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How does civic education affect the development of democratic political culture in new democracies? Using a unique three-wave panel data set from Kenya spanning the transitional democratic election of 2002, we posit a two-step process of the social transmission of democratic knowledge, norms, and values. Civic education first affected the knowledge, values, and participatory inclinations of individuals directly exposed to the Kenyan National Civic Education Programme (NCEP). These individuals became opinion leaders, communicating these new orientations to others within their social networks. Individuals who discussed others’ civic education experiences then showed significant growth in democratic knowledge and values, in many instances more than individuals with direct exposure to the program. We find further evidence of a “compensation effect,” such that the impact of civic education and post-civic education discussion was greater among Kenyans with less education and with lower levels of social integration.

Regime transitions to democracy bring with them transitions of another sort: rapid changes in the political behaviors, knowledge, and values expected of citizens.1 Individuals quickly need to learn the basic structure of a new set of institutions and norms, to develop new political loyalties, and to figure out where and how they fit in. How can citizens acquire these new civic competencies and attitudes in such a short period of time? Theorists initially posited that the acquisition of democratic norms, values, and participatory orientations among individuals in new democracies would be a long-term process linked to social modernization and generational replacement (Almond and Verba 1989; Lipset 1959). A spate of more recent research on third-wave democracies, however, has established a new truism: that democratic orientations are malleable, in the medium and even in the short term. Evidence abounds that democratic attitudes in transition societies respond to the regimes’ political and economic performance (Mattes and Bratton 2007; Mishler and Rose 1997; Seligson 2002). Mass attitudes in new democracies also have been found to mirror shifts in elite political culture, ideology, and attitudes toward civil liberties (Gibson and Gouws 2003; Mishler and Rose 2007). And democratic values in some postcommunist and authoritarian societies developed quickly due to “demonstration effects,” whereby Western...
democracies served as positive role models observed through the international mass media (Dalton 1994; Rohrschneider 1999). These findings all suggest that democratic transitions can be accompanied by relatively rapid changes in political orientations, as the new regime demonstrates positive performance, and citizens learn from new leaders, institutions, and other democratic systems.

But are there more direct ways to promote democratic norms, values, and participatory orientations? Given the plethora of new democratic regimes that exhibit poor performance or outright backsliding toward authoritarianism, successful transmission of democratic norms and values in the short run would seem to require interventions that are independent of potentially problematic institutions and elites. Perhaps the most promising direct means for promoting democratic orientations in new democracies is through civic education programs, which teach democratic citizenship to young people in classroom settings or to adults in community workshops, lectures, or public fora (Finkel 2003a; Torney-Purta et al. 2001). Over the past several decades, there has been an explosion of such programs in the emerging democracies of Eastern Europe, Africa, and Latin America, with the vast majority funded by the United States, other OECD donors, or philanthropic organizations seeking to stimulate more democratic political culture (Carothers 1999). These programs range from new primary and secondary school curricula on democracy, to local NGO programs providing instruction about the social and political rights of women, to voter education, to neighborhood problem-solving programs bringing individuals and local authorities together. It is difficult to estimate the precise number of these programs in developing democracies, but United States Agency for International Development (USAID) data suggest that the United States alone spent between $30 million and $50 million a year on civic education between 1990 and 2005.2

Despite the proliferation of civic education programs in new democracies, there has been relatively little research on their effectiveness in changing democratic orientations among students or adults. Given the amount of money invested in civic education, as well as the theoretical importance of supportive mass dispositions for the consolidation of new democracies, clear and solid evidence regarding the effectiveness of these programs is critical. A small number of published studies, however, has emerged in recent years. Most report that civic education among secondary school students (Slomczynski and Shabad 1998; Torney-Purta et al. 2001) or adults in community-based workshops (Finkel 2002, 2003a) significantly impacts political knowledge and participation, as well as, under certain conditions, democratic values and norms such as tolerance, efficacy, and institutional trust. Thus, there is some optimism regarding the benefits of donor-sponsored civic education for democratic political cultures in recipient countries.

In this article, we add to this emerging literature by assessing the impact of a major countrywide civic education initiative in Kenya during the period spanning the transitional democratic election of December 2002. The Kenyan National Civic Education Programme (NCEP) consisted of some 50,000 discrete workshops, lectures, plays, and puppet shows, and community meetings conducted by nearly 80 Kenyan NGOs between late 2001 and December 2002. These activities aimed to promote civic skills, democratic values, and engagement in the democratic regime among ordinary Kenyan citizens—specifically to prepare them to exercise the vote, to provide input to an ongoing constitutional reform process, and “to contribute to the consolidation of a mature political culture in Kenya” (NCEP Programme Document, cited in Finkel 2003b).

We estimate that approximately 15% of all Kenyans of voting age were trained in the program, making it one of the largest—if not the largest—coordinated civic education program for adults yet conducted in developing democracies (Niemi and Finkel 2007). Our evaluation is similarly national in scope and can therefore speak to both the program’s microlevel effects and its aggregate-level impacts on Kenyan democratic orientations.

Kenya, moreover, is an ideal context in which to carry out an assessment of civic education’s impact. It is a country whose political culture has many characteristics common to struggling democracies, including long-standing ethnic rivalries and inequalities (which erupted into violence most recently in 2008), high levels of intolerance and distrust, and relatively low levels of citizen engagement with the political process (Barkan 2008; Gugerty and Kremer 2008). At the same time, after only fitful and uncertain movement away from one-party rule in the years leading up to the 2002 election, there was real hope that year that true democratic change in the country was possible. The Kenya NCEP, then, took place in a difficult context, yet one where it had at least some

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2These figures were obtained from official USAID activity data, available at http://www.pitt.edu/~politics/democracy/democracy.html as part of the project “Deepening our Understanding of the Effects of US Foreign Assistance on Democracy Building, 1990–2004,” principal investigators Steven E. Finkel, Aníbal Pérez Liñán, Mitchell A. Seligson, and C. Neal Tate. The data show that expenditures in the category “Civic Education, Civil Society and Leadership Training,” which includes all civil society activities funded by USAID aside from activities related to labor unions and the support of independent mass media, totaled more than $2 billion between 1990 and 2005.
chance of building successfully on recent democratic developments.

We address two major deficiencies in previous studies. One is theoretical, in that previous research has been limited by a restrictive view of the target population of civic education programs. We argue that, rather than focusing solely on individuals trained in the program per se, evaluations of civic education must also examine its indirect effects, whereby treated individuals go on to discuss lessons and ideas in the workshops with “untreated” members of their social networks. To the extent that civic education stimulates such democratic discussions—and we show below that they occurred in Kenya with great frequency—democracy education may exert even greater impact on democratic political culture than previously recognized, as the “downstream” effects of political discussions amplify the programs’ direct effects.

The other deficiency we address is methodological. Knotty problems of selection and control are endemic to the evaluation of civic education in real-world settings. School-based civic education is often mandatory, making it difficult to compare trained students to appropriate control groups, while the voluntary nature of adult civic education leads inexorably to problems of self-selection bias. Overcoming these problems is difficult in observational studies and nearly impossible with the single-shot cross-sectional designs utilized in the literature thus far. In this study, we make use of the first longitudinal design to date in the evaluation of adult civic education in developing democracies. The three-wave panel data here allow us to disentangle the effect of civic education from that of prior attitudes and to estimate the effects of civic education exposure while controlling for confounding variables that may be associated with both exposure to civics training and democratic knowledge, values, or behaviors.

