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Civic Concern as a Foundation of Social Science Education for Digital Citizenship

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Abstract. The rapid expansion of digitally mediated public life has repositioned schools as key sites for cultivating responsible citizenship, yet digital citizenship education continues to be organized largely around technical competencies such as verification, privacy management, and platform literacy. This study examines how civic concern, understood as attentiveness to public affairs, moral responsibility toward others, and readiness to contribute to the common good, can be positioned as a foundation of social science education for digital citizenship. Employing a structured systematic literature review with a qualitative approach, content analysis, and thematic synthesis, this study analyzes 22 peer-reviewed articles by inventorying existing conceptualizations of civic concern and related dispositions, identifying tensions between competency-centered practice and the limited attention given to disposition, and synthesizing these findings into directions for social science learning. The analysis reveals that the literature offers relevant but heterogeneous evidence on responsibility, identity, values, and belonging that points to a disposition operating alongside digital competence; that implementation studies report a tendency toward technical and safety-oriented objectives that leaves this disposition unevenly addressed; and that teacher training, community-based experience, and dispositional assessment are promising but still insufficiently tested routes to its cultivation. This study proposes a conceptual framework that embeds civic concern as an explicit instructional objective within social science topics, strengthens teacher preparation, and expands assessment to capture civic disposition, while calling for psychometric validation and predictive testing in future research. Without such development, digital citizenship risks remaining technically accomplished but civically thin.

Keywords: Civic Concern, Digital Citizenship, Social Science Education.

1 Introduction

Scroll through any young person's phone and civic life appears in fragments: a shared petition, a heated comment thread, a meme that compresses a policy debate into a single line. Digital media have become an everyday infrastructure through which young people encounter public issues and decide whether to respond to them. A meta-analysis of youth engagement research by Boulianne and Theocharis [1] finds that digital media

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use is consistently, if modestly, associated with civic and political participation across studies and national contexts. Participation itself has also taken on a more personal, less institutional character, with political consumerism, boycotts, and issue-based expression increasingly organized around individual choice rather than party or union membership, a pattern that Boulianne et al. [2] documented across the United States, the United Kingdom, and France. Social life and civic life now blur so thoroughly that sharing, commenting, or scrolling past a post can carry civic weight, whether or not anyone intends it. What counts as taking part in public life has quietly expanded well beyond the ballot box.

Openness, however, has a darker twin. Vosoughi et al. [3] showed that falsehoods travel farther and faster online than accurate reports, largely because novelty and emotional charge attract attention more reliably than verification does. Users also drift toward like-minded content, forming echo chambers that, as Cinelli et al. [4] demonstrated, harden group boundaries and narrow the range of views they meet. What makes this especially troubling for educators is that participation and division seem to grow from the same soil, which is why Oden and Porter [5] examined teenagers' social media use in relation to both civic engagement and affective polarization within a single analytic frame. A pressing question follows: how can young people be prepared to take part in public life without being swept along by its most corrosive currents, and can a classroom realistically compete with a feed engineered to hold attention?

Schools do not yet appear equal to that task. When students were asked to judge the reliability of online sources, the national assessment reported by Breakstone et al. [6] found that many struggled to distinguish sponsored content, weak evidence, and doctored images from trustworthy reporting. Judgment, moreover, is not simply a matter of training; it is also shaped by what people already want to believe. A field experiment in India by Badrinathan [7] found that a short educative intervention meaningfully reduced participants' willingness to believe and share political misinformation, suggesting that motivated reasoning can be loosened, even if not erased, through deliberate instruction. Echo chambers make the underlying problem harder still, since, as Cinelli et al. [4] indicate, they supply each student with a steady diet of confirming material before any lesson begins. Skill deficits alone, then, cannot explain why some students act on what they learn while others simply shrug and keep scrolling.

Indonesia makes these questions concrete. The systematic review of digital citizenship scholarship in education by Prasetiyo et al. [8] identifies digital readiness, citizenship competencies, and education policy as dominant themes, while noting how few studies examine what actually happens once such competencies reach the classroom. In a sprawling archipelago of unevenly connected yet intensely active communities, the distance between being online and being civically responsible is easy to see: a hashtag can trend nationally within hours, yet the practical follow-through it inspires is far harder to trace. Lessons drawn from Indonesian classrooms therefore carry meaning well beyond the country's own borders, since similar gaps between digital enthusiasm and civic substance are visible wherever youth participation has migrated online.

