Identifying the Objectives of the Lower Secondary Social Studies Curriculum Based on 21st-Century Skills

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ABSTRACT

This study aims to identify and articulate the objectives of the lower secondary social studies curriculum based on the competencies required for 21st-century skills. A qualitative research design was adopted, consisting of two sequential phases. In the first phase, a research synthesis method was used to review 132 national and international sources related to 21st-century skills and social studies curricula, from which 44 studies were purposively selected based on defined inclusion criteria. In the second phase, semi-structured interviews were conducted with 16 curriculum specialists and senior educational group leaders in social studies using purposive sampling until data saturation was reached. Data collection tools included a researcher-designed coding worksheet for the synthesis phase and a semi-structured interview guide. Thematic analysis and Roberts' six-step synthesis model were used for data analysis. The findings revealed 14 initial themes including enhancing effective communication, developing active listening, fostering group collaboration, promoting social and cultural adaptability, cultivating responsibility, and encouraging critical thinking. These themes were categorized into three broader skill domains: social skills, intercultural communication skills, and life-career readiness. All of these were integrated under one overarching category—education of life, communication, and career skills grounded in 21st-century competencies. The study also highlighted the importance of learner agency, ethical responsibility, and practical employability as key curriculum objectives. The study underscores the necessity of revising the lower secondary social studies curriculum to systematically incorporate 21st-century skills. The proposed objectives serve as a guiding framework for curriculum designers, educators, and policymakers to align educational practices with the evolving demands of society, the labor market, and democratic participation in a globalized world.

Keywords: Social studies curriculum, 21st-century skills, lower secondary education, curriculum objectives, qualitative research, communication skills, critical thinking, life skills.

Introduction

In the rapidly evolving landscape of the 21st century, education systems worldwide face a pressing demand to equip learners not only with academic knowledge but also with a diverse set of competencies necessary for navigating complex societal, technological, and professional environments. Among these, social studies education at the lower secondary level holds a unique potential in shaping socially responsible, critically aware, and communicatively competent citizens. With the rise of

digitalization, globalization, and socio-political complexities, the ability of learners to think systemically, collaborate effectively, and act responsibly has become essential. As Schoots-Snijder et al. argue, promoting student agency in curriculum frameworks is foundational to preparing learners who can take ownership of their social roles and learning processes (1). This shift toward competency-based and skills-integrated curricula aligns with broader global efforts to transform education through inclusive and future-ready pedagogies.

Social studies, by its interdisciplinary and civic-oriented nature, is particularly suited to foster the development of 21st-century skills such as critical thinking, communication, collaboration, digital literacy, cultural awareness, and social responsibility. However, achieving this potential requires a fundamental re-evaluation of curricular goals and structures. In countries undergoing curriculum reform, such as Uganda, the effective assessment of generic skills within secondary schools remains a challenge, revealing systemic gaps in aligning intended learning outcomes with practical classroom implementation (2). Likewise, in Iran and other developing education systems, the design of social studies curricula often lacks the strategic integration of core 21st-century competencies such as systems thinking, self-directed learning, and cross-cultural collaboration, all of which are essential in today's interconnected world (3).

Recent global reforms underscore the need to redefine curricular priorities by embedding skills that are responsive to societal transformations and economic shifts. As Hamidu and Péter observe, the mismatch between the competencies developed in secondary schools and those required at the university and workplace level suggests an urgent need for alignment and coherence in curriculum design (4). In Sri Lanka, for example, the implementation of competence-based education (CBE) in mathematics has encountered challenges due to a lack of clarity in expected skills and the absence of instructional support (5). These experiences resonate across various regions, where reforms are often hindered by misalignments between policy intent and pedagogical reality. Thus, any meaningful reform must begin with a clear articulation of the curriculum's objectives, particularly in subjects like social studies that deal with social, civic, and cultural domains.

