Political Perspectives 2011 Vol. 5 (1), pp. 89 – 111.

Touchdown, Slam Dunk, or Home Run: How Media Coverage of Athletics Shapes Perceptions of Local Education Quality

Ryan Yonk
Georgia State University/Utah State University

Abstract

Education is a central issue to most Americans and because of this it is necessary to understand how their opinions of such are derived. Even though many Americans focus on the state of urban education, rural education is prone to many shortcomings that need to be addressed. The authors conduct an analysis of local print media for nine intermountain-west states in addition to surveying adults living in ten rural western counties. It is discovered that positively framed stories led to an increase in positive parental perception of education. In addition to stories about local educational achievement increases the public's perception of education. However, these stories need to be paired with athletics to create positive perceptions, otherwise positively framed stories can have a negative affect on parental opinion.

When asked what area of public policy they are most concerned with, Americans have traditionally included education in their answer. Given this orientation, understanding how individuals arrive at their opinions about public education is important. Considering potential policy alternatives requires an understanding of what drives public opinion about public education. Particularly as identifying and then responding to the specific concerns expressed by the public is a key concern of policy makers.

As national awareness and concern over public education has increased, typically the focus of research has been the relatively poor performance of urban schools.[1] However, the state of rural schools is also an area of much concern. We have investigated the public education system in nineteen rural counties located across the nine intermountain-western states. Our research compares survey data with local media coverage. Our results show a significant and positive relationship between parental perception of the quality of education and local media coverage. We focus on the relationship between parental perceptions of the quality of the education and varies types of media coverage, finding a unique confounding effect of the coverage of public school athletics in relation to parental perceptions. The implications of this research sheds a unique light on the role of that athletics play in public education, while suggesting a new perspective on how public education might be handled in a market setting.

[1] See USDA 2004 for a detailed discussion .

During the summer of 2006, a public opinion survey of adults living in ten rural western counties[2] was conducted to ascertain the feeling of the public about a variety of quality of life issues. The authors of the survey were particularly interested in how the public felt about education as provided in their county of residence. We attempt to identify the effects of media on public opinion, using local newspapers coverage of education, and the responses collected in the survey. We consider the effects of various media frames as presented in local newspaper's coverage of public education. Initially we consider whether the coverage of education is positive or negative. Next we consider specific media content; whether the local newspaper presents education as a local achievement, or as a federal and state mandated program. Finally, we consider the effect of covering athletics on public perceptions of education.[3]

Determining how members of the public develop and maintain opinions about the provision and quality of government services is a topic that has been hotly discussed. What is clear, is despite many members of the public's lack of information, the lack of information does not prevent them from identifying how they feel about government services. Citizens have opinions and can identify what they dislike, if not why they dislike it. This model of public opinion mirrors the literature's assertions about how individuals process information, are able to use that information in making decisions, and how they identify preferred policy outcomes.

[2] These counties were across Utah, Arizona, Oregon, New Mexico, Montana, and Colarado

[3] Considering Athletics in this way grew out of the propensity for both positive and local achievement stories to be directly tied to High School Athletics.

One school of thought asserts that citizens are unable and unlikely to have full information about policy questions and therefore answer questions about policy through a process little better than random guessing. Converse and others, correctly identify a tendency of respondents to answer policy questions even when they lack information about the policy in question (Converse, 1964:206-261). These authors laid the groundwork for a discussion of both why respondents answer in this way, and a larger discussion about how respondents come to answers even when they have little or no information. A review of the literature makes it apparent that something more than random guessing is occurring; respondents are utilising decision strategies that draw on the minimal information they have to answer questions when asked (Popkin, 1991). Members of the public's attempts to use information when considering public policy, leads directly to a consideration of how that information is used and what influences its use.

John Zaller (1992), in "The Nature and Origins of Mass Opinion," proposes that opinions held by individuals are based on pieces of information that have become salient to them as they interact in the world every day. As individuals are faced with situations where decision making is necessary, they draw on what information is available. Decisions are made and information is used based prior experience, saliency, heuristic value, and other factors that draw pieces of information to the front of an individual's mind. In this model of decision making, the idea that individuals are merely guessing as suggested by Converse, or are minimally using information as suggested by Popkin, is replaced with information intensive processes where the individuals rely on a relatively large amount of information to make decisions. The provision and

reception of that information by individuals is paramount in this model. Zaller's model of how information is gathered, received, and evaluated on an individual basis asserts that information is received, considered in light of other information, and filed away for future consideration. Thus when the individual faces a similar situation the information is available, as how to respond to the new situation is considered (Zaller, 1992).