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Social science education has long been entrusted with preparing students for democratic life, though scholars rarely agree on exactly what that preparation should produce; Westheimer and Kahne [9], for example, distinguished personally responsible, participatory, and justice-oriented conceptions of the good citizen, each implying different educational aims. Some frameworks emphasize technical and critical media competencies as the backbone of good citizenship, while Emejulu and McGregor [10] warn that a narrow focus on skills and safety quietly empties citizenship of its political substance, favoring individual conduct over collective agency and structural critique. Digital disruption does not simply add a new topic to either camp's curriculum; it changes the setting in which any vision of citizenship must now play out, since students are expected to exercise judgment, participate, and cooperate within environments that were never designed with civic learning in mind.

Digital citizenship has become the main label under which these concerns are gathered, yet the term means rather different things depending on who is using it. The review by Richardson et al. [11], spanning 15 years of research, shows how quickly the field has grown and how unevenly its definitions have settled, with studies ranging from narrow lessons on online safety to broad accounts of democratic participation. Choi's concept analysis [12] reveals a similar unevenness in the concept's own history: an earlier generation of scholarship treated digital citizenship largely as a matter of appropriate conduct online, while more recent work has pushed toward a fuller account that folds in ethics, participation, and critical awareness, exposing a persistent conceptual gap between the two. That gap is both an opportunity and a hazard. It invites diverse contributions, but it also lets the term stretch to cover practices that share little beyond a screen.

Systematic reviews of empirical work sharpen this concern. Mapping the methods, regions, and predictors used across digital citizenship studies, Shi et al. [13] show that psychological and social factors, such as confidence, empathy, and a sense of belonging, are studied far less often than technical competencies, even though they appear to matter just as much for how students actually behave online. Read alongside the conceptual account of Richardson et al. [11], this evidence suggests that competence-centered approaches, however necessary, are still missing something the field has not yet learned to measure or teach with much confidence.

That missing piece can be called civic concern: an attentiveness to public affairs, a sense of moral responsibility toward others, and a readiness to contribute to the common good. Civic engagement, it turns out, is rarely a matter of skill alone. Using a person-oriented approach, Martínez et al. [14] identified distinct patterns of civic and political commitment among early adolescents, with an involved group standing apart from peers who remained detached despite comparable access to information and comparable opportunity to participate. Among older adolescents, Lannegrand-Willems et al. [15] found that patterns range from vigorous engagement to several kinds of passivity, and passivity tended to appear alongside diffuse identity and a weak sense of belonging to any larger social group. Seen this way, passivity looks less like a lack of ability than a lack of concern, a distinction that matters enormously for how a curriculum ought to respond.

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Concern is not formed in a vacuum. It grows in families, classrooms, and friendships, and those settings now overlap with digital platforms in ways earlier generations of educators never had to consider. The meta-analytic evidence of Boulianne and Theocharis [1] that links digital media use to participation also implies that these platforms have become part of how concern itself is cultivated or left to wither, since so much of adolescent social life now unfolds there. Meanwhile, as Lannegrand-Willems et al. [15] suggest, identity and a sense of social belonging continue to steer how engaged or passive young people become, whether that belonging is anchored offline, online, or, as is increasingly common, in both at once. Conditions for cultivating concern are therefore being rewritten alongside the conditions for expressing it, and few curricula have caught up with that shift.

Consider two students who have learned to verify a viral video about a flood in a distant province. Both can trace the original upload, compare it with credible reports, and spot edited footage. One shares a correction, asks who has been affected, and starts a discussion in the class group about how neighbors might help. The other, equally capable, closes the application and moves on because the matter feels like someone else's business. Technical ability was identical, yet the civic consequences diverged completely. Scenes like this are ordinary in digital life, and they suggest that the decisive variable is often not what students can do but whether they care enough to do it, a distinction that technical training alone does not seem able to supply.