As Putra et al. point out in their analysis of hidden curriculum and industrial transitions in the United States, educational goals must evolve to address both visible and implicit dimensions of learning in the context of societal expectations and economic innovation (6). Consequently, the objectives of a contemporary social studies curriculum must be framed not merely in terms of content mastery, but in fostering life skills that promote ethical reasoning, intercultural competence, participatory citizenship, and resilience. In sub-Saharan Africa, similar curricular challenges have been documented, where secondary school teachers perceive competence-based curricula as valuable in principle, yet difficult to implement due to lack of training and conceptual clarity (7).

The incorporation of 21st-century skills into educational standards is not only a matter of instructional innovation but also of socio-political necessity. Kabir, in his critical analysis of listening instruction in Bangladesh's English curriculum, emphasizes that competencies such as active listening and critical communication are rarely integrated with sufficient depth, despite their recognized importance in real-world social interactions (8). These findings align with Bhowa and Aribino's critique of Zimbabwe's education system, where a disconnection between curriculum content and practical skill development continues to exacerbate youth unemployment and economic disempowerment (9). Such realities emphasize the transformative potential of a redesigned social studies curriculum grounded in 21st-century life, career, and civic skills.

Furthermore, the epistemological and pedagogical foundation of such a curriculum must consider diverse cognitive and cultural contexts. For example, Athanasiadis highlights how the inclusion of artificial intelligence concepts in high school computer science in Western Macedonia has not only advanced digital competencies but also redefined the purpose of subject-area education in relation to real-world application (10). Similarly, Štolcová et al. show how fidelity to curriculum goals—such as map-skills development in geography—depends not only on clear learning objectives but also on teacher understanding and

pedagogical intent (11). These studies demonstrate that effective curriculum implementation requires a shared understanding among all stakeholders of the competencies being targeted and their relevance to broader educational and social purposes.

Comparative curricular analyses further underscore the significance of strategic curriculum design in promoting 21st-century competencies. Özen and Kaplan examined the integration of such skills in the curricula of Turkey, Alberta, Korea, and Singapore, revealing substantial variation in both conceptual frameworks and pedagogical strategies (12). While some systems demonstrate coherent vertical and horizontal integration of skills such as critical thinking, problem-solving, and media literacy, others struggle with fragmented objectives and lack of instructional support. These disparities highlight the importance of contextualizing curriculum objectives based on national priorities, learner needs, and sociocultural realities.

In the Iranian context, recent efforts have begun to explore frameworks such as systems thinking and heutagogy—learner-centered, self-determined learning—as viable approaches for curriculum reform. Manochehri and colleagues have proposed a multi-dimensional model that emphasizes learner agency, complexity thinking, and adaptability, which align closely with global calls for curriculum transformation (3). Likewise, Mpisili stresses that strategic innovation in educational management is vital for implementing competency-based curricula effectively, especially in resource-constrained environments (13). Without such strategic coherence, the risk of superficial or inconsistent curriculum reform remains high.

It is also essential to address assessment and evaluation mechanisms, which serve as the operational backbone of any curriculum. As Knekta et al. argue, defining the purpose of science education in Nordic countries has revealed tensions between disciplinary knowledge and transversal competencies, prompting educators to reimagine how learning outcomes are defined, assessed, and interpreted (14). In arts education, Chen and Lin emphasize the role of design literacy in middle schools, reflecting a growing recognition of creativity and aesthetic judgment as critical educational goals (15). These findings reinforce the idea that objectives in the social studies curriculum must go beyond knowledge recall and foster multidimensional forms of engagement, including aesthetic, ethical, and experiential dimensions.

Ultimately, curriculum reform in social studies must align with both global educational discourses and local aspirations for youth development. As SarigÖZ's examination of the secondary mathematics curriculum shows, 21st-century skill integration is not merely an additive feature but a foundational reorientation of educational purpose and content (16). The same can be said for Ashraf's analysis of social responsibility in Pakistani secondary education, where life skills are increasingly viewed as the glue between academic learning and real-world competence (17). The demand for such integration is echoed by Sapkota, who argues that frameworks such as Bloom's revised taxonomy need to be updated to reflect communicative, collaborative, and metacognitive dimensions of modern learning (18).