Like the evolution from Converse to Zaller, a discussion of the role and influence of the media has occurred. A number of scholars had proposed that the effects of media on individual decision making was minimal, and personal interaction and discussion had a much larger effect on decision making (Klapper, 1967). In large, part the literature has turned on its head, and work that proposed only a minimal effect of media has been replaced with a much more nuanced view of the role of media, namely that media has at least the potential to affect public opinion. A significant amount of literature has developed that indicates the effect of media on individual decision making is significant. Also, a number of studies have been conducted that focused on establishing the cognitive effects of media on individual instances of decision-making. The results of those studies lead directly to more recent explorations, which attempt to tease out how media both influences decision making and constructs how those decision are made. (Scheufele, 1999: 103-122) The research in this area illustrates the effect that media can have. From the recitation of this effect in "News on American Opinion" by Iyengar and Kinder (1987), which lays out the specific effect that television has on public opinion, to the false construction of an economic crisis during the 1992 presidential campaign (Hetherington, 1996) the potential effects of media on individual decision-making are well established. A number of experimental studies have been conducted to

test media effects as well. In her book, “Impersonal Influence,” Diana Mutz (1998) conducts a series of experiments that suggest that not only are there identifiable effects of media exposure, but that those effects can aid the decision making of individuals.

That media would have an effect is not unexpected; the model of decision making proposed by Zaller and studied by others recognises that each new piece of information is used in making decisions. As media is a large source of information, it is expected that the effect of media would be identifiable in individual decision-making.

Given this theoretical foundation, we conducted an analysis of the primary data from the survey of residents of rural counties, using local print media coverage of education that occurred from 1 January 2006, to 30 June 2006 the six months immediately prior to the survey. The goal of this analysis was first, to consider if media coverage had an effect on public perceptions of education in these counties, and second, to evaluate if the type of coverage by local print media had a substantive effect on public opinion.

Differentiating type between articles in newspapers is at first a puzzling formulation of a research question, and one where typology might not vary significantly across cases. However we use what one scholar called ‘a scattered conceptualisation’ known as framing to provide differentiation across cases (Entman, 1993: 51-58). Framing has been described both as a mechanism of agenda setting and also of social construction, the consideration of framing might well be likened to the view of the world that is presented by looking through a camera lens. The lens provides a particular snapshot, and the external information that is not directly targeted by the lens is lost,

thus highlighting the information that is ultimately captured in the photograph (Scheufele, 1999: 103-122). Like a photograph, a media frame presents only part of the information available on a subject, and selects information that works together to make an engaging story. The effects of media framing are well established, both through real world analysis (Gilens, 1996: 515-541) and through experimental studies (Nelson, Clawson, & Oxley, 1997: 567-583). Throughout the literature the effects of media framing have been well documented, and using media framing as an independent variable to consider responses regarding the quality of education, matches well other uses of media frames. Scheufele in his article, “Framing as a Theory of Media Effects” suggests just this use of media frames as a way to consider both changes in attitude and outcomes (Scheufele, 1999: 103-122).

The use of media frames as independent variables allows not just the aggregate effect of media coverage on public opinion to be considered, but also how specific parts of media coverage, affect aggregate opinion. We investigate the effect of three sets of media frames on public perceptions of education quality. The first frame is simply whether the tenor of the story is positive or negative. In this frame the variable is expressed as the per cent of stories that are written from a favorable perspective. The next set of frames asks how the newspaper considers education. Two frames are considered, Local Achievement, which uses the perspective of how schools are serving local residents, and Federal State Mandate, which asks how well local schools are living up to federal and state standards. Both of these frames are expressed in the analysis as a percentage of stories framed this way. A final frame emerged from the coding of the second. Coverage of education by local newspapers was dominated by high school

athletics and as such the local achievement and generic positive frames were dominated by athletic stories. The final frame asks if the story is primarily covering an athletic event or is it exclusively covering just education. This frame is expressed as a percentage of stories that are not focused on athletics.

Having primary survey data provides a unique chance to consider media effects at the local level. The timing of the survey, which was conducted beginning 1 July 2006 and finished by mid August 2006, is unique in that no immediate issues regarding education were likely to have occurred simultaneously with the survey. This timing increases the reliability of the responses by eliminating proximity bias, because no issue regarding education was likely to be closely situated in time with the survey. The evaluation of the respondents was likely based on the aggregate impressions they held rather than by their response to any single event, or single series of events. In addition, the timing of the survey and the subsequent choice of time frame for the sample of newspaper coverage allows both an active sports season, and academic season to be included in the data.