The results show strong support for a “two-step” model of the impact of civic education. Using a variety of longitudinal models to control for selection effects, we find first that the Kenyan National Civic Education Programme (NCEP) affected the knowledge, attitudes, and participatory inclinations of those directly trained in the program. These individuals then became opinion leaders, communicating new democratic orientations to neighbors, family members, and friends within their social networks. We show that individuals with no personal exposure to the program who discussed others’ civic education experienced significant growth in political knowledge, tolerance, and a sense of national versus tribal self-identification, in many instances more than individuals who were directly trained. Moreover, the results suggest that the effects of civic education depend critically on factors related to the nature of the individual’s civic education experience, as well as on factors related to the individual’s previous store of information and sociopolitical resources. Civic education had consistently greater impact when workshops were conducted with active, participatory methodologies; and the effects of civic education and post-civic education discussion were concentrated among Kenyans with less education, and with lower levels of social integration. The study presents perhaps the strongest evidence to date of the full range of civic education’s effects and reinforces its promise for promoting democratic political culture.

Civic Education, Political Discussion, and Democratic Learning: Theoretical Expectations

Several recent studies suggest that civic education in new democracies can have a significant impact on a variety of democratic orientations, especially basic knowledge and political participation. Finkel and Ernst (2005), for example, find that high school students who receive civics instruction on at least a weekly basis are far more likely to identify correctly key South African political leaders and to possess basic knowledge of the South African constitution than students who receive civics instruction less often or not at all. Among adult populations, Finkel (2002) shows rather large effects of civic education on political participation, especially at the local level: adults in nine programs in the Dominican Republic, Poland, and South Africa were nearly twice as likely as control group members to attend municipal meetings or participate in community problem-solving activities. Evidently, conducting adult civic education through “advocacy NGOs” and other civil society organizations augments the normal mobilization processes taking place within these groups.

The effects of civic education in these studies on democratic attitudes and values such as tolerance, efficacy, and institutional trust are typically more modest.\(^3\) These dispositions should be relatively resistant to change, as a long line of research on democratic values points to their origins in deeply rooted factors such as dogmatism, psychological security, and individual locus of

\(^3\)In fact, the effects of civic education on political trust is sometimes negative, as such training appears to raise awareness of the deficiencies of less democratic regimes and the performance of political elites (Finkel, Sabatini, and Bevis 2000). Moehler (2008) finds a similar pattern in an analysis of the impacts of civic participation in constitution-building activities in Uganda.
control (Sullivan and Transue 1999, 632). However, civic education may change even these “difficult” democratic orientations under certain conditions, specifically when exposure to civics training is more frequent, and when training makes greater use of participatory teaching methodologies such as role playing, group problem-solving activities, open discussions, and the like. Role playing and other active behaviors within the small-group setting allow individuals to practice or “try out” new orientations within a safe environment; and much research in social psychology suggests that these kinds of exercises stimulate attitude change that is consistent with the behaviors that are being acted out (Campbell 2008; Zimbardo and Leippe 1991). Previous civic education research confirms these processes as well, as a host of studies among school-age children (Campbell 2008; Finkel and Ernst 2005; Niemi and Junn 1998; Torney-Purta et al. 2001) and adults (Finkel 2002, 2003a) in both developed and developing contexts shows that exposure to democracy training that makes use of open discussion and participatory methodologies has significantly greater effects on democratic orientations than does lecture-based instruction (Torney-Purta et al. 2001). This discussion leads to two main expectations for the effect of exposure to civic education training: it should have somewhat greater effects on knowledge and participation than on democratic values, and its effects will be greater among individuals who are trained more frequently with more participatory methodologies.

All previous civic education research, however, has been limited in theoretical scope, in that evaluations have focused on its effects only among individuals directly exposed to democracy training. We argue instead that civic education involves a two-step process, whereby trained individuals go on to discuss the messages and ideas from programs with others in their social networks. The two-step process of message reception and subsequent diffusion through social networks has long been viewed as one of the primary ways that media affect political attitudes (Berelson, Lazarsfeld, and McPhee 1954); more recent research has shown a similar effect for campaign mobilization, as individuals contacted by parties and get-out-the-vote efforts in turn mobilize others in their social networks (McClurg 2004; Nickerson 2008). Despite the theoretical importance of these kinds of social diffusion processes, however, they have not been taken into account in any previous study of the effects of civic education.

There are several reasons to expect post-civic education political discussions to be relatively widespread. First, nearly all adult civic education in developing democracies is conducted through NGOs or other secondary groups that organize these activities in their local communities. Group-based discussion networks are thus already available to most civic education participants. Second, as noted above, civic education programs for adults in new democracies frequently consist of workshops that make extensive use of group-based political discussion as a pedagogical technique. Thus, civic education participants are likely to engage in a good deal of political discussion as part of their training, and they are likely to have access to other individuals with whom they may continue discussions after formal training has ended.

When civic education leads to political discussion among network members, it may then activate the whole range of social network, discussion, and deliberation effects on democratic learning and participation that have been found in previous research. A host of studies, for example, shows that political discussion promotes general political knowledge (Delli Carpini and Keeter 1996; Eveland et al. 2005), tolerance for and awareness of the reasons behind others’ views (Mutz 2006), support for democratic institutions and processes (Gibson 2001), and political participation (Lake and Huckfeldt 1998; McClurg 2003, 2006). These effects should be particularly strong in new democracies, where individuals are “actively trying to learn the new rules of the political game,” and where everyday conversations may be “especially effective in transmitting novel information about unfamiliar political institutions” (Gibson 2001, 54). Indeed, Kenyan social networks appear to play a major role in conveying information and changing norms on issues such as birth control and disease prevention (Behrman, Kohler, and Watkins 2002; Kremer and Miguel 2007).

But there are deeper links between civic education, political discussion, and democratic change, beyond the fact that civic education may simply lead to more political talk and deliberation. Civic education trainees are likely to be especially effective agents of democratic socialization. For one thing, their participation in civic education activities is likely to make them de facto experts on democratic processes within their social networks, in particular networks in emerging democracies characterized by relatively low levels of political information (Huckfeldt 2001; Lake and Huckfeldt 1998; McClurg 2006). For another, trainees are likely to have relatively strong social and emotional bonds with network members, making them especially effective at transmitting dissonant ideas (Huckfeldt and Sprague 1995; Walsh 2004). Given that many social networks in new democracies may be relatively closed, homogenous, and not particularly infused with democratic values (Gibson 2001), the affective bonds that network members share may be valuable in persuading those who are not exposed to civic education to accept pro-democracy messages.
For all of these reasons, we hypothesize that civic education influences attitudes, values, and participatory orientations in new democracies through a two-step diffusion process. In the first step, democracy training—especially training that makes use of open, participatory teaching methodologies— influences the knowledge, values, and behaviors of individuals exposed to civics instruction. In the second step, there are indirect effects on the individuals with whom trainees talk. To the extent that previous research has failed to take these secondary or indirect effects into account, civic education’s overall impact on democratic change may have been greatly underestimated.

Finally, we can expect civic education and post-civic education discussion to have greater effects on some individuals than others. In line with previous research on political mobilization, Finkel (2002) found that the effects of adult civic education programs on participation accrue disproportionately to those with higher levels of social integration and other political resources. This pattern may also hold for the participatory impact of postworkshop political discussions as well; U.S.-based work (Kwak, Shah, and Holbert 2004; McClurg 2003) finds that the highly educated and more socially integrated participate more as a result of political discussion. Connections to civil society in Kenya have similarly been found to reinforce participatory inequalities and privileges based as patronage or clientelistic networks (Gugerty and Kremer 2008; Orvis 2001a).