In light of these international perspectives, the present study aims to identify the specific objectives of the Iranian lower secondary social studies curriculum in accordance with 21st-century skills frameworks.

Methods and Materials

Study Design and Participants

This study was conducted using a mixed qualitative approach in two sequential phases. In the first phase, a research synthesis methodology was applied to explore existing literature and derive preliminary data relevant to 21st-century skills in the context of social studies curriculum development. The target population for this phase included academic theses, research projects, scholarly articles, and relevant books accessed through both national and international academic databases. From an initial pool of 132 studies identified using key terms such as "21st-century skills-based curriculum," "social studies curriculum," and "curriculum design based on 21st-century competencies," a final sample of 44 studies was selected through purposive sampling

based on defined inclusion and exclusion criteria. These criteria ensured that only high-quality research with clear methodological structures and relevance to the study's objectives were included.

In the second phase of the study, semi-structured interviews were conducted to enrich the synthesis findings with expert insights. The target population for the interviews consisted of curriculum specialists and senior educational group leaders in the field of social studies. A purposive sampling technique was used to select 16 participants with more than five years of professional experience in curriculum development. Selection was finalized based on data saturation, ensuring that no new themes emerged after the final interviews. All participants provided informed consent, and their participation was voluntary.

Data Collection

Two principal tools were used for data collection. For the research synthesis phase, a researcher-designed data extraction worksheet was developed to organize relevant data from the selected studies. The data sources included national databases such as IranDoc, Noormags, Magiran, Civilica, Ganj, and Elmnet, as well as international databases like Google Scholar, ERIC, Scopus, ScienceDirect, and IJET. The worksheet collected detailed information about each study's objective, methodology, and findings. To ensure coding reliability, two independent coders re-coded a random sample of the extracted data, and discrepancies were resolved through discussion.

The semi-structured interviews were conducted face-to-face, each lasting between 45 and 60 minutes. Interviews were arranged in advance via telephone coordination, during which participants were informed about the study's purpose and the nature of the interview. Upon obtaining verbal consent, interviews were audio-recorded for accuracy. Each interview began with a broad question about the role of 21st-century skills in the social studies curriculum and then transitioned into probing questions based on themes identified during the synthesis phase. Interview questions were designed to be open-ended and allowed for flexible conversation, ensuring a deeper exploration of expert perspectives. The credibility and dependability of the interview process were evaluated using Lincoln and Guba's (1985) trustworthiness criteria, and inter-rater reliability was assessed using Cohen's Kappa coefficient.

Data analysis

The data analysis was conducted in two corresponding phases aligned with the study's methodological framework. In the research synthesis phase, Roberts' (2006) six-step model was used. The process began with identifying the need and conducting an initial scoping search to define research gaps. The second step involved comprehensive retrieval of relevant studies based on defined keywords across multiple databases. The third step focused on screening, refining, and organizing the studies using inclusion and exclusion criteria. The fourth step involved developing a conceptual framework integrating the themes of "curriculum design" and "21st-century skills." In the fifth step, data were processed and interpreted through inductive coding, resulting in a set of categorized indicators. The final step included synthesizing the results into meaningful outcomes to be used for model development.

For the analysis of interview data, Braun and Clarke's thematic analysis approach was employed. The first step involved familiarizing with the data through transcription and repeated readings of the interview content. The second step entailed generating initial codes by highlighting meaningful segments of the text and assigning descriptive labels. In the third step, codes were reviewed to identify broader patterns and themes. The fourth step involved verifying these themes against the full data set to ensure their accuracy and representativeness. The fifth step focused on defining and naming the themes, clarifying their meaning and how they contributed to understanding the research problem. In the final step, the themes were structured and presented in a coherent narrative to inform the study's findings and implications.

Throughout the data analysis, methodological rigor was maintained through triangulation of sources, member checking, peer debriefing, and thorough documentation of coding and theme development processes.

