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***Civic Reasoning and Discourse***

**Learning Environments and School/Classroom Climate**

**As Supports for Civic Reasoning, Discourse, and Engagement**

Carolyn Barber<sup>1</sup>, University of Missouri Kansas City  
Christopher Clark<sup>2</sup>, University of North Dakota  
Judith Torney-Purta<sup>3</sup>, University of Maryland

With the Assistance of:

David Campbell, Notre Dame University (Panel Member)  
Carole Hahn, Emory University (Panel Member)  
Deanna Kuhn, Teachers College Columbia University (Panel Member)

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1. Professor and Interim Dean, School of Education, 615 E. 52nd Street, Suite 347, Kansas City MO 64110, (816)235-6151, [barberce@umkc.edu](mailto:barberce@umkc.edu)
2. Assistant Professor, College of Education and Human Development, 231 Centennial Dr., Grand Forks, ND 58202, [christopher.h.clark@und.edu](mailto:christopher.h.clark@und.edu)
3. Professor Emerita, Department of Human Development and Quantitative Methodology, 3124 Gracefield Rd., KC213, Silver Spring, MD 20904, [jtpurta@umd.edu](mailto:jtpurta@umd.edu)

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## **LEARNING ENVIRONMENTS AND SCHOOL/CLASSROOM CLIMATE AS SUPPORTS FOR CIVIC REASONING, DISCOURSE, AND ENGAGEMENT**

### **Abstract**

The success of educational endeavors is closely tied to the environments in which those endeavors take place. It is therefore important for educators wishing to promote civic discourse, reasoning, and engagement to consider how elements of the learning environment interact to promote or inhibit the development of these skills and dispositions. This chapter reviews the research literature on the relationship between learning environments at school and the development of civic discourse, reasoning, and engagement. We identify four main areas of focus: definition and assessment of learning environments, establishing conducive climates for reasoning and discourse in schools and classrooms, varying student perceptions of climates, and barriers to establishing climates for civic discourse and reasoning. Based on our review of these four areas, we provide recommendations for research that responds to changing political and social landscapes. These recommendations include: 1) exploring relationships between communities and schools in ways that can enhance young people’s sense of empowerment; 2) considering a broader range of educational contexts; 3) directly focusing on supports in the classroom and school contexts for reasoning and discourse; 4) connecting more explicitly to differing theories and approaches, such as socio-emotional learning; and 5) expanding research infrastructure to support access to current data and further research. Further, we provide recommendations for practice; these include establishing consistently positive values and climates within schools, supporting teachers in the classroom, modeling civic discourse in multiple aspects of school experience, and creating opportunities for collaboration among students.



24 Academy of Education might encourage. The purpose of this paper is to synthesize existing  
25 literature on how formal learning environments support (or detract from) young people’s civic  
26 reasoning, discourse, and (in turn) civic engagement. In addition to relevant literature from  
27 several areas of education, we incorporate concepts from political science as well as several  
28 branches of psychology (including community, developmental, educational, and political  
29 psychology) that approach this topic from different theoretical perspectives. Taking into account  
30 the strengths and limitations of available literature, including how well it generalizes across  
31 educational settings and contexts, we follow this review with recommendations for strengthening  
32 research on this topic. We conclude with some initial recommendations for teachers and  
33 administrators who seek to develop learning environments to foster students’ civic skills and  
34 dispositions in a variety of contexts.

### 35 **Defining the Problem Space and Challenges**

36 It is important first to define the scope of our focus on *learning environments* in general  
37 and on school and classroom climate in particular. The academic journal *Learning Environments*  
38 *Research: An International Journal* describes learning environments as including “the social,  
39 physical, psychological, and pedagogical contexts in which learning occurs and which affect  
40 student achievement and attitudes” (Springer Nature Switzerland AG, 2020). Based on this  
41 definition, we posit that a given learning environment comprises numerous, interrelated, and  
42 constantly shifting factors. Young people are exposed to numerous learning environments that  
43 can influence how civic discourse and reasoning skills develop, including family, neighborhoods,  
44 peers, and community and religious organizations, and online spaces as well as schools. In this  
45 chapter we focus on formal learning environments within K-12 schools, as perceived by  
46 students, administrators, and teachers. For consideration of the impacts of out-of-school factors

47 on student learning, we refer readers to Rubin, Abu El-Haj, and Bellino’s chapter on the social  
48 and ecological contexts of schooling (this volume). We focus primarily on face-to-face  
49 interactions, with some discussion of digital learning opportunities as employed within formal  
50 educational settings; we encourage readers to consult Kahne, Garcia, McGrew, Mirra, and Tynes  
51 (this volume) for a broader exploration of online spaces for civic reasoning and discourse.

52         Moreover, and as further defined below, we focus our paper on *school and classroom*  
53 *climates*, or the qualities of these formal learning environments as experienced by members of  
54 the school and classroom community, including though not limited to teachers, administrators,  
55 and (importantly) students (Schweig, Hamilton, & Baker, 2019). As climates within a given  
56 school or classroom are formed from the collective experiences of multiple people, they develop  
57 and change over time as the individuals within them develop and change. This forms a recursive  
58 loop between the development of the individual and of the learning environment within the  
59 classroom/school (Freedman, Hull, Higgs, & Bootman, 2016). The importance of climate has  
60 been underscored by Cohen, Pickeral, and Levine (2010), who described school climate as “the  
61 single most powerful K-12 educational strategy” (p. 74) for supporting the knowledge, skills, and  
62 dispositions central to participation in a democracy. While the climates of learning environments  
63 within schools are theorized to be distinct from formal curriculum and pedagogical strategies,  
64 they affect how students may respond to course content or activities. Teachers’ pedagogical  
65 choices have a reciprocal relationship with the learning environment: While the selection and  
66 effectiveness of teaching methods is informed by the broader environment in which specific  
67 activities take place, feelings of support, safety, or challenge within the environment are in turn  
68 determined in part by the use of particular teaching methods (Hahn, 1996). In this chapter, we  
69 consider pedagogy insofar as it shapes the learning environment but do not provide in-depth

70 descriptions of specific teaching methods; rather, we refer readers to Conklin (this volume) for  
71 further elaboration on pedagogies that are successful in promoting civic reasoning and discourse.

72 We also acknowledge the need to place the emphasis on *civic reasoning, discourse, and*  
73 *engagement* including its manifestation in contexts outside the school. This means focusing on  
74 publications that exhibit a clear connection between learning environments and these particular  
75 processes and/or outcomes. In defining these terms, we consider Stitzlein’s (this volume) posing  
76 of the “key civic question” as “what should we do.” The focus is on actions, taken by a group,  
77 toward a desired outcome that is aligned with a sense of ethical responsibility. Within this  
78 framing, Stitzlen considers civic discourse as a context for reasoning, in which individuals work  
79 together through discussion and deliberation to support inquiry and empirical investigation while  
80 also engaging with the emotional aspects of civic questions. For the purposes of this paper, we  
81 consider “engagement” as broadly inclusive of the knowledge, skills, attitudes, and behaviors  
82 (current or intended) that both represent and inform courses of action that could be taken in  
83 response to a civic issue or opportunity. This is similar to what Torney-Purta and Amadeo  
84 (2011) have called “emergent participatory citizenship.” While those in the field generally  
85 theorize that engagement follows civic reasoning and discourse, it is important to acknowledge  
86 that experiences in other contexts shape the background that young people bring to formal  
87 learning environments. In turn, these environments will shape students’ civic discourse and  
88 reasoning skills, as well as their propensity for future inquiry and civic engagement beyond the  
89 classroom.

90 Even with this framing, considering civic reasoning and discourse in formal K-12  
91 learning environments presents challenges. The first challenge is that neither “learning  
92 environments” nor their “climates” are unitary entities. Rather, there are a number of features of

93 an environment that scholars, practitioners, or policymakers may have in mind when using these  
94 terms. As a case in point, Lee, Nasir, and Smirnov (this volume) describe effective learning  
95 environments for civic reasoning and discourse as constituting a number of characteristics, in  
96 that they must:

97 ...draw and build on students’ prior knowledge, promote a sense of emotional safety,  
98 establish relevance through engagement with real-world problems, provide opportunities  
99 to develop personal and collective efficacy through scaffolded and iterative challenges,  
100 support students in questioning sources of information and beliefs, interrogating their  
101 own assumptions, and wrestling with complex and contradictory ideas, and ensure access  
102 to a multiplicity and variety of cultural and ideological perspectives, including ones that  
103 resonate with students’ own lived experiences and those that are less represented in the  
104 dominant culture (p.8).

105 This statement suggests that any of a number of features of an environment’s climate may act as  
106 a support (or deterrent) for providing students opportunities to engage in civic reasoning and  
107 discourse in ways that support further engagement. In a similar vein, Conkin (this volume)  
108 describes a positive classroom discourse climate as being characterized by three factors:  
109 establishing personal trust between teachers and individual students; containing  
110 developmentally-appropriate scaffolding by the teacher; and continuing consistent threads of  
111 discussion over time (as opposed to moving between multiple varied, isolated points of  
112 discussion). What is clear from both papers is that, when we refer to a “positive” climate, we  
113 may mean one that is supportive, safe, and/or intellectually challenging for any of a number of  
114 reasons. Because of this, careful attention to how terms are used and how researchers assess  
115 different aspects of school and classroom environments is warranted when looking to apply  
116 research findings to policy and practice.

117 Second, the effectiveness of any approach toward creating an effective formal learning  
118 environment may depend on where a school is situated geographically and within broader  
119 discourse communities. At the time of this writing, the United States and other countries have

120 seen a recent rise in political contention and what many see as a decline in democratic norms of  
121 discourse. At the same time, social divides pertaining to race, immigrant status, gender, wealth  
122 distribution, and many other characteristics have exposed stark differences in how people  
123 perceive and address issues. Levinson and Fay (2019) noted that completely open discourse may  
124 even pose threats to the safety or wellbeing of some students (e.g., deliberations about  
125 immigration policy for immigrant students or bathroom access for transgender youth).  
126 Consideration of the specific learning environments in which students address civic issues thus  
127 becomes important, both for supporting individual students' learning and for raising policy- and  
128 practice-based questions about how educators should balance competing considerations and  
129 interests when promoting civic discourse and reasoning.

130         This consideration of multiple, dynamic social and cultural contexts also raises a third  
131 challenge, in that each individual's particular set of contexts inhabited and experiences garnered  
132 uniquely shapes how they learn (National Academies of Science, Engineering, and Medicine,  
133 2018). Schweingruber (2020) pointed to this report (also known as *How People Learn 2*) as  
134 indicating the socially situated nature of civic reasoning, distributed across students. This is  
135 based on the fact that various individuals in any given learning environment perceive its climate  
136 differently (a feature also noted by Conklin, this volume), and may learn from that climate  
137 differently. Students enter schools and classrooms with differing life experiences that are  
138 embedded in different life settings, informed not only by the beliefs of adults around them but  
139 broader cultural beliefs as well (Torney-Purta & Amadeo, 2011). In turn, they interact with  
140 classmates, staff, and faculty in their schools in ways that inform the approach they take to civic  
141 issues. These approaches may at times, be different from learning processes experienced in  
142 community or family settings (Freedman, Barr, Murphy, & Beširević, 2016), particularly when

143 those out-of-school experiences are characterized by conflict or marginalization (Rubin, Abu El-  
144 Haj, & Bellino, this volume). Also important are individuals' identities and attitudes toward  
145 various groups or institutions, as well as the extent of interest in social or political issues. Other  
146 variations reflect systemic ways in which educational contexts tend to privilege or dismiss voices  
147 of students from particular backgrounds or those who embrace particular identities (as Mirra &  
148 Garcia, 2017 have documented). This challenge is especially salient among adolescents, who are  
149 beginning to construct their own political identities (Prior, 2010; Sears, 1983) and becoming  
150 cognitively and socially equipped to take perspectives of others holding different viewpoints  
151 (Franzoi, Davis, & Young, 1985; King & Baxter Magolda, 2005). However, adolescents are also  
152 very sensitive to the reactions of the peer groups with which they affiliate, to the attitudes which  
153 their parents express, and to a wide range of emotions that they may experience in interpersonal  
154 interactions. Thus, attention to the developmental status of students within particular school and  
155 classroom settings becomes another dynamic process to take into account.

156         Given this context, our review addresses four questions:

- 157         1. What is meant by the term “climate” in the context of formal learning environments?  
158                 What specific features of the learning environments are important to address, both in  
159                 individual classrooms and schools?
- 160         2. What features of learning environments and climates support students' civic  
161                 reasoning and discourse, and why are they effective?
- 162         3. How do students perceive and shape these learning environments? What might  
163                 account for individual and group differences in experiences within a particular school  
164                 or classroom? In particular, what role is played by social group membership (e.g.,  
165                 race, ethnicity, gender, immigrant status, sexual identity) and/or individual identity?

166 4. What are the barriers that educators face in establishing learning environments that  
167 promote civic reasoning, discourse, and engagement?

168 Our exploration of these four questions has led to envisioning a program of research with  
169 the potential to shape the design and implementation of robust school climates for students' civic  
170 reasoning and discourse that would be effective with a wide range of students. In addition, we  
171 provide recommendations for teachers, administrators, and other stakeholders (including teacher  
172 educators and professional organizations) who wish to help establish learning environments that  
173 foster civic discourse, reasoning, and engagement.

#### 174 **What is Meant by the Term “Climate” in the Context of Formal Learning Environments?**

175 Prior to making recommendations for creating educational climates conducive to civic  
176 discourse and reasoning, it is important to understand what is meant when describing an  
177 environment's “climate” or using other related terms. Educators taking steps toward productive  
178 climates should do so with an understanding of the various ways in which it has been  
179 operationalized and studied in the literature. As described earlier, distilling the specific  
180 characteristics of climates within formal learning environments is complex, as “climate” is not a  
181 single, static characteristic or entity. Nor is it necessarily experienced in the same way by  
182 different individuals. Rather, it is a collection of factors interacting with each other that can  
183 sometimes change even over short periods of time. Appropriately, research on formal learning  
184 environments tends to use multi-dimensional models to capture the various aspects of an  
185 organization's climate, although some dimensions are more often studied than are others. Adding  
186 further complexity, the “climate” of a learning environment can be applied to a school as a whole  
187 or to a particular classroom within it. In this section, we pose two questions that Schweig,

188 Hamilton, and Baker (2019) believe that educators should ask when examining the interrelated  
189 features of school/classroom climate: 1) What is meant by climate? and 2) How is it assessed?

190 **What is School and Classroom Climate?**

191 Berkowitz and colleagues (2017) reviewed several models outlining core components of  
192 school climate. While specific definitions varied across models, the most prominent positive  
193 dimensions were strong interpersonal *relationships*, *a sense of safety* (emotional as well as  
194 physical), a feeling of *connectedness*, and reliable *supports* for learning. Beyond these broad  
195 dimensions are more specific terms. These include the “*ethos*” of a school (Campbell, 2006) or  
196 of teachers (Flanagan, Cumsille, Gill, & Gallay, 2007). Others are the *pedagogical climate*  
197 resulting from teachers’ classroom organization and setting of an atmosphere (Geboers, Geijsel,  
198 Admiraal, & ten Dam, 2013), *relationship quality* among peers or between students and teachers  
199 (including the absence of bullying: Shukla, Konold, & Cornell, 2016), the role of *student voice* in  
200 meaningful school decision-making, perceptions of *equity* in how students from different  
201 backgrounds are treated, *openness* in discussions, and general sense of *belonging*. Taken  
202 together, these various constructs capture many ways in which the quality of learning  
203 environments can support student learning: Students are motivated to learn when in an  
204 environment where they feel emotionally safe and valued (by adults or by each other), and where  
205 they are supported to engage in authentic and meaningful ways (Lee, Nasir, & Smirnov, this  
206 volume; National Academies of Sciences, Engineering, and Medicine, 2018a).

207 While these general characteristics of climate have been considered in relation to civic  
208 outcomes, some other aspects of climate pertain more directly to the perception of environments  
209 as supportive for specific civic reasoning and discourse activities. From this latter vantage, a  
210 focus on the degree of openness for discussion, specifically of social issues where controversy

211 may exist, is particularly important. From this viewpoint, a climate conducive to students’  
212 development of competencies for civic engagement is one that fosters discussion in ways that  
213 expose youth to differing and sometimes conflicting opinions (see review by Campbell, 2019).  
214 Such an environment incorporates many traditional features of climate identified by Berkowitz  
215 and colleagues (2017) and aligns with the way learning environments can be informed by core  
216 learning principles (National Academies of Sciences, Engineering and Medicine, 2018a): open  
217 discussion requires the feeling of a sense of safety for sharing one’s viewpoints and this can be  
218 fostered by positive interpersonal relationships.

219         A further distinction is required between school and classroom climate. One of the  
220 earliest, most influential articles on civic education climate, by Ehman (1980), was a review  
221 written soon after the “first wave” of political socialization research. It distinguished between  
222 school-level and classroom-level factors supporting civic discourse and participation. At the  
223 school level, he argued that norms, policies, and opportunities for student participation contribute  
224 to a community where civic discourse is (or is not) valued. Following Ehman’s work, others  
225 have focused on how shared civic norms and values among students and staff at a school in  
226 support of particular civic outcomes (e.g., voting, civic character) can in turn shape the climate  
227 of a school (Campbell, 2006, 2019; Seider, 2012), in a mutually reinforcing way.

228         A second layer suggested by Ehman is climate within the classroom. Even within a single  
229 school, students interact within several different environments that can facilitate or inhibit their  
230 learning (each with its own climate: Berkowitz et al. 2017). Authors who discuss this level  
231 describe a consistent connection between the pedagogies enacted in the classroom for the  
232 purposes of encouraging discussion, argumentation, and dialogue along with the overarching  
233 atmosphere (e.g., its degree of support and safety) in which these activities take place. This

234 connection between climate and pedagogy, detailed earlier (e.g., through discussion of Hahn,  
235 1996) was also reflected in Geboers and her colleagues’ (2013) use of the term “pedagogical  
236 climate” in their literature review to discuss ways in which civic education influences student  
237 outcomes.

### 238 **How Is Climate Assessed?**

239 Beyond acknowledging the multiple aspects of climate, it is also important to consider  
240 the variety of ways in which these constructs have been operationalized (Schweig, Hamilton, &  
241 Baker, 2019). Researchers have employed a variety of methodologies to assess various  
242 components of climate, both as they characterize the learning environment generally and as  
243 specifically related to environments designed to support civic learning and engagement. Some  
244 use observation and case study, identifying exemplary schools and classrooms (e.g., Seider,  
245 2012) or documenting the range of openness found in typical classroom environments (e.g.,  
246 Hahn, 1991). However, while features of climate can be construed as organizational  
247 characteristics, they are experienced uniquely by each person within an environment. Thus,  
248 researchers also interview individual students and teachers (e.g., Flanagan, 2013), or conduct  
249 content analyses of the nature of particular discussions (e.g., Kuhn, Zillmer, Crowell, & Zavala,  
250 2013). That said, the most common way to assess aspects of climate, both by researchers and by  
251 educational leaders at both state and local levels, is through the use of students’ self-report scales  
252 (Berkowitz et al., 2017; Schweig, Hamilton, & Baker, 2019). Such scales are often based on only  
253 a few questions; therefore, even when they have undergone rigorous psychometric testing, their  
254 brevity limits the extent to which they provide actionable information. In fact, sometimes only a  
255 single question is used: For example, Campbell (2012) acknowledged that a distinct limitation of

256 his measure of school “ethos” is that it was based on one item about the importance of voting for  
257 good citizenship.