Assante et al. [16] found that personal values and critical dispositions help university students grow as digital citizens, beyond what formal instruction in platform mechanics alone can achieve. Among Filipino undergraduates, Cleofas and Labayo [17] linked online civic engagement and respectful online conduct with dimensions of global competence such as intercultural communication, suggesting that civic disposition and cross-cultural sensitivity may develop together rather than separately. Findings of this kind hint that dispositions do real work in digital citizenship. Still, both studies tend to treat disposition as a supporting factor or a fortunate by-product of learning, rather than as the foundation around which a social science curriculum might be deliberately organized from the outset.

Young people's own patterns of civic participation add a further layer to this picture. The longitudinal research of Martínez et al. [14] on early adolescence shows that involvement in civic life is not a fixed trait but a trajectory, one that can shift as students move through school, form new friendships, and encounter new causes worth caring about. Some students settle early into a habit of paying attention to public affairs, while others drift toward it only when a cause becomes personally vivid enough to notice, a distinction that has as much to do with disposition as with any particular skill a classroom might teach. Whichever path a given student takes, what appears to matter most is not the platform they use but whether they have been given reason to feel that public affairs are, in some sense, also their own affairs.

Here lies the gap this study takes up. Polizzi [18] has begun to separate functional digital literacy, the ability to operate a platform competently, from critical digital literacy, the capacity to question what a platform does with attention and data, and to ask how each shapes strategic participation and disengagement differently. Civic concern, however, the affective and moral ground from which either kind of literacy

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must eventually draw its purpose, is usually assumed as a background condition rather than examined as an educational aim in its own right. Discussions of digital citizenship, including the reviews by Richardson et al. [11] and Shi et al. [13], keep returning to competencies, safety, and media skills, while concern receives comparatively little sustained attention and is treated as something students either happen to bring with them or do not.

Positioning civic concern as a foundation is not a plea to replace skills with sentiment. Verification skills matter, and, as Breakstone et al. [6] and Badrinathan [7] show, students who cannot evaluate a claim are easily misled regardless of how much they care. Concern is what gives those skills a direction. It prompts a student to check a story because someone might be harmed by it, to answer a rumor because a neighbor is affected, or to stay in a hard conversation instead of muting it. Without concern, capability sits idle, however well it has been trained. Without capability, concern is easily exploited by falsehoods that, as Vosoughi et al. [3] demonstrated, travel fast and convincingly. Foundation, then, means priority in sequence and purpose, not exclusivity, and certainly not a dismissal of the technical competencies that digital citizenship scholarship has worked hard to define.

Building on this gap, this study asks how civic concern can be positioned as a foundation of social science education for digital citizenship. It aims to clarify the conceptual dimensions of civic concern, to identify tensions between civic ideals and digital practice among young citizens, and to formulate directions for strengthening social science learning. Using a conceptual and literature-based approach, it seeks to reframe civic concern as a foundational principle, not an incidental outcome, of preparing students for democratic life in a digital society. Its findings are intended for educators, curriculum developers, and policymakers who wish to move digital citizenship beyond technical competence toward sustained civic responsibility.

2 Method

2.1 Research Type and Approach

This study uses a structured systematic literature review (SLR) with a qualitative approach, content analysis, and thematic synthesis. The review is designed to identify, evaluate, and synthesize conceptual and empirical scholarship relevant to civic concern, digital citizenship, and social science education. The procedure is organized into research type and approach, data sources, search strategy, inclusion and exclusion criteria, research instruments, study-selection procedure, and data-analysis techniques, and the selection process is reported following the PRISMA 2020 statement of Page et al. [19], where PRISMA stands for Preferred Reporting Items for Systematic Reviews and Meta-Analyses. The present review does not calculate a pooled effect size because the included literature is conceptually and methodologically heterogeneous. It also does not make causal claims that cannot be supported by the designs of the reviewed studies.

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2.2 Data Sources

The bibliographic sources are Scopus, Web of Science Core Collection, and Google Scholar. The review considers peer-reviewed journal articles and scholarly review papers in English or Indonesian. The substantive evidence is organized into two groups: (1) conceptual and theoretical studies on civic education, democratic education, digital citizenship, and civic dispositions; and (2) empirical studies and systematic reviews addressing civic and political engagement, adolescent development, digital participation, media literacy, social responsibility, and educational practice. The principal publication window is 2018 to the final search date. Earlier publications are retained only when they provide a foundational concept directly needed for interpretation. No publisher is prioritized or excluded; publisher identity is not an eligibility criterion.