At the same time, theories of attitude change and persuasion would support an alternative “compensation” effect, whereby civic education and post-civic education discussion would have the greatest impact on the attitudes and values of individuals with fewer cognitive and social resources (Campbell 2008). This pattern, held, for example, in Valentino and Sear’s (1998) analysis of the effects of new information conveyed during political campaigns, as this information tended to narrow the gap between adolescents and adults in political knowledge and attitude formation. The well-known McGuire-Zaller model of attitude change (Zaller 1992) predicts that, conditional on an individual’s attention to and comprehension of the content of a message, attitude change, or persuasion is most likely to occur among individuals with less prior information and among those whose prior attitudes and values are more ambivalent, less cohesive, and less crystallized. This would suggest that respondents with more cognitive resources and who are more socially integrated should be less likely to respond to democratic messages conveyed through civic education and discussion. Not only are their prior attitudes likely to be more crystallized, but in the Kenyan context they also will be more likely to have encountered such messages elsewhere, whether through media to which access is socially stratified, through civic associations, or in the urban milieu itself (Orvis 2001b). We expect, then, that the less educated and the less socially integrated will be more likely to accept and to exhibit attitude change as a result of the “nonredundant” democratic messages conveyed through civic education workshops. Such a process would paint a more benign picture of the impact of civic education, as its effects on attitudes and values would benefit those who, in important ways, “need it” the most.

Research Design and Data

We investigate these processes in the context of an evaluation of the Kenyan National Civic Education Programme (NCEP), a countrywide civic education initiative conducted during the run-up to the transitional national elections of December 27, 2002. This election produced a decisive victory for Mwai Kibaki and his NARC party coalition over Uhuru Kenyatta, the candidate of the ruling KANU party, and the successor to the incumbent President Daniel Arap Moi. Moi had led the country in corrupt and authoritarian fashion since 1978, stifling opposition following an attempted coup in 1982 and establishing Kenya as a one-party state thereafter. International pressure following the end of the Cold War in the 1990s resulted in a gradual opening of the country to multiparty elections in 1992 and 1997. Both elections produced KANU victories, though both were widely viewed as flawed, marred by intimidation of the opposition and widespread violence. Nevertheless, some democratic progress continued throughout the late 1990s. Moi promised to step down in 2002 in accordance with the 10-year term limit set out in the Kenyan constitution, though until the date of the election was set (and even during the campaign), there was doubt about whether he would follow through on this promise. In 2001, a Constitutional Review Commission was formed with the task of writing a new constitution in time for the 2002 election. Extensive public debate took place on a variety of proposals, among them restricting presidential powers, creating a prime ministerial position, and increasing the powers

所提供的，当然，如果个体了解和理解所传达的信息。我们期待消息接收者在信息传递中处于不利地位，因为这些信息的大部分内容和教学材料都是针对特定的、社会边缘化群体，例如，这些群体在肯尼亚和该地区中没有扫盲教育（见NCEP, Making Informed Choices）。
of local and provincial governments. Though a new constitution was not agreed upon by late 2002, the election campaign proceeded, with the result being the first alteration of political power through the electoral process in Kenyan political history. The election was widely viewed as a democratic breakthrough for the country (Barkan 2004; Howard and Roessler 2006).

In this context, a consortium of so-called “like-minded donors” from the European Union funded an ambitious civic education program to raise awareness about the 2002 election and the associated constitutional reform process. Some 80 Kenyan NGOs participated in the National Civic Education Programme (NCEP), conducting over 50,000 workshops and other organized activities with over 4.5 million individuals between late 2001 and December 2002. The program was national in scope, as the NGOs developed and executed a detailed “roll-out” plan for covering different areas of the country. Further, the “treatment” was standardized to a significant degree, as the Programme administration spent nearly two years developing a common curriculum, a handbook entitled Making Informed Choices: A Handbook for Civic Education for the overall initiative, and a supplemental teaching manual for conducting workshops in the field.

The United States Agency for International Development (USAID/Nairobi) commissioned Management Systems International, a U.S.-based management consulting firm, to conduct an evaluation of the project’s impact on participants in late 2001. The evaluation consisted of pre- and post-civic education survey interviews with individuals who attended NCEP workshops and with control group respondents. We interviewed 2,601 individuals between February and April 2002, with half selected at random upon entering one of 181 selected NCEP workshops sponsored by 26 different civil society organizations throughout seven of Kenya’s eight provinces. The other half consisted of individuals who did not attend that workshop, and who matched a given workshop attendee in terms of age, educational attainment, gender, and village or neighborhood of residence. This sampling strategy produced nearly identical groups of initial workshop attendees and nonattendees in terms of the demographic factors that we attempted to match. Two follow-up waves of interviews were conducted. In October and November 2002 (Wave 2), between six and nine months after the initial NCEP workshops, we reinterviewed 1,787 individuals (901 initial workshop attendees and 886 from the initial sample of matched nonattendees).\(^5\) Between late March and early June 2003, we conducted a third wave of interviews with 401 respondents who had also been interviewed in Wave 2 of the study and with 514 “fresh” individuals who had previously been interviewed only in Wave 1. The sample analyzed here thus consists of two waves of panel data for 1,900 individuals (952 from the initial workshop group and 948 from the sample of initial nonattendees) and three waves of data for an additional 401 respondents (210 from the initial workshop group and 191 from the sample of initial nonattendees). Table 1 summarizes the sample information for the study; the analysis is based on the 2,301 individuals interviewed in at least two waves.

**Dependent Variables.** The survey measured a number of dimensions of political culture, including—most importantly for our purposes—political knowledge, participation, tolerance, and the individual’s sense of national versus tribal identification. Knowledge, tolerance, and participation, of course, are core aspects of democratic citizenship, and are of central concern to many civic education programs in developed as well as developing democracies. We focus on national versus tribal self-identification because the NCEP aimed specifically to promote a sense of Kenyan “nationhood,” given the often troubling relationships between ethnic groups that have hampered the country’s development (Ndewga 1997; Orvis 2001b). In the wake of the explosion of ethnic political violence following the flawed elections of December 2007, the importance of this variable, along with political tolerance, for Kenya’s democratic political culture became clearer still (Barkan 2008).

The specific questions we used to measure each dimension were similar to those used in recent Afrobarometer and other survey-based studies of public opinion, participation, and democratic values in Kenya and sub-Saharan Africa (e.g., Bratton, Mattis, and Gyimah-Boadi 2004; Gibson and Gouws 2003). The questions were vetted with the Research International survey personnel as well as with a Kenyan sociologist with extensive survey experience, Dr. Paul Mbatia of the University of Nairobi. The questionnaire was finalized after a thorough pretest and interviewer debriefing conducted in January 2002 by Research International.

We measured political knowledge through responses to four questions regarding the names of the Vice

\(^5\) Response rates were extremely high. Of 2,601 respondents interviewed in the pre-civic education wave, we were able to obtain reinterviews in either the second or third wave with 2,301, or 88%.
President and the Provincial Commissioner, the length of the President’s term in office, and the provisions for amending the Kenyan constitution. We summed respondents’ correct answers to create a general knowledge scale ranging from 0 to 4. The reliability of the scale was .50 in both the pre- and postworkshop interviews. We measured the respondent’s level of democratic Political participation by asking whether the respondent had done any of the following in the past year: worked for a political party or candidate; participated in an organized effort to solve a neighborhood or community problem; attended a meeting of the local council or with other government officials; contacted a local official; contacted a national elected official; taken part in a protest, march, or demonstration on some national or local issue; and contacted a local chief or traditional leader about a problem. Waves 2 and 3 questions explicitly called for respondents to report whether they had taken part in any of these activities since their previous interview. We sum these responses to create an overall scale ranging from 0 to 7. The reliability of the scale is .74 in the postworkshop interviews, and .70 in the preworkshop interviews.