258 Assessments of the openness of a classroom discussion climate, the most frequently  
259 assessed facet of climate pertaining specifically to civic reasoning and discourse, often do not  
260 capture quality or even frequency of discussion. Instead, they provide information on whether  
261 participants perceive the classroom environment as conducive to such discussions. One of the  
262 most well-known and rigorously-tested measures of this construct is the Openness of Classroom  
263 Climate for Discussion scale, initially developed by Ehman (1969). This scale was developed  
264 around the same time as several survey-based studies of young people’s political socialization in  
265 the fields of psychology and political science (Hess & Torney, 1967; Jennings & Niemi, 1965).  
266 Different versions have been developed over the years, using items from several sources (Hahn,  
267 1998; Hahn & Tocci, 1990; Torney, Oppenheim & Farnen, 1975; Walberg & Anderson, 1968).  
268 Notably, versions of this scale have been adapted by international teams of researchers for the  
269 civic education studies fielded by the International Association for the Evaluation of Educational  
270 Achievement (IEA) beginning in the 1970s (Torney et al., 1975), including the 1999 IEA Civic  
271 Education Study (CIVED: Torney-Purta, Lehmann, Oswald, & Schulz, 2001) and the  
272 International Civics and Citizenship Studies of 2009 (ICCS:09: Schulz, Ainley, Fraillon, Kerr, &  
273 Losito, 2011) and 2016 (ICCS:16: Schulz, Ainley, Fraillon, Losito, Agrusti, & Friedman, 2017).  
274 These studies have reported very similar results based on nationally-representative samples of  
275 students in schools drawn from more than forty-five countries. The scale contains the following  
276 items:

277 When discussing political and social issues during regular lessons, how often do the  
278 following things happen? (Never, rarely, sometimes, often)

- 279 1. Teachers encourage students to make up their own mind.
- 280 2. Teachers encourage students to express their opinion.

- 281 3. Students bring up current political events for discussion in class.
- 282 4. Students express opinions in class even when their opinions are different from
- 283 most of the other students.
- 284 5. Teachers encourage students to discuss the issues with people having different
- 285 opinions.
- 286 6. Teachers present several sides of the issues when explaining in class.
- 287

288 The Openness of Classroom Climate for Discussion scale has been a robust predictor of  
289 students' civic knowledge and engagement both across countries and across more than five  
290 decades, not only in the IEA studies themselves (e.g., Knowles, Torney-Purta, & Barber, 2018;  
291 Lin, 2014; Torney et al., 1975), but also in smaller-scale data collections (e.g., Avery, Levy &  
292 Simmons, 2013; Gniewosz & Noack, 2008; Hahn, 1998). Results from these analyses are  
293 featured prominently throughout the remainder of this paper. Although it is the most widely-used  
294 and discussed scale embedded in the IEA civic studies, there are other scales measuring students'  
295 sense of the effectiveness of student voice in addressing school issues (Torney-Purta, Lehmann,  
296 Oswald & Schulz, 1999), students' assessments of the quality of student-teacher relationships  
297 (e.g., Maurissen, Claes, & Barber, 2018) and teachers' or principals' reports of the openness of  
298 climate (e.g., Quintelier & Hooghe, 2013). Other large-scale survey programs, such as the  
299 National Longitudinal Study of Adolescent Health, similarly provide scales both for use in  
300 secondary data analyses and in primary data collections (e.g., Flanagan et al., 2007).

301 Outside of these large-scale survey instruments, survey-based studies have incorporated  
302 other self-report measures of climate characteristics including students' perceptions of discussion  
303 openness (e.g., Kahne, Crow, & Lee, 2013) or fairness within the classroom (e.g., Gniewosz &  
304 Noack, 2008) or within the school (e.g., Karakos, Voight, Geller, Nixon, & Nation, 2016). For  
305 example, instruments by Brand, Felner, Shim, Seitsinger, & Dumas (2003) assessing school  
306 climate in the middle school context, have been used by several researchers to assess aspects of  
307 climate in association with civic engagement (Geller, Voight, Wegman, & Nation, 2013;

308 Guillaume, Jagers, & Rivas-Drake, 2015; Karakos et al., 2016). These include dimensions with  
309 specific connections to civic participation at school (e.g., experience of a democratic school  
310 climate), as well as more general measures of perceptions by students of their relationships with  
311 each other and with teachers that may be associated with civic outcomes. Taken together, the  
312 variety of measures used underscores the complex and myriad ways in which a school or  
313 classroom “climate” can support civic reasoning and discourse. It provides background to keep  
314 in mind when considering key findings from research employing these measures and approaches  
315 as they are presented in subsequent sections of this paper.

### 316 **Challenges of Defining and Measuring Climate**

317 Practitioners should bear in mind the assumptions and contexts in which school and  
318 classroom climate research takes place. Learning environments are complex and assessing them  
319 necessitates simplification, especially if one is limited to survey measures. Further, as Morriner-  
320 Derschimer (2006) notes, investigations of the discourses present in classrooms are often tied to  
321 the subject matter of the course being observed. Insights gleaned from research in one context  
322 and subject might not translate to another. This issue becomes particularly salient when  
323 considering that much of the research on the formal learning environments for civic discourse  
324 and reasoning at the class level has been situated in social studies classrooms. Lee, Nasir, and  
325 Smirnov (this volume) note that civic discourse and reasoning take place in all subject areas. In  
326 addition, although research on climate (both qualitative and quantitative) has produced important  
327 insights, several measurement challenges remain to be addressed. Researchers should be explicit  
328 about which aspects of climate they are measuring (and from whose viewpoint) and to which  
329 outcomes these features are expected to connect. For example, in theorizing approaches to  
330 studying Black youths’ sense of belonging at school, Gray, Hope, and Matthews (2018)

331 conceptualized institutional and instructional opportunity structures (including teachers’  
332 modeling of civic behavior and frequency of sociopolitical discussions) as being predictive of  
333 students’ sense of belonging. Beyond this, many consider outcomes that measure civic  
334 engagement or action (current or intended), but do not include assessments of civic reasoning or  
335 discourse. Rather, reasoning and discourse are assumed to be the mediating mechanism through  
336 which characteristics of a learning environment’s climate produce the engagement outcome.

337         Because of the nature of existing large surveys, it is not usually adequate to use these  
338 methodologies alone to examine the specific meanings that students place on climate, or the  
339 specific ways in which it is embedded into school contexts. Although survey-based studies of  
340 classroom and school climate are useful, a broader array of methodologies would enhance  
341 understanding of learning environments. These include qualitative and mixed-methods studies,  
342 as well as longitudinal work tracing students’ experiences and activities. Examples include  
343 Sakiz’s (2017) evaluation of interventions designed to improve perceptions of school climate  
344 among Turkish students with disabilities, Mischel and Kisantis’s (2019) mixed methods study  
345 about the impact of bullying on school climate, and Malin, Ballard, and Damon’s (2015)  
346 longitudinal, mixed-methods study on civic purpose in adolescence as expressed in different  
347 contexts. Qualitative studies are time consuming but important, especially because of their ability  
348 to describe several dimensions of context in addition to discussion processes or to deeply assess  
349 the nature of discourse within a targeted learning environment (e.g., the micro-ethnographic  
350 discourse-analytic approach described by Green et al., 2020). Multi-method studies, perhaps  
351 including methods such as focus-group interviews with teachers, could also advance research in  
352 this area (Torney-Purta, Amadeo, & Andolina, 2010). Regardless of approach taken, a challenge  
353 for researchers is to distill and adequately describe results gained with a variety of methods

354 (often in a variety of contexts with a wide range of students) to make them helpful to those  
355 outside the research community.

356 **Which Features of Learning Environments and Climates Support Students' Civic**  
357 **Reasoning and Discourse, and Why are they Effective?**

358 There is a consistent connection between the environment in which learning takes place  
359 and the success of learning activities (see Hahn, 1996; 1998 for an overview). A climate that is  
360 open for discussion of issues and respectful of student voice, even when it involves disagreeing  
361 with peers or teachers, has been found to support reasoning and quality discourse about civic  
362 issues. This in turn fosters important civic engagement outcomes, such as the exploration of  
363 alternative courses of civic action and understanding the kinds of reasons individuals give for  
364 holding particular opinions. Green (1983), in a review of early studies on the then-emergent field  
365 of linguistic process research in teaching, found that classroom contexts for discourse arise  
366 through teacher and student interactions, and that these contexts impact how discourse takes  
367 place and how it is interpreted by participants. Likewise, learning environments and climates for  
368 civic discourse and reasoning specifically are co-constructed by educators and students in  
369 schools and classrooms. In this section, we focus specifically on the role of educators in creating  
370 climates for civic discourse and reasoning, both through their own actions with students and by  
371 providing opportunities for students to engage with teachers and with each other (Kuhn,  
372 Feliciano, & Kostikina, 2019).

373 **Climate at the Classroom Level**

374 **Overall impacts of classroom climate.** Although based on correlational findings, an  
375 association between an open classroom climate for discussion and youths' civic outcomes is  
376 well-documented, spanning over 40 years and across many countries (early examples being

377 Hahn, 1998; Torney, Oppenheim & Farnen, 1975). This association was one of four key findings  
378 in Knowles, Torney-Purta, and Barber’s (2018) review of 100 research studies that had analyzed  
379 survey data across multiple nations from the IEA’s CIVED and ICCS:09 studies. Similarly, two  
380 literature reviews drawing from studies employing a broad range of data sources have  
381 highlighted an open discussion climate (or “pedagogical climate”) as an important factor for  
382 teaching civic or moral education (Geboers, et al., 2013; Schiutema, ten Dam, & Veugelers,  
383 2008). Although both of these reviews were conducted by European researchers, they each drew  
384 from research conducted across multiple national contexts. The literature summarized in these  
385 reviews documented associations between positive climates and civic engagement as defined in a  
386 number of ways, including knowledge, attitudes, and current and intended action in both  
387 conventional civic and social-action oriented spheres. For example, an analysis of ICCS:09 data  
388 across 38 countries and more than 5000 schools found that variation in open classroom climate  
389 accounted for 5 to 8% of the variance between schools in egalitarian values (Carrasco &  
390 Irribarra, 2018).

391         The extent to which students vary in their perceptions of climate have led some to  
392 wonder to what extent teachers shape classroom climate (Hart & Youniss, 2018). We focus here  
393 on research that describes features of open climates over which teachers have some control, and  
394 will later discuss students’ perceptions and experiences. A first step toward establishing a  
395 classroom climate conducive to discourse is willingness on the part of the teacher to encourage  
396 civic discourse at all, and then being able to incorporate appropriate pedagogies to do so (Hahn,  
397 2010). As Stitzlein (this volume) notes, civic reasoning and civic discourse differ from reasoning  
398 and discourse more broadly because of their connection to questions of common action (i.e., the  
399 “What should we do?” question). Many teachers feel unprepared to lead students in discussions

400 of controversial public issues that would help develop students' civic reasoning and discourse  
401 skills (Hess & McAvoy, 2015; Kuhn, 2019; Parker & Hess, 2001; Reznitskaya & Wilkinson,  
402 2017). In some cases, teachers fear negative reactions from parents or community members if  
403 they include contradictory views on controversial topics, a subject we discuss briefly in a later  
404 section (see also Hess & McAvoy, 2015; McAvoy & Hess, 2013). A larger number of teachers,  
405 however, simply lack confidence in their classroom management abilities to effectively lead such  
406 discussion. Teacher educators could address this problem by modeling strategies for future  
407 teachers and providing space to practice (Pace, 2019; Parker & Hess, 2001).

408         One specific solution Kuhn and colleagues have reported as effective is transferring more  
409 of the managerial role to students themselves, having them engage in discourse in various  
410 structured forms in pairs and small groups (Kuhn, Feliciano, & Kostikina, 2019). Middle-school  
411 students, these researchers have found, are quite able to engage in serious discussion of  
412 challenging issues, with an adult largely overseeing rather than serving as a conduit through  
413 which all talk passes. In fact, one product of students' engaging in argumentation in the  
414 classroom is the likelihood of their becoming increasingly aware and accepting of norms  
415 governing their discourse. During the course of an intervention designed to facilitate the  
416 development of argumentation skills in electronically-mediated dialogs, Kuhn et al. (2013)  
417 observed an increase in metatalk (i.e., talk about the discourse in which one is engaging).  
418 Students increasingly held themselves accountable to these self-imposed norms regarding  
419 acceptable argument moves and called their peers to task when these were violated. This  
420 indicates development of the metacognitive skills needed for these learners to direct their own  
421 activities in similar situations in the future (National Academies of Sciences, Engineering, and  
422 Medicine, 2018a). Indeed, in reflecting on such findings, Zorwick and Wade (2016) noted that

423 such norms potentially go beyond the context of a specific activity and inform behavior in a  
424 broader range of deliberative contexts. These student behaviors have the potential to impact the  
425 character of future interactions in classrooms as well as communities; this speaks broadly to the  
426 importance of the role of the student in shaping the climates within a variety of learning  
427 environments.

428         Second, teachers can model cogent political reasoning, disclosing their opinions and  
429 leaving space for student disagreement (Hess, 2009; Hess & McAvoy, 2015; Journell, 2017).  
430 Interestingly, while many teachers believe that neutrality (rather than disclosure) creates an  
431 appropriate class climate, many researchers argue this is not necessarily the case. Certainly,  
432 disclosing opinions with the explicit or implicit understanding that the teacher’s opinion is the  
433 “correct” view can be counterproductive and even unacceptable (Kelly, 1986), yet many teachers  
434 actually create more closed climates while trying to remain neutral. This is particularly so if  
435 opinions are inadvertently disclosed (Niemi & Niemi, 2007) or teachers unintentionally choose  
436 materials or topics for discussion that privilege one position over another (Clark, Schmeichel, &  
437 Garrett, 2020; Journell, 2017). Although teachers should not make the classroom a platform for  
438 their political views, the other extreme of providing no models or opportunities for expressing  
439 opinion sends the implicit message that political thinking is not important or even dangerous. We  
440 recognize, however, that this is often difficult for teachers, as they may fear sanctions as a result  
441 of expressing their opinions (Zimmerman & Robertson, 2017). For example, Geller (2020) noted  
442 that recent political circumstances have made even some basic facts politically charged. Teachers  
443 in Geller’s study feared that correcting misconceptions, addressing inaccurate media, or even  
444 supporting student advocacy (for example, during the March for Our Lives walkouts protesting  
445 gun violence) could be viewed as biased by students, parents, or administrators.

446           Beyond modeling reasoning, teachers play an important role in setting the norms for civic  
447 discourse in all classroom interactions. In reflecting on what was learned about improving  
448 classroom civility in their study of deliberation on contentious social policy issues in four  
449 Midwest high schools, Crocco, Halvorsen, Jacobsen, and Seagall (2018) acknowledged that  
450 skillful facilitation is key. In deliberative contexts, explicit teacher guidance is vital to ensure that  
451 students respond to their peers’ viewpoints in a respectful manner. Such guidance is especially  
452 important when classrooms include individuals from both dominant and marginalized social  
453 groups (such as those defined by race or ethnicity or by immigration status). Discussion without  
454 close teacher guidance can increase the likelihood of intergroup conflict and stereotyping  
455 (Banks, 2008). One approach is to incorporate students’ perspectives when setting ground rules  
456 for deliberation. Parker (2006; 2010) argued that deliberative elements should be pervasive in  
457 classrooms, for example, when setting behavioral expectations. Some teachers opt for structured  
458 methods, such as “accountable talk” protocols, to make sure that the classroom environment  
459 remains respectful and conducive to discussions, while scaffolding intellectual standards and  
460 reasoning skills such as the need for evidence (Michaels, O’Connor, & Resnick, 2008). Such  
461 efforts appear to be noticed by students: Gniewosz and Noack (2008) found that it was students’  
462 perceptions of fairness within the classroom that predicted lower intolerance toward foreigners  
463 among German youth.

464           Finally, teachers can establish respectful and supportive relationships with students.  
465 While emotional support and positive relationships are key components of positive climates  
466 generally, they are especially crucial for the development of civic reasoning and discourse given  
467 the potential discussion of controversial social issues and the propensity for disagreement or  
468 discomfort among members of the classroom community. Maurissen, Claes, and Barber (2018)

469 argued that positive student-teacher relationships set the context in which deliberations can  
470 openly take place. Using data from the ICCS:09 study in 38 countries, they found a correlation  
471 between students' positive perceptions of relationships with teachers (both individual and  
472 aggregated across the school) and their perceptions that their classrooms are open for discussion.  
473 In addition, the quality of such relationships were themselves positively related to greater civic  
474 knowledge and stronger norms of citizenship (Isac, Maslowski, Creemers, & van der Werf,  
475 2013). We also see this focus on strong relationships, particularly between educators or adult  
476 leaders and students, as a core component of action civics programs (e.g., Andolina & Conklin,  
477 2019, when discussing Project Soapbox; Mikva Challenge, 2020).

478       **Climate in groups within the classroom.** Teachers also have opportunities to construct  
479 micro learning environments such as small groups and online spaces. These can have  
480 substantially different dynamics when compared to the macro class environment. A full  
481 recounting of group pedagogies is beyond this review's scope. The social interactions within  
482 group contexts, however, are significant to the development of civic reasoning and discourse.  
483 Kuhn (2015) found little difference between the quality of work in tasks devoted to concept  
484 acquisition completed by individuals compared with groups. However, she found that  
485 collaborative work both between students who shared a position, and with those who held an  
486 opposing view, was a key advantage in the development of argument skills. Both approaches to  
487 collaborative work require seeking to make one's ideas understood, as well as seeking to  
488 understand those of another. It has been known for a couple of decades that differences in group  
489 structure as well as task structure influence this process (Cohen, 1994). In addition, according to  
490 Johnson, Johnson, & Roseth (2010), collaboration can benefit students' socio-emotional well-

491 being by, for example, reducing anxiety and raising self-esteem, as well as promoting positive  
492 feelings towards classmates and peer-to-peer interactions.

493         Group work can also cultivate feelings of collective efficacy among students. This is  
494 particularly true in cases where group activities focus students' attention to working together to  
495 address issues of importance in their communities beyond the school. For example, Gallay,  
496 Pykett, Smallwood, and Flanagan (2020) drew upon work by Elinor Ostrom to describe how  
497 characteristics of effective groups (including mutual respect, responsibility and communication)  
498 could be applied in educational practices designed to cultivate students' support for the  
499 environmental commons. One of the themes identified by Gallay and colleagues in analyzing  
500 4th-12th graders' essays on their experiences with place-based stewardship education in  
501 Michigan was the importance and power of working as a team of change agents in their  
502 communities, alongside peers as well as teachers and community partners. Relatedly, some  
503 students' responses indicated that they had personally developed skills needed as a member of a  
504 team, especially when navigating diversity in experiences and perspectives within groups.

