related non-scientific, anecdotal stories in support of their position. As shown in Table 5, those who opposed bilingual education programs were more likely to rely on personal experience and anecdote than those in favor, the difference falling just short of statistical significance (Chi-square, Yates' Correction for Continuity applied, = 3.05, p = .08).

Table 4

Frequency of Sources Cited in Editorials and Letters by Position on Bilingual Education, 1984-1994

Position	Favor	Against	Total
Official	12% (10)	24% (21)	31
Other Media	8% (7)	28% (24)	31
Institution	20% (17)	9% (8)	25
Teacher	10% (9)	13% (11)	20
Parent	5% (4)	13% (11)	15
Researcher	7% (6)	5% (4)	10
Administrators	5% (4)	3% (3)	7
Student	1% (1)	5% (4)	5
Total	58	86	144

Note: Percentages are of total number of opinion pieces (n=87). The Total column does not contain percentages since some pieces mentioned persons from the same category both in favor and against bilingual education.

Table 5

Number of Opinion Pieces that Use Personal Experience or Anecdote as Evidence to Support Positions on Bilingual Education

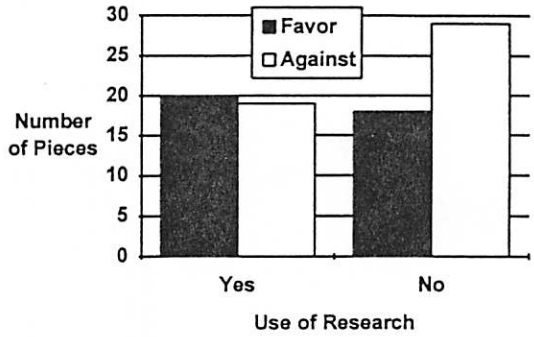
	Use of Personal Experience or Anecdote as Evidence		
Position on Bilingual Education:	Yes	No	Total
Against	41% (19)	59% (28)	47
Favor	21% (8)	79% (31)	39
Total	31 % (27)	69% (59)	86

Note: Total does not include 1 piece which took no position on bilingual education.

Chi-square, Yate's Correction for Continuity applied = 3.05, p = .08

Figure 3

Number of Editorials and Letters by Position on Bilingual Education and Whether Research Was Cited, 1984-1994



Chi-square = .98, Yates correction for continuity applied, df = 1, p = .32

Program effectiveness was the most often mentioned issue for both those in favor of and opposed to bilingual education. Despite the relatively little reliance on research to support their positions, editorial and letter writers cited the effectiveness of bilingual education in helping students learn English and succeed academically as the primary reasons for being for or against such programs. Table 6 lists the issues raised by the opinion pieces. Following effectiveness, the issues of

segregation and fostering potentially anti-American sentiments among bilingual students were most prominent among those pieces opposed to bilingual education, with the possible benefits of bilingualism cited by those pieces in favor of the approach.

Table 6
Frequency of Issues Mentioned in Opinion Pieces in Favor or Against Bilingual Education

	Issue	Opinion Pieces Mentioning Issue
In Favor of Bilingual Education	Students learn English faster	38% (33)
	Helps academic achievement	24% (21)
	Bilingualism as national asset	13% (11)
	Helps cognitive development	8% (7)
Against Bilingual Education	Not effective in helping student learn English/overall academic achievement	51% (44)
	Leads to segregation of students	20% (17)
	Leads to anti-Americanism and is unpatriotic	19% (16)
	Is too expensive	13% (11)
	Goes against public opinion	10% (9)
	Allows for no parental choice in child's education	10% (9)

Note: Percentages are of total number of editorials and letters (n=87).

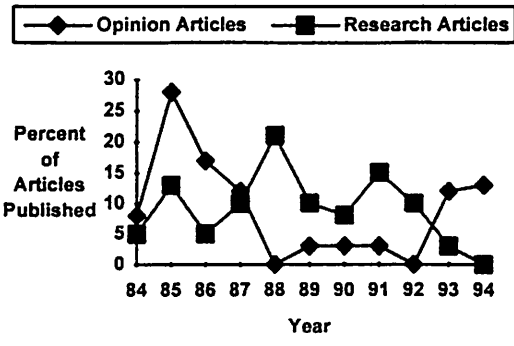
There are dramatic differences between educational researchers and media opinion writers in the assessment of the effectiveness and desirability of bilingual education. Figure 1 compares the percentage of persuasive articles and research articles by position on bilingual education. The positions taken are significantly different: 87% of all research articles reported favorably on bilingual education programs, compared to only 45% of the persuasive print media articles which

support bilingual programs (Chi-square, Yates Correction for Continuity applied = 49.56, df = 1, $p < .0001$).