We measured Political tolerance with four standard questions regarding whether atheists and individuals who want to abolish elections in favor of military rule should be allowed “to speak publicly in your locality” and “to organize a peaceful demonstration to express their point of view.” Answers are on a 4-point agree/disagree scale, and we create a tolerance index by averaging responses to the four questions, yielding a scale that runs from 1 to 4. Its reliability was .90 for the postworkshop interviews and .84 for the preworkshop interviews. To measure National Versus Tribal Identity, we asked individuals “how important is being Kenyan to the way you think of yourself,” with responses coded as 3 for “very important,” 2 for “somewhat important,” and 1 for “not important.” The same question was asked for the individual’s “tribe or ethnic group.” We created a composite variable by subtracting the individual’s ethnic identity score from his or her national identity score, resulting in a scale ranging from −2 (greater ethnic identity) to +2 (greater tribal identity).6

**Independent Variables. Exposure to civic education.**

The primary variable for civic education is based on a series of questions administered in Waves 2 and 3. As described in the previous section, we conducted interviews in Wave 1 with both workshop attendees and with nonattendees who were matched to the workshop group on sex, age, educational status, and place of residence. Individuals in the nonattendee group, of course, could not be prevented from seeking out subsequent NCEP workshops on their own, and many did so. Some 30% (349 individuals) in this group received civic education at some point during the study. Moreover, many from the initial workshop sample sought out additional civic education workshops as well: in Wave 2, 38% of them reported additional civic education, while in Wave 3, 30% of them did. We therefore asked a series of questions designed to measure the extent to which interviewees had been exposed to civic education since their previous interview. We asked members of the initial workshop sample whether they had attended other civic education workshops since their previous interview, and whether they had attended organized teachings about democracy and the constitution at their church, mosque, or place of worship. Members of the initial nonattendee sample received the same questions without reference to an initial workshop. For the workshop sample in Wave 2, we code Civic education exposure as 1 + the number of additional workshops or organized teachings. For the initial nonattendee sample and for individuals who were interviewed a third time, Civic education exposure is simply the number of workshops plus organized teachings since the last interview. Because of the small number of respondents attending more than four workshops, and to reduce the right skew of the variable, we truncated the exposure count to produce a variable coded from 0 to 4.

6The four dependent variables are empirically, as well as theoretically, distinct; the maximum intercorrelation between the indicators is a very low .18.
Our use of self-reported civic education exposure raises legitimate concerns about the reliability of these verbal reports. We cannot absolutely validate these self-reports (any more than can most other survey-based studies of political or social participation), but other evidence gathered as part of the larger research project suggests that overreporting of attendance at civic education events was not common in Kenya in 2002. As noted above, the NCEP’s Technical Assistance Team (TAT) kept detailed records of each program activity, including the number of individuals present. According to these records, the total number of trained individuals was approximately 4.6 million, or 23% of the Kenyan voting age population. This figure, of course, does not represent the number of unique individuals the program reached because some portion of the population attended more than one event. To estimate the program’s actual reach, we take advantage of a representative national survey collected after the program concluded in December 2002, in which 16% of the population reported attending at least one event (Finkel 2003b). Of the attendees, 37% reported participating in one event, 31% in two events, and 31% in three or more events. If we apply these proportions to the TAT’s estimate of 4.6 million individuals trained, we arrive at a program reach of 2.8 million unique individuals, or 14.4% of the country’s voting age population. The two estimates—16% from the national sample versus 14.4% from the discounted TAT records—are strikingly similar. This gives us confidence in the self-reported exposure measures we use here; social desirability or other pressures on individuals to overreport their attendance at civic education events seem to have been minimal in the Kenyan context in 2002.7

Discussion of civic education. We measured post-civic education political discussion by asking all individuals in both the treatment and control groups: “Setting aside any events or workshops that you may have attended personally, has anyone you know talked to you about events or workshops about democracy and the Constitution that they have attended this past year?” If respondents said “yes,” we asked whether the number of such individuals was “one or two people” (coded as 1), “three to five people” (coded as 2), or “more than five people” (coded 3). Respondents who reported no discussion with civic education workshop attendees were coded as 0 on the variable Discuss others.

Control variables. We also include in the analysis several variables related to political awareness and engagement. We measured Political interest on a scale from 1 to 3 as the mean of responses to two questions regarding whether the respondent has “a great deal,” “some,” or “very little interest” in local community affairs and national politics and affairs. The correlation between the two variables in both the pre- and postworkshop interviews was moderate at .43. We measured Media consumption on a scale from 1 to 4 based on the mean of responses to two questions regarding how often the respondent pays attention to news about politics on the radio and in newspapers. Response categories ranged from “never” to “about every day,” and they were moderately correlated at .47. We measured Group memberships as a count (from 0 to 11) of the number of types of formal organizations in which the respondent is a member, including churches, burial societies, sports and women’s groups, and business associations. Each of these variables was then recoded to a 0 to 1 scale, with the index showing a reliability of .69.

We measured General political discussion by responses to a question: “How often have you discussed political issues with friends, family, or co-workers in the past year [since your previous interview]?” with codes of 0 for “have not done this,” 1 for “once,” and 2 for “for several times.” Demographic variables such as education (1–9 scale from “no primary schooling” to “completed university”) and an indicator for urban/rural location were measured as well.

Statistical Methods

Observational, or nonexperimental, evaluations of civic education face a number of important obstacles to successful causal inference. Let $Y_i$ be an individual’s democratic orientation (say, “tolerance”) measured if she receives civic education training, and $Y_i^0$ be the same individual’s tolerance measured at the same point in time if she does not receive civic education training. The causal effect of civic education exposure is:

$$\Delta Y_i = Y_i - Y_i^0,$$

or the difference between the tolerance of an individual who receives civic education training and her tolerance if
she is not trained. The “fundamental problem of causal inference” (Holland 1986) is that, for any given individual $i$, we observe only one of the two quantities on the right-hand side of (1); that is, we observe only $Y_i^1$ for individuals who received civic education, and we observe only $Y_i^0$ for individuals who did not. Thus, estimating the causal effect by comparing tolerance levels for the observed “civic education” and the “no civic education” groups is unwarranted without invoking additional assumptions.

In cross-sectional studies, the most common assumption is that, conditioned on a series of observed $X$ variables, the expected “no treatment” outcome for those who receive and who do not receive treatment is the same. Letting $D$ be an indicator for civic education exposure, this assumption means that:

$$E(Y_i^0 | X, D = 1) = E(Y_i^0 | X, D = 0).$$

(2)

If this assumption holds, then controlling for $X$, the outcome for the group which did not receive civic education would be exactly what the civic education treatment group would have looked like in the absence of treatment. In that case, comparison of the mean outcomes for the treatment and control groups (adjusted for $X$ via regression or some matching procedure) would yield the causal effect of civic education for those who received it or the “average impact of the treatment on the treated” ($ATT$). 8

The problem, however, is that the assumption in (2) is likely to be untenable, given the self-selected nature of civic education exposure. There are likely to be myriad factors that lead individuals to attend such programs that also would lead to higher levels of democratic orientations in the absence of any civic education treatment. Some, such as education, age, and membership in secondary associations, are likely to be included in $X$, the vector of observed control variables, but some relevant factors—for example, democratic or authoritarian personality, motivation, or other idiosyncratic attributes—are likely not to be known to the researcher or included in the data set. 9 The result will be a correlation between the treatment variable and the unobserved error term of the equations predicting democratic orientations, and hence endogeneity in the outcome equations and potential bias in the estimation of causal effects.

8The $ATT$ provides the most direct answer to the question of whether an intervention affected those individuals who were exposed to it. See Heckman and Vytlacil (2001) for a discussion of other impact evaluation parameters.

9We assess the degree to which workshop attendees and nonattendees differ on observed covariates in the article’s Supporting Information document (see footnote 1). There we also show the results of models that combine the panel methods described below with propensity score matching methods to control further for selection effects due to Wave 1 observables (see also footnote 13).

Similar problems of selection biases exist in the analysis of the effects of political discussion on democratic attitudes. The amount of political discussion in which a person engages is likely to be a function of a number of usually unobserved personal traits—extroversion, motivation, and the like—that may also relate to democratic attitudinal and behavioral orientations. Individuals may also seek out congenial discussion networks based on these same unobserved traits or their own prior political attitudes (Conover, Searing, and Crewe 2002; Mutz 2002). Thus, greater tolerance observed among those with higher levels of post-civic education discussion may be due to the differences in their (counterfactual) “no discussion” level of tolerance, compared to a control group of nondiscussants.