505         Online spaces such as discussion forums are another approach increasingly used by  
506 teachers to foster civic discourse. Here we focus only on classroom-based applications of digital  
507 learning spaces. For a fuller treatment of the opportunities and limitations of online environments  
508 for supporting student civic reasoning and discourse, see Kahne et al. (this volume). Choosing to  
509 use digital spaces as a classroom environment for civic reasoning and discourse involves trade-  
510 offs, some of which may be more or less appealing to teachers depending on their goals for  
511 student knowledge and skill development. For example, online learning environments differ in  
512 terms of the pace and type of interaction among students and instructors. These environments are  
513 typically asynchronous and rely on reading and writing skills instead of speaking and listening

514 (Blankenship, 2016; Larson, 2003). They noted that written interactions tend to require more  
515 investment of student time than verbal interactions. Content analysis of student work, however,  
516 suggests that a benefit of the slowed pace is that students have more time to process information  
517 and compose more thoughtful responses (Blankenship, 2016). In addition, online discourse has  
518 the benefit of preserving a record of the exchange, enhancing opportunity for reflection by  
519 students as well as teachers (Kuhn, 2015).

520 Asynchronous online environments also tend to elicit broader participation than face-to-  
521 face settings. Larson (2003) noted that students who are reluctant to participate in classroom  
522 discussions are more likely to contribute to online forums. Recently, Clark, Bordwell, and Avery  
523 (2015) found that female high school students tended to express a preference for online forums  
524 when discussing controversial issues and participated in them at levels similar to male students.  
525 Anonymity in discussion forums also appears to encourage female participants. Clark and  
526 colleagues found that female students' participation in online forums was related to perceptions  
527 of the overall classroom climate when student names were visible. When students discussed a  
528 controversial issue using a pseudonymous screen name, the association with classroom climate  
529 perceptions disappeared and participation rates were roughly equal for male and female students.

530 Educational websites may also offer students a means of developing civic discourse and  
531 reasoning. Stoddard, Banks, Nemacheck, and Wenska (2016) offered one of the few in-depth  
532 analyses of an online civic learning platform in their study of the iCivics program. While the  
533 game-based structure of the content of iCivics offered many learning opportunities, these  
534 researchers identify ways in which iCivics could improve, such as providing students more  
535 opportunities for deliberative thinking or weighing multiple considerations or perspectives.  
536 Some of these issues may have been mitigated more recently to strengthen its use as a means of

537 developing civic discourse and reasoning skills. The iCivics platform is only one example,  
538 however, and more research is needed to evaluate the potential of such digital environments.

### 539 **Climate at the School Level**

540 Turning to the school level, one reason that a positive climate is thought to be associated  
541 with civic discourse, reasoning, and engagement outcomes is due to the presence of widely-  
542 shared core values among members of the school community. Early research on school-level  
543 climates for citizenship education focused on comparing public schools, private schools, and  
544 charter schools in the United States. Campbell (2012) noted several studies that found  
545 differences favoring private and charter schools in civic skills and volunteer activity, although  
546 findings on civic attitudes (including tolerance) were more mixed. In reflecting on these  
547 differences, Campbell posited that the sense of mutual trust and shared values, presumably  
548 afforded by a common religious tradition, could result in a shared “ethos” within a school that  
549 fosters civic outcomes.

550 Campbell (2012) also noted that Catholic schools were not the only settings able to  
551 cultivate a civic “ethos.” When members of the school community shared strong views on the  
552 importance of certain activities for good citizenship (e.g., voting), civic outcomes among  
553 students were stronger. He suggested research on charter schools could explore what it means to  
554 have a strong school “ethos” for civic education, particularly when they incorporate a civic  
555 mission explicitly in their mission statement (e.g., Cesar Chavez Schools for Public Policy in  
556 Washington DC: Chavez Schools, 2020). Broad school missions also provide a context through  
557 which teachers can make instructional decisions that are aligned with school values: For  
558 example, Ladson-Billings (2000) described how a math teacher within an African-centered  
559 school in Milwaukee selected activities designed to hone math skills in application to racist

560 zoning laws, thus connecting to youths’ developing understanding of sociopolitical  
561 consciousness. These principles are extensively illustrated in Seider’s (2012) research on the  
562 connection between school culture and civic character development in a Boston charter school.  
563 Specifically, he noted a shared commitment to working for continuous improvement and a sense  
564 of community in fostering civic character. In earlier grades, this included a focus on behaviors  
565 leading to a harmonious environment within specific classrooms; in older grades, this included  
566 respect for diverse viewpoints about issues and students working together across differences.

567         Seider’s case-study research highlights additional features of the overall school culture  
568 that speak to broader principles about what constitutes a positive school climate for civic  
569 discourse, reasoning, and engagement. School leaders can intentionally strive to create a  
570 particular culture (or “ethos”) in their schools. A review of research sponsored by the Wallace  
571 Foundation (Leithwood, Louis, Anderson, & Wahlstrom, 2004), found that superintendents and  
572 principals played a valuable role in shaping the culture of schools and promoting student  
573 learning. In particular, the report found that effective school leaders articulated a vision for the  
574 school, provided the necessary tools and training to achieve that vision, and created the support  
575 structures needed to sustain work towards the community’s goals. That said, what is unique  
576 about setting a school climate in support of civic reasoning and discourse is that, practically by  
577 definition, the most supportive climates are those in which leaders explicitly take into account  
578 student voice in these processes. School leadership is in and of itself a learning environment for  
579 civic reasoning and discourse, and the focus on consequential decisions to the schools that  
580 students attend means that the issues being discussed are relevant and connected to personal  
581 experience (National Academies of Sciences, Engineering, and Medicine, 2018a). Yet, despite  
582 the benefits that come from having students involved in decision-making processes, authentic

583 opportunities for student engagement remain limited (Brasof & Mansfield, 2018), often due to  
584 perceptions of youth as unprepared to contribute meaningfully to the work of a school.

585         Nevertheless, research has documented benefits of incorporating and valuing student  
586 voice, particularly when it comes to students’ subsequent civic action. Mansfield, Westin, and  
587 Halx (2018) presented a continuum of incorporating student voice, building upon work by Mitra  
588 and others, ranging from students “being heard” to collaborating with adults to being prepared to  
589 take on leadership roles. Flanagan (2014) noted that students who believed that teachers within  
590 their schools respected students’ diverse perspectives were themselves more committed to civic  
591 dispositions. However, student voice appears especially effective in encouraging further civic  
592 action when it contributes meaningfully to school decision-making. Studies employing data  
593 from the IEA civics studies, both in the United States (Godfrey & Grayman, 2014, using  
594 CIVED) and cross-nationally (Maurissen, Claes & Barber, 2018, using ICCS:09), found a  
595 positive association of students’ perceptions of schools as responsive to students’ voice in  
596 decision-making (which can be considered a feeling of collective efficacy within the school  
597 context) to their perceptions of classrooms as open to discussion. Perceived responsiveness to  
598 student voice also had strong and unique effects on important civic outcomes themselves. In a  
599 separate analysis focusing specifically on Flemish youth participating in ICCS:09, Maurissen and  
600 colleagues found that both individual perceptions of the importance of student voice in school  
601 decision-making and averages at the school level were related to greater support for immigrants’  
602 rights (Maurissen, Barber, & Claes, 2018). However, the openness of classroom climate itself  
603 was not. Similarly, using CIVED data, Torney-Purta, Wilkenfeld, and Barber (2008) found that  
604 confidence in the value of student voice was related to knowledge about children’s rights,  
605 although classroom discussion climate was not. Student voice in school was also a stronger

606 predictor of attitudes toward immigrant rights and social-movement citizenship than was  
607 classroom climate.

608         Mitra, Serriere, and Kirshner (2014) have pointed out that active and meaningful student  
609 participation in school decision-making is rare in the United States. Yet Mitra and colleagues did  
610 identify some examples of school-wide efforts that engaged youth meaningfully. They described  
611 a California secondary school serving immigrant and working class youth that engaged students  
612 as leaders in responding to important school issues. One key feature was the importance placed  
613 on cultivating skills for civic reasoning as well as capacities for taking on leadership in school  
614 improvement efforts: skills and roles at the higher end of the continuum of student voice.  
615 Situating these activities within the broader community context was also important.

616         More broadly, a positive school climate also contains positive and supportive  
617 relationships among individuals in the school, building upon the need for feelings of emotional  
618 safety within learning environments identified earlier. Guillaume, Jagers, and Rivas-Drake  
619 (2015) used surveys to examine the association between school climate, measured by Brand et  
620 al.'s (2003) school climate measure, and “emergent” civic engagement behaviors among middle  
621 school youth of color from a city in the Midwestern United States. They found that perceiving a  
622 more positive school climate, defined by characteristics such as teacher helpfulness and positive  
623 relationships among students, was related indirectly to civic engagement through perceptions of  
624 connectedness at school. This suggests the importance of meeting students’ needs for support  
625 and inclusion when supporting their participatory development. Moreover, Jagers, Lozada,  
626 Rivas-Drake, and Guillaume (2017) found that positive climates within homeroom classes (e.g.,  
627 involvement in setting rules) were predictive of civic engagement of Black and Latino middle-  
628 school youth only when the school at large was perceived as treating students of different social

629 group backgrounds equitably. This suggests that part of the effectiveness of overall school  
630 climates comes from providing a setting in which individual classroom climates can be effective.

631         Similar findings emerge when operationalizing school climate in other ways as well.  
632 Flanagan et al. (2007) found associations between students’ perceptions of teacher “ethos” in the  
633 school (standards of respect, fairness, and tolerance as perceived by students) and students’ civic  
634 commitment and belief in America as a just society; these findings were consistent for students  
635 across racial/ethnic groups. A context of safety in the school is also important. Using a person-  
636 centered analytic approach with ICCS:09 data, Reichert, Chen and Torney-Purta (2018)  
637 examined how perceptions of various aspects of school and classroom climate cohered into  
638 different patterns across countries within the Nordic region. In examining predictors of such  
639 patterns, Reichert and colleagues noted that, when there are substantial instances of bullying and  
640 social exclusion in a school, climates for developing active citizenship appear to be reduced.

641         Finally, extracurricular activities within the school environment provide contexts in  
642 which skills of deliberation may be honed, much in the same way as classroom activities. As one  
643 example, student councils are commonly considered as a mechanism for providing students a  
644 voice in school decision-making and in creating an open climate that is respectful of students’  
645 opinions. A survey of 524 administrators conducted by the *Education Week* Research Center  
646 (2018) found that student government was the most commonly reported place where students  
647 were thought to be able to express their civic voices and rights (36%), ranking slightly higher  
648 than classroom activities and assignments (33%). However, there is mixed evidence on the  
649 extent to which student councils effectively provide authentic and consequential opportunities to  
650 inform how schools function. Importantly, McFarland and Starmanns (2009) noted that U.S.  
651 public schools serving students from low-income and/or minoritized racial and ethnic groups

652 often lacked student councils altogether, or had councils charged with overseeing social  
653 functions rather than contributing to decision-making within a school in meaningful ways. To  
654 contrast, elite public schools (which tended to serve more privileged students) granted their  
655 student councils more decision-making power and autonomy. The nature of involvement itself  
656 can also vary across student councils: Halfon and Romi (2019) classified student councils in  
657 Israel into four groups along two dimensions: one representing the extent to which councils  
658 encouraged volunteering in the community and the other representing how councils fostered  
659 students' rights. Of note is that there was one group of councils that did not encourage either type  
660 of involvement.

661 Other activities center on the importance of democratic deliberation in schools and other  
662 contexts to promote civil discourse (Ladenson, 2012; McGranaham, 2020). Particularly  
663 important in these activities is having students justify their ideas, as part of a mutually accepted  
664 norm of discourse (Kuhn et al., 2013; Michaels et al., 2008). Ladenson's Intercollegiate Ethics  
665 Bowl program asks students at the high school or college level to develop arguments about a  
666 variety of issues taking into account stakeholders' values as well as relevant facts. The quality of  
667 these arguments and students' responses to counterarguments is judged in a competition.  
668 However, equitable access to such extracurricular contexts is often limited due to the fees that  
669 many schools charge to participate in such activities (Putnam, 2015).

670 In summary, in addition to classroom environments, the structures for discussion and  
671 participation introduced by a school's influential adults is essential in creating the supportive  
672 context needed for civic discourse and reasoning. Creating a school-wide culture for civic  
673 discourse can reinforce and enhance such learning in the classroom. Extracurricular activities can  
674 provide additional opportunities for discourse, reasoning, and engagement.

675 **Limitations of Research on Features of Learning Environments**

676 While researchers have highlighted the substantial role of class and school climate, there  
677 are areas that remain under-studied. Earlier work contains notable studies relevant to climates for  
678 civic reasoning and discourse for elementary students (Angell, 1991; Bickmore, 1999), but most  
679 of the research described here focuses on climates as experienced by adolescent students.  
680 Notable exceptions include Seider’s (2012) focus on civic character development in the early  
681 grades and Mitra, Serriere, and Kirschner (2014)’s discussion of “carpet time democracy”  
682 activities. While adolescence is an important period for the development of civic reasoning and  
683 discourse skills, as mentioned earlier, additional research on the nature of learning environments  
684 in the early years of schooling is warranted (Lee, Nasir, & Smirnov, this volume; Patterson,  
685 Bigler, Pahlke, Brown, Hayes, Ramirez, & Nelson, 2019). In addition to research on class and  
686 school climate, progress continues in attempts to understand the nature and patterns of  
687 development of fruitful student discourse on social and civic issues, particularly as it relates to  
688 students’ developing moral positions (Lee, Nasir, & Smirnov, this volume) and as it ultimately  
689 connects to civic reasoning, discourse and engagement.

690 Second, there is room in this research arena for a more nuanced discussion of the  
691 intended civic outcomes of positive school and classroom climate. The work presented here  
692 focuses on a variety of civic reasoning, discourse, and engagement outcomes. Certainly, the  
693 positive impact of climate on such outcomes is generally consistent. More innovative research,  
694 however, might detail the nature of supports for specific civic competencies that encompass lived  
695 experiences out of school and take into account ways in which broader social structures in and  
696 out of school either privilege or marginalize those experiences. Some existing work in this area is  
697 discussed in the next section, but more is clearly needed.

698           Moreover, additional research should focus on how learning environments for civic  
699 reasoning and discourse may function similarly or differently across subject areas. While  
700 opportunities for civic reasoning and discourse exist across the disciplines (Lee, Nasir, &  
701 Smirnov, this volume), the vast majority of the research that considers the nature of classroom  
702 climates for civic learning focuses on civics or other social studies-related content areas. This  
703 makes it challenging but important to bring the perspectives of other disciplines to bear when  
704 discussing civic issues: For example, the consideration of climate change as a civic issue  
705 inspiring youth action involves the incorporation of knowledge from an array of scientific  
706 disciplines to engage in informed reasoning and discourse (Cherif, Gialamas, Pelonis, Harris, &  
707 Siuda, 2019). Little is known about the nature of science classroom climates as they support  
708 civic reasoning and discourse specifically, however. Work exploring the teaching of socio-  
709 scientific issues in science classrooms holds particular promise, as many of the same principles  
710 described above are discussed in research in this area (Walsh & Tsurusaki, 2014; Zeidler,  
711 Appelbaum, & Sadler, 2011). However, researchers and practitioners alike focused more on how  
712 these learning environments support scientific reasoning rather than on civic reasoning about  
713 social issues or on potential civic actions (e.g., Nuangchalerm, 2009, in Thailand; Kuş, 2015, in  
714 Turkey). Citizen Science approaches may further inform this work through their focus on the  
715 scientific process as experienced in community contexts (National Academies of Science,  
716 Engineering, and Medicine, 2018b).

717           Turning to literacy education, Mirra and the Debate Liberation League (2020) provide an  
718 example of research foregrounding climate issues through their description of how a group of  
719 middle-school students integrated personal identities and experiences into their experiences with  
720 policy debate. This resulted in an English/Language Arts learning environment in which student

721 voices and experiences were central and valued as part of civic dialogue in ways that are not  
722 typical of conventional debate programs.

723         The role of schools and (especially) classrooms in the development of competencies for  
724 critical consciousness (Watts, Diemer, & Voigt, 2011) is one area that would benefit from  
725 additional work, even while acknowledging the limitations of traditional civic education in  
726 cultivating these abilities (Rubin, Abu El-Haj, & Bellino, this volume). Godfrey and Grayman  
727 (2014)'s analysis of CIVED data is one example of research tying classroom climates to these  
728 specific outcomes. Diemer, Hsieh, and Pan (2008)'s analysis of data from the National  
729 Longitudinal Study of 1988 focused on the role of race relations in school as predictors of  
730 sociopolitical development among low-income youth of color. Each of these studies noted the  
731 limitations inherent in using existing data to measure the types of social action thought to be  
732 fostered through critical consciousness. However, this also suggests ample room for further  
733 research. Given the role of students' own backgrounds in such development (and specifically,  
734 their experiences with marginalization), some relevant research appears in the following section.

735         Finally, research is needed to connect teacher education practices to teachers' abilities to  
736 establish open climates in K-12 schools. Researchers should examine the features of teacher  
737 preparation programs that best prepare teachers to establish climates where civic discourse and  
738 reasoning can thrive. In one of the few studies of teacher education practices related to  
739 establishing open climates, Pace (2019) documented the practices of four teacher educators in  
740 Northern Ireland, England, and the United States as they prepared future teachers to facilitate the  
741 teaching of controversial issues and to create open classroom climates. The teacher educators  
742 utilized contained risk-taking strategies, which alerted preservice teachers to be prepared for  
743 unforeseen difficulties that might be associated with addressing controversial issues in their

744 class. Strategies were discussed for addressing some of these potential difficulties (such as  
745 managing emotional moments and reflecting on positionality) before they actually happened in  
746 class. Follow up studies that track preservice teachers as they move into their own classrooms  
747 should investigate the extent to which teachers effectively follow through with such strategies  
748 from their methods courses. Professional development focusing on promoting civic discourse in  
749 the classroom shows promise in increasing both teacher self-efficacy and student perceptions of  
750 climate (Barr et al., 2015). However, more thorough study is needed to identify best practices  
751 for such programs, especially in classrooms where students are not used to being allowed to  
752 express their opinions or where they perceive risk to themselves in doing so.

753 **How Do Students Perceive and Shape these Learning Environments?**

754 It is especially important for educators to understand the influence of students in shaping  
755 classroom and school climates. The *Education Week* survey of administrators (2018) found that  
756 respondents viewed the classroom as one of the principle places in schools where students can  
757 express their civic voices and opinions. We assume that students who participate in learning  
758 environments with the features described above are more likely to have positive experiences  
759 engaging in high-quality civic discourse, compared to students lacking such opportunities.  
760 However, students' own perspectives on topics and their prior experiences both inside school and  
761 in the community more broadly shape how learning environments are ultimately formed, and  
762 also how students perceive and benefit from experiences in their schools and classrooms. As  
763 Green (1983) notes, and as acknowledged earlier, discourse and the construction of meaning in  
764 classrooms is dependent on interactions between and among both teachers and students. Thus,  
765 understanding student perceptions of the classroom and events therein is an important part of  
766 understanding classroom climates for civic discourse.