There is no relationship across time between the publication of bilingual education research and the appearance of media opinion pieces on the topic, but there is a significant relationship between the publication of opinion pieces on bilingual education and immigration. An examination of the number of bilingual education research articles and opinion pieces published over the eleven year period reveals no significant relationships, with a slightly negative correlation ($r = -.31$) (Figure 4). More than a quarter of all of the opinion pieces were published in 1985 due to the controversy over state and federal funding for bilingual programs raised by Secretary of Education William Bennett in the Reagan Administration. There was little editorial comment for the three years following 1987, with a slight resurgence of interest in the topic in 1993-94.

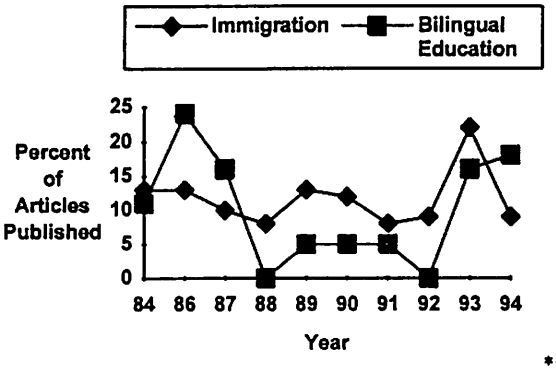
A different picture emerges when we compare opinion page coverage of bilingual education and the broader topic of immigration. The correlation between the percentage of editorials and letters to the editor published by year on bilingual education and immigration is moderately positive but not significant, $r = .42$. However, as can be seen in Figure 4, 1985 was definitely an "outlier" year due to the unusually large amount of attention the issue provoked directly by the criticism of then Secretary of Education Bennett of bilingual programs. If we remove the year 1985 from our analysis, a much stronger relationship is seen. The correlation between the number of articles published by year jumps to a significant .73, and the pattern becomes much clearer as to the link between the two issues in terms of press coverage (Figure 5).

Figure 4
*Percentage of Total Number of Opinion Pieces and Research Articles on Bilingual Education by Year, 1984-1994**



*r =-.31

Figure 5
*Percentage of Total Number of Opinion Pieces Published on Immigration and Bilingual Education by Year, 1984, 1986-1994**



*r = .73, p < .05

Discussion

The results of the present study are not encouraging for those researchers in bilingual education who believe that the efforts of social

scientists can influence public policy issues dealing with education via the national media. Despite overwhelmingly positive evaluations by researchers of bilingual education programs in the United States, the majority of opinion pieces took positions against such programs. This was true even though the primary reason for opposing bilingual education hinged on the empirical question – answered by research in the affirmative – of whether or not the programs were effective. Rather than rely on research, opinion writers on both sides of the issue chose instead to use other sources of information in supporting their positions– government reports, news reports, institutional officials, personal anecdotes.

There are several possible reasons for the relatively sparse use of educational research by opinion writers. As Savage (1989) proposed, the dense academic style of research articles makes research reports inaccessible, and contributes to reporters' reliance on known education figures, so-called "media stars," for information. These identified "experts" may or may not know the research on the specific educational issues in question or may have their own political agendas.

There is also a noticeable reliance on non-researchers to bolster support for editorial positions. We note the high number of government officials and administrators cited in persuasive pieces. The percentages are very close to those found by Singer and Endreny (1993) in their study of social science press coverage: 24% in the present study, 20.1% in the Singer and Endreny analysis. The results reported here are also similar to Singer and Endreny's findings on the percentage of articles which mention researchers in stories about environmental and health risks: 5-7% in the present study, 7 % in the risk articles. The relatively high reliance on the use of personal stories and anecdotal information, while not deemed "rigorous" in the scientific community, may be due to their effectiveness as persuasive devices for a general news audience.