The longitudinal design implemented in the Kenya NCEP evaluation allows us to overcome these difficulties to a significant extent. With panel data, we observe tolerance or some other democratic orientation ($Y_{it}$) for a given individual $i$ at several $t$ points in time, and we also observe the individual’s exposure to civic education ($D_i$) and subsequent political discussion ($D_{i2}$) that takes place between any two given time periods of observation. Following Allison (1994), the task is to estimate the effect of the two civic education–related “events” that may have taken place between time points $t – 1$ and $t$ on the individual’s democratic orientations at time $t$. For two-wave data, the basic model may be written as:

(a) $Y_{i1} = \alpha_1 + \beta_1 X_{i1} + (U_i + \epsilon_{i1})$

(b) $Y_{i2} = \alpha_2 + \gamma_1 D_{i12} + \gamma_2 D_{i22} + \beta_1 X_{i1} + (U_i + \epsilon_{i2})$

(3)

where the $X_{it}$ represent a set of control variables that are observed in the given data, and the unobserved error term at each point in time is comprised of two components: the idiosyncratic component $\epsilon_{it}$, which varies across individuals and over time, and the $U_i$ term, which represents all unobserved individual-level factors that are related to $Y$ and that vary across individuals but do not vary over time. The absence of $D_{i11}$ and $D_{i21}$ in equation (3a) reflects the fact that they are zero for all individuals at time 1, which represents the “pretest” before any civic education or post-civic education discussion took place. If we assume that the idiosyncratic errors $\epsilon_{it}$ are unrelated to the $X_{it}$ to $U_{i1}$, or to one another, we can estimate $\beta_1$ and $\beta_2$ by first subtracting equation (3a) from (3b):

$$Y_{i2} - Y_{i1} = (\alpha_2 - \alpha_1) + \gamma_1 D_{i12} + \gamma_2 D_{i22} + \beta_1 (X_{i2} - X_{i1}) + (\epsilon_{i2} - \epsilon_{i1})$$

(4)

and then regressing the change score in $Y$ against the $D$s and the change score in $X$. The intercept in this estimation will yield the average change in $Y$ for individuals who
never experienced $D$, i.e., the pure control group, with $\gamma_1$ and $\gamma_2$ representing the additional average change in $Y$ for every unit increase in civic education exposure and post-civic education discussion. Equation (4) is equivalent in the two-wave case to the “fixed effects” model, which subtracts an individual time-averaged value of $Y$ and $X$ from equation (3) and regresses “mean-deviated $Y$” against “mean-deviated $X$” and time dummy variables to yield identical estimates (Allison 1994). These difference or “within” estimators provide the causal effects $\gamma_1$ and $\gamma_2$ while controlling for the selection biases that may have been produced by the unobserved $U_{it}$, i.e., by stable personality or other idiosyncratic factors.

As in the cross-sectional case, however, the unbiased estimation of causal effects with panel data depends on a critical assumption. We can define civic education’s causal effect on democratic orientations analogously to (1), this time in terms of gains:

$$\Delta Y_{it} = (Y_{it}^1 - Y_{it-1}^1) - (Y_{it}^0 - Y_{it-1}^0).$$

(5)

The causal effect is thus the difference between the gain for individual $i$ at time $t$ and time $t-1$ if she experiences civic education and the gain for the same individual over time if she does not experience civic education training. Again, for any given individual, only one group of terms in the parentheses in (5) is observed: $(Y_{it}^1 - Y_{it-1}^1)$ for the treatment group, and $(Y_{it}^0 - Y_{it-1}^0)$ for the control group. In the longitudinal case, the key assumption for identifying the causal effect is that, controlling for both observed $X$ and unobserved stable $U$ variables that influence both treatment and outcomes, the gain in tolerance that the treatment group would have experienced in the absence of treatment is the same as the gain in tolerance that the control group did experience in the absence of treatment:

$$E(Y_{it}^1 - Y_{it-1}^1 | X, U, D = 1) = E(Y_{it}^0 - Y_{it-1}^0 | X, U, D = 0)$$

(6)

The assumption in (6) is weaker than in (2), requiring only that the counterfactual growth rate, not level, of $Y$ for the treatment group in the absence of treatment be the same as the control group.

It may be the case, however, that even this weaker assumption is not tenable. It is plausible that the same unobserved factors that lead individuals to seek out civic education are those that determine subsequent gains in tolerance over time, and these gains may have been realized in the absence of treatment as well. Disentangling the “true” causal effect of treatment from such a differential trend is impossible with two-wave data, but the third wave of data gathered here enables us to make progress. Following Morgan and Winship (2007, 269), we may estimate a model with three-wave data that includes both a separate time trend for the treatment and control groups and time-specific treatment indicators:

$$Y_{it} = \alpha + \gamma_1 D_{it} + \beta_1 X_{it} + \beta_2 D_{it}^2 + \beta_3 T + \beta_4 (D_{it}^2 T) + \epsilon_{it}$$

(7)

where $D_{it}^2$ is an indicator for whether the individual was ever exposed to civic education over the course of the study, $T$ is a variable measuring the survey wave or time, and all other variables are defined as before. The model allows the estimation of the causal effect of the time-specific level of civic education exposure ($D_{it}$), controlling for initial differences between the “ever-treated” and control groups ($\beta_2$) and controlling for differences in the trend in democratic orientations between the “ever-treated” and the control group as well ($\beta_4$). This analysis provides an additional strong test for the causal effects of civic education and post-training political discussion on the democratic orientations examined here.10

**Results**

**The Frequency of Civic Education Exposure: Direct Effects**

In the columns marked (a) in Table 2 we present the results of two-wave fixed effects estimation of the direct impact of civic education exposure on our four key dependent variables: Political knowledge, Political participation, Political tolerance, and National versus tribal identification. The columns marked (b) in that table report estimates of the same causal effects from three-wave regression models that control for potentially different over-time trajectories in each democratic orientation for the civic education treatment and control groups. As can be seen in the two-wave models, civic education significantly affects each dependent variable. The models control for the individual’s level of political interest, media exposure, group memberships, and general political discussion; for over-time changes in each orientation that are common to all individuals; and most importantly, for stable factors that could have led individuals to select into civic education and that were also potentially related to the four democratic outcomes. This is strong evidence that adult civic education programs are able to affect orientations relevant to democratic political culture.

Contrary to the findings of previous research, however, the effects of exposure in the two-wave models were

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10Models including separate time trend and time-specific treatment indicators are more robust with longer wave panels; for this reason (and the fact that we have three-wave data on only 401 respondents), we report the results of both the two-wave difference and three-wave time trend models in the analyses to follow.
Table 2 Two-Wave Fixed Effect and Three-Wave Differential Trend Models: Civic Education’s Effect on Democratic Orientations