767 **Students' Experiences in the Classroom**

768 **Differences in perceptions of classroom climates.** Not all students share the same view  
769 of a given classroom as a space to talk and learn, or one in which civic discourse is encouraged.  
770 Indeed, individual perceptions of climate have been found to be more predictive of student  
771 outcomes than aggregate ratings or ratings provided by teachers or principals (Quintelier &  
772 Hooghe, 2013). Both Hart and Youniss (2018) and Campbell (2019) cite this variation as  
773 evidence of a problem of endogeneity, where variables that have not been measured impact the  
774 outcome of a study. In short, cross-sectional surveys cannot disentangle respondents' pre-  
775 existing differences from their reports of recent experiences. Students who have long had more  
776 interest in political and social issues, for example, may both feel more comfortable in classroom  
777 discussions and report stronger dispositions toward civic involvement. Temperamental  
778 characteristics such as shyness may also similarly contribute. Another explanation (and our  
779 primary focus in this paper) comes from Michaels, O'Connor, and Resnick (2008), who  
780 acknowledged that some youth are socialized (by specific aspects of their family background or  
781 interactions in their neighborhood) to shy away from engaging in discourse in public, including  
782 at school. Such differences in socialization are an expected part of a diverse educational  
783 landscape reflecting varying norms and values across (for example) religions, ethnicities, nations  
784 of origin, or community groups. Because such variation in norms among members of a  
785 classroom reciprocally contribute to how learning environments are perceived by those in the  
786 classroom, this issue makes causal direction hard to specify.

787 One set of such individual differences includes enduring personal and group identities.  
788 Individual identities are multifaceted and, especially in young people, may shift. In addition,  
789 different elements of an individual's identity can become more or less salient depending on

790 circumstances. Lee, Nasir, & Smirnov (this volume) have reviewed literature on the development  
791 of identity and its relation to civic discourse and reasoning. Here we focus on what happens  
792 when aspects of student identities intersect and interact with features of their learning  
793 environments, how they are perceived, and how students learn to negotiate within them.

794         Researchers have been able to associate elements of individual or group identity to  
795 perceptions of learning environments relevant to civic discourse and reasoning. For example,  
796 group differences, both in terms of demographic characteristics such as race or gender and in  
797 terms of affiliations such as religious or political beliefs, can impact individuals' prior  
798 knowledge or framing of a given issue. In one study, Crocco, Seagall, Halvorsen, and Jacobsen  
799 (2018) noted the role of positionality in determining students' approaches to the discussion of  
800 immigration policy. Students' identities in relation to the topic under consideration, particularly  
801 as members of immigrant families, informed their approach to classroom discussion. While  
802 classroom discussion and deliberation pedagogies might be egalitarian in their intent, members  
803 of some groups may find their voices ignored or repressed by the majority in such exercises  
804 (Conklin, this volume; Fraser-Burgess, 2012; Rubin, Abu El-Haj, & Bellino, this volume;  
805 Young, 2000). Thus, providing support for engaging with diverse perspectives may be an  
806 especially important part of an open classroom climate, especially for students whose  
807 experiences with the political and legal system are characterized by conflict, uncertainty, and  
808 marginalization (Rubin, Al Haj, & Bellino, this volume). In part because group identity deeply  
809 informs participation and boundaries of acceptable topics for debate, these students may benefit  
810 from experiences designed to allay their anxieties, foster a sense of trust, and facilitate a gradual  
811 learning process about being members of a "civic public." Conklin (this volume) similarly  
812 suggests that when the teacher opens questions of current concern to class members, such as their

813 experiences of inequality, lack of connection to the community or discrimination, discussion can  
814 be an entry point to “critically relevant civics.” Taken together, this suggests that educators may  
815 benefit from training on how to be sensitive to these issues as they attempt to create these  
816 settings.

817         Group identity also guides behavior and shapes the beliefs of individuals who hold that  
818 identity (Brown, 1991; Gilbert, 1994; Tajfel & Turner, 1979). Focusing on students engaging in  
819 discussions and deliberations, Fraser-Burgess (2012) argued that group identities incorporate  
820 foundational beliefs and ideas (e.g., based on religion or traditions) that play a role in defining an  
821 individual’s identity. When such beliefs conflict with those of the majority, she argues that  
822 engaging in a discussion of those ideas results in a situation where “the student must either  
823 repressively transcend his or her group identity beliefs or face further social marginalization” (p.  
824 496). While several responses in this situation may also be possible (particularly if the learning  
825 environment itself is adaptable), Fraser-Burgess’ framing may be helpful in understanding  
826 findings of racial differences in classroom climate perceptions based on group comparisons in  
827 large-scale survey data. For example, Campbell (2007) found in analysis of CIVED data from  
828 the United States that, on average, white students tended to perceive classroom climates as  
829 significantly more open than did students of color. Campbell also noted an inverse relationship  
830 between the racial heterogeneity of the classroom and students’ overall perception of an open  
831 classroom climate. Racially diverse classrooms were generally perceived as less open than  
832 homogenous classrooms (regardless of the predominant race of students in the classroom).  
833 Similarly, Torney-Purta, Barber, and Wilkenfeld (2007) found that students who indicated they  
834 were of Latino ethnicity reported their classrooms to be less open on average than did their peers  
835 who did not self-identify in this way. In fact, when these group differences in classroom climate

836 perceptions were statistically controlled, the size of differences in scores on conventional civic  
837 outcomes such as civic knowledge and intent to vote was considerably reduced. Findings such as  
838 these deserve reflection with the aim of better understanding of how to improve perceptions of  
839 classrooms as open by all students.

840         Gender (binary self-report of male or female) has also been predictive of perceptions of  
841 classroom climate, with female students perceiving more openness on average than male  
842 students in many countries (Barber, Sweetwood, & King, 2015; Hahn, 2010; Knowles, Torney-  
843 Purta, & Barber, 2018; Maurissen, Claes, Barber, 2018). The impact of gender on perceptions of  
844 classroom climate was moderated by the degree of confidence students had in the value of  
845 student voice in school more broadly: Such confidence in student voice was more strongly  
846 predictive of classroom climate perceptions for male students, resulting in smaller gender  
847 differences among students with high degrees of confidence (Maurissen, Claes, & Barber, 2018).  
848 This finding is particularly interesting given that the dynamics of social interaction can privilege  
849 the voices of male students over female students in classrooms. For example, Crocco et al.  
850 (2018), in their study of deliberation on controversial issues such as immigration policy, found  
851 that contributions that were more traditionally masculine in nature (typically couched in  
852 statistical explanations, and most often coming from male students) were less often challenged or  
853 dismissed than were contributions that focused on relational issues (more often interpreted as  
854 feminine). Moreover, as Michaels et al. (2008) noted when reflecting on gender dynamics in the  
855 classrooms they observed, girls may be socialized not to raise objections when they disagree  
856 with another's viewpoint.

857         Another factor affecting perceptions of classroom climate is socio-economic status. A  
858 review of studies conducted using IEA datasets concluded that students of lower socio-economic

859 status tended to report less openness of classroom climate than did their higher-income peers  
860 (Knowles, Torney-Purta, & Barber, 2018). Michaels et al. (2008) described instances of socio-  
861 economic privilege that they witnessed when observing the implementation of accountable talk  
862 protocols (rules for peer interaction and use of evidence). To put these findings into context,  
863 however, analyses of ICCS:09 data from Chile, a country with high degrees of structural  
864 inequality and economic segregation impacting the education system, revealed that socio-  
865 economic differences in the openness of classroom climate for discussion were not as dramatic  
866 as observed differences in civic knowledge (Castillo, Miranda, Bonhomme, Cox, & Bascopé,  
867 2014). However, both were key predictors of anticipated future civic participation. Thus, while  
868 Castillo and colleagues raise concern over the ways in which schools perpetuate existing political  
869 inequalities through inequitable opportunities for acquisition of civic knowledge, they see  
870 promise in the promotion of open classroom climates as a strategy for encouraging more  
871 equitable political participation.

872         **Differences in the functioning of small groups.** Individual and group differences also  
873 impact the dynamics found within smaller discussion groups. In general, there is evidence that  
874 identity or salient group membership (national, religious, racial) influences students’  
875 interpretation of information (Barton & McCully, 2005; Epstein, 2008; Porat, 2004). However,  
876 these factors are associated with varied behavior depending on the identities or affiliations of  
877 other group members. Goldberg (2013), for example, found that Mizrahi and Ashkenazi Israeli  
878 students’ self-reported ethnicity was associated with differences in the way they discussed a  
879 controversial issue with group members, depending on whether group members shared a  
880 common ethnicity. In discussing the Israeli Melting Pot policy, an instance of controversy

881 between members of the two ethnic groups, non-mixed ethnicity groups tended to reinforce their  
882 own identities more often than did those in mixed ethnicity groups.

883         Students’ political affiliations and their impact on discussion groups has also been  
884 examined as an influence on student behavior and perceptions of the classroom (Clark, 2018;  
885 Hess & McAvoy, 2015; Kahne & Bowyer, 2017), especially in the broader social context of  
886 ideological bubbles, fake news, and partisan polarization. Political scientists have found that  
887 ideology or prior beliefs can impact reasoning about political and social issues in adults (e.g,  
888 Lodge & Tabor, 2013), though studies of the impact of ideological composition of discussion  
889 groups have often reached divergent conclusions (Esterling, Fung, & Lee, 2019; Farrar, Green,  
890 Green, Nickerson, & Shewfelt, 2009; Kuhn, Floyed, Yaksick, Halpern, & Ricks, 2018; Kuhn &  
891 Lao, 1996; Lao & Kuhn, 2002; Schkade, Sunstein, & Hastie, 2007). Empirical research on  
892 political affiliation’s impact on discourse and reasoning for young people is relatively sparse,  
893 particularly in the context of formal learning environments. However, Stoddard and Chen  
894 (2016), in a study of discussions about a controversial social issue among small groups of young  
895 adults, suggested that political identity affected the dynamics of discussion groups. In particular,  
896 mixed-political identity groups (liberal/conservative) tended to have richer discussions with more  
897 divergent points of view expressed than did homogenous groups. Clark (2018) found that high  
898 school students with strong partisan identities tended to increase their repertoire of arguments  
899 (see Capella, Price, & Nir, 2002) in ways that favored their own position shortly after an online  
900 deliberation. This took place regardless of whether they were in mixed or uniform partisan  
901 identity groups.

902         **Differences in climate’s association to civic outcomes.** In addition to considering  
903 differences among students in their experiences in classrooms, it is also important for educators

904 to consider the ways in which classroom climate may influence anticipated future engagement  
905 differently for students who are members of different social groups. Specifically, there may be a  
906 compensatory effect of classroom climate on civic engagement. For example, the openness of  
907 classroom climate has been found to moderate gender differences in civic outcomes. Using  
908 CIVED data from 28 countries, for example, Barber and Torney-Purta (2009) found that the  
909 differences between male and female students in support for women’s rights were smaller in  
910 schools with higher average reports of classroom climate openness; this was due to more support  
911 for gender equality among male students in schools with more open climates. In another analysis  
912 of CIVED data in the United States, Godfrey and Grayman (2014) found that the association  
913 between an open classroom climate and students’ sense of collective efficacy in school decision-  
914 making was stronger among non-white students compared to white students. Similarly, Campbell  
915 (2008) found stronger effects of open classroom climate on intent to vote among students from  
916 lower-socioeconomic backgrounds, compared to those from higher-socioeconomic backgrounds.  
917 This set of conclusions, however, should be viewed with caution, as other research has identified  
918 ways in which some features of a climate can exacerbate existing inequalities. In Dutch schools,  
919 for example, Wanders, van der Veen, Dijkstra, and Maslowski (2019) found that differences in  
920 youths’ societal involvement associated with parent education were more pronounced among  
921 those students who perceived their relationships with teachers to be the most positive.

922 An open classroom climate may be especially important in providing support for  
923 engaging with diverse perspectives in ways that lead to future engagement. Campbell (2007)  
924 found that the more racially and ethnically heterogeneous a classroom was, the less that students  
925 within the classroom saw themselves as future informed voters or active political participants.  
926 However, discussion in open classroom environments, particularly those fostering rich

927 intercultural dialogue that credits different experiences and recognizes positionality of  
928 participants may partially compensate for these effects. We are encouraged in this belief because  
929 Campbell (2007) also found that highly open classroom climates mitigated the lower levels of  
930 intended participation sometimes associated with students in racially diverse classrooms.  
931 Similarly, following the 2012 U.S. election, Kawashima-Ginsberg and Levine (2014) found that  
932 students from racially diverse schools who reported more frequent engagement with  
933 controversial issues in school showed higher political engagement than those who did not. This  
934 scattered set of findings suggest that this topic should be further investigated.

### 935 **Student Experiences at the School Level**

936 Students also perceive and shape the school environment beyond their classrooms in  
937 various ways. In his review of early research, Ehman (1980) recognized extracurricular activities  
938 as spaces in which peers could be brought together to encourage civic norms. One way in which  
939 extracurricular contexts encourage civic development is by providing space for young people to  
940 discuss personally salient social issues with peers. To connect to the earlier discussion of student  
941 voice, such activities provide dedicated spaces and structure to foster the types of discussion that  
942 may be recognized as an important part of school decision making by administrators.

943 Seider (2012) highlighted how some extracurricular discussion groups for young men and  
944 women provided space for discussion of issues particularly salient to their developing gender  
945 identities. These included discussion groups that were tied not only to social issues in the  
946 community, but also to issues in the school (e.g., disciplinary practices). Other activities have  
947 similarly used connections to students' social identities to create safe and engaging environments  
948 in which youth could discuss social issues. Extracurricular groups such as gay-straight alliances  
949 (GSAs), for example, can promote feelings of inclusion, encouraging engagement and activism,

950 and influencing the climate of schools as a whole. Mayo (2013b) and Lapointe (2017) argued  
951 that such groups can provide models for teachers wishing to incorporate the voices of lesbian,  
952 gay, bisexual, trans, or queer (LGBTQ) individuals into the curriculum, where they have  
953 typically been excluded (Thornton, 2003). Further, Mayo (2013a) argued that students and  
954 teachers involved in GSAs are able to take steps to foster a generally more inclusive school  
955 environment. A study of 33 GSAs by Poteat, Calzo, and Yoshikawa (2018) noted that higher  
956 levels of involvement in these organizations were related to higher civic engagement and  
957 advocacy among students.

958         Other extracurricular or co-curricular activities characterized by broader opportunities for  
959 peer interaction also potentially serve as an important bridge between learning within classrooms  
960 and the broader climate for civic reasoning within schools. Thapa, Cohen, Guffey, and Higgins-  
961 D’Allesandro (2013) highlighted service learning as one example of how teaching and learning  
962 activities connect to the larger climate of the school and have a role in promoting civic  
963 development. Specifically, service learning activities that take place in collaborative  
964 environments, where students are encouraged to interact and build upon each other’s ideas, are  
965 thought to be particularly effective for developing civic competencies. While there is extensive  
966 literature on service learning, little of it explicitly ties to civic discourse skills, however.

967         To this point, there has been an implicit assumption that students’ experiences of  
968 particular climates within a school have an impact on their civic engagement, often through  
969 shared opportunities for reasoning and discourse. However, in understanding individual  
970 variability in perceptions of climate, it is also possible that levels of actual civic engagement  
971 among youth within schools can have a bearing on the type of climate perceived, a reciprocal  
972 direction of causality similar to that suggested earlier. This possibility has been explored in a

973 series of studies in middle schools in the urban Southeastern United States. Individuals with  
974 higher levels of civic participation (reports of helping or leadership in the school or local  
975 community) reported stronger relationships in school, believed rules to be more consistent, and  
976 reported a more democratic school climate; they also reported lower degrees of bully  
977 victimization. This finding was also observed at the group level: Cohort-level average of civic  
978 participation was associated with a democratic climate (Karakos et al. 2016).

979         Also on this topic, Geller et al. (2013) compared the associations of different forms of  
980 civic engagement to climate perceptions. Some associations were found in expected directions  
981 (e.g., higher degrees of personally-responsible civic behavior were positively associated with  
982 perceiving positive relationships, fair rules, and democratic climates). However, participating in  
983 leadership activities was associated with perceiving school rules as less consistent and fair.  
984 Geller et al. acknowledged that the participants in this third study were enrolled in schools in  
985 which young African-American men were disproportionately suspended, suggesting that youth  
986 were responding to present and critical issues of inequality witnessed in their school community.  
987 Involvement in youth participatory action research (YPAR) has similarly been found to be  
988 related to Black students' critical analyses of their schools (Hope, Skoog, & Jagers, 2015). These  
989 results illustrate that in some contexts the reasoning and discourse skills gained through  
990 meaningful, active involvement in supportive structures that centers the perspectives of youth  
991 and their communities, including but not limited to YPAR, youth organizing, and leadership  
992 opportunities, appears to be associated with students becoming more critical of injustice in their  
993 school environment (Akom, Ginwright, & Cammarota, 2007; Caraballo, Lozenski, Lyiscott, &  
994 Morrell, 2017; Kirshner & Ginwright, 2012; Mitra, Serriere, & Kirshner, 2014). These findings  
995 call to mind a variety of social movements over the past 50 to 60 years in which civically-

996 engaged youth took social action against unjust environments in their schools, including (though  
997 not limited to) walkouts sponsored by the Brown Berets in response to Chicano students’  
998 treatment in California schools in the 1960s, activities to support the lack of action in support of  
999 gay-straight alliances and LGBTQ students in Utah high schools in the 1990s, and (more  
1000 recently) activities in response to the shootings at Marjory Stoneman Douglas High School and  
1001 in support of the Black Lives Matter movement (Cherif et al., 2019; Mansfield, Weston, & Halx,  
1002 2018; Wray-Lake & Abrams, 2020).

### 1003 **Limitations of Research on Students’ Influence on Learning Environments**

1004       Opportunities exist to expand research into ways students perceive and shape learning  
1005 environments and as important, to inform other areas of research, teacher preparation and policy.  
1006 Much of the research presented here, particularly at the classroom level, relies on data from  
1007 large-scale survey programs. These surveys may not be able to identify specific practices and  
1008 conditions that serve to create learning environments for civic reasoning and discourse. While no  
1009 survey can capture all the potentially relevant factors affecting the classroom and school climate,  
1010 they help to generate hypotheses that could be further tested using more rigorous quantitative  
1011 research designs such as randomized control trials (e.g., Barr et al., 2015) or within-subjects  
1012 longitudinal designs. Realistically, however, such studies are difficult to conduct in schools and  
1013 classrooms and can be difficult to appropriately contextualize.

1014       Moreover, many of the studies cited here rely on categorical indicators of membership in  
1015 demographic groups (e.g., by race or gender): an approach that has limited explanatory value for  
1016 exploring young people’s complex and intersecting identities (Freedman et al., 2016). Research  
1017 examining a broad range of civic engagement outcomes and/or that considers features of learning  
1018 environments as moderators of group differences adds some nuance; however, research using

1019 complementary methodologies (particularly qualitative approaches like case study analysis)  
1020 provides important insight into how individual youth construct their civic identities. Research on  
1021 differences in how particular groups perceive classroom climates includes relatively few  
1022 investigations involving characteristics such as immigrant status (for exceptions see Abu El-Haj,  
1023 2007 and follow-up studies) or being an English language learner.