The survey asked a series of nine questions focused on the quality of education, and a respondents' overall perception of quality score was calculated using eight dummy variables where responses were coded as indicating a perception of high quality or not, with one point given when the response indicated a perception of high quality. The ninth variable asked respondents to rank the quality of teachers in local public schools on a scale of low, medium, or high. Responses were given from one to three points; a response of high garnered three points, medium two, and low one point. A

percentage of the available points that were captured by respondent's answers to the questions was calculated, and is expressed as the dependent variable.

Using a calculated variable such as this one is not without controversy. Assigning equal weight to each of the eight variables is a methodological choice that allows for variation across respondents. Likewise, placing a higher weight on teacher quality, while supported by the literature, is again a methodological choice that attempts to express variation more clearly. The appropriateness of these assumptions could be tested using logistic regression for each of the quality responses and evaluating whether those analyses provide an alternate construction of the effects of media frames. Given this formulation of the dependent variable, we can utilise OLS regression to evaluate the effect of media frames.

Similarly, we were forced to make another possibly controversial statistical decision, because matching the individual level data obtained by the survey responses with county level data provides a methodological puzzle. Forcing interaction between variables measured at differing levels of analysis is problematic. In this case, simply using OLS regression would require that we assign the county level average data as actual values for individual respondents. Forcing the data into this assumption has the potential to alter the results substantially. Fortunately, a number of techniques exist that overcome these problems. The simplest would simply be to convert the individual level survey response into aggregated county level data. The use of this technique would necessitate a substantive change in the research question addressed, and would reduce the number of cases to ten. Clearly this is not the ideal solution. Fortunately

other techniques can be used that correct for the differing levels of analysis. Because the county level data is the independent variables in this study and an individual level variable is the dependent variable, I conduct an OLS regression that corrects the results for use of aggregate data at the county level. This process allows a confidence interval to be estimated that takes into account the problems of mixed level data. This process whereby the individual level responses are clustered by county provides results that can be interpreted in much the same way as standard OLS coefficients. [4]

For each of the sets of frames in this study, an OLS regression clustered by county was conducted, including a number of control variables. Literature on the quality of education has identified key variables that have an effect on education quality. We use a number of these variables as controls in the OLS regressions. The education quality literature identifies, Per Pupil Spending, Student Teacher Ratio, Per Cent Minority Students[5], Per Cent Low Income Students[6] as important (USDA Economic Research Service, 2004). In addition, we control for total enrollment to correct for variation in district size. Using these control variables while also controlling for the number of stories published in each county allows us to identify the effect of the media frame being tested on the perception responses in the survey.

An additional methodological issue deserves consideration; the survey data lacks demographic indicators for respondents. This lack of the standard demographic indicators is likely to cause at least two problems. The first, and most concerning, is that

[4] In addition we utilise robust standard errors to correct for any potential Heteroskedasticity.
[5] Expressed as the per cent of students who are non-white.
[6] Expressed as the per cent of students eligible for free or reduced lunch.

in the absence of these indicators the regression analysis may miss important interaction effects between these indicators and the tested media frames and therefore, over or under represent the influence of media frames on respondents' perceptions. A connected, but much less important, issue raised by the absence of these indicators is that a low R Square seems likely. How individuals form opinions and make decisions has a clear connection with some of these indicators, and in their absence the amount of the variation explained by the OLS regression is likely to be much smaller than it would be if they could be included. While the effect of these indicators is not known, it is not unreasonable to move forward in their absence given the relative rarity of direct survey data about perceptions of rural schools, while relying on the random sampling of data to lend credibility to the result. Given the limitation inherent in the survey data, the results should be considered carefully.

A seemingly simple solution to this potential problem would be to use county level demographic information in proxy of the respondent's actual demographic identity. Given the plethora of data available this approach at first glance seems the most appropriate. However because the model contains controls for the demographic makeup of the schools contained within county boundaries, it is likely that the demographic makeup of the school will in most respects mirror that of the larger community. Given this reality the addition of what are seemingly important controls through a proxy process would actually only introduce redundancy into the model. This would be problematic at varying degrees, if the schools mirror the county level data closely the model would simply fail to estimate, at lower levels of convergence the addition of these variables would add significant multi-collinearity into the estimation.