<table>
<thead>
<tr>
<th></th>
<th>Political Knowledge</th>
<th>Participation</th>
<th>Tolerance</th>
<th>National vs. Tribal Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Two-Wave Fixed Effects (a)</td>
<td>Three-Wave Differential Trends (b)</td>
<td>Two-Wave Fixed Effects (a)</td>
<td>Three-Wave Differential Trends (b)</td>
</tr>
<tr>
<td>Civic education exposure</td>
<td>0.120** (0.02)</td>
<td>0.117** (0.01)</td>
<td>0.106** (0.03)</td>
<td>0.100** (0.03)</td>
</tr>
<tr>
<td>Media consumption</td>
<td>0.520** (0.08)</td>
<td>1.342** (0.06)</td>
<td>0.447** (0.15)</td>
<td>0.561** (0.11)</td>
</tr>
<tr>
<td>Political interest</td>
<td>0.048 (0.08)</td>
<td>0.088 (0.06)</td>
<td>0.505** (0.14)</td>
<td>0.627** (0.10)</td>
</tr>
<tr>
<td>Group memberships</td>
<td>0.441** (0.11)</td>
<td>0.591** (0.07)</td>
<td>2.972** (0.19)</td>
<td>3.235** (0.12)</td>
</tr>
<tr>
<td>General political</td>
<td>0.089 (0.02)</td>
<td>0.209** (0.04)</td>
<td>0.181** (0.04)</td>
<td>0.263** (0.03)</td>
</tr>
<tr>
<td>discussion</td>
<td>(0.28)</td>
<td>(0.04)</td>
<td>(0.04)</td>
<td>(0.03)</td>
</tr>
<tr>
<td>November reinterview</td>
<td>0.318** (0.04)</td>
<td>-0.690** (0.07)</td>
<td>-0.232** (0.04)</td>
<td>-0.122** (0.03)</td>
</tr>
<tr>
<td>March-June reinterview</td>
<td>0.013 (0.06)</td>
<td>-0.528** (0.10)</td>
<td>-0.230** (0.06)</td>
<td>-0.122** (0.04)</td>
</tr>
<tr>
<td>Treatment group</td>
<td>-0.045 (0.04)</td>
<td>0.143* (0.06)</td>
<td>-0.035 (0.04)</td>
<td>-0.035 (0.04)</td>
</tr>
<tr>
<td>Time trend</td>
<td>0.024 (0.03)</td>
<td>-0.305** (0.05)</td>
<td>-0.122** (0.03)</td>
<td>-0.122** (0.03)</td>
</tr>
<tr>
<td>Trend × treatment group</td>
<td>0.092** (0.03)</td>
<td>-0.039 (0.06)</td>
<td>0.086* (0.04)</td>
<td>0.086* (0.04)</td>
</tr>
<tr>
<td>Constant</td>
<td>1.582** (0.08)</td>
<td>0.916 (0.06)</td>
<td>0.808** (0.14)</td>
<td>0.213* (0.09)</td>
</tr>
<tr>
<td>No. of observations</td>
<td>4593 4993 4593 4993</td>
<td>4593 4993 4586 4983</td>
<td>4586 4983 4583 4983</td>
<td>4586 4983 4583 4983</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.181 0.214 0.166 0.222</td>
<td>0.021 0.018 0.021 0.018</td>
<td>0.069 0.056 0.069 0.056</td>
<td>0.069 0.056 0.069 0.056</td>
</tr>
</tbody>
</table>

Note: Robust standard errors in parentheses are clustered on 2,301 individuals in all models. Coefficients are significant at #p < .10; *p < .05; **p < .01. R-squared within is presented for two-wave fixed-effect models.

Civic education is likely to most groups’ ethnic homogeneity and to the politicization of ethnicity in postindependence Kenya (Barkan 2008; Ndewa 1997; Orvis 2001b; Posner 2007). Civic education thus proves to be useful in developing even difficult democratic values such as tolerance, and in counterbalancing the in-group identifications promoted through some other forms of civil society engagement. At the same time, the program appears to have been relatively less successful in promoting general political participation; we attribute this finding to the lack of direct mobilization appeals in the NCEP curriculum aside from encouraging individuals to vote in the 2002 election.¹¹

¹¹We do find significant effects of NCEP exposure on voter turnout in a separate, two-wave fixed effects model among individuals whose post-test interview was conducted after the December 27, 2002 balloting. The results indicate that the turnout rate among
TABLE 3 The Number of People Who Discussed Their Own Workshop with Respondent (% of Respondents)

<table>
<thead>
<tr>
<th>Treated respondents</th>
<th>Wave 2</th>
<th>Wave 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>No One</td>
<td>31.79%</td>
<td>26.62%</td>
</tr>
<tr>
<td>1–2 People</td>
<td>12.43%</td>
<td>16.17%</td>
</tr>
<tr>
<td>3–5 People</td>
<td>23.74%</td>
<td>27.36%</td>
</tr>
<tr>
<td>More Than 5 People</td>
<td>32.05%</td>
<td>29.85%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Untreated respondents</th>
<th>Wave 2</th>
<th>Wave 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>No One</td>
<td>51.13%</td>
<td>57.89%</td>
</tr>
<tr>
<td>1–2 People</td>
<td>24.03%</td>
<td>14.81%</td>
</tr>
<tr>
<td>3–5 People</td>
<td>17.58%</td>
<td>14.04%</td>
</tr>
<tr>
<td>More Than 5 People</td>
<td>7.26%</td>
<td>13.26%</td>
</tr>
</tbody>
</table>

The results from the three-wave differential trend models, shown in column (b) of Table 2 for each variable, are remarkably similar to the two-wave estimates, with one exception. For knowledge, participation, and national versus tribal identification, the magnitude and significance of the effects found for civic education are nearly identical to the two-wave estimates. This provides strong evidence for the robustness of the civic education effects, as they hold even controlling for the general tendency of those attending workshops to show differential change over time on the outcomes, change that may have been already ongoing or have been unrelated to the individual’s civic education exposure at any given time. In the tolerance model, however, the effect of civic education drops dramatically after including the differential time trend variables, with a (barely) significant effect of .033. This is due, as can be seen, to the pattern of general decline over the course of the campaign for the control group and a significantly less pronounced decline over the course of the campaign for those who were exposed to some civic education training. We conclude that the impact of direct civic education exposure is robust in the case of knowledge, participation, and national versus tribal identification, and significant, though somewhat more equivocal, in the case of political tolerance.

The Extent and Effects of Post-Civic Education Discussion

We turn next to the indirect effects of civic education via political discussions within individual social networks. In Table 3, it can been seen that the potential for indirect effects from the Kenyan National Civic Education Programme is substantial, given the number of individuals treated respondents was 6 percentage points higher than among nontreated individuals.

who discussed workshops that others attended. Among individuals in the treatment group in Wave 2, that is, individuals who attended at least one NCEP workshop between February and November, over half also discussed the workshop experiences of at least three other individuals, and only one-third engaged in no discussion about other individuals’ workshop experiences. The figures in Wave 3 are even more striking, indicating that treated individuals were also very likely to discuss the workshop experiences of other treated individuals within their social networks. The typical NCEP workshop participant thus discussed the workshop experiences of a good many other people as well.

But the diffusion of NCEP messages also reached a substantial number of individuals who themselves did not attend any of the program’s workshops. Among individuals in Wave 2 with no exposure to civic education workshops of their own, approximately half nevertheless had some discussion with others in their networks who did attend NCEP activities. In fact, about one-quarter of these ostensibly “control” individuals discussed the workshop experiences of three or more other “treated” individuals. The figures for Wave 3 are again comparable, with over 40% of the “control” group nevertheless discussing civic education issues with at least one NCEP participant, and 27% discussing the workshop experiences of three or more other individuals. This indicates clearly that the NCEP reached many more individuals via subsequent political discussions than via formal training. Among this sample of individuals interviewed upon entering NCEP workshops between February and March 2002 and a corresponding sample of nonattendees, approximately 80% either attended their own workshop or discussed the NCEP workshop experiences of at least one other individual. There is thus at least significant potential to observe secondary effects of the civic education training.

In Table 4, we show the results of two-wave fixed effects models and three-wave differential trend models predicting the four democratic orientations with both Civic education exposure and Discuss others. The latter variable measures the extent to which individuals discussed the workshop experiences of others exposed to NCEP messages. Direct exposure to civic education itself remains statistically significant in all models in column (a), with these effects supplemented by significant secondary effects of political discussion in all models aside from political participation. The more individuals engage in discussion of civic education workshops that others attended, the greater the change in knowledge, tolerance, and national versus tribal identity over time. The results in column (b) strongly support these findings with...
three-wave differential trend analyses. As in Table 2, the impact of direct civic education exposure on tolerance drops essentially to zero, and the insignificant effect of Discuss others on participation in the two-wave case remains negligible in the three-wave model. All other civic education and discussion variables remain significant and of roughly equal (and sometimes greater) magnitude compared to the two-wave case. The pattern of effects in Table 4 confirms the notion that both civic education exposure and post-civic education discussion have robust and independent effects on important variables related to Kenyan democratic political culture, effects that obtain in the context of strenuous controls for the selection biases that confound causal inference in nonexperimental research.