1024         Although studies of students' civic engagement and perceptions of the civics curriculum  
1025 often carry implications for research on learning environments, extended exploration would be  
1026 needed to make such connections explicit. For example, work by Rubin and colleagues (Rubin,  
1027 2007; Rubin, Hayes, & Benson, 2009) documented that many students in urban schools, with  
1028 student bodies marginalized by both socioeconomic status and race, lack trust in school  
1029 institutions. This is often due to lack of connections between their own lived experiences in their  
1030 families and neighborhoods and what they experience at school (Speer, Peterson, Christens, &  
1031 Reid, 2019), or to limited sense of safety or empowerment within schools, particularly when  
1032 working with teachers or other adults affiliated with the school (Wray-Lake & Abrams, 2020).  
1033 On one hand, negative experiences with educational authorities, including with inequitable and  
1034 harsh disciplinary practices, have been shown to have long-term effects on political trust and  
1035 participation later in life (Bruch & Soss, 2018). No-excuse classroom management approaches  
1036 employed by some urban charter schools are posited, based on ethnographic analyses, to have  
1037 similar effects on reproducing social inequalities by encouraging compliance-oriented rather than  
1038 participatory-oriented approaches to civic life (Graham, 2019).

1039         At the same time, Mirra and Garcia (2017) highlighted how a re-conceptualization of  
1040 civic life toward actions for social justice lends itself to models of engagement foregrounding the  
1041 voices of students from minoritized communities. Such an approach is often found when

1042 researchers examine learning environments outside of the school context, including grassroots  
1043 youth activism organizations (Kirshner, 2008; 2009) and digital spaces (Kahne et al., this  
1044 volume). Indeed, when discussing how critical social capital can support civic development  
1045 through the cultivation of collective efficacy, particularly for Black and Latinx youth, it is more  
1046 likely to be community organizations rather than schools that are described as contexts in which  
1047 this could be developed (Akom, 2003; Akom, Ginwright, & Cammarota, 2008; Ginwright, 2007;  
1048 Sampson, Morenoff, & Earls, 1999). What is not always clear is how formal learning  
1049 environments (which Mirra and Garcia, 2017, argue have historically perpetuated inequalities in  
1050 civic learning) could be re-envisioned to provide climates offering fruitful spaces for such action  
1051 and reflection.

1052 **What Are the Barriers that Educators Face in Establishing Learning Environments that**  
1053 **Promote Civic Reasoning, Discourse, and Engagement?**

1054 Despite considerable evidence on the qualities of learning environments that promote  
1055 civic reasoning and discourse, it is often a challenge to implement these features within actual  
1056 school and classroom environments, with students who may have vastly different backgrounds in  
1057 discussing political or social issues. In this section, we address these barriers at the school,  
1058 classroom, and individual level. Many are directly related to the two major challenges identified  
1059 earlier: contexts beyond the school and individual differences in students' characteristics and  
1060 experience within and outside of school.

1061 Within a school, an important factor is how the school responds to external pressures (for  
1062 example, policy mandates from the district or the broader context of the community, including its  
1063 political and/or partisan dimensions). School leaders adapt their behavior to the social context in  
1064 which schooling takes place in ways that may influence the climate for civic discourse,

1065 reasoning, and engagement among students. In some cases, such as mandates for testing that  
1066 determine funding or school evaluations, there is little choice. Many schools, perceiving that  
1067 raising test scores is the key to the evaluation of their school, restructure the school schedule to  
1068 prepare for required tests. Most states do not have assessments of civic discourse and reasoning  
1069 skills, preferring to focus on civic knowledge, if civics is tested at all (Brezicha & Mitra, 2019).  
1070 Basic reading and computational skills are often emphasized at the expense of less-frequently  
1071 tested conceptual skills and understandings necessary to make sense of political or social topics  
1072 (Fitchett & Heafner, 2010).

1073         Civic reasoning and discourse should not exclusively exist in social studies curriculums  
1074 and classrooms. However, while opportunities for civic reasoning and discourse exist across the  
1075 curriculum (Lee, Nasir, & Smirnov, this volume), many believe that there is a unique set of  
1076 language and practice existing in the social studies that supports the development of civic  
1077 reasoning and discourse skills. Thus, time in this subject is critical to helping students develop  
1078 the core understandings needed to engage in civic-related problems outside of the social studies  
1079 classroom, whether in other content areas or more broadly in their schools in communities  
1080 (National Academies of Sciences, Engineering, and Medicine, 2018a). However, testing  
1081 requirements and the pressure to boost math and reading scores, particularly in the elementary  
1082 years, can often reduce the time available for civic reasoning and discourse by reducing the space  
1083 for social studies (Fitchett, Heafner, & Lambert, 2014; Thomas, 2005). To compensate for  
1084 reduced time, teachers often attempt to integrate social studies content with literacy instruction,  
1085 but researchers studying such integration typically find that literacy becomes the primary goal  
1086 and other content or skills development is incidental (Boyle-Baise et al., 2008; Brophy &  
1087 Alleman, 2008). Within social studies courses themselves, concerns about preparing students for

1088 system-wide tests can also reduce attention to discussions that can develop civic discourse and  
1089 reasoning. Journell (2010), for example, studied six teachers in Chicago during the 2008  
1090 election. While all six felt it was important to discuss the election with students, several of the  
1091 teachers reported a tension between their desire to incorporate this current event with pressure to  
1092 prepare students for an examination required for graduation.

1093         Social and political contexts can also influence school and classroom climate.  
1094 Historically, educators in the United States have often been sanctioned for encouraging discourse  
1095 about controversial issues or attempting to teach subjects perceived as beyond the comfort zones  
1096 of administrators or community members (Zimmerman & Robertson, 2017). In the contemporary  
1097 climate, some teachers fear that their discussions of controversial issues will invite criticism  
1098 (McAvoy & Hess, 2013). As discussed earlier, the result is that many teachers commit to  
1099 maintaining a neutral stance in the classroom, which can result in political opinions going  
1100 unexamined, as Journell (2012) found in his study of six teachers during the 2008 election.

1101         Often, societal forces without explicit connections to schooling result in alterations to the  
1102 way schools function. One example is the increasing social and political polarization in the  
1103 United States and elsewhere. In a relatively well-publicized incident, conservative parents  
1104 objected to their students hearing a message from then president Barack Obama at the beginning  
1105 of the 2009 school year even though the message was focused on encouraging students to work  
1106 hard in school (McAvoy & Hess, 2013). In other cases, parents and community members may  
1107 influence students' sense of the school as a welcoming place to learn. Macgillivray (2004), to  
1108 give just one example, highlighted a school facing resistance from community members as it  
1109 sought to include LGBTQ students in its non-discrimination policies.

1110 A related concern is that school personnel may become uncomfortable with student  
1111 expressions of political opinion and, in turn, may restrict opportunities for students to express  
1112 and defend their opinions in the classroom. Levinson and Fay (2019) used vignettes to elicit  
1113 reactions from education scholars, administrators, teachers, and students. There was considerable  
1114 disagreement about how schools and teachers should respond to discussion of divisive political  
1115 issues. Disagreements occurred, for example, on what constitutes appropriate student political  
1116 expression in the classroom, or whether students should be allowed to express support for  
1117 policies if their classmates would be negatively impacted by those policies. In such situations, it  
1118 is understandable that many teachers restrict student opinion expression.

1119 Many of the barriers to creating environments conducive to civic discourse and reasoning  
1120 in schools stem from external factors. These shift over time, and researchers continually identify  
1121 new barriers (or new manifestations of old barriers) to creating productive civic learning  
1122 environments. In the current period of political polarization and shifting political norms, studying  
1123 the interplay of these factors and school environments is particularly crucial.

#### 1124 **Suggestions for Further Research**

1125 In the process of conducting this review, we have found substantial literature that either  
1126 directly or implicitly describes and investigates high quality learning environments as contexts  
1127 where students can engage in civic discourse leading to a range of potentially beneficial  
1128 outcomes. There are many ways for researchers to extend this work, attending both to individual  
1129 development and variation in experience and to broader contexts. A general principle is that civic  
1130 discourse is both an essential component of the process of civic education, and a facilitator of  
1131 individual outcomes that span social and political reasoning, knowledge, and behavior. It is also

1132 deeply contextualized by factors at the school, community and family levels. In concluding we  
1133 make some specific recommendations.

1134 **Research Directions that Address Changing Social and Cultural Contexts**

1135 **Acknowledge the need for research that adapts to changing political and social**  
1136 **landscapes in which discourse takes place.** At the dawn of the third decade of the 21<sup>st</sup> Century,  
1137 the norms of civic discourse are in flux. Students and teachers have few models of respectful  
1138 disagreement and productive civic discourse from beyond the classroom. Researchers cannot  
1139 ignore the current political context of discourse, both nationally and locally. A normative  
1140 conversation about the value of different forms of civic reasoning, such as that described by  
1141 Westheimer and Kahne, (2004) in an age of widening political and social divides may be  
1142 essential. For example, the civic reasoning and discourses that promote consensus or  
1143 compromise are different from those intended to combat entrenched injustice.

1144 **Increase research focused on the interplay between the school and the community.**  
1145 Torney-Purta, Amadeo, and Andolina (2010) noted that research that considers only in-school or  
1146 out-of-school factors ignores overlap in individuals' membership in numerous communities. In  
1147 this vein, research on learning environments should not ignore the opportunities and challenges  
1148 provided in the community surrounding the school. While other papers in this project describe  
1149 the broader context of civic learning, and how such contexts are mediated by proximal settings  
1150 including families, peers, and schools (Rubin, Abu El-Haj, & Bellino, this volume), we focus  
1151 here on recommendations for research addressing explicit areas of overlap between school and  
1152 other contexts. Service learning, to provide one example, is thought to support the development  
1153 of youth civic dispositions (particularly in light of social inequality) because youth have an  
1154 opportunity to have contact with individuals whose perspectives vary from their own (Flanagan,

1155 2014). Activities designed to foster youth empowerment, including leadership and grassroots  
1156 organizations for youth social action, are potentially a very valuable context (Mitra, Serriere, &  
1157 Kirshner, 2014; Kirshner, 2009), and additional research on the interaction of empowerment with  
1158 the formal learning environment is warranted (see Speer et al., 2019).

1159         In particular, up-to-date empirical documentation (e.g., Macgillivray, 2004) is needed to  
1160 specify the various mechanisms through which community contexts shape the willingness to  
1161 discuss issues within the learning environment. For example, there is fear of community  
1162 pushback on the part of some teachers wishing to discuss controversial issues (McAvoy & Hess,  
1163 2013). In depth examination of such events can help educators and researchers understand the  
1164 frequency and ramifications of instances of community pressure that may cause teachers and  
1165 schools to alter curriculum, policy, or activities. Tools that use network analysis techniques to  
1166 better understand community contexts (e.g., Paluck, Shepherd, & Aronow, 2016) hold particular  
1167 promise in this regard. Collaboration with scholars who study school and community policy  
1168 should also be encouraged. As social environments are prone to change, continued research on  
1169 the interaction between the community and the school environments is necessary.

1170         **Conduct research on environments beyond traditional, in-person classes.** While  
1171 digital civic literacy is covered more fully in other sections of this report (Kahne et al., this  
1172 volume), new technologies have created new educational spaces for civic discourse and  
1173 reasoning, including forums for digital interaction/discussion and websites (and programs) such  
1174 as iCivics that scaffold civic thinking. Despite increased interest in these digital spaces, their  
1175 impact on civic discourse, reasoning, and engagement remains relatively understudied. In  
1176 particular, researchers should more fully explore the interactions that these online or simulated  
1177 educational environments promote, and how these interactions compare to and connect with

1178 those in face-to-face contexts (Larson, 2003). As digital environments are increasingly prevalent  
1179 in youth civic discourse and engagement, research on these climates is becoming particularly  
1180 important (Middaugh, Bowyer, & Kahne, 2017).

1181 Further, more research designed to study civic skill development within extracurricular or  
1182 co-curricular environments that link instruction within the school with engagement in  
1183 community contexts is warranted. This could expand on work on conventional service-learning  
1184 contexts in ways that are familiar to educators (e.g., Billig, Root, & Jesse, 2005). It also needs to  
1185 be updated to consider more empowerment-oriented approaches to such involvement. In doing  
1186 so, special attention should be paid to the context of these environments and how students are  
1187 likely to engage with the individuals with whom they meet in the communities outside school.  
1188 Further, the role of students themselves in creating and taking leadership in these opportunities  
1189 should be at the forefront.

#### 1190 **Research that Foregrounds Attempts to Understand the Individual Student’s Experience**

1191 **Consider how multiple developmental contexts interact.** Ehman (1980) was prescient  
1192 in commenting about the importance of extracurricular activities for cultivating the peer  
1193 relationships that can support civic learning (a focus that continues until today), and more recent  
1194 research has considered peer interactions in the context of small groups within classroom settings  
1195 (e.g., Kuhn, 2015). Research on informal civic learning environments also points to peer  
1196 relationships in and of themselves (alongside other groups such as families) as an important  
1197 context for developing skills related to civic reasoning and discourse (Richardson, 2003;  
1198 Wilkenfeld & Torney-Purta, 2012). These interactions take place both in face-to-face and online  
1199 contexts. If students attend school (and specific classes) with a particular group of peers, there is

1200 also likely to be overlap between peer networks and experiences in formal learning  
1201 environments.

1202         McDevitt and Kiouisis (2007) developed a model to conceptualize how peers and parents  
1203 each influence the associations between classroom discussions and later civic outcomes; they  
1204 posited that peer groups are especially important contexts for cultivating capacities for protesting  
1205 and non-conventional forms of participation, whereas more conventional forms of participation  
1206 were more often cultivated through parents. Researchers could more fully consider how the  
1207 informal peer context and specific features of formal educational learning environments relate to  
1208 each other, particularly as they create (or constrain) supportive climates for civic learning and  
1209 discourse. For example, Morine-Dershimer (2006) has noted the need for researchers to more  
1210 fully explore student dynamics and discourse as it takes place in small group work, and recent  
1211 work by Green et al. (2020) highlights the potential of micro-ethnographic discourse analysis to  
1212 aid in such exploration by providing a framework for theoretically-grounded inquiry into  
1213 complex learning processes. From another methodological vantage point, social network analysis  
1214 may be useful in assessing how peer networks interface with the more formal organization of  
1215 students existing within schools. This approach has been used to study aspects of young people’s  
1216 civic development from other vantage points, but it has not been adequately integrated into  
1217 methodologies for studying school or classroom climate.

1218         **Further examine developing reasoning and discourse skills as processes through**  
1219 **which a supportive school/classroom climate shapes civic outcomes.** By drawing on a variety  
1220 of literature from different disciplines, we have laid out evidence that the climate of a learning  
1221 environment shapes opportunities for dialogue, which in turn has the potential to influence  
1222 attitudes or lead to civic action. We also have highlighted literature that examines how teachers

1223 and peers construct opportunities for argumentation and dialogue within formal learning  
1224 environments, and ways in which these opportunities support civic reasoning and discourse  
1225 skills. At present, however, it is implied that the broader climate of classrooms and schools  
1226 shapes reasoning and discourse skills (which in turn prepares youth for further civic action).  
1227 There are very few studies that explicitly follow this pathway of linking an open climate to civic  
1228 action through increased civic reasoning skills, however. Research that directly tests links  
1229 between climate and discourse skills is needed to assess whether the cognitive and social  
1230 processes that are thought to be encouraged within an open discussion climate are indeed being  
1231 developed in a way that equips students for participation in and outside school. An increased use  
1232 of randomized controlled trials (advocated by Campbell, 2019) is one approach to strengthening  
1233 research in this area. However, there are also important caveats in this area related to appropriate  
1234 generalizations across social contexts that should be further developed through qualitative and  
1235 mixed-methods work. Taken together, the resulting knowledge base could strengthen the theory  
1236 of change that could inform practical interventions in this area.

1237         Also important is increased attention to the relationship between thinking and discourse  
1238 as related to action. Throughout this paper we have made reference to discourse, reason, and  
1239 action as three mutually-enforcing pillars of civic development. Reviewing the large literature on  
1240 how thinking and reasoning develop in the second decade of life and beyond exceeds the scope  
1241 of this paper. However such development, which is substantial albeit variable across individuals,  
1242 is crucial to consider when linking discourse to action. Thinking is implicit in discourse, and  
1243 discourse may provide a particularly effective path to its development (Kuhn, 2019; Michaels et  
1244 al., 2008; Olson, 2016). Moreover, thinking is essential to civic action; without well-reasoned

1245 conviction to give them purpose, civic actions are unlikely to be sustained (Malin, Ballard, &  
1246 Damon, 2015).

1247         **Connect research on reasoning and discourse skill development to research in the**  
1248 **field of social-emotional learning.** Finally, the foregrounding of reasoning and discourse  
1249 processes placed emphasis on a primarily cognitive approach to understanding the  
1250 developmental underpinnings of civic action. However, in keeping with the acknowledgement  
1251 that human learning integrates perceptual and affective components along with cognitive factors  
1252 (Lee, Nasir, & Smirnov, this volume; National Academies of Sciences, Engineering, and  
1253 Medicine, 2018a), we have also summarized clear evidence that the socio-emotional components  
1254 of civic action cannot be overlooked. Particularly important are feelings of belonging and safety  
1255 that are encouraged through positive, open school and classroom climates. Looking at the issue  
1256 in this way, there is an opportunity for increased theoretical and practical connection between  
1257 programs in civic engagement and in socio-emotional learning (SEL). Jones, McGarrah, and  
1258 Kahn (in press) recently outlined a framework for understanding socio-emotional learning in  
1259 practice that highlights the ways in which cognitive, social, and emotional skills develop through  
1260 supportive relationships. They highlight particular SEL initiatives developed from work in  
1261 school districts to foster positive school climates. These initiatives were developed through close  
1262 research-practice partnerships and in ways that were responsive and grounded in meaningful  
1263 theories of change. While Jones et al. (in press) discuss SEL’s roots in prevention science--a  
1264 framework not traditionally tied to civic-related outcomes--the two traditions overlap extensively  
1265 (Catalano, Hawkins, Berglund, Pollard, & Arthur, 2002; Cohen et al., 2010; Kia-Keating,  
1266 Dowdy, Morgan, & Noam, 2011; Wentzel, 2015). This overlap in traditions has considerable

1267 potential for considering the role of school and classroom climate as related to civic outcomes in  
1268 nuanced ways (Andolina & Conklin, 2019).

### 1269 **Expanding and Developing Research Infrastructure**

1270       Beyond the specific and substantive recommendations provided, we also note a few  
1271 general recommendations for encouraging the collecting and sharing of relevant data in further  
1272 research. The first acknowledges that many of the findings presented in this paper are based on  
1273 research from the IEA civics studies. From the vantage of understanding the U.S. context in  
1274 particular, this presents a limitation, as the United States has not participated in these studies  
1275 since CIVED in 1999. A recommendation for further research in this area, therefore, is to resume  
1276 participation in IEA’s civics and citizenship education studies. This could be accomplished  
1277 through full national participation or through involvement via state-level benchmarking, which  
1278 takes place using the same instruments but later than the main testing. Through such  
1279 involvement, the United States would gain up-to-date information about students’ opportunities  
1280 to benefit from civic discourse and from an atmosphere of mutual respect in their schools, which  
1281 could assist in identifying ways to improve educational programs to encourage civic  
1282 participation. The next International Civics and Citizenship Education Study, slated for 2022,  
1283 will include many of the same psychometrically-rigorous measures of civic participation and  
1284 attitudes in classrooms and schools used previously (including those relating to class and school  
1285 climate) while also considering new or updated measures to assess current issues and challenges  
1286 (IEA, 2020).