While this is certainly an interesting theoretical problem that could be tested for using a variety of methods my hypothesis is interested primarily in whether any media effect can be identified using the statistical analysis, and resolving the potential pitfalls of using dual proxies would add little to the hypothesis tests of this study. [7]

The initial test that we ran was an evaluation of whether media coverage of education presented using a positive media frame effects parental perceptions. Given our hypothesis we would predict that the directionality of this effect should be positive for this frame. Using the per cent of stories that had a positive connotation out of the total number of education stories, the OLS regression does indeed yield a positive and significant coefficient for the positive frame. Table 1 illustrates the results.

Table 1
Positive Media Frame
N=220
R SQUARE .0499

Variable	Coef	Robust Standard Error
Positive Frame	.6391**	.0237
Number of Stories	.0202**	.0026
Average Word Count	-.0217**	.0021
Per cent Students Non-White	-.0276*	.0121
Per cent Students Eligible for Free Reduced Lunch	.4686**	.0135
Student Teacher Ratio	2.8562**	.2185
Per Pupil Spending	.0007**	.0001
Total Enrollment	.0016**	.002
Constant	-84.8641	6.2007

**Significant at the .001 Level
* Significant at the .05 Level

[7] When models were estimated with the dual proxies included, they dropped one of the dual proxies to allow estimation to occur. The behavior of the estimation seems to indicate that something approximating near perfect multicollinearity may be occurring. Tables for these estimations are available on request.

Given the coefficient of .6391, the overall effect of a positive frame is that for each per cent increase in stories covered using a positive frame, parental perception of education increases by approximately .64. Given that the regression analysis returned a statistically significant positive coefficient the null hypothesis, which asserted no relationship between the positive frame and public perceptions, can be rejected. Given this rejection, the data indicates the existence of media effects on the public perception of education in my test counties.

It should be noted that in this test we find that each of the control variables indicated in the literature also return significant results with varying directions and magnitudes.

Given this initial confirmation of the hypothesis; that media effects affect public perception of education, we evaluated two specific content based media frames, Local Achievement and Federal State Mandate. The results of the OLS regression for each is found in Tables 2 and 3 respectively.

Table 2
Local Achievement Frame
N=220
R SQUARE .0449

Variable	Coef	Robust Standard Error
Local Achievement Frame	.1882**	.0217
Number of Stories	-.0073	.0072
Average Word Count	-.0074	.0109
Per cent Students Non-White	.4005**	.0744
Per cent Students Eligible for Free Reduced Lunch	-.1722	.1029

Student Teacher Ratio	3.0445*	1.1044
Per Pupil Spending	-.0011	.0005
Total Enrollment	.0020	.0009
Constant	-9.7897	26.9970

**Significant at the .001 Level
* Significant at the .05 Level

The Local Achievement Frame returned a positive and significant coefficient, although one that is much smaller than the one for a generic positive frame. This result also confirms our hypothesis. The consideration of this media frame, that has specific mechanism of coverage, provides some indication of how local print media coverage effects public perceptions of local education. In this case we find that for each percentage increase in stories, which use the local achievement frame when discussing education, a .1882 increase in the composite measure of public perception occurs.

Also, a number of previously significant control variables are insignificant, and the effect of Percentage of Non White students becomes positive in its effect on perception of quality.

Table 3
Federal State Mandate Frame

N=220
R SQUARE .0330

Variable	Coef	Robust Standard Error
Federal State Mandate Frame	-.3543	.4179
Number of Stories	-.0038	.0196
Average Word Count	-.0086	.0259
Per cent Students Non-White	-.1459	.1516
Per cent Students Eligible for Free Reduced Lunch	.3772*	.1308
Student Teacher Ratio	.0984	1.8808

Per Pupil Spending	-.0006	.0007
Total Enrollment	.0016	.0017
Constant	34.7206	.442

**Significant at the .001 Level
* Significant at the .05 Level

The Federal State Mandate frame, however, returned a non-significant negative coefficient. Which does not allow the null hypothesis to rejected, and exposure to this frame cannot be said to have an effect on public perception of local education. The test of the hypothesis using this frame does not allow a relationship to be asserted, and a further testing of potential negative frames should be conducted to evaluate the possibility of negative relationships.

A final content frame that the coding of local newspapers indicated was a consideration of the effect of Athletic stories. In order to test that effect a percentage of stories that did not primarily cover athletics was calculated. This subset, which we have termed the Non-Athletic frame, is interesting to consider because these stories were included in both the Local Achievement Frame and the generic positive frame. Given the propensity for athletic coverage by local newspapers an understanding the effect of non-athletic stories alone is important. The results for this analysis are found in Table 4.