Examination of the relative sizes of the Civic education exposure and Discuss others effects, as well as the distributions of these variables in our sample, reveals several additional points of interest. First, the direct effects of civic education exposure outweigh the secondary effects. Attending, for example, three civic education workshops leads to higher levels of knowledge, participation, tolerance, and national versus tribal identification than does discussing three other individuals’ workshop experiences, other things being equal. But at the same time, discussing the workshop experiences of three or more other people has a greater effect on knowledge, tolerance, and national identification than does attending only one workshop and not engaging in any discussion of others’ experiences. Thus, political discussion about civic education workshops among individuals who were not treated often produces more democratic change than formal civic education exposure itself.

12 We note that these effects obtain in models that control for General Political Discussion, which itself has significant effects on three of the four dependent variables. To this extent, the results for Discuss Others indicate the impact of workshop discussions per se, and not size or intensity of the individual’s normal political discussion network.

13 We conducted one final robustness check on the results by estimating the effects of both Civic education exposure and Discuss others via the propensity score matching methods for multiple treatments outlined in Imai and van Dyk (2004) and Yanovitsky et al. (2005). We first estimated an ordinal logistic regression model predicting levels of Civic education exposure and Discuss others with group memberships, political interest, media exposure, general political discussion, education, age, gender, rural/urban location, and frequency of church attendance, all measured at Wave 1. After eliminating the relatively few cases that fell outside of the region of common support (i.e., “control” individuals whose propensities were lower than the lowest “treatment” individuals and “treatment” individuals whose propensities were higher than the highest “control” individuals), we divided the sample into four equal strata on the two propensity scores and verified that, within each strata, the observed covariates were balanced with few minor exceptions. We then ran separate models estimating the effect of civic education exposure, and then Discuss others, and aggregated the results across strata. In every test, the magnitude of the estimated coefficient remained nearly identical to those obtained in Tables 2 and 4 above, though in one case, Civic education exposure’s effect on political participation, the standard error increased enough to yield an insignificant effect (likely due to the smaller sample sizes within strata). The results of these tests and further discussion can be found in the article’s Supporting Information document (see footnote 1).
Second, the combined effect of both direct and indirect civic education effects can be quite substantial. For example, attending four or more workshops and discussing the workshop experiences of an additional five individuals leads to an approximately .70 increase in the individual’s average amount of Political knowledge, and increases of about two-thirds of a point on the 4-point Political tolerance and 5-point National versus tribal identification scales, respectively. Taken together, high “doses” of both formal civic education treatment and subsequent discussion about the treatment of others can be especially effective in producing democratic change.

Third, it is also the case that many more respondents are located toward the high end of Discuss others than toward the high end of Civic education exposure; that is, in this sample more individuals discuss the workshops of other individuals than attend a high number of workshops themselves. In Wave 2, for example, only 29% of respondents attended more than one NCEP event, while a full 45% discussed the workshop experiences of three or more other people. In Wave 3, only 12% of respondents attended more than one workshop, while more than one-third talked about the workshop experiences of at least three other people. This means that the average respondent receives in general a greater boost in democratic orientations from discussing others’ workshops than from attending his or her own.

The Conditional Effects of Civic Education: The Role of Participatory Methodologies

According to our theoretical discussion above, the effects of civic education should depend in important ways on factors related to the nature of the individual’s civic education experience, as well as factors related to the individual’s previous store of political resources. That is, we expect to find greater effects when individuals are taught through more intensive, engaging participatory methodologies. We also expect greater effects on democratic attitudes and values among those individuals who have less prior information and who are less socially integrated.

We measured the extent to which participatory teaching methodologies were employed in the first workshop of the initial group of attendees, taking advantage of the fact that interviews were conducted with approximately eight different attendees for each workshop. Participants were asked whether the following took place in that particular workshop: breaking into small groups to discuss material; staging plays or dramatizations; playing games; solving problems and developing proposals; role-playing exercises; or mock elections. All six items loaded strongly on a single factor, with a reliability coefficient (alpha) of .78. We counted the number of these activities from 0 to 6 and averaged these values across all participants in a given workshop to arrive at a measure of the kinds of teaching methodologies employed. We then divided workshops into those that did not make use of participatory methods (average value of less than 1, 25.4% of all workshops) and those that did use open, participatory teaching techniques (average value of greater than 1, 74.6% of all workshops), and estimated the impact of attending each kind of workshop on changes in the study’s four dependent variables in two-wave fixed effects models.

The results show clear support for the impact of exposure to civic education that uses participatory teaching methods. As can be seen in Figure 1, attending a workshop that made use of at least one active, participatory methodology was associated with a significant change in each dependent variable. Attending a single participatory workshop, for example, raised knowledge by a third of a point on the 4-point scale and increased tolerance by over two-tenths of a point on its 4-point scale as well. On the other hand, attending a purely lecture-based workshop that made use of none of the six participatory methodologies had effects that were statistically distinguishable from zero only in the case of imparting factual political knowledge. For the three other democratic orientations, it was only when workshops made use of active methods that any significant effects obtained. These results confirm the central importance of teaching methodologies in generating attitude and behavioral change through civic education, as individuals develop participatory orientations and supportive democratic values through the role playing and other active learning processes that may take place within workshops. Moreover, as nearly all of the “participatory” teaching methods involve political discussion—activities such as group problem solving, small-group exercises, and the like, the findings reinforce the importance of social transmission processes in democratic learning as well.

The Conditional Effects of Civic Education and Discussion: Cognitive and Social Resources

The effects we have shown thus far indicate much optimism for the potential of civic education and post-civic

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14Campbell (2008) uses a similar procedure to measure the “openness” of U.S. student civics classrooms, but excludes the respondent’s own estimation from the calculations in order to guard against endogenous self-reports of classroom characteristics based on the respondent’s own levels of knowledge, tolerance, and the like. Following this procedure yields a measure that is correlated at .99 with the measure that includes the respondent’s own assessments of participatory methodologies and a virtually identical pattern of results in models that estimate this variable’s impact.
education political discussions to instill democratic knowledge, values, and participatory orientations. However, it remains to be seen whether those effects obtain for all individuals, or whether NCEP training and the subsequent political discussion within Kenyan social networks had greater impact on some individuals than others. In particular, if these effects depend on prior levels of political or participatory resources, the benefits of civic education and social network discussions may be concentrated among those who “need” them the least.

We test these possibilities by creating interaction terms between Civic education exposure and Discuss others and three variables measuring cognitive resources and social integration: Rural (versus urban) status and

### Table 5 Two-Wave Fixed Effects Models: The Interaction of Civic Education and Discussion with Education and Social Integration

<table>
<thead>
<tr>
<th>Civic Education Interactions</th>
<th>Discussion Interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Participation</td>
</tr>
<tr>
<td>Civic education exposure</td>
<td>0.186** (0.049)</td>
</tr>
<tr>
<td>Discuss others</td>
<td>0.070** (0.023)</td>
</tr>
<tr>
<td>Interactions with:</td>
<td></td>
</tr>
<tr>
<td>Group memberships</td>
<td>−0.070 (0.071)</td>
</tr>
<tr>
<td>Education</td>
<td>−0.225** (0.074)</td>
</tr>
<tr>
<td>Rural</td>
<td>0.024 (0.030)</td>
</tr>
<tr>
<td>R-squared within</td>
<td>0.189 (4593)</td>
</tr>
<tr>
<td>Number of observations</td>
<td>4593</td>
</tr>
</tbody>
</table>

Note: Coefficients for media consumption, political interest, group memberships, general political discussion, and time of interview are omitted here; see the article’s Supporting Information document for full results (see footnote 1). Robust standard errors in parentheses are clustered on 2,301 individuals. Coefficients are significant at #p < .10; *p < .05; **p < .01.
Wave 1 levels of Education and Group memberships. We then ran separate two-wave fixed effects models (similar to model (a) in Table 1, including all time-varying control variables) for Civic education exposure and Discuss others, along with each interaction variable to test for conditional effects. The results of these “bivariate” interaction models are suggestive: to the extent that differential effects exist, civic education and especially subsequent discussion appear to benefit those less integrated into secondary groups, those with lower levels of education, and rural respondents. Out of the 12 estimated interaction effects (three cognitive and social resources on four dependent variables), five are significant for Civic education exposure and seven for Discuss others, with all of these effects showing greater impact on those with greater “need.” Only for participation do we find that neither the impact of civic education nor subsequent discussion is contingent on respondent characteristics.