1287       A second suggestion recognizes that infrastructures to support data sharing, whether from  
1288 international surveys or from studies specific to a particular country or region, would also help  
1289 foster further research. For example, CivicLEADS, funded by the Spencer Foundation and

1290 housed at the University of Michigan’s Inter-university Consortium for Political and Social  
1291 Research (Regents of the University of Michigan, 2020), has become a repository for  
1292 information on studies in this area, including those conducted using qualitative or geospatial  
1293 methodologies as well as survey-based studies. Available resources include more than 20  
1294 datasets with accompanying instruments, codebooks, and bibliographies of published research.  
1295 With expanded funding, this could become a source for enhancing networks and collaborations  
1296 between researchers to foster and develop new projects, either using archived datasets or  
1297 encouraging new data collections specifically addressing topics raised here. Furthermore,  
1298 CivicLEADS or another source could provide a bulletin board or even an early warning system  
1299 about threats to open discourse and suggestions from teachers about how to deal with them.

### 1300 **Implications for Teachers and Administrators**

1301 Given the associations between democratic school and classroom climates and the  
1302 development of student civic reasoning and discourse, educators should be encouraged to  
1303 promote such environments in their particular contexts (and should have the backing and support  
1304 of administrators). These efforts, however, must be carefully contextualized in light of the  
1305 political and social climate of the community that surrounds the school. Based on the literature  
1306 reviewed above, we offer several recommendations for educators toward building classrooms  
1307 conducive to the development of civic reasoning and discourse:

#### 1308 **Encourage Climates that are Conducive to Civic Discourse Consistently Across the School**

1309 Democratic discourse thrives in schools where faculty, administrators, and staff are  
1310 conscious of it and emphasize it. Although discussions of social and political issues commonly  
1311 take place in social studies classes (and are thus the focus of much of the research literature),  
1312 there are ample opportunities to engage in civic discourse and reasoning in other school subjects.

1313 Engaging with civic issues from a scientific perspective (such as Citizen Science approaches) or  
1314 a literary perspective can emphasize to students that civic discourse takes place in a variety of  
1315 contexts and illustrate the transferability of discursive skills.

1316 While classroom pedagogy and climate are important, educators can make the  
1317 development of civic discourse and reasoning a priority in school governance and policies, extra-  
1318 curricular activities, and other elements of the school. This must be contextualized within the  
1319 communities surrounding the schools. The aim is that students should see civic discourse and  
1320 reasoning modeled across multiple school contexts and, in turn, have many opportunities to  
1321 engage themselves. If a given school emphasizes civic reasoning, discourse, and engagement as  
1322 part of the “ethos” of the school (Campbell, 2006), classroom activities and climates, and  
1323 extracurricular opportunities, it sends the message that such skills and dispositions are valuable  
1324 foundations for civic life. Further, students should be encouraged to suggest new activities that  
1325 promote these aims, particularly in the realm of using digital technologies.

### 1326 **Ensure that Teachers are Prepared and Supported**

1327 Teachers who engage (or want to engage) students with political and social issues are  
1328 often concerned that they will become targets of ire from parents or community members, or  
1329 even students who have objections to the content or format of class discussions. If the school  
1330 values civic discourse and reasoning, there should be procedures and plans for dealing with  
1331 challenges. Often students who have become engaged because of innovative programs are the  
1332 best defenders of those programs. Further, as much as possible, incorporation of civic reasoning  
1333 and discourse skills in school mission statements and policies can lay the groundwork for  
1334 responses to criticism. Relatedly, when there are strong networks of educators and administrators

1335 committed to engaging students in civic reasoning and discourse, the school can better respond  
1336 to unforeseen pressures.

1337 Professional organizations can also play a role in supporting teachers as they create  
1338 spaces for civic reasoning and discourse. In addition to providing resources and strategies for  
1339 teachers as they strive for open classrooms and schools, organizations such as the National  
1340 Council for the Social Studies (NCSS) or the Association for Supervision and Curriculum  
1341 Development (ASCD), through public statements and policy advocacy, and the development of  
1342 standards can serve as a counterweight to public discourses that may stifle open discussion of  
1343 controversial issues. As Hahn (1998; 2010) notes, NCSS has served a similar role in previously  
1344 contentious political times through issuing statements in support of open discussion of ideas.

1345 **Model Civic Discourse and Reasoning for Students and Create Spaces for Students to**  
1346 **Practice These Skills**

1347 Because educators have considerable power to shape student thinking, they should be  
1348 conscious about how they model civic behaviors. Open discussion of current events and  
1349 controversial issues, with the allowance of multiple, reasonable viewpoints models the value of  
1350 civic thinking to students. Avoidance of controversy and opinion expression, on the other hand,  
1351 sends the message that such issues and skills are not important to citizens. In turn, teacher  
1352 educators should challenge future teachers to consider dilemmas of practice that exist around  
1353 such discussions and help develop professional judgement about how to facilitate productive  
1354 discussions appropriate to the needs and concerns of different developmental levels, student  
1355 populations, communities, and contexts (Pace, 2019).

1356 **Provide Opportunities for Collaboration in Class**

1357 Collaborative learning environments in which students talk about political and social  
1358 issues allow students to develop discursive skills (Kuhn, 2015; Kuhn, Feliciano, & Kostikina,  
1359 2019). The social interaction inherent in collaborative learning or group discussion helps build  
1360 these skills for later civic participation (Hess, 2009; Hess & McAvoy, 2015). Educators should  
1361 be intentional about structuring these activities: e.g., which students collaborate with each other  
1362 in class. Diverse groups often present opportunities for students to engage with a range of ideas  
1363 and often result in rich discussions (Goldberg, 2013; Stoddard & Chen, 2016).

#### 1364 **Engage in Organization and Advocacy**

1365 Teachers and administrators intending to engage in any or all the above may find  
1366 themselves constrained by local, state, or even national policies. For example, restrictions on  
1367 funding availability or mandates for testing can shift the focus to easily-measured rote learning  
1368 and dis-incentivize more robust civic reasoning and discourse. While educators certainly should  
1369 exercise the power and influence they have in their local communities to create environments  
1370 that promote civic reasoning and discourse, they must also strive to voice their concerns in  
1371 statehouses. Professional organizations and teachers unions can also serve to amplify teacher’s  
1372 voices at the state and national level.

#### 1373 **Conclusion**

1374 Developing students’ civic reasoning and discourse skills for future civic engagement is a  
1375 challenging and complicated objective, particularly in light of supporting future civic  
1376 engagement. The success of curriculum and pedagogy designed to fulfill this objective is  
1377 inextricably linked to the environment in which activities takes place (Hahn, 1996). In this paper,  
1378 we have examined the various tools used to assess the climates of learning environments within  
1379 classrooms. In addition, we have focused on factors that shape students’ experiences in

1380 classrooms and schools as a whole. If a student has had an opportunity over time to be a member  
1381 of a learning community that is open to group participation and also where individual students’  
1382 views and varied backgrounds are respected, that usually means that student has had the  
1383 experience of high-quality civic discourse. This participation in turn has likely contributed to the  
1384 student's own skill, confidence, and disposition to participate, with the many present and  
1385 potential benefits we have noted. If we deconstruct the constructs of school and classroom  
1386 climate, some of their characteristics might be better understood. We might then be able to  
1387 understand how to encourage changes in policies and educational practices, with the potential to  
1388 orient educators toward the new realities of school-aged populations, who are being prepared to  
1389 be the new population of voters, parents, work associates. friends, and community participants.

1390       Classroom and school climates are never totally predictable: They depend on a variety of  
1391 factors and are not easy to change, especially in the short-term. Consistent policies and practices  
1392 on the part of teachers and administrators promoting the inclusion of current issues on a regular  
1393 basis, or support for school-wide values and behaviors that promote student agency and voice,  
1394 can gradually build learning environments suitable for civic reasoning and discourse. A range of  
1395 international and national research studies have useful information for teachers and  
1396 administrators about some factors influencing climates at school. Most teachers recognize  
1397 variation in classroom and school climates. We believe it is possible and useful to describe and  
1398 assess climate as an organizational feature of formal learning environments. In particular we  
1399 have focused on respect for the unique contributions for students from all backgrounds, students’  
1400 perceptions of openness to their contributions, and assistance to students in providing the spaces  
1401 and guidance necessarily to hone their ideas. Of particular importance is teachers’ awareness of  
1402 the everyday out of school contexts in which students live and the factors that encourage or

1403 inhibit their civic reasoning and discourse. These can all be useful in providing educators with  
1404 some ideas about actions to take to further the goals of civic reasoning, discourse and  
1405 engagement.

1406

## References

1407 Abu El-Haj, T. R. (2007) "I was born here, but my home, it's not here": Educating for democratic  
1408 citizenship in an era of transnational migration and global conflict. *Harvard Educational*  
1409 *Review*, 77(3), 285-316. doi: 10.17763/haer.77.3.41217m737q114h5m

1410 Akom, A. A. (2003). Reexamining resistance as oppositional behavior: The Nation of Islam and  
1411 the creation of a Black achievement ideology. *Sociology of Education*, 76(4), 305-325.  
1412 <http://www.jstor.com/stable/1519868>

1413 Akom, A. A., Ginwright, S., & Cammarota, J. (2008). Youthtopias: Towards a new paradigm of  
1414 critical youth studies. *Youth Media Reporter: The Profession Journal of the Youth Media*  
1415 *Field*, 2(4), 1-30. [http://www.youthmediareporter.org/2008/08/15/youthtopias-towards-a-](http://www.youthmediareporter.org/2008/08/15/youthtopias-towards-a-new-paradigm-of-critical-youth-studies/)  
1416 [new-paradigm-of-critical-youth-studies/](http://www.youthmediareporter.org/2008/08/15/youthtopias-towards-a-new-paradigm-of-critical-youth-studies/)

1417 Andolina, M. W., & Conklin, H. G. (2020). Fostering democratic and social-emotional learning  
1418 in Action Civics Programming: Factors that shape students' learning from Project  
1419 Soapbox. *American Educational Research Journal*, 57(3), 1203–1240.  
1420 doi:[10.3102/0002831219869599](https://doi.org/10.3102/0002831219869599)

1421 Angell, A. (1991). Democratic classrooms: A review of theory and research. *Theory and*  
1422 *Research in Social Education*, 19(3), 241-266. doi:10.1080/00933104.1991.10505640

1423 Avery, P. G., Levy, S. A., & Simmons, A. M. M. (2013). Deliberating controversial public issues  
1424 as part of civic education. *The Social Studies*, 104(3), 105–114. doi:  
1425 10.1080/00377996.2012.691571

1426 Banks, J. A. (2008). Diversity, group identity, and citizenship education in a global age.  
1427 *Educational Researcher*, 37(3), 129–139. doi: 10.3102/0013189X08317501

1428 Barber, C., Sweetwood, S. O., & King, M. (2015). Creating classroom-level measures of  
1429 citizenship education climate. *Learning Environments Research*, 18(2), 197–216. doi:  
1430 10.1007/s10984-015-9180-7

1431 Barber, C., & Torney-Purta, J. (2009). Gender differences in political efficacy and attitudes  
1432 toward women's rights as influenced by national and school contexts: Analysis from the  
1433 IEA Civic Education Study. In D. Baker & A. Wiseman (Eds.), *Gender, equality and*  
1434 *education from international and comparative perspectives*. (International Perspectives  
1435 on Education and Society, Volume 10, p. 357-394). Bingley, United Kingdom: Emerald  
1436 Group Publishing.

1437 Barr, D. J., Boulay, B. Selman, R. L., McCormick, R., Lowenstein, E., Games, B., ... Leonard,  
1438 B. (2015). A randomized control trial of professional development for interdisciplinary

- 1439 civic education: Impacts on humanities teachers and their students. *Teachers College*  
1440 *Record*, 117(2), 1-52. <https://www.tcrecord.org/Content.asp?ContentId=17470>
- 1441 Barton, K. C., & McCully, A. W. (2005). History, identity, and the school curriculum in  
1442 Northern Ireland: an empirical study of secondary students' ideas and perspectives.  
1443 *Journal of Curriculum Studies*, 37(1), 85-116. doi: 10.1080/0022027032000266070
- 1444 Berkowitz, R., Iachini, A., Moore, H., Capp, G., Astor, R. A., Pitner, R., & Benbenishty, R.  
1445 (2017). School Climate. In *Oxford Research Encyclopedia of Education*. Retrieved:  
1446 <http://education.oxfordre.com>.
- 1447 Bickmore, K. (1999). Elementary curriculum about conflict resolution: Can children handle  
1448 global politics? *Theory and Research in Social Education*, 27(1), 45-69. doi:  
1449 10.1080/00933104.1999.10505869
- 1450 Billig, S., Root, S., & Jesse, D. (2005). *The impact of participation in service-learning on high*  
1451 *school students' civic engagement*. (CIRCLE Working Paper 33.) College Park, MD:  
1452 Center for Information and Research on Civic Learning and Engagement (CIRCLE),  
1453 University of Maryland.
- 1454 Blankenship, W. G. (2016). Talking it out : Online discussion forums in the social studies  
1455 classroom. *Social Studies Research and Practice*, 11(1), 136–158.  
1456 [http://www.socstrpr.org/wp-content/uploads/2016/04/MS06595\\_Blankenship.pdf](http://www.socstrpr.org/wp-content/uploads/2016/04/MS06595_Blankenship.pdf)
- 1457 Boyle-Baise, M., Hsu, M. C., Johnson, S., Serriere, S. C., & Stewart, D. (2008). Putting reading  
1458 first: Teaching social studies in elementary classrooms. *Theory & Research in Social*  
1459 *Education*, 36(3), 233-255. doi: 10.1080/00933104.2008.10473374
- 1460 Brand, S., Felner, R., Shim, M., Seitsinger, A., & Dumas, T. (2003). Middle school improvement  
1461 and reform: Development and validation of a school-level assessment of climate, cultural  
1462 pluralism, and school safety. *Journal of Educational Psychology*, 95(3), 570. doi:  
1463 10.1037/0022-0663.95.3.570
- 1464 Brasof, M., & Mansfield, K. C. (2018). Student voice and school leadership: An introduction.  
1465 *Journal of Ethical Educational Leadership, Special Issue 1*, 5-9.
- 1466 Brezicha, K. F. & Mitra, D. L. (2019). Should we be testing civics? Examining the implications  
1467 of the civic education initiative. *Peabody Journal of Education*, 94(1), 63-77. doi:  
1468 10.1080/0161956X.2019.1553602
- 1469 Brophy, J., & Alleman, J. (2008). Early elementary social studies. In L.S. Levstik & C. A. Tyson  
1470 (Eds) *Handbook of research in social studies education* (33-49). New York: Routledge.

- 1471 Brown, D. (1991) *Human universals*. Philadelphia, Temple University Press.
- 1472 Bruch, S. K., & Soss, J. (2018). Schooling as a formative political experience: Authority  
1473 relations and the education of citizens. *Perspectives on Politics* 16(1), 36–57. doi:  
1474 10.1017/S1537592717002195
- 1475 Campbell, D. E. (2006). *Why we vote: How schools and communities shape our civic life*.  
1476 Princeton, NJ: Princeton University Press.
- 1477 Campbell, D. E. (2007). Sticking together: Classroom diversity and civic education. *American*  
1478 *Politics Research*, 35(1), 57–78. doi: 10.1177/1532673X06294503
- 1479 Campbell, D. E. (2008). Voice in the classroom: How an open classroom climate fosters political  
1480 engagement among adolescents. *Political Behavior*, 30(4), 437-454. doi:  
1481 10.1007/s11109-008-9063-z
- 1482 Campbell, D. E. (2012). Civic education in traditional public, charter, and private schools:  
1483 Moving from comparison to explanation. In D. E. Campbell & M. Levinson (Eds.),  
1484 *Making civics count* (pp. 229-246). Cambridge, MA: Harvard University Press
- 1485 Campbell, D. E. (2019). What social scientists have learned about civic education: A review of  
1486 the literature. *Peabody Journal of Education*, 94(1), 32-47. doi:  
1487 10.1080/0161956X.2019.1553601
- 1488 Cappella, J. N., Price, V., & Nir, L. (2002). Argument repertoire as a reliable and valid measure  
1489 of opinion quality: Electronic dialogue during campaign 2000. *Political Communication*,  
1490 19(1), 73-93. doi: 10.1080/105846002317246498
- 1491 Caraballo, L, Lozenski, B., Lyiscott, J., & Morrell, E. (2017). YPAR and critical epistemologies:  
1492 Rethinking education research. *Review of Research in Education*, 41(1), 311-336. doi:  
1493 10.3102/0091732X16686948
- 1494 Carrasco, D. & Iribarra, D. T. (2018). The role of classroom discussion. In A. Sandoval-  
1495 Hernandez, M. M. Isac, & D Miranda (Eds.). *Teaching tolerance in a globalized world*  
1496 (pp. 87-102). Chaim, Switzerland: Springer.
- 1497 Carretero, M., Haste, H., & Bermudez, A. (2016). Civic education. In L. Corno and E. M.  
1498 Anderman (Eds.), *Handbook of educational psychology* (3<sup>rd</sup> ed., pp. 295-308). Routledge.
- 1499 Castillo, J. C., Miranda, D., Bonhomme, M., Cox, C., & Bascopé, M. (2015). Mitigating the  
1500 political participation gap from the school: The roles of civic knowledge and classroom  
1501 climate. *Journal of Youth Studies*, 18(1), 16-35. doi: 10.1080/13676261.2014.933199