2.3 Search Strategy

The search strategy combines terms for the focal disposition, related civic constructs, digital environments, and educational context. Each database is searched separately, and the search date, query, filters, and number of records returned are recorded in a search log. The database-specific search strings are (a) “civic concern”; (b) “civic disposition” and “civic responsibility”; (c) “digital citizenship”; (d) “civic engagement” and “social media”; and (e) “social science education” and “digital citizenship.”

2.4 Inclusion and Exclusion Criteria

Studies were included when they (1) were peer-reviewed journal articles or scholarly reviews; (2) were written in English or Indonesian; (3) were published within the principal publication window, or earlier when they provide a foundational concept; and (4) addressed at least one defining element of civic concern, digital citizenship, or the educational conditions under which civic dispositions are cultivated. Studies were excluded when they did not meet these criteria or addressed digital technology without any civic, ethical, or educational dimension.

2.5 Research Instruments

Two instruments guided the review: a data-extraction form recording each study’s authors and year, context, and main findings (summarized in Table 1), and a coding scheme that applies the conceptual inclusion tests and evidence levels described in Section 2.7 and summarized in Table 2.

2.6 Study Selection Procedure

The search and selection procedure follows three operational steps: (1) identification through database searches and supplementary reference-list checking; (2) title-and-abstract screening against the eligibility criteria; and (3) full-text assessment followed

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by the extraction of eligible sources. This procedure yielded the 22 articles analyzed in this study.

2.7 Data Analysis Techniques

Thematic synthesis followed the approach of Thomas and Harden [20], moving from line-by-line coding of the extracted findings to descriptive themes and then to analytical themes that answer the review question. The review does not assume that responsibility, identity, values, empathy, belonging, intercultural sensitivity, and civic engagement are interchangeable indicators of one established latent variable. They are treated as adjacent constructs only when their reported content overlaps with at least one defining element of civic concern. The synthesis therefore applies three conceptual inclusion tests, summarized in Table 2: (1) public-issue orientation, which asks whether the construct involves noticing, attending to, or being informed about a matter with collective consequences; (2) other-regarding responsibility, which asks whether it includes concern for affected people, recognition of obligations, or consideration of consequences beyond personal interest; and (3) common-good orientation, which asks whether it involves an intention or disposition to contribute to collective welfare.

Table 1. Conceptual inclusion tests and evidence levels used in the thematic synthesis

Element	Guiding question or definition	Example of an adjacent construct
Test 1: Public-issue orientation	Does the construct involve noticing, attending to, or being informed about a matter with collective consequences?	Political interest
Test 2: Other-regarding responsibility	Does it include concern for affected people, recognition of obligations, or consideration of consequences beyond personal interest?	Empathy; moral and prosocial responsibility
Test 3: Common-good orientation	Does it involve an intention or disposition to contribute to collective welfare?	Social responsibility; civic engagement
Level A: Direct evidence	The study explicitly measures civic concern or a closely defined civic-disposition construct.	Civic disposition instrument
Level B: Partial or adjacent evidence	The study measures one dimension or a theoretically related construct.	Identity; personal values; belonging
Level C: Contextual evidence	The study explains the digital, developmental, or institutional conditions in which concern may be expressed.	Echo chambers; misinformation diffusion

A study may inform one or more dimensions without measuring the full construct. Empathy may support other-regarding responsibility but does not necessarily imply attention to public affairs or willingness to act. Political interest may indicate attention but not moral responsibility. Civic engagement is generally an expressed behavior or participation outcome, not a synonym for concern. Digital competence is a set of knowledge and skills for effective digital action, not an indicator of caring. Identity and

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belonging may provide motivational or contextual resources, but neither alone establishes civic concern.

On this basis, the evidence is classified into three levels: direct evidence, in which a study explicitly measures civic concern or a closely defined civic-disposition construct; partial or adjacent evidence, in which a study measures one dimension or a theoretically related construct; and contextual evidence, in which a study explains the digital, developmental, or institutional conditions in which concern may be expressed. This classification prevents findings on distinct constructs from being presented as if they validated a common latent factor. The current literature supports a conceptual synthesis across adjacent dimensions but does not establish the factor structure, discriminant validity, or measurement invariance of civic concern. Those psychometric questions require a dedicated instrument-development and validation study.