Findings and Results

The findings of this study emerged through a two-phase process combining research synthesis and thematic analysis of expert interviews. In the first phase, 44 selected studies were systematically analyzed to extract key educational objectives aligned with 21st-century skills within the context of social studies curricula. These objectives were categorized according to three core dimensions: learning and innovation skills, information and media literacy skills, and life and career skills. In the second phase, insights gathered from interviews with curriculum experts and senior educational group leaders provided deeper contextual validation of the synthesized objectives. Thematic analysis of the interview data revealed alignment with the categories identified in the synthesis phase, while also highlighting context-specific priorities such as fostering social responsibility, enhancing digital citizenship, and developing critical civic awareness in students. The integration of these two data sources yielded a comprehensive framework of curriculum objectives tailored for the lower secondary social studies program, emphasizing the competencies necessary for active participation in a complex, information-rich, and interconnected world.

Table 1. Results of Qualitative Analysis of Interviews and Research Synthesis Regarding the Objectives of the Social Studies Curriculum Based on 21st-Century Skills

Interviewee Code	Interview Excerpt	Initial Theme
1	Developing communication skills can assist all aspects of a person's professional and social life. The ability to communicate clearly, precisely, and purposefully is a vital life skill and should not be neglected in the social studies curriculum.	Enhancing effective interpersonal communication
2	Listening is essential for learning, creativity, and even acquiring critical thinking and life skills. It is one of the most influential skills in both career success and relationship quality.	Learning to become an active listener
3	The social studies curriculum should prepare students for participating in society and working in diverse teams with different cultures and perspectives.	Promoting effective strategies for teamwork across diverse groups
4	Peer collaboration in the classroom fosters critique and teamwork skills for future employment.	Modeling collaborative behavior
5	A well-designed curriculum must prepare students for future life. Group work in the classroom simulates real-life scenarios where every student plays a key role in shared success.	Enhancing employability skills
6	Social skills are vital for students' emotional and social growth. They help students express themselves and build healthy relationships.	Developing social skills
7	Collaboration is a gateway skill because producing work with others is a challenging ability that must be taught. Teachers should intentionally model such behavior.	Modeling group collaboration
8	A modern social studies curriculum should teach students how to socially integrate to be employable in society.	Social integration
9	A structured curriculum must foster professionalism, responsibility, integrity, and self-regulation to prepare students for successful careers.	Responsibility
10	Students should be aware of their purpose when engaging in classroom activities. Awareness of objectives and a sense of commitment should be embedded in the curriculum.	Sense of commitment
11	If the curriculum implicitly encourages critical thinking, it can help students apply it in everyday life.	Fostering a critical mindset
12	Students need to actively engage with and accept differing ideas and beliefs to think critically. The curriculum should cultivate this mindset.	Acceptance of different ideas and perspectives
13	Group work is more than just an instructional strategy; it creates exciting opportunities for collaboration and knowledge exchange.	Effective group activities
14	Successful teamwork requires training and practice. Students learn how to collaborate and achieve shared goals through team-based learning.	Collaboration-based activities
15	A 21st-century-focused curriculum must emphasize critical thinking as the core of learning. It helps students reflect on and comprehend their perspectives and understand the world.	Fostering a critical mindset (Repeated)

16	Responsibility is essential in the 21st century. Teaching responsibility through curriculum leads to ethical, socially capable individuals.	Responsibility (Repeated)

Table 1 presents the consolidated results of the qualitative analysis conducted on expert interviews and research synthesis, identifying key objectives for a 21st-century skills-based social studies curriculum at the lower secondary level. From the analysis, fourteen initial themes were extracted, including enhancing effective interpersonal communication, learning to become an active listener, promoting strategies for effective teamwork in diverse workgroups, modeling collaborative behavior, enhancing employability skills, and developing social skills. Additional themes identified were modeling group collaboration, promoting social integration, fostering responsibility, cultivating a sense of commitment, encouraging critical thinking, and supporting acceptance of differing ideas. Moreover, effective group activities and collaboration-based learning were highlighted as crucial instructional strategies. These themes reflect broader underlying competencies such as social, intercultural, and communication skills. The overarching category that emerged from the data was "life, communication, and career skills education based on 21st-century skills." This synthesis emphasizes that a socially responsive curriculum must not only address academic content but also foster key life competencies that prepare students for professional, civic, and interpersonal challenges in a rapidly evolving global society.