- 1502 Catalano, R. F., Hawkins, J. D., Berglund, M. L., Pollard, J. A., & Arthur, M. W. (2002).  
1503 Prevention science and positive youth development: Competitive or cooperative  
1504 frameworks? *Journal of Adolescent Health, 31*(6, Supplement), 230-239. doi:  
1505 10.1016/S1054-139X(02)00496-2
- 1506 Chavez Schools. (2020). *History*. <http://www.chavezschools.org/history/>
- 1507 Cherif, A. H., Gialamas, S., Pelonis, P., Harris, J., & Siuda, J. E. (2019). The role of educators in  
1508 growing leaders and leadership among school students. *Journal of Education and*  
1509 *Practice, 10*(18). doi: 10.7176/JEP/10-18-01
- 1510 Clark, C. H. (2018) The impact of student political identity over the course of an online  
1511 controversial issue discussion. *Democracy and Education, 26*(2), 1-15.  
1512 <https://democracyeducationjournal.org/home/vol26/iss2/1/>
- 1513 Clark, C. H., Bordwell, D. T., & Avery, P. G. (2015). Gender and public issues deliberations in  
1514 named and anonymous online environments. *Journal of Public Deliberation, 11*(2),  
1515 Article 2. <https://www.publicdeliberation.net/jpd/vol11/iss2/art2/>
- 1516 Clark, C. H., Schmeichel, M., & Garrett, H. J. (2020). Social studies teacher perceptions of news  
1517 source credibility. *Educational Researcher, 49*(4), 262-272.  
1518 <https://doi.org/10.3102/0013189X20909823>
- 1519 Cohen, E. G. (1994). Restructuring the classroom: Conditions for productive small groups.  
1520 *Review of Educational Research, 64*(1), 1-35. doi: 10.3102/00346543064001001
- 1521 Cohen, J., Pickeral, T., & Levine, P. (2010). The foundation for democracy: Promoting social,  
1522 emotional, ethical, cognitive skills and dispositions in K-12 schools. *Interamerican*  
1523 *Journal of Education for Democracy, 3*(1), 74-94.  
1524 <https://scholarworks.iu.edu/journals/index.php/ried/article/view/618>
- 1525 Crocco, M., Halvorsen, A-L., Jacobsen R., & Seagall, A. (2018). Less arguing, more listening:  
1526 Improving civility in classrooms. *Phi Delta Kappan, 99*(5) 67-71. doi:  
1527 10.1177/0031721718754818
- 1528 Crocco, M., Seagall, A., Halvorsen, A-L, & Jacobsen, R. (2018). Debating public policy issues  
1529 with adolescents: Classroom dynamics and sociocultural considerations. *Democracy and*  
1530 *Education, 26*(1), 1-10. <https://democracyeducationjournal.org/home/vol26/iss1/3/>
- 1531 Diemer, M. A., Hsieh, C., & Pan, T. (2008). School and parental influences on sociopolitical  
1532 development among poor adolescents of color. *The Counseling Psychologist, 37*(2), 317-  
1533 344. doi: 10.1177/0011000008315971

- 1534 *Education Week* Research Center (2018). Civics education in K-12 schools: Results of a national  
1535 survey. Editorial Projects in Education. [https://www.edweek.org/media/civics-survey-](https://www.edweek.org/media/civics-survey-report-education-week.pdf)  
1536 [report-education-week.pdf](https://www.edweek.org/media/civics-survey-report-education-week.pdf)  
1537
- 1538 Ehman, L. H. (1969). An analysis of the relationships of selected educational variables with the  
1539 political socialization of high school students. *American Educational Research Journal*,  
1540 *61*, 559-580. 10.3102/00028312006004559
- 1541 Ehman, L. H. (1980). The American school in the political socialization process. *Review of*  
1542 *Educational Research*, *50*(1), 99-119. doi: 10.3102/00346543050001099
- 1543 Epstein, T. (2009). *Interpreting national history: Race, identity, and pedagogy in classrooms and*  
1544 *communities*. New York: Routledge.
- 1545 Esterling, K. M., Fung, A., & Lee, T. (2019). When deliberation produces persuasion rather than  
1546 polarization: Measuring and modeling small group dynamics in a field experiment.  
1547 *British Journal of Political Science*, 1-19. doi: 10.1017/S0007123419000243
- 1548 Farrar, C., Green, D. P., Green, J. E., Nickerson, D. W., & Shewfelt, S. (2009). Does discussion  
1549 group composition affect policy preferences? Results from three randomized  
1550 experiments. *Political Psychology*, *30*(4), 615-647. doi: 10.1111/j.1467-  
1551 9221.2009.00717.x
- 1552 Fitchett, P. G., & Heafner, T. L. (2010). A national perspective on the effects of high-stakes  
1553 testing and standardization on elementary social studies marginalization. *Theory &*  
1554 *Research in Social Education*, *38*(1), 114-130. doi: 10.1080/00933104.2010.10473418
- 1555 Fitchett, P. G., Heafner, T. L., & Lambert, R. G. (2014). Examining elementary social studies  
1556 marginalization: A multilevel model. *Educational Policy*, *28*(1), 40–68. doi:  
1557 10.1177/0895904812453998
- 1558 Flanagan, C. (2013). *Teenage citizens: The political theories of the young*. Cambridge: Harvard  
1559 University Press.
- 1560 Flanagan, C. (2014). Teaching a larger “sense of community.” *Analysis of Social Issues and*  
1561 *Public Policy*, *14*(1), 423-425. doi: 10.1111/asap.12057
- 1562 Flanagan, C. A., Cumsille, P., Gill, S., & Gallay, L. S. (2007). School and community climates  
1563 and civic commitments: Patterns for ethnic minority and majority students. *Journal of*  
1564 *Educational Psychology*, *99*(2), 421-431. doi: 10.1037/0022-0663.99.2.421

- 1565 Fraser-Burgess, S. (2012). Group identity, deliberative democracy and diversity in education.  
1566 *Educational Philosophy and Theory*, 44(5), 480-499. doi: 10.1111/j.1469-  
1567 5812.2010.00717.x
- 1568 Franzoi, S. L., Davis, M. H., & Young, R. D. (1985). The effects of private self-consciousness  
1569 and perspective taking on satisfaction in close relationships. *Journal of Personality and*  
1570 *Social Psychology*, 48(6), 1584–1594. doi: 10.1037/0022-3514.48.6.1584
- 1571 Freedman, S. W., Barr, D. J., Murphy, K., & Beširević, Z. (2016). The development of ethical  
1572 civic actors in divided societies: A longitudinal case. *Human Development*, 59, 107-127.  
1573 doi: 10.1159/000448229
- 1574 Freedman, S. W., Hull, G. A., Higgs, J., & Booten, K. P. (2016). Teaching writing in a digital  
1575 and global age: Toward access, learning, and development for all. In D. H. Gitomer and  
1576 C. A. Bell (Eds.), *Handbook of research on teaching* (5th Ed., pp. 1389-1449).  
1577 Washington, DC: American Educational Research Association
- 1578 Gallay, E., Pyckett, A., Smallwood, M., & Flanagan, C. (2020). Urban youth preserving the  
1579 environmental commons: Student learning in place-based stewardship education as  
1580 citizen-scientists. *Sustainable Earth*, 3(3). doi: 10.1186/s42055-020-00026-1
- 1581 Geboers, G., Geijsel, F., Admiraal, W., & ten Dam, G. (2013). Review of the effects of  
1582 citizenship education. *Educational Research Review*, 9, 158-173. doi:  
1583 10.1016/j.edurev.2012.02.001
- 1584 Geller, R. C. (2020). Teacher political disclosure in contentious times: A “responsibility to speak  
1585 up” or “fair and balanced”? *Theory and Research in Social Education*, 48(2), 182–210.  
1586 <https://doi.org/10.1080/00933104.2020.1740125>
- 1587 Geller, J. D., Voight, A., Wegman, H., & Nation, M. (2013). How do varying types of youth  
1588 civic engagement relate to perceptions of school climate? *Applied Developmental*  
1589 *Science*, 17(3), 135-147. doi: 10.1080/10888691.2013.804377
- 1590 Gilbert, M. (1994) Remarks on collective belief. In F. Schmitt (Ed.) *Social epistemology: The*  
1591 *social dimensions of knowledge* (pp. 235–253). Lanham, MD, Rowman & Littlefield,  
1592
- 1593 Ginwright, S. A. (2007). Black youth activism and the role of critical social capital in Black  
1594 community organizations. *American Behavioral Scientist*, 51(3), 403-418. doi:  
1595 10.1177/0002764207306068
- 1596 Gniewosz, B. & Noack, P. (2008). Classroom indicators and attitudes towards foreigners.  
1597 *Journal of Adolescence*, 31(5), 609-624. doi: 10.1016/j.adolescence.2007.10.006

- 1598 Godfrey, E. B. & Grayman, J. K. (2014). Teaching citizens: The role of open classroom climate  
1599 in fostering critical consciousness among youth. *Journal of Youth and Adolescence*,  
1600 43(11), 1801-1817. doi: 10.1007/s10964-013-0084-5
- 1601 Goldberg, T. (2013). It's in my veins: Identity and disciplinary practice in students' discussions  
1602 of a historical issue. *Theory and Research in Social Education*, 41(1), 33–64. doi:  
1603 10.1080/00933104.2012.757265
- 1604 Graham, E. J. (2019). “In real life, you have to speak up:” Civic implications of no-excuse  
1605 classroom management practices. *American Educational Research Journal*. Advance  
1606 online publication. doi: 10.3102/0002831219861549
- 1607 Gray, D. L., Hope, E. C., & Matthews, J. S. (2018). Black and belonging at school: A case for  
1608 interpersonal, instructional, and institutional opportunity structures. *Educational*  
1609 *Psychologist*, 53(2), 97-113. doi: 10.1080/00461520.2017.1421466
- 1610 Green, J. L. (1983). Research on teaching as a linguistic process: A state of the art. In E. Gordon  
1611 (Ed.), *Review of research in education* (Vol. 10, pp.151–254). Washington, DC:  
1612 American Educational Research Association.
- 1613 Green, J. L., Baker, W. D., Chian, M. M., Vanderhoof, C., Hooper, L., Kelly, G. J.,  
1614 Skukauskiate, A., & Kalainoff, M. Z. (2020). Studying the over-time construction of  
1615 knowledge in educational settings: A microethnographic discourse analysis approach.  
1616 *Review of Research in Education*, 44, 161-194. doi: 10.3102/0091732X20903121
- 1617 Guillaume, C., Jagers, R., & Rivas-Drake, D. (2015). Middle school as a developmental niche  
1618 for civic engagement. *American Journal of Community Psychology*, 56(3-4), 321-331.  
1619 doi: 10.1007/s10464-015-9759-2
- 1620 Hahn, C. L. (1991). Controversial issues in social studies. In J. Shaver (Ed.) *Handbook of*  
1621 *research on social studies teaching and learning* (pp. 470-480). New York: Macmillan.
- 1622 Hahn, C. L. (1996). Research on issues-centered social studies. In R. W. Evans & D. W. Saxe  
1623 (Eds.), *Handbook on teaching social issues* (pp. 25–41). Washington, DC: National  
1624 Council for the Social Studies.
- 1625 Hahn, C. L. (1998). *Becoming political: Comparative perspectives on citizenship education*.  
1626 Albany: State University of New York Press.
- 1627 Hahn, C. L. (2010). Issues-centered pedagogy and classroom climate for discussion: A view  
1628 from the United States. In K. J. Kennedy, W. O. Lee, & D. L. Grossman (Eds.),  
1629 *Citizenship pedagogies in Asia and the Pacific*. (CERC Studies in Comparative

- 1630 Education, Vol. 28, pp. 315-331). Dordrecht: Springer. doi: 10.1007/978-94-007-0744-  
1631 3\_15
- 1632 Hahn, C. L., & Tocci, C. M. (1990). Classroom climate and controversial issues discussions: A  
1633 five nation study. *Theory and Research in Social Education*, 18, 344-362. doi:  
1634 10.1080/00933104.1990.10505621
- 1635 Halfon, E., & Romi, S. (2019). High-school student councils: A typological approach.  
1636 *Education, Citizenship, and Social Justice*, Advance online publication. doi:  
1637 10.1177/1746197919886880
- 1638 Hart, D., & Youniss, J. (2018). *Renewing democracy in young America*. New York: Oxford  
1639 University Press
- 1640 Hess, D. E. (2009). *Controversy in the classroom: The democratic power of discussion*. New  
1641 York: Routledge.
- 1642 Hess, D. E., & McAvoy, P. (2015). *The political classroom: Evidence and ethics in democratic*  
1643 *education*. New York: Routledge. doi: 10.4324/9781315738871
- 1644 Hope, E. C., Skoog, A. B., & Jagers, R. J. (2015). “It’ll never be the white kids; it’ll always be  
1645 us:” Black high school students’ evolving critical analysis of racial discrimination and  
1646 equity in schools. *Journal of Adolescent Research*, 30(1), 83-112. doi:  
1647 10.1177/0743558414550688
- 1648 IEA (2020). *ICCS 2022: International Civics and Citizenship Education Study of 2022*.  
1649 Retrieved from <https://www.iea.nl/studies/iea/iccs/2022>.
- 1650 Isac, M. M., Maslowski, R., Creemers, B., & van der Werf, G. (2013). The contribution of  
1651 schooling to secondary-school students’ citizenship outcomes across countries. *School*  
1652 *Effectiveness and School Improvement*, 25(1), 29-63. doi:  
1653 10.1080/09243453.2012.751035.
- 1654 Jagers, R. J., Lozada, F. T., Rivas-Drake, D., & Guillaume, C. (2017). Classroom and school  
1655 predictors of civic engagement among Black and Latino middle-school youth. *Child*  
1656 *Development*, 88(4), 1125-1138.
- 1657 Johnson, D. W., Johnson, R. T., & Roseth, C. (2010). Cooperative learning in middle schools:  
1658 Interrelationship of relationships and achievement. *Middle Grades Research Journal*,  
1659 5(1).

- 1660 Jones, S. M., McGarrah, M., & Kahn, J. (2019). Social and emotional learning: A principled  
1661 science of human development in context. *Educational Psychologist, 54*(3), 129-143. doi:  
1662 10.1080/00461520.2019.1625776
- 1663 Journell, W. (2010). The influence of high-stakes testing on high school teachers' willingness to  
1664 incorporate current political events into the curriculum. *The High School Journal, 93*(3),  
1665 111-125. doi: 10.1353/hsj.0.0048
- 1666 Journell, W. (2012). Ideological homogeneity, school leadership, and political intolerance in  
1667 secondary education: A study of three high schools during the 2008 Presidential Election.  
1668 *Journal of School Leadership, 22*, 569-599. doi: 10.1177/105268461202200306
- 1669 Journell, W. (2017). *Teaching politics in secondary education: Engaging with contentious*  
1670 *issues*. Albany: State University of New York Press.
- 1671 Kahne, J., & Bowyer, B. (2017). Educating for democracy in a partisan age: Confronting the  
1672 challenges of motivated reasoning and misinformation. *American Educational Research*  
1673 *Journal, 54*(1), 3-34. doi: 10.3102/0002831216679817
- 1674 Kahne, J., Crow, D., & Lee, N. J. (2013). Different pedagogy, different politics: High school  
1675 learning opportunities and youth political engagement. *Political Psychology, 34*(3), 419-  
1676 441. doi: 10.1111/j.1467-9221.2012.00936.x
- 1677 Karakos, H. L., Voight, A., Geller, J. D., Nixon, C. T., & Nation, M. (2016). Student civic  
1678 participation and school climate: Associations at multiple levels of the school ecology.  
1679 *Journal of Community Psychology, 44*(2), 166-181. doi: 10.1002/jcop.21748
- 1680 Karpowitz, C. F., & Medelberg, T. (2014). *The silent sex: Gender, deliberation, and institutions*.  
1681 Princeton, NJ: Princeton University Press.
- 1682 Kawashima-Ginsberg, K., & Levine, P. (2014). Diversity in classrooms: The relationship  
1683 between deliberative and associative opportunities in school and later electoral  
1684 engagement. *Analyses of Social Issues and Public Policy, 14*(1), 394–414. doi:  
1685 10.1111/asap.12038
- 1686 Kia-Keating, M., Dowdy, E., Morgan, M. L., & Noam, G. G. (2011). Protecting and promoting:  
1687 An integrative conceptual model for healthy development of adolescents. *Journal of*  
1688 *Adolescent Health, 48*(3), 220-228. doi: 10.1016/j.jadohealth.2010.08.006
- 1689 Kelly, T. E. (1986). Discussing controversial issues: Four perspectives on the teacher's role.  
1690 *Theory & Research in Social Education, 14*, 113-138. doi:  
1691 10.1080/00933104.1986.10505516

- 1692 King, P. M., & Baxter Magolda, M. B. (2005). A developmental model of intercultural maturity.  
1693 *Journal of College Student Development, 46*(6), 571–592. doi: 10.1353/csd.2005.0060
- 1694 Kirshner, B. (2008). Guided participation in three youth activism organizations: Facilitation,  
1695 apprenticeship, and joint work. *Journal of the Learning Sciences, 17*(1), 60-101. doi:  
1696 10.1080/10508400701793190
- 1697 Kirshner, B. (2009). Power in numbers: Youth organizing as a context for exploring civic  
1698 identity. *Journal of Research on Adolescence, 19*(3), 414-440. doi: 10.1111/j.1532-  
1699 7795.2009.00601.x
- 1700 Kirshner, B. & Ginwright, S. (2012). Youth organizing as a developmental context for African  
1701 American and Latino adolescents. *Child Development Perspectives, 6*(3), 288-294. doi:  
1702 10.1111/j.1750-8606.2012.00243.x
- 1703 Knowles, R., Torney-Purta, J., Barber, C. (2018). Enhancing citizenship learning with  
1704 international comparative research: Analyses of IEA civic education datasets.  
1705 *Citizenship, Teaching, & Learning, 13*(1), 7-30. doi: 10.1386/ctl.13.1.7\_1
- 1706 Kuhn, D. (2015). Thinking together and alone. *Educational Researcher, 44*(1), 46–53. doi:  
1707 10.3102/0013189X15569530
- 1708 Kuhn, D. (2019). Critical thinking as discourse. *Human Development, 62*, 146–164. doi:  
1709 10.1159/000500171
- 1710 Kuhn, D., Feliciano, N., & Kostikina, D. (2019). Engaging contemporary issues as practice  
1711 for citizenship. *The Social Studies*. doi: 10.1080/00377996.2019.1625856
- 1712 Kuhn, D., Floyd, D., Yaksick, P., Halpern, M., & Ricks, W. (2018). How does discourse among  
1713 like-minded individuals affect their thinking about a complex issue? *Thinking and*  
1714 *Reasoning*. doi: 10.1080/13546783.2018.1532460
- 1715 Kuhn, D., & Lao, J. (1996). Effects of evidence on attitudes: Is polarization the norm?  
1716 *Psychological Science, 7*(2), 115-120. doi: 10.1111/j.1467-9280.1996.tb00340.x
- 1717 Kuhn, D., Zillmer, N., Crowell, A., & Zavala, J. (2013). Developing norms of argumentation:  
1718 Metacognitive, epistemological, and social dimensions of developing argumentative  
1719 competence. *Cognition and Instruction, 31*(4), 456-496. doi:  
1720 10.1080/07370008.2013.830618
- 1721 Kuş, Z. (2015). Science and social studies teachers' beliefs and practices about teaching  
1722 controversial issues: Certain comparisons. *JSSE-Journal of Social Science Education, 14*  
1723 (3) 84-97. doi: 10.4119/jsse-753
- 1724 Ladenson, R. F. (2012). Civility as a democratic civic virtue. In D. Mower & W. Robinson  
1725 (Eds.), *Civility in politics and education* (pp 207-220). New York: Routledge.
- 1726 Ladson-Billings, G., (2000). Culturally-relevant pedagogy in African centered schools:  
1727 Possibilities for progressive educational reform. In D. Pollard and C. Ajirotutu (Eds.)