3 Results

Table 1 describes the 22 articles included in the review, together with the context of each study and its main findings relevant to civic concern and digital citizenship.

Table 2. Description of the 22 articles included in the review

No.	Author(s) and year	Context	Main findings
1	Boulianne and Theocharis (2020) [1]	Youth digital media use and civic and political engagement across studies	Digital media use is positively but modestly associated with civic and political participation.
2	Boulianne, Copeland, and Koc-Michalska (2024) [2]	Political consumerism and digital participation in the United States, United Kingdom, and France	Digital participation increasingly includes individualized and issue-based forms of political consumerism.
3	Vosoughi, Roy, and Aral (2018) [3]	Online diffusion of true and false news	False news can diffuse more rapidly than truthful information, highlighting risks in digital public communication.
4	Cinelli et al. (2021) [4]	Echo-chamber dynamics across social media platforms	Online interactions can cluster around like-minded information and reinforce homophilous exposure.
5	Oden and Porter (2023) [5]	Teen social media use, civic engagement, and affective polarization	Civic engagement and affective polarization may co-occur; participation is not automatically inclusive or deliberative.
6	Breakstone et al. (2021) [6]	Students' evaluation of online sources and civic information	Many students experience difficulty evaluating the credibility and evidentiary quality of online information.
7	Badrinathan (2021) [7]	Field experiment on a misinformation intervention in India	An educational intervention reduced susceptibility to political misinformation; it measured epistemic judgment, not civic concern itself.

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No.	Author(s) and year	Context	Main findings
8	Prasetiyo et al. (2021) [8]	Digital citizenship scholarship in the educational sphere, with a focus on Indonesia	Research emphasizes digital readiness, citizenship competencies, and education policy.
9	Emejulu and McGregor (2019) [10]	Critical and radical approaches to digital citizenship education	Digital citizenship should address power, inequality, collective agency, and structural conditions, not only individual online conduct.
10	Richardson, Martin, and Sauers (2021) [11]	Review of 15 years of digital citizenship research	The field contains varied definitions and approaches, from online conduct to broader democratic participation.
11	Shi, Chan, and Lin (2023) [13]	Empirical predictors and dimensions of digital citizenship	Research includes psychological and social predictors alongside technical competencies, though coverage is uneven.
12	Martínez et al. (2020) [14]	Patterns of civic and political commitment in early adolescence	Adolescents show distinct patterns of civic and political commitment; the study does not establish a causal sequence from concern to competence.
13	Lannegrand-Willems et al. (2018) [15]	Civic engagement, personal identity, and social identity among late adolescents and emerging adults	Civic engagement patterns are associated with identity configurations; identity is an adjacent construct, not a direct measure of civic concern.
14	Assante, Popa, and Momanu (2022) [16]	Personal values and critical dispositions in higher-education digital citizenship	Personal values and critical dispositions contribute to explaining digital citizenship development.
15	Cleofas and Labayo (2024) [17]	Digital citizenship and global competence among Filipino undergraduates	Online civic engagement is examined alongside global competence and intercultural dimensions.
16	Polizzi (2025) [18]	Functional and critical digital literacy in relation to participation	Functional and critical digital literacy have different implications for strategic participation and disengagement.
17	Hudson and Brandenberger (2023) [21]	Moral and prosocial responsibility among college students	Community-engagement experiences are associated with moral and prosocial responsibility.
18	Godonoga and Sporn (2023) [22]	Social responsibility in higher-education institutions	Social responsibility is conceptualized as an institutional and community-oriented concern in higher education.
19	Avci, Baams, and Kretschmer (2025) [23]	Social media use and adolescent identity development	Patterns of social media use are related to adolescent identity development; this is developmental context, not a direct test of civic concern.