Table 4
Non-Athletic Frame
N=220
R SQUARE .0348

Variable	Coef	Robust Standard Error
Non-Athletic Frame	-.6812*	.2508
Number of Stories	-.0046	.0181
Average Word Count	.0229	.0186
Per cent Students Non-White	-.4236*	.1786
Per cent Students Eligible for Free	.0886	.1002

Reduced Lunch		
Student Teacher Ratio	-3.0421	2.448
Per Pupil Spending	-.0022	.0011
Total Enrollment	-.0021	.0015
Constant	150.14	71.6721

**Significant at the .001 Level
* Significant at the .05 Level

The results of the OLS regression for the Non-Athletic Frame are interesting. The relationship between the frame, which is the remaining stories of both the Local Achievement and generic Positive Frames after all stories covering athletics are removed, is both significant and negative. Like the results from the FSM and LA frames, a number of the control variables are insignificant. Given this result, where an increase of one per cent of non-athletic stories yields a .68 reduction in public perception of local education quality, the effect of media can be clearly seen. This result again rejects the null hypothesis and provides additional reinforcement for the hypothesis that media coverage does in fact effect parental perception. However when we consider the effect of non athletic stories that which remains causes the direction of the relationship between coverage and perception to switch. This switch calls into question whether the results found in the Positive Frame and the Local Achievement Frame are consistent with our hypotheses. It appears given this result that media coverage may, in fact, have a negative effect on parental perceptions even when the coverage is positive but non-athletic.

Each of the results, as was predicted, yielded low R Square's. As the results our analysis indicate that media effects are having an effect on the perception of the public

about local education, future studies which include demographic data for the respondents would be valuable in further considering our hypotheses.

Even with this need for additional study these results having interesting implications, the first which tracks closely with the hypothesis of this study is that media coverage even at the local level can have an effect on how individuals view public programs. In each of the regressions, except the FSM frame, how media covered local education had a significant effect that resulted in measurable change to the public's perception.

Additionally, these results provide interesting evidence that when local media uses a positive orientation towards a government program like education, it can positively affect the public's perception. What is more interesting is that when a particular class of story such as athletics, is controlled for testing the residual stories yields an alternative effect. When stories about athletics are aggregated with all education stories, media has a positive effect on public perception, when athletic stories are excluded generic media exposure has a negative effect.

Why the coverage of athletics would have such strong influence on the relationship between media coverage and public perception of education is a puzzle. One possible explanation of this relationship is that high school athletics have such a positive connotation that coverage of them has spillover effects for generic perception of public education. Essentially, the public uses the nearly uniformly positive coverage of athletics as a heuristic when considering education, and coverage of athletics adds to

the reserve of positive information they use when responding to questions about education in their local area.

Despite the puzzling relationship between athletic coverage and public perception, the evaluation of these frames, including the frame where athletics is controlled out, provide evidence for the effect of media on public perceptions. When local newspapers use a positive frame to present stories we find that public perception is positively affected. As well as, when a specific positive frame is tested in this case Local Achievement we find similar results. These results confirm the media effects hypothesis, and track well with the literature that asserts which media has an effect on the public. This study pushes that assertion down to the local level by considering local media coverage of a specific local policy, education, and tests for the media effects the literature indicates should be present.

Why the puzzle?

One way to think about parental support is to consider it using market terms. Parental support may be a form of parental demand for better quality schools and better quality education. Demand is met in most markets through competing suppliers. But the only competition with rural public schools is home schooling as the population base can seldom support a charter or private school or even other public schools where parents could exercise school choice. Because rural schools are monopolies there are not competitive pressures encouraging individual schools to respond to consumer demand as there are in urban settings where private, parochial, and increasingly charter schools

are an ever present option for parents creating competition from inside and outside the system.

Economic theory indicates that the role that information plays in a particular market is of particular importance. Consumers use the information they have immediately available, or that is available through a simple search process, to determine first if they desire a particular good, and if so what their demand for that good is (Stigler, 1961). George Stigler's work indicates that consumers perform a utility calculation when trying to determine whether to search for more information on a product before choosing to purchase it or not. Stigler asserts 'If the cost of search is equated to its expected marginal return, the optimum amount of search will be found.' (Stigler, 1961: 5) If a consumer does not expect to gain more utility from the search for more information, then they will simply revert back to the pool of knowledge that may already be in existence from all previous sources.