Discussion and Conclusion

The findings of this study highlighted a set of well-defined objectives for the lower secondary social studies curriculum that align with the essential competencies of 21st-century skills. Through a two-phase approach—research synthesis and semi-structured interviews with curriculum experts and social studies educators—fourteen initial themes emerged, grouped into broader categories related to communication, collaboration, responsibility, critical thinking, and life and career readiness. These themes reflect an overarching objective: to design a curriculum that nurtures socially competent, professionally capable, and ethically responsible citizens equipped to navigate a complex and evolving global society.

One of the central results was the emphasis on enhancing effective communication skills, including becoming an active listener and expressing oneself clearly in diverse contexts. This aligns strongly with findings from Kabir's study, which revealed that listening and communication are critical but often underrepresented skills in many secondary-level curricula, particularly in non-Western education systems (8). Developing active listening skills also supports students' ability to understand different perspectives and navigate interpersonal relationships—core aspects of 21st-century civic engagement. Furthermore, the significance of interpersonal communication in achieving social integration and employment readiness echoes the call for socially responsive curricula by Ashraf, who emphasized social responsibility and life skills as essential outcomes of contemporary education (17).

Collaboration and teamwork also featured prominently among the identified objectives. These were reflected in themes such as group-based learning, cooperation strategies in diverse teams, and modeling collaborative behavior. These findings are supported by the work of BÜKen and Artvinli, who examined the Turkish social sciences curriculum and stressed the role of collaborative learning in achieving higher-order thinking outcomes, particularly through geography education (19). Similarly, Štolcová et al. underscored that student collaboration is most effective when integrated with clear curricular intentions and teacher facilitation strategies that model social and cognitive cooperation (11). In this study, both interview data and synthesized literature emphasized that collaboration should not merely be a pedagogical technique but a core competency explicitly outlined in curriculum objectives.

The promotion of critical thinking and openness to diverse ideas also emerged as a foundational goal. Teachers and experts highlighted the need to cultivate in students the ability to think analytically, question assumptions, and evaluate multiple viewpoints. These goals align with the vision articulated by SarigÖZ, who found that critical thinking is increasingly prioritized in the design of secondary school mathematics curricula across multiple countries (16). The development of critical thinking is also echoed in Sapkota's reassessment of Bloom's taxonomy, where metacognitive skills such as reflection, evaluation, and synthesis are viewed as essential components of modern learning paradigms (18). In this context, social studies is uniquely positioned to engage students in evaluating social phenomena, historical narratives, and civic responsibilities, making critical inquiry a natural instructional goal.

Another major theme concerned responsibility and commitment—both as personal attributes and social duties. Objectives such as fostering a sense of accountability, promoting ethical behavior, and reinforcing commitment to tasks and group outcomes were frequently mentioned. These are consistent with findings by Manochehri et al., who advocated for a systems thinking curriculum model grounded in heutagogy, emphasizing learner agency, self-regulation, and ethical decision-making (3). The emphasis on commitment also resonates with the work of Guffová et al., who found that Slovak educational standards increasingly include self-directed learning and moral responsibility as fundamental aims of secondary education (20). From a broader perspective, the integration of responsibility into curriculum objectives suggests an intentional focus on preparing youth not just for employment, but for constructive, ethical participation in society.

The identification of employability skills as curriculum goals—such as adaptability, leadership in team settings, and professionalism—reflects the growing emphasis on the school-to-work transition in global curriculum reforms. This concern is particularly relevant in regions like sub-Saharan Africa and Southeast Asia, where economic transformation has heightened the need for vocationally relevant education. For instance, Mpisili reported that effective implementation of competency-based education in Kenya relies heavily on preparing learners with strategic and professional competencies needed in the labor market (13). Similarly, Bhowa and Aribino highlighted the importance of pragmatic, skill-based education models in Zimbabwe as a means to counteract chronic youth unemployment and socio-economic disenfranchisement (9). In the present study, such concerns were expressed through themes like "career preparedness" and "enhancing job-related capabilities," both pointing toward a shift from purely academic goals to broader life-readiness objectives.