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No.	Author(s) and year	Context	Main findings
20	Tadlaoui-Brahmi, Çuko, and Alvarez (2022) [24]	Implementation of digital citizenship in primary education	The review maps how digital citizenship is translated into school practice.
21	Piceci, Mariani, and Peluso Cassese (2021) [25]	Teacher professional development in digital citizenship	Structured teacher training can strengthen teachers' confidence and preparedness to address digital citizenship.
22	Mazid et al. (2026) [26]	Civic dispositions among junior high school students	The preliminary instrument examines responsibility, participation, politeness, empathy, and patience.

3.1 Civic Concern as a Distinct Construct within Digital Citizenship Scholarship

Civic concern surfaces less often as a named construct than as a set of scattered findings that, once assembled, point toward the same underlying disposition. Among college students, Hudson and Brandenberger [21] showed that moral and prosocial responsibility correlates closely with the depth of prior community engagement experiences, suggesting that concern for others functions as both a cause and a consequence of civic involvement rather than a fixed trait students either possess or lack. A parallel line of inquiry in higher education research, the review by Godonoga and Sporn [22] of how universities come to be seen as socially responsible institutions, arrives at a similar conclusion at the organizational level: responsibility is less a checklist of compliant behaviors than a disposition that has to be cultivated deliberately within a community, whether that community is a university or a classroom. Developmental research reinforces this picture from the individual side: the longitudinal study by Martínez et al. [14] found that an identifiably "involved" group of early adolescents could be distinguished from their peers well before differences in skill or opportunity became apparent, implying that something like concern may precede competence in the sequence of civic development.

In a related study of late adolescents and emerging adults, Lannegrand-Willems et al. [15] similarly found civic engagement clustering with a stable sense of social identity, while passivity clustered with diffuse or unresolved identity, a pairing that looks less like a skills gap than a motivational one. This finding gains further support from the systematic review by Avci et al. [23] of how social media use relates to adolescent identity development more broadly, which found that active, authentic participation, rather than passive consumption or idealized self-presentation, predicted healthier identity exploration and a clearer sense of self. If identity clarity and civic involvement move together, as both strands of evidence suggest, then civic concern may be better understood as one visible expression of a young person's broader sense of who they are and where they belong, rather than as an isolated attitude that a single lesson could install or a single survey item could capture.

Work among university students adds a further layer to this emerging picture. Assante et al. [16] found that personal values and critical dispositions, rather than technical proficiency, were the stronger predictors of meaningful digital citizenship

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among higher education students, while Cleofas and Labayo [17] linked online civic engagement among undergraduates in the Philippines to broader dimensions of global competence such as intercultural sensitivity, hinting that concern for one's own community may generalize outward to concern for others beyond it. None of these studies set out to isolate civic concern as their primary variable, yet each arrives at a version of the same conclusion from a different angle: something prior to skill is doing a great deal of the explanatory work, and existing frameworks have not yet given it a stable name or a dedicated place in curriculum design.

Taken together, these studies provide convergent but indirect indications that dispositions and social-psychological resources can be relevant to civic and digital behavior. They do not establish that responsibility, identity clarity, personal values, empathy, belonging, and intercultural sensitivity are interchangeable manifestations of one empirically validated construct. Nor do the cited studies jointly test civic concern and digital competence in the same model. The more defensible interpretation is that these constructs identify potentially related dimensions that warrant conceptual organization and direct empirical testing. The contribution of this article is therefore construct clarification and framework development, not proof of an already established distinct latent variable.

3.2 The Competency Bias in Digital Citizenship Education

The literature points to a recurring emphasis on operationally measurable dimensions of digital citizenship, particularly safety, etiquette, access, and digital literacy. The review of primary-education implementation by Tadlaoui-Brahmi et al. [24] reported that classroom practice often centers on technology-related tasks and online safety, while the broader review by Richardson et al. [11] mapped a heterogeneous field extending from appropriate online conduct to democratic participation. The systematic mapping of empirical predictors by Shi et al. [13] also reported comparatively less attention to psychological and social factors such as confidence, empathy, and belonging. These findings support a qualified concern about imbalance, but they do not justify the claim that all contemporary frameworks are competency-only. Several frameworks explicitly include participation, ethics, criticality, identity, and social responsibility. The issue is therefore not the universal absence of civic dimensions, but the uneven translation of those dimensions into classroom objectives, learning activities, and measurable outcomes.