The use of athletics to provide information is unsurprising in a market with insufficient information available. Parents seek information that is easily available to them in order to make judgments about the school, a role athletics has naturally fulfilled. Given this market disruption the failure of dissemination of information that goes along with it, the continued use of athletics as a heuristic seems extraordinarily likely.

Another potential explanation for parental perception that would apply in all public schools, not just rural ones, is that the parents pay for a small percentage of their children's education and that portion is hidden in the overall property tax and, or other taxes such as income and sales tax. Thus, the connection between those receiving the

service and those paying is obscured. Without a clear connection between cost and product, parents have less incentive to be involved in school decisions than they might have if they were actually paying for their children's education.[8] They also have little incentive to accurately demonstrate their demand for school outcomes since consumers over-consume goods provided at no or less than market prices. Thus, educators face a continuum anchored by two kinds of parents. Those who are pleased there are schools for their children but care little about the educational product, and those who care too much about the educational product and make unreasonable demands on the school system.

Given a near monopoly on the supply side and consumers who do not pay on the demand side, educators who want to improve their students' performance are in a difficult position. Situations where there are no ready alternatives do not create incentives the further pursuit of information about alternatives because there is no comparison to be made. A Cato Institute study found that five of the seven states with counties considered in this study fell below the twenty-fifth percentile of market based education systems. (Cato, 2008) Increased competition in the educational system likely leads parents to attempt comparisons between educational options, and in doing so provides incentives for exploration of school quality. This exploration seems likely to reduce the tendency of parents to rely on local media coverage, and in particular athletics in determining educational quality.

[8] We are not necessarily saying that parents ought to pay, just noting the incentives that arise from not having to pay. Educators who do not recognise those incentives will be less successful at increasing parental involvement.

Our findings indicate that in the existing educational monopoly parents find that the utility of searching for detailed information on the academic quality of their schools does not outweigh the cost. They then revert to the pool of knowledge that is readily available to them. That pool of available knowledge includes the local media coverage with its emphasis on athletics. In this sense we find a unique unity between the economic literature that describes the role of the information in the market, and the decision making literature of political science. When information is difficult to find economics predicts that parents may cease their search for information, while Political Science provides a unique perspective on what information parents are likely to use once they abandon the search for full information.

Works cited

Converse, P. E. 1964. “The Nature of Belief Systems in Mass Politics,” in D. E. Apter, Ideology and Discontent, pp. 206-261. New York: The Free Press of Glencoe.

Entman, R. M. 1993. “Framing: Towards clarification of a fractured paradigm,” Journal of Communication 43 (4): 51-58.

Gibbs, R. M., P. L. Swaim, and R. Teixeira. 1998. Rural Education and Training in the New Economy. Ames: Iowa State University Press.

Gilens, M. 1996. “Race and Poverty in America: Public Misperceptions and the American News Media,” The Journal of Politics 60: 515-541.

Hetherington, M. J. 1996. “The Media’s Role In Forming Voter’s National Economic Evaluations in 1992,” American Journal of Political Science 40 (2): 372-395.

Iyengar S., and D. R. Kinder. 1987. News That Matters. Chicago: The University of Chicago Press.

Klapper, J. T. 1967. The Effects of Mass Communication. New York: The Free Press.

Mutz, D. C. 1998. Impersonal Influence: How Perceptions of Mass Collectives Affect Political Attitudes. New York: Cambridge University Press.

Nelson, T. E., R. A. Clawson, and Z. M. Oxley. 1997. “Media Framing of a Civil Liberties Conflict and Its Effect on Tolerance,” American Political Science Review 91 (3): 567-583.

Peterson, P. E., and B. C. Hassel. 1998. Learning From School Choice. Washington DC: The Brookings Institute.

Popkin, S. L. 1991. The Reasoning Voter. Chicago: The University of Chicago Press.

Scheufele, D. A. 1999. “Framing as a Theory of Media Effects,” The Journal of Communication 49 (1): 103-122.

Stigler, G. J. 1961. “The Economics of Information,” The Journal of Political Economy 69 (3): 213-225.

USDA Economic Research Service. 2004. “Publications, Rural Education at a Glance,” http://www.ers.usda.gov/publications/rdrr98/rdrr98_lowres.pdf, Accessed November 25, 2008.

Zallar, J. R. 1992. The Nature and Origins of Mass Opinion. New York: Cambridge University Press.