In Table 5, we show the multivariate estimation of these conditional effects models. Of course, relatively high levels of collinearity between all of the interaction terms make these models somewhat fragile. Nevertheless, when significant interactions exist, they all indicate that Civic education exposure and Discuss others are more effective in producing democratic change among individuals with lower levels of education and secondary group memberships, and among rural residents. The estimated effect of civic education workshops on political knowledge is strongly concentrated among those with lower levels of education, and its effect on tolerance and national versus tribal identification is more than twice as large in rural areas as in urban ones. The conditional effects of postworkshop discussion are at least as strongly clustered among those with greater “need” as well. Discussion has significantly greater effects on knowledge and tolerance among those with less education, significantly greater effects on knowledge and national identification among those less integrated into secondary associations, and significantly greater effects on tolerance and identification among rural respondents. The results, then, offer qualified support for the “compensation” hypothesis: civic education and post-civic education discussion disproportionately benefit those who are disadvantaged in education and social resources, enabling them to acquire knowledge and values their more advantaged fellow citizens may acquire in other ways.

Conclusions

The analysis of the impact of the 2002 National Kenyan Civic Education Programme yields several important findings with significant implications for theories of civic education, democratic learning, and the effects of political discussion and social networks. First, we have provided perhaps the most conclusive evidence to date that exposure to adult civic education training can matter for the development of democratic knowledge, values, and participatory orientations. Unlike previous civic education evaluations, the design implemented here included a pretest, comparison of individuals who attended civic education training and matched individuals not attending the given training activities, and statistical controls via fixed effects and differential trend models for possible selection effects due to (stable) unobservable variables. The results indicate that adults trained in NCEP activities showed significant increase in political knowledge and participation, and in such critical democratic values as the sense of Kenyan versus tribal identification and political tolerance. Civic education, especially when it is conducted with active, participatory teaching methodologies, can work, and it can have direct and immediate effects on strengthening democratic attitudes and heightening political awareness among adults in new democracies. On a theoretical level, these findings reinforce the message that democratic norms, values, and behaviors can change over fairly short time periods. On a policy level, they should encourage donors seeking to promote positive change in democratic culture in recipient countries.

Second, the analysis has shown for the first time compelling evidence of widespread indirect or secondary effects of civic education training through postworkshop political discussions. Individuals who were trained in NCEP workshops went on to talk about their experiences with many others in their social networks, leading to large numbers of Kenyans—even those not directly trained in NCEP activities—being exposed to civic education messages via discussions with network partners. Moreover, these discussions had a significant and substantial positive impact on all of the democratic orientations we examined aside from political participation. Again, these effects obtained from statistical models that control for possible endogeneity due to stable individual characteristics related both to the likelihood of engaging in postworkshop political discussions and to democratic attitudes, knowledge, and participation. The results thus provide strong support for a two-step process of social diffusion of democratic messages through civic education.

Taken together, the findings suggest that the potential impact of adult civic education on strengthening democratic political culture in transition societies is far beyond what has previously been estimated. The National Civic Education Programme in Kenya was an extensive, countrywide effort consisting of over 50,000 activities
coordinated by dozens of implementing NGOs over a 14-month period in 2001–2002. As noted above, we estimate that these workshops trained between 14% and 16% of the Kenyan population. But the reach of the program from secondary effects was far greater. Our data suggest that some 40% of “control” individuals nevertheless discussed the workshop experiences of others, a slightly higher figure than was reported in the 2003 national survey. This means that somewhere between 40% and 50% of all Kenyans were exposed in some way to civic education messages during the run-up to the 2002 election, the vast majority consisting of discussions between friends, family members, and others in the trainees’ social networks. Given the significant effects estimated here from both direct and indirect exposure, it is clear that the NCEP had a nontrivial impact on the aggregate level of Kenyan democratic political culture. Such secondary effects need to be taken into account in future assessments of the impact of civic education and other short-term democracy assistance interventions undertaken by international donors. And given that other emerging democracies face many of the same difficult conditions as are found in Kenya—high economic inequality, poverty, ethnic tensions, and often poor political performance—the findings suggest that large-scale, coordinated civic education programs such as the NCEP, along with the social diffusion processes that they are likely to generate, may be a generally promising short-term means of strengthening democratic attitudes and heightening political awareness among adults.

The results also have a number of implications for the burgeoning literature on political discussion and deliberation effects in new democracies. Both workshop exposure and post-civic education training have “compensation effects” on knowledge and democratic values, with greater impacts being observed among those who are less socially integrated, either through civil society or through the urban milieu, as well as those with lower educational levels. This is a promising result, tempered only by the finding that the amount of post-civic education discussion is greater among those belonging to more secondary associations and possessing other politically relevant resources. Still, prodemocratic messages are much more likely to reach such individuals through political discussion than through direct exposure to civic education activities. The pattern of results thus suggests that discussion and political talk can be particularly important mechanisms for the development of democratic values among the socially and cognitively disadvantaged in new democracies.

The results have clear implications for the implementation of future civic education programs in transition societies. Most obviously, there is strong support for the enterprise of adult civic education itself, given the reach and impact of organized and coordinated efforts such as the Kenyan NCEP. It is also clear that such efforts must be conducted with active, participatory methodologies, as our results suggest that lecture-based civic education has virtually no impact on democratic attitudes, learning, or participatory orientations. And the fact that so much of the overall impact of civic education stems from post-training discussions also implies that programs should encourage participants to talk about their experiences after the fact. This may be done in many ways, ranging from role-playing exercises during the training to providing trainees with pamphlets, books, or other materials that they can share with family, friends or others in their social networks. Further, the more that individuals are encouraged to speak to others outside of their immediate social networks, in particular to those with lower levels of political or organizational involvement, the more likely it is that programs will extend their overall reach and exert secondary effects on individuals who themselves did not participate in any training. Given that discussion effects are stronger among individuals with fewer connections to existing civil society organizations and with lower educational levels, the gains from doing so in terms of democratic change can be high.

Finally, the positive findings here regarding civic education must be tempered with the recognition that there are limits to what even an extensive civic education effort like the 2002 NCEP can achieve in developing democratic societies. Successful democratic transitions depend on a good many other factors aside from a supportive mass political culture, most importantly elite behavior and the crafting of institutions that can ameliorate ethnic and other potentially destabilizing social cleavages (Diamond 1999; Posner 2007). And, as we have stressed, mass opinion in many developing contexts such as Kenya is
characterized by high levels of political intolerance and intense ethnic identifications, creating relatively difficult baseline conditions in which programs such as the NCEP must operate. The combination of reckless elite behavior and mass intolerance came together tragically in the aftermath of the disputed 2007 Kenyan national elections, during which over 1,000 individuals were killed and thousands more displaced in ethnic violence that wrecked the country for several months. Our results imply that the violence would likely have been worse in the counterfactual absence of programs such as the 2002 NCEP (and its 2007 successor), and that even more broad-based and continuous civic education efforts would be highly beneficial. But it is also clear that a successful democratic transition in Kenya will require large-scale changes in elite as well as in mass political culture, and that civic education is but one of the interventions that are sorely needed for consolidating Kenyan democracy.

References