The critique of competency-centered practice must also distinguish between conceptual frameworks and implementation evidence. A framework may contain ethical, participatory, and critical dimensions while school-level interventions still assess safety knowledge or technical behavior more frequently. The sources cited in this article suggest such a possible implementation gap, but the present review did not conduct a systematic content analysis of curriculum documents or intervention outcomes across a representative sample. Accordingly, "competency bias" is used here as a provisional interpretive label for a reported tendency in selected implementation studies, not as a quantified conclusion about the entire international field.

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Digital skills are necessary for evaluating information and participating safely, but skill acquisition alone does not guarantee that learners will orient those skills toward collective concerns. The Indian field experiment by Badrinathan [7] targeted motivated reasoning and misinformation susceptibility; it did not directly measure civic concern. A reduction in willingness to believe or share misinformation may reflect improved epistemic judgment, reduced partisan bias, or greater media literacy. It cannot be interpreted as evidence that civic concern increased unless the intervention also measures public-issue attentiveness, other-regarding responsibility, and common-good orientation. The intervention is therefore relevant as contextual evidence about teachable judgment, not as direct evidence that civic concern itself can be taught.

3.3 Divergent Patterns of Civic Concern Among Young Citizens Across Contexts

The studies discussed in this section cover different countries and populations, but they do not constitute a formal cross-national comparison. The evidence includes Indonesian scholarship on digital citizenship reviewed by Prasetiyo et al. [8], research on political consumerism in the United States, the United Kingdom, and France by Boulianne et al. [2], the field experiment in India by Badrinathan [7], research with Filipino undergraduates by Cleofas and Labayo [17], and studies in other contexts. These sources differ in age group, educational level, political environment, sampling, and measurement. They are therefore used to illustrate the range of contexts in which related issues have been examined, not to rank countries or infer national differences. A defensible comparative study would require a common matrix covering curriculum orientation, participant age and level, civic-disposition measure, digital participation outcome, intervention type, and sociopolitical context. Where instruments and populations are not comparable, findings should be presented descriptively rather than pooled.

The evidence of Oden and Porter [5] on civic engagement and affective polarization illustrates why participation should not automatically be equated with civic concern. Participation may be motivated by solidarity and public responsibility, but it may also be driven by group loyalty or antagonism. Similarly, the rapid diffusion of false information documented by Vosoughi et al. [3] and the formation of echo chambers described by Cinelli et al. [4] represent structural risks in digital environments, not direct measures of civic concern. These studies provide contextual evidence for the need to combine concern with critical judgment, pluralism, and evidence evaluation. They do not demonstrate that concern varies independently of digital competence or that a specific sequence of concern, competence, and behavior has been established.

4 Discussion

Civic concern is a useful proposed construct for organizing public-issue attentiveness, other-regarding responsibility, and common-good orientation within social science education. The reviewed studies show that related dispositions, identities, values, and

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forms of engagement are associated with civic and digital practices. However, the evidence base does not contain a cited study that simultaneously measures civic concern and digital competence and tests their independent predictive effects on civic behavior. It also does not establish a temporal causal sequence in which concern precedes competence and then produces behavior. The framework developed here should therefore be read as a conceptual proposition for future empirical validation, rather than as a confirmed developmental or predictive model.

For social science education, the distinctive contribution is not simply adding another digital-literacy lesson. Social science subjects examine how people, institutions, resources, rights, power, and collective decisions shape shared life. Civic concern can be embedded in these substantive topics by asking learners to identify who is affected by a public issue, whose perspectives are absent, what responsibilities follow from the evidence, and which forms of collective response are justified. For example, a unit on disasters can combine geographical risk mapping, analysis of public policy and resource distribution, verification of online claims, and a deliberation on equitable assistance. A unit on diversity can combine historical and sociological analysis of inequality with perspective-taking and the evaluation of inclusive policy options. These tasks, summarized as an illustrative curriculum map in Table 3, connect disposition to disciplinary knowledge and evidence-based judgment rather than treating concern as an unstructured feeling.