- 1728            *African-centered schooling in theory and practice* (pp. 187-198). Westport, CT: Bergin &  
1729            Garvey.
- 1730    Lao, J., & Kuhn, D. (2002). Cognitive engagement and attitude development. *Cognitive*  
1731            *Development, 17*, 1203-1217. doi: 10.1016/S0885-2014(02)00117-X
- 1732    Lapointe, A. A. (2016). Queering the Social Studies: Lessons to be learned from Canadian  
1733            secondary school Gay-Straight Alliances. *Journal of Social Studies Research, 40*(3),  
1734            205–215. doi: 10.1016/j.jssr.2015.07.004
- 1735    Larson, B. E. (2003). Comparing face-to-face discussion and electronic discussion : A case study  
1736            from high school social studies. *Theory & Research in Social Education, 31*(3), 347–365.  
1737            doi: 10.1080/00933104.2003.10473229
- 1738    Leithwood, K., Louis, K. S., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences*  
1739            *student learning*. The Wallace Foundation. New York. [https://doi.org/10.1016/B978-0-](https://doi.org/10.1016/B978-0-08-044894-7.00439-5)  
1740            [08-044894-7.00439-5](https://doi.org/10.1016/B978-0-08-044894-7.00439-5)
- 1741    Levinson, M. & Fay, J. (2019). *Democratic discord in schools: Cases and commentaries in*  
1742            *educational ethics*. Cambridge: Harvard Education Press.
- 1743    Lin, A. R. (2014). Examining students’ perception of classroom openness as a predictor of civic  
1744            knowledge: A cross-national analysis of 38 countries. *Applied Developmental Science,*  
1745            *18*, 1-14.
- 1746    Macgillivray, K. (2004). Gay rights and school policy: A case study in community factors that  
1747            facilitate or impede educational change. *International Journal of Qualitative Studies in*  
1748            *Education, 17*(3), 347–370. doi: 10.1080/0951839042000204652
- 1749    Malin, H., Ballard, P. J., & Damon, W. (2015). Civic purpose: An integrated construct for  
1750            understanding civic development in adolescence. *Human Development, 58*, 103-130. doi:  
1751            10.1159/000381655
- 1752    Mansfield, K. C., Welton, A., & Halx, M. (2018). Listening to student voice: Toward a more  
1753            holistic approach to school leadership. *Journal of Ethical Educational Leadership,*  
1754            *Special Issue 1*, 10-18.
- 1755    Maurissen, L., Barber, C., & Claes, E. (2018). Classroom discussions and political tolerance  
1756            towards immigrants: The importance of mutual respect and responsiveness. *Acta Politica.*  
1757            Advance online publication. doi: 10.1057/s41269-018-0114-0
- 1758    Maurissen, L., Claes, E., Barber, C. (2018). Deliberation in citizenship education: how the school  
1759            context contributes to the development of an open classroom climate. *Social Psychology*  
1760            *of Education, 21*(4), 951-972. doi: 10.1007/s11218-018-9449-7

- 1761 Mayo, J. B. (2013a). Critical pedagogy enacted in the gay-straight alliance: New possibilities for  
1762 a third space in teacher development. *Educational Researcher*, 42(5), 266–275. doi:  
1763 10.3102/0013189X13491977
- 1764 Mayo, J. B. (2013b). Expanding the meaning of social education: What the social studies can  
1765 learn from gay straight alliances. *Theory and Research in Social Education*, 41(3), 352–  
1766 381. doi: 10.3102/0013189X13491977
- 1767 McAvoy, P., & Hess, D. (2013). Classroom deliberation in an era of political polarization.  
1768 *Curriculum Inquiry*, 43(1), 14–47. doi: 10.1111/curi.12000
- 1769 McDevitt, M. & Kiouisis, S. (2007). The red and blue of adolescence: Origins of the compliant  
1770 voter and the defiant activist. *American Behavioral Scientist*, 50(9), 1214-1230. doi:  
1771 10.1177/0002764207300048
- 1772 McFarland, D., & Starmanns, C. E. (2009). Inside student government: The variable quality of  
1773 high school student councils. *Teachers College Record*, 111(1), 27-54.  
1774 <https://www.tcrecord.org/Content.asp?ContentId=15173>
- 1775 McGranaham, L. (2020). The examined life: Winning Words prepares high schoolers for an epic  
1776 ethics competition. *The University of Chicago Magazine*, 112(3), 12-13.
- 1777 Michaels, S., O'Connor, C., & Resnick, L. B. (2008). Deliberative discourse idealized and  
1778 realized: Accountable talk in the classroom and in civic life. *Studies in Philosophy and*  
1779 *Education*, 27(4), 283-297. doi: 10.1007/s11217-007-9071-1
- 1780 Middaugh, E., Bowyer, B., & Kahne, J. (2017). U suk! Participatory discourse and youth  
1781 experiences with political media. *Youth and Society*, 49 (7), 902-922. doi:  
1782 10.1177/0044118X16655246
- 1783 Mikva Challenge. (2020). *Theory of change*. [https://mikvachallenge.org/our-work/theory-of-](https://mikvachallenge.org/our-work/theory-of-change/)  
1784 [change/](https://mikvachallenge.org/our-work/theory-of-change/)
- 1785 Mirra, N., & Garcia, A. (2017). Civic participation reimaged: Youth interrogation and  
1786 innovation in the multimodal public sphere. *Review of Research in Education*, 41, 136-  
1787 158. doi: 10.3102/0091732X17690121
- 1788 Mirra, N., & The Debate Liberation League. (2020). Without borders: Youth debaters  
1789 reimagining the nature and purpose of public dialogue. *English Teaching: Practice and*  
1790 *Critique*. Advance online publication. doi: 10.1108/ETPC-07-2019-0102
- 1791 Mischel, J., & Kitsantas, A. (2019). Middle school students' perceptions of school climate,  
1792 bullying prevalence, and social support and coping. *Social Psychology of Education*.  
1793 Advance online publication. doi: 10.1007/s11218-019-09522-5

- 1794 Mitra, D., Serriere, S., & Kirshner, B. (2014). Youth participation in U.S. contexts: Student voice  
1795 without a national mandate. *Children and Society*, 28(4), 292-304. doi:  
1796 10.1111/chso.12005
- 1797 Morine-Dersheimer, G. (2006). Classroom management and classroom discourse. In C. M.  
1798 Everston and C. S. Weinstein (Eds.) *Handbook of classroom management* (pp. 127-156).  
1799 New York: Routledge.  
1800
- 1801 National Academies of Sciences, Engineering, and Medicine. (2018a). *How people learn II:  
1802 Learners, contexts, and cultures*. Washington, DC: National Academies Press. doi:  
1803 10.17226/24783
- 1804 National Academies of Sciences, Engineering, and Medicine. (2018b). *Learning through citizen  
1805 science: Enhancing opportunities by design*. Washington, DC: The National Academies  
1806 Press. doi: <https://doi.org/10.17226/2518>
- 1807 Niemi, N. S., & Niemi, R. G. (2007). Partisanship, participation, and political trust as taught (or  
1808 not) in high school history and government classes. *Theory and Research in Social  
1809 Education*, 35(1), 32–61. doi: 10.1080/00933104.2007.10473325
- 1810 Olson, D. R. (2016). *The mind on paper: Reading, consciousness and rationality*. Cambridge:  
1811 Cambridge University Press.
- 1812 Paluck, E. L., Shepherd, H., & Aronow, P. M. (2016). Changing climates of conflict: A social  
1813 network experiment in 56 schools. *Proceedings of the National Academy of Sciences of  
1814 the United States of America*. 113(3), 566-571. doi: 10.1073/pnas.1804429115
- 1815 Parker, W. C. (2006). Talk isn't cheap : Practicing deliberation in school. *Social Studies and the  
1816 Young Learner*, 19(1), 12–15.
- 1817 Parker, W. C. (2010). Listening to strangers: Classroom discussion in democratic education.  
1818 *Teachers College Record*, 112(11), 2815–2832.
- 1819 Parker, W. C., & Hess, D. (2001). Teaching with and for discussion. *Teaching and Teacher  
1820 Education*, 17(3), 273-289. doi: 10.1016/S0742-051X(00)00057-3
- 1821 Patterson, M. M., Bigler, R. S., Pahlke, E. , Brown, C. S., Hayes, A., Ramirez, M. C., & Nelson,  
1822 A. (2019). Toward a developmental science of politics. *Monographs of the Society for  
1823 Research in Child Development*, 84(3). doi: 10.1111/mono.12410
- 1824 Porat, D. A. (2004). From the scandal to the Holocaust in Israeli education. *Journal of  
1825 Contemporary History*, 39(4), 619-636. doi: 10.1177/0022009404046757
- 1826 Poteat, V. P., Calzo, J. P., & Yoshikawa, H. (2018). Gay-Straight Alliance involvement and  
1827 youths' participation in civic engagement, advocacy, and awareness-raising. *Journal of  
1828 Applied Developmental Psychology*, 56, 13-20. doi: 10.1016/j.appdev.2018.01.001

- 1829 Prior, M. (2010). You've either got it or you don't? The stability of political interest over the life  
1830 cycle. *Journal of Politics*, 72(3), 747–766. doi: 10.1017/S0022381610000149
- 1831 Putnam, R. D. (2015). *Our kids: The American dream in crisis*. New York: Simon & Schuster.
- 1832 Quintelier, E., & Hooghe, M. (2013). The relationship between political participation intentions  
1833 of adolescents and a participatory democratic climate at school in 35 countries. *Oxford*  
1834 *Review of Education*, 39(5), 567–589. doi: 10.1080/03054985.2013.830097
- 1835 Regents of the University of Michigan (2020). *CivicLEADS: Civic learning, engagement, and*  
1836 *action data sharing*. Retrieved:  
1837 <https://www.icpsr.umich.edu/web/pages/civicleads/index.html>
- 1838 Reichert, F., Chen, J., & Torney-Purta, J. (2018). Profiles of adolescents' perceptions of  
1839 democratic classroom climate and students' influence: The effect of school and  
1840 community contexts. *Journal of Youth and Adolescence*, 47, 1279-1298. doi:  
1841 10.1007/s10964-018-0831-8
- 1842 Reznitskaya, A., & Wilkinson, A. (2017). *The most reasonable answer: Helping students build*  
1843 *better arguments together*. Cambridge MA: Harvard Education Press.
- 1844 Richardson, W. K. (2003). *Connecting political discussion to civic engagement: The role of civic*  
1845 *knowledge, efficacy and context for adolescents*. Unpublished doctoral dissertation.  
1846 University of Maryland-College Park.
- 1847 Rubin, B. C. (2007). "There's Still Not Justice": Youth civic identity development amid distinct  
1848 school and community contexts. *Teachers College Record*, 109(2), 449–481.
- 1849 Rubin, B. C., Hayes, B., & Benson, K. (2009). "It's the worst place to live": Urban youth and the  
1850 challenge of school-based civic learning. *Theory Into Practice*, 48(3), 213-221. doi:  
1851 10.1080/00405840902997436
- 1852 Sakız, H. (2017). Impact of an inclusive programme on achievement, attendance and perceptions  
1853 towards the school climate and social-emotional adaptation among students with  
1854 disabilities. *Educational Psychology*, 37(5), 611–631. doi:  
1855 10.1080/01443410.2016.1225001
- 1856 Sampson, R. J., Morenoff, J. D., & Earls, F. (1999). Beyond social capital: Spatial dynamics of  
1857 collective efficacy for children. *American Sociological Review*, 64(5), 663-660.  
1858 <https://www.jstor.org/stable/2657367>
- 1859 Schkade, D., Sunstein, C. R., & Hastie, R. (2007). What happened on deliberation day. *Calif. L.*  
1860 *Rev.*, 95(3), 915-940. doi: 10.2307/20439113
- 1861 Schuitema, J., ten Dam, G., & Veugelers, W. (2008). Teaching strategies for moral education: A  
1862 review. *Journal of Curriculum Studies*, 40(1), 69-89. doi: 10.1080/00220270701294210

- 1863 Schulz, W., Ainley, J., Fraillon, J., Kerr, D., & Losito, B. (2010). *ICCS 2009 international*  
1864 *report: Civic knowledge, attitudes, and engagement among lower-secondary students in*  
1865 *38 countries*. Amsterdam: IEA.
- 1866 Schulz, W., Ainley, J., Fraillon, J., Losito, B., Agrusti, G., & Friedman, T. (2017). *Becoming*  
1867 *citizens in a changing world: IEA International Civic and Citizenship Education Study*  
1868 *2016 international report*. Amsterdam: IEA. doi: 10.1007/978-3-319-73963-2
- 1869 Schweig, J., Hamilton, L. S., & Baker, G. (2019). *School and classroom climate measures:*  
1870 *Considerations for use by state and local education leaders*.  
1871 [https://www.rand.org/pubs/research\\_reports/RR4259.html](https://www.rand.org/pubs/research_reports/RR4259.html).
- 1872 Schweingruber, H. (2020, March). *Session discussant: Developmental underpinnings and*  
1873 *psychological foundations*. Presented at the National Academy of Education’s Civic  
1874 Reasoning and Discourse Project, Washington, DC.
- 1875 Sears, D. O. (1983). The persistence of early political predispositions: The roles of attitude object  
1876 and life stage. In L. Wheeler & P. R. Shaver (Eds.) *Review of Personality and Social*  
1877 *Psychology* (79-116). Beverly Hills: Sage.
- 1878 Seider, S. (2012). *Character compass: How powerful school culture can point students toward*  
1879 *success*. Cambridge: Harvard University Press
- 1880 Shukla, K., Konolad, T. & Cornell, D. (2016). Profiles of student perceptions of school climate:  
1881 relations with risk behaviors and academic outcome. *American Journal of Community*  
1882 *Psychology*, 57, 291-307. doi: 10.1002/ajcp.12044
- 1883 Speer, P. W., Peterson, N. A., Christens, B. D., & Reid, R. J. (2019). Youth cognitive  
1884 empowerment: Development and evaluation of an instrument. *American Journal of*  
1885 *Community Psychology*, 64, 528-540. doi: 10.1002/ajcp.12339
- 1886 Springer Nature Switzerland AG (2020). *Learning Environments Research: An International*  
1887 *Journal*. Retrieved: <https://www.springer.com/journal/10984>
- 1888 Stoddard, J., Banks, A. M., Nemacheck, C., & Wenska, E. (2016). The challenges of gaming for  
1889 democratic education: The case of iCivics. *Democracy and Education*, 24(2), 2.  
1890 <https://democracyeducationjournal.org/home/vol24/iss2/2/>
- 1891 Stoddard, J., & Chen, J. (2016). Young people's response to The Response: The impact of  
1892 political diversity and media framing on discussions of combatant tribunals. *Journal of*  
1893 *Contemporary Issues in Education*, 11(1), 65. doi: 10.20355/C5588N
- 1894 Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin  
1895 & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47).  
1896 Monterey, CA: Brooks/Cole.

- 1897 Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school  
1898 climate research. *Review of Educational Research*, 83(3), 357-385. doi:  
1899 10.3102/0034654313483907
- 1900 Thomas, R.M. 2005. *High-stakes testing: Coping with collateral damage*, Mahwah, NJ:  
1901 Erlbaum. doi: 10.4324/9781410612809
- 1902 Thornton, S. J. (2003). Silence on gays and lesbians in social studies curriculum. *Social*  
1903 *Education*, 67(4), 226–230.
- 1904 Torney, J. V., Oppenheim, A. N., & Farnen, R. F. (1975). *Civic education in ten countries: An*  
1905 *empirical study*. New York: Halstead Press of John Wiley.
- 1906 Torney-Purta, J., & Amadeo, J. (2011). Participatory niches for emergent citizenship in early  
1907 adolescence: An international perspective. *The ANNALS of the American Academy of*  
1908 *Political and Social Science*, 633, 180-200. doi: 10.1177/0002716210384220
- 1909 Torney-Purta, J., Amadeo, J. & Andolina, M. (2010). A conceptual framework and a  
1910 multimethod approach for research in civic engagement and political socialization. In L.  
1911 Sherrod, J. Torney-Purta, & C. Flanagan (Eds.), *Handbook of research on civic*  
1912 *engagement in youth (pp. 497-534)*. Hoboken, NJ: John Wiley.
- 1913 Torney-Purta, J., Barber, C. H., & Wilkenfeld, B. (2007). Latino adolescents' civic development  
1914 in the United States: research results from the IEA Civic Education Study. *Journal of*  
1915 *Youth and Adolescence*, 36(3), 111-126. doi: 10.1007/s10964-006-9121-y
- 1916 Torney-Purta, J., Lehmann, R., Oswald, H., & Schulz, W. (2001). *Citizenship and education in*  
1917 *28 countries: Civic knowledge and engagement at age 14*. Amsterdam, NL: IEA.
- 1918 Torney-Purta, J., Wilkenfeld, B., & Barber, C. (2008). How adolescents in twenty-seven  
1919 countries understand, support and practice international human rights. *Journal of Social*  
1920 *Issues*, 4(4), 857-880. doi: 10.1111/j.1540-4560.2008.00592.x
- 1921 Vygotsky, L. (1978). Interaction between learning and development. *Readings on the*  
1922 *Development of Children*, 23(3), 34-41.
- 1923 Wanders, F. H., van der Veen, I., Dijkstra, A. B., & Maslowski, R. (2019). The influence of  
1924 teacher-student and student-student relationships on societal involvement in Dutch  
1925 primary and secondary schools. *Theory and Research in Social Education*, 1-19. doi:  
1926 10.1080/00933104.2019.1651682
- 1927 Walsh, E. M., & Tsurusaki, B. K. (2014). Social controversy belongs in the climate science  
1928 classroom. *Nature Climate Change*, 4(4), 259-263. 10.1038/nclimate2143
- 1929 Watts, R. J., Diemer, M. A., & Voight, A. M. (2011). Critical consciousness: Current status and  
1930 future directions. *New Directions for Child and Adolescent Development*, 134, 43–57.  
1931 doi:10.1002/cd.310.

- 1932 Wentzel, K. R. (2015). Socialization in school settings. In J. Grusec & P. Hastings (Eds.),  
1933 *Handbook of socialization: Theory and research*, (2nd edition, pp. 251-275). New York:  
1934 Guilford Press.
- 1935 Westheimer, J., & Kahne, J. (2004). What kind of citizen? The politics of educating for  
1936 democracy. *American Educational Research Journal*, 41(2), 237-269. doi:  
1937 10.3102/00028312041002237
- 1938 Wilkenfeld, B., & Torney-Purta, J. (2012). A cross-context analysis of civic engagement linking  
1939 CIVED and US Census data. *JSSE-Journal of Social Science Education*, 11(1), 64-80.  
1940 doi: 10.4119/jsse-591
- 1941 Wray-Lake, L., & Abrams, L.S. (2020). Pathways to civic engagement among urban youth of  
1942 color. *Monographs of the Society for Research in Child Development*, 85(2). doi:  
1943 10.1111/mono.12415
- 1944 Young, I. M. (2000). *Inclusion and democracy*. New York: Oxford University Press.
- 1945 Zeidler, D. L., Applebaum, S. M., & Sadler, T. D. (2011). Enacting a socioscientific issues  
1946 classroom: Transformative transformations. In T. D. Sadler (ed.), *Socio-scientific issues*  
1947 *in the classroom* (pp. 277-305). Dordrecht: Springer.
- 1948 Zimmerman, J., & Robertson E. (2017). *The case for contention: Teaching controversial issues*  
1949 *in American schools*. Chicago: The University of Chicago Press. doi:  
1950 10.7208/chicago/9780226456485.001.0001
- 1951 Zorwick, L. W., & Wade, J. M. (2016). Enhancing civic education through the use of assigned  
1952 advocacy, argumentation, and debate across the curriculum. *Communication Education*,  
1953 65(4), 434-444. doi: 10.1080/03634523.2016.1203005