Another possible reason for the negatively biased positions in the editorial pages on bilingual education relates to the workings of university press and publicity offices responsible for helping researchers make their findings known to those outside the academic community. The impact public relation offices have on setting the agendas of news coverage has been well documented (Blyskal & Blyskal, 1985). In an organizational context, one of the primary roles of a public relations

office is to promote a positive image of the institution, and in the case of a university, this image ultimately should encourage greater alumni contributions and donations from public and private organizations. To that end, the university public relations office has an incentive to publicize research conducted in the schools and departments that is most likely to make the university "look good." It may be that research in the social sciences, particularly that done on controversial and potentially unpopular issues such as bilingual education, is less likely to be publicized by the publicity office and ultimately reach the media, although we must also point out that the present study did not address this issue. Clearly, further work is needed in determining how research is disseminated at the university end of the information pipeline.

A final possibility for the disparity between the research findings and opinion piece positions on bilingual education is that the press may be influenced more by larger political trends than by the available research. As Padilla (1992) points out, negative positions taken on bilingual education issues may be a reflection of larger societal and media attitudes toward immigration and bilingualism. The prevalence of anti-immigration sentiments in the United States throughout the 1980s as expressed in a variety of ways – a new Immigration Act in 1986, several "English-only" referendum drives – may have influenced editorial views on bilingual education. While the strong correlation between the number of pieces published on bilingual education and on immigration can be only suggestive until more detailed analysis is undertaken, the link found here between the two issues is consistent with the view that opposition to bilingual education is partly a result of a larger concern about immigration in the United States.

While the forces of public policy and opinion on bilingual education may be driven by other concerns, there is some reason to be optimistic about the impact of providing information to those interested in educational issues. There is evidence, for example, that the more parents know about the aims and procedures of bilingual education, the more they support it (Shin & Kim, 1993, cited in Shin, 1994). Researchers should perhaps consider the means available to them to disseminate the results of their work which can have an impact on policy decisions through the use of opinion pieces, press conferences, interviews, and other ways of gaining direct access to the media.

Without such efforts, there may be little opportunity for the work of bilingual education investigators to effect the changes they believe their results warrant.

References

Note: References with asterisks (*) were those used for the analysis of bilingual education research articles.

Adam, J. (1992). Increasing the media profile of sociology and anthropology: Report to the CSAA Executive Committee. *Society-Societe, 16* (2), 31-32.

*Aguirre, A., Jr. (1984). Parent and teacher opinions of bilingual education: Comparisons and contrasts. *NABE, 9*(1), 41-51.

Anning, A. (1988). Teachers' theories about children's learning. In J. Calderhead, (Ed.), *Teachers' professional learning* (pp. 128-145). London: Falmer.

*Baker, K. (1987). Comment on Willig's "A meta-analysis of selected studies in the effectiveness of bilingual education." *Review of Educational Research, 57*(3), 351-362.

Best, J. (1986). Famous for fifteen minutes: Notes on the researcher as newsmaker. *Qualitative Sociology, 9,* 372-282.

Blyskal, J., & Blyskal, M (1985). *How public relations write the news.* New York: Morrow.

Bracey, G. W. (1995). Disarming misinformation: Ways to counter negative critics. *Journal of Educational Public Relations, 16* (1), 2-8.

*Brittain, F. P. (1991). Effects of a maintenance bilingual bicultural program on fully English proficient students. *Journal of Educational Issues of Language Minority Students, 8,* 125-146.

*Burnham-Massey, L., & Pina, M. (1990). Effects of bilingual instruction on English academic achievement of LEP students. *Reading Improvement, 27*(2), 129-132.

*Carlisle, R. S. (1989). The writing of Anglo and Hispanic elementary school students in bilingual, submersion, and regular programs. *Studies in Second Language Acquisition, 11*(3), 257-280.

*Carter, T. P., Chatfield, M. L. (1986). Effective bilingual schools: Implications for policy and practice. *American Journal of Education, 95*(1), 200-232.

Clark, C. M., & Peterson, P. L. (1986). Teachers' thought processes. In M. C. Wittrock (Ed.). *Handbook of research on teaching (3rd ed.)* (pp. 255-296). New York: Macmillan.

*Commins, N. L. (1989). Language and affect: Bilingual students at home and at school. *Language Arts, 66*(1), 29-43.