The findings also support the inclusion of intercultural and social adaptability as cross-cutting competencies in the curriculum. As Namubiru et al. showed in Uganda, the success of competence-based curricula depends largely on their ability to address learners' sociocultural realities and to foster adaptability in diverse environments (7). This aligns with the emphasis in the current study on skills such as group communication in diverse contexts and openness to conflicting opinions. When students learn to interact respectfully and effectively across cultural and ideological divides, they are better prepared for civic life in pluralistic societies.

Moreover, the emphasis on student agency—as identified in this study—mirrors global trends in education reform. Schoots-Snijder et al. argued that modern curriculum guidelines must be intentionally designed to nurture student agency through open-ended, exploratory, and learner-centered objectives (1). This view is reflected in several themes from the expert interviews, including promoting autonomy, modeling responsible participation, and encouraging reflective thinking. The role of the teacher, in this sense, shifts from transmitter of knowledge to facilitator of learning experiences that help students define their own goals and pathways.

From a technological standpoint, the study's findings also intersect with broader debates around digital education. Though not a primary focus of the interviews, the implication of media literacy, technology integration, and information evaluation in some curriculum objectives is consistent with the need to develop digital competencies. Hörmann et al. noted that while

Austrian educators see value in digital education reforms, they face practical challenges such as resource limitations and pedagogical confusion (21). This suggests that integrating technology-related competencies into the social studies curriculum must be accompanied by systemic support and professional development to avoid superficial or inconsistent application.

Additionally, the study contributes to the discourse on educational alignment. As highlighted by Hamidu and Péter, a major challenge in secondary education is the misalignment between student competencies developed in school and those expected in university or professional contexts (4). The identified curriculum objectives in this study aim to address that gap by emphasizing transferable skills, lifelong learning dispositions, and real-world problem-solving. This is in harmony with findings from Knekta et al., who emphasized the importance of clearly defining the purpose of each educational level to ensure a smooth transition across learning stages (14).

Finally, the study reinforces the idea that meaningful curriculum reform must be context-sensitive and policy-aligned. As Tabaro asserted in his study of Rwandan educational reform, successful curricular transformation requires alignment between university programs and secondary school outcomes, ensuring that learners experience a coherent and supportive educational journey (22). This resonates with the current study's conclusion that defining clear, actionable curriculum objectives rooted in 21st-century skills is the cornerstone for systemic improvement in social studies education.

While this study provides a structured framework for identifying 21st-century-oriented objectives in the social studies curriculum, it is not without limitations. First, the sample size for the interview phase, though adequate for qualitative research, was limited to 16 curriculum specialists and educators, potentially excluding other relevant perspectives such as those of students, parents, or policymakers. Additionally, the research synthesis was limited to literature published between 2016 and 2024 and may not fully capture emerging trends or gray literature. The focus on the Iranian educational context may also restrict the generalizability of findings to other cultural or institutional settings, particularly those with differing policy mandates or curricular philosophies.

Future research should expand the participant pool to include a broader spectrum of educational stakeholders, including students, parents, and school administrators, to gain a more holistic view of curriculum expectations and outcomes. Cross-national comparative studies could also provide insight into how different countries integrate 21st-century skills into their social studies curricula and what contextual factors facilitate or hinder success. Moreover, longitudinal studies tracking student outcomes based on curriculum reforms would offer valuable evidence on the long-term effectiveness of such reforms.

To operationalize the findings of this study, curriculum developers should revise existing social studies frameworks to incorporate clearly defined 21st-century skills across grade levels. Teacher training programs should emphasize pedagogies that foster communication, collaboration, and critical thinking. Finally, assessment systems should be redesigned to evaluate not only knowledge acquisition but also the development of essential life, social, and professional skills. This will ensure a more meaningful, future-oriented learning experience for students.

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Authors' Contributions

All authors equally contributed to this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

All ethical principles were adheried in conducting and writing this article.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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