Table 3. Illustrative curriculum map for embedding civic concern in social science topics

Element	Unit on disasters	Unit on diversity
Disciplinary content	Geographical risk mapping; analysis of public policy and resource distribution	Historical and sociological analysis of inequality
Digital competence	Verification of online claims about the event	Evaluation of evidence behind online claims and policy options
Civic-concern tasks	Identifying who is affected and whose perspectives are absent; deliberating on equitable assistance	Perspective-taking; deliberating on inclusive policy options
Observable assessment evidence	Justified identification of affected groups and of responsibilities that follow from the evidence	Reasoned evaluation of inclusive policy options that considers absent perspectives

Whether this kind of integration actually reaches students, however, depends heavily on something curriculum documents cannot control by themselves: how teachers have been prepared to teach it. Teachers who have only been trained in tools and safety protocols tend to reproduce that same narrow emphasis in their own classrooms, whatever the official curriculum happens to say on paper. Piceci et al. [25] found that structured, sustained professional development in digital citizenship measurably shifted how confident and how equipped teachers felt to address these topics with students, suggesting that the same kind of investment could be extended specifically to dispositional content rather than technical content alone. This matters because civic

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concern appears to travel through relationships as much as through curriculum material; a teacher who models attentiveness and responsibility in ordinary classroom conduct may do more to cultivate concern in students than any standalone lesson could accomplish on its own. This observation grounds the second practical direction proposed here: teacher preparation programs need to treat civic concern as a professional competency in its own right, not an incidental outcome of subject-matter expertise.

Civic concern is unlikely to hold a stable place in any curriculum for as long as assessment systems continue to reward only what is easiest to quantify, since teachers, however committed, tend to teach toward whatever a rubric actually checks. Large-scale international assessment frameworks have already begun building instruments that treat attitudes and dispositional indicators as measurable alongside cognitive civic knowledge; the International Association for the Evaluation of Educational Achievement (IEA) International Civic and Citizenship Education Study (ICCS) reported by Schulz et al. [27], for example, measures students' civic attitudes and engagement alongside their civic knowledge, offering a model that national curricula could adapt rather than invent from scratch. Closer to the classroom, Mazid et al. [26] developed a preliminary multidimensional civic disposition instrument covering responsibility, participation, politeness, empathy, and patience among junior secondary students and found that participation and patience often lag behind responsibility and empathy, a pattern that a purely competency-focused assessment would have no way of detecting.

This gives the third practical direction proposed here: assessment practices should expand beyond civic knowledge and technical competency to capture civic disposition directly, so that what gets measured stops silently defining what gets taught. Taken together, embedding concern within technical instruction, preparing teachers to model rather than merely explain it, and measuring it alongside knowledge and skill do not ask schools to abandon the competencies that digital citizenship scholarship has spent more than a decade refining. Instead, they ask that those competencies be reorganized around a disposition that has so far been assumed rather than taught, measured, or modeled with any consistency.

5 Conclusion

This structured conceptual review positions civic concern as a proposed foundation for social science education for digital citizenship, defined through public-issue attentiveness, other-regarding responsibility, and common-good orientation. The literature reviewed contains relevant but heterogeneous evidence on civic responsibility, identity, values, empathy, belonging, intercultural sensitivity, digital participation, and civic engagement. These constructs should not be treated as interchangeable or as proof of a validated latent variable. Likewise, the available cited studies do not establish that civic concern is empirically distinct from digital competence, independently predicts civic behavior, precedes competence in a causal developmental sequence, or increases as a result of misinformation interventions. Those

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propositions require direct measurement and testing. The article's contribution is a conceptual-operational framework, explicit construct boundaries, and an illustrative curriculum map connecting social science topics to learning activities and observable assessment evidence. The proposed framework recommends integrating public-issue inquiry, perspective coordination, ethical deliberation, and constructive participation alongside civic knowledge and digital skills. Future research should rerun and document the database search, validate the proposed dimensions psychometrically, examine age and context differences, and evaluate classroom interventions using designs capable of testing temporal and predictive relationships.

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Conflict of Interest

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Data Availability Statement

This review analyzed previously published studies, all of which are cited in the article. No new data were generated.

Artificial Intelligence (AI) Disclosure

The authors reviewed and edited the output and take full responsibility for the content.

Research Ethics

Ethical review and approval were not required for this study because it is a review of published literature and did not involve human participants, animals, or personal data.

Informed Consent Statement

Not applicable.

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