*Crawford, J. (1990). Bilingual education: The effectiveness debate. *Equity and Choice, 6*(2), 37-45.

*Curiel, H., Rosenthal, J., & Richek, H. (1986). Impacts of bilingual education on secondary school grades, attendance, retentions and drop-out. *Hispanic Journal of Behavioral Sciences, 8*(4), 357-367.

*Cziko, G. A. (1992). The evaluation of bilingual education: From necessity and probability to possibility. *Educational Researcher, 21*(2), 10-15.

*de la Garza, J. V., & Medina, M., Jr. (1985). Academic achievement as influenced by bilingual instruction for Spanish-dominant Mexican American children. *Hispanic Journal of Behavioral Sciences, 7*(3), 247-257.

*Diaz, R. M., Padilla, K., & Weathersby, E. (1991). The effects of bilingualism on preschoolers' private speech. *Early Childhood Research Quarterly, 6*(3), 377-395.

*Dolson, D. P., & Mayer, J. (1992). Longitudinal study of three program models for language minority students: A critical examination of reported findings. *Bilingual Research Journal, 16*(1-2), 105-157.

Drake, N. M. (1991, September). What is needed most: School reform or media reform? *Phi Delta Kappan, 73*(1), 57.

Endres, F. F. (1987). Editorial writers and the research process. *Newspaper Research Journal, 8*(3), 11-20.

*Felix, J. W., Waxman, H., Paige, S., & Hueng, S. (1993). A comparison of classroom instruction in bilingual and monolingual secondary classrooms. *Peabody Journal of Education, 69*(1), 102-116.

*Garcia, E. (1988). Bilingual education in early childhood programs. *Teacher Education and Practice, 4*(1), 31-46.

*Genesee, F. (1985). Second language learning through immersion: A review of U.S. programs. *Review of Educational Research, 55*(4), 541-561.

*Gersten, R. (1985). Structured immersion for language minority students: Results of a longitudinal evaluation. *Educational Evaluation and Policy Analysis, 7*(3), 187-196.

*Gersten, R., Woodward, J., & Moore, L. (1988). Alternative educational models for language minority students: Research on structured immersion. *Equity and Excellence, 23*(4), 14-16.

Goodfield, J. (1981). *Reflections on science and the media.* Washington, D.C.: American Association for the Advancement of Science.

*Hakuta, K., & Gould, L. J. (1987). Synthesis of research on bilingual education. *Educational Leadership, 44*(6), 38-45.

*Hakuta, K., Chang, M., Fernandez-Gimenez, M., Gould, L., Hendrickson, J., Hiser, T., Hoh, K., Kim, S., McNutt, M., Navon, M., Perrow, M., Suben, J., Pakowitz, S., & Ramos, L. (1984). Bilingual education in the public eye: A case study of New Haven, Connecticut. *NABE, 9*(1), 53-76.

Hansen, A. (1991). The media and the social construction of the environment. *Media, Culture, and Society, 13*, 443-458.

Krippendorff, K. (1980). *Content analysis: An introduction to its methodology*. Beverly Hills, CA: Sage Publications.

*Lindholm, K. J. (1991). Theoretical assumptions and empirical evidence for academic achievement in two languages. *Hispanic Journal of Behavioral Sciences, 13*(1), 3-17.

McArthur, E. (1993). *Language characteristics and schooling in the United States, A changing picture: 1979-1989*. Washington, D.C.: Office of Educational Research and Improvement, Department of Education.

*McCarty, T. L., Lynch, R., Wallace, S., & Bennally, A. (1991). Classroom inquiry and Navajo learning styles: A call for reassessment. *Anthropology and Education Quarterly, 22*(1), 42-59.

McQuaid, E. P. (1989). A story at risk: The rising tide of mediocre education coverage. *Phi Delta Kappan, 70*(5), K1-K8.

*Medina, M. (1991). Native and Spanish language proficiency in bilingual education programs. *Journal of Educational Research, 85*(2), 100-106.

*Medina, M., Jr., & de la Garza, J. V. (1989). Initial language proficiency and bilingual reading achievement in a transitional bilingual educational program. *NABE, 13*(2), 113-125.

*Medina, M., Jr., & Escamilla, K. (1992). English acquisition by fluent- and limited-Spanish-proficient Mexican Americans in a 3-year maintenance bilingual program. *Hispanic Journal of Behavioral Sciences, 14*(2), 252-267.

*Medrano, M. F. (1988). The effects of bilingual education on reading and mathematics achievement: A longitudinal case study. *Equity and Excellence, 23*(4), 17-19.

*Moll, L. C. (1988). Some key issues in teaching Latino students. *Language Arts, 65*(5), 465-472.

*Mortensen, E. (1984). Reading achievement of native Spanish-speaking elementary students in bilingual vs. monolingual programs. *Bilingual Review, 11*(3), 31-36.

*Nadeau, A., & Miramontes, O. (1988). The reclassification of limited English proficient students: Assessing the inter-relationship of selected variables. *NABE, 12*(3), 219-242.

Nelkin, D. (1985). Managing biomedical news. *Social Research, 52,* 625-245.

Nelkin, D. (1987). *Selling science: How the press covers science and technology.* New York: W.H. Freeman and Company.

O'Neill, B. (1994, March 6). The history of a hoax. *The New York Times Magazine,* pp. 46.

Padilla, R. V. (1992, March). *Theoretical framework for the analysis of bilingual education.* Paper presented at the Annual Meeting of the American Education Research Association, New York, NY. (ERIC Document Reproduction Service No. ED 217 719)

*Pease-Alvarez, L. (1991). Effective instruction for language minority students: An early childhood case study. *Early Childhood Research Quarterly, 6*(3), 347-363.

Pulford, D. L. (1976). Follow-up study of science news accuracy. *Journalism Quarterly, 53,* 119-121.

*Ramirez, D. J. (1992). Executive summary of the final report: Longitudinal study of structured English immersion strategy, early-exit and late-exit transitional bilingual education program for

language minority children. *Bilingual Research Journal, 16*(1-2), 1-62.

*Rossell, C. H. (1988). The problem with bilingual research: A critique of the Walsh and Carballo study of bilingual education projects. *Equity and Excellence, 23*(4), 25-29.

*Rossell, C. H. (1990). The research on bilingual education. *Equity and Choice, 6*(2), 29-36.

*Santos, S. L. (1985). Parental perceptions of bilingual education in northeast Texas: Implications for administrators. *NABE, 9*(3), 57-67.

Savage, D. (1989, August). *The press and education research: Why one ignores the other*. Paper presented at the Colloquium on the Interdependence of Educational Research, Educational Policy, and the press, Charlottesville, VA. (ERIC Document Reproduction Service No. ED 311 464)

Schoonmaker, M. E. (1985). The beat nobody wants. *Columbia Journalism Review, 23*(5), 37-40.

*Secada, W. (1987). This is 1987, not 1980: A comment on a comment. *Review of Educational Research, 57*(3), 377-384.

Shin, F. (1994). Attitudes of Korean parents toward bilingual education. *BEOutreach, 5*(2), 47-48.

Simon, T. F., Fico, F., & Lacy, S. (1989). Covering conflict and controversy: Measuring balance, fairness, defamation. *Journalism Quarterly, 66,* 427-434.

Singer, E., & Endreny, P. (1993). *Reporting on risk: How the mass media portray accidents, diseases, and other hazards*. New York: Russell Sage Foundation.

*Snow, C. E. (1988). The problem with bilingual education research critiques: A response to Rossell. *Equity and Excellence, 23*(4), 30-31.

Stonecipher, H. W. (1979). *Editorial and persuasive writing: Opinion functions of the news media*. New York: Hastings House.

Tankard, J., & Ryan, M. (1974). News source perceptions of accuracy of science coverage. *Journalism Quarterly, 51*, 219-225, 334.

*Walsh, C. E. ((1988). Doing bilingual research in schools: A response to Christine H. Rossell. *Equity and Excellence, 23*(4), 32-35.

Weiss, C., & Singer, E. (1987). *Reporting of social science in the national media.* New York: Russell Sage Foundation.

*Willig, A. C. (1985). A meta-analysis of selected studies on the effectiveness of bilingual education. *Review of Educational Research, 55*(3), 269-318.

*Willig, A. C. (1987). Examining bilingual education research through meta-analysis and narrative review: A response to Baker. *Review of Educational Research, 57*(3), 363-376.