

Original Research Article

ACQUISITION AND APPLICATION OF 21ST CENTURY SKILLS AMONG PRE-SERVICE SOCIAL STUDIES TEACHERS IN GHANA

ABSTRACT

It is widely acknowledged that Social Studies can aid students in acquiring essential 21st-century skills. Nonetheless, research on the real-world application of these skills is limited. While some studies have looked at integrating these skills into the Social Studies curriculum and teaching approaches, they have not investigated their use in practical situations. This study aimed to examine how pre-service Social Studies students at the University of Education, Winneba, in Ghana acquire and apply 21st-century skills. A quantitative approach was used with a descriptive survey design. The study included a population of 333 pre-service Social Studies students from the Department of Social Studies Education. The respondents were selected through proportionate stratified sampling, and data was gathered using a structured questionnaire. Descriptive statistics and a one-sample t-test were used to analyze the data. The results showed a low level of 21st-century skills acquisition among the respondents, with a mean of mean score of 1.9 (SD = 0.9). The one-sample t-test revealed significant findings across all assessed 21st-century skills, with mean scores consistently below the benchmark of 3.0 (p -value = .00). However, the findings also indicated that respondents actively applied 21st-century skills in managing socio-economic aspects of their lives.

Keywords: 21st century skills; social studies; core competences; pre-service; socio-economic.

1. INTRODUCTION

In recent times, youth face numerous socio-economic challenges, with poverty standing as a particularly significant issue. Bokombe (2020) highlights that poverty remains a major global concern, impacting millions of young people across both developed and developing nations. Poverty transcends mere financial insufficiency, depriving individuals of the resources necessary for full societal participation. Townsend (1979), as cited in Cobbinah et al. (2013) asserts that poverty deprives people of resources essential for maintaining society's standard of living. Townsend's perspective underscores poverty's severe consequences, as it restricts access to basic needs and leaves individuals struggling to fulfill even their most fundamental requirements. According to the 2023 Global Multidimensional Poverty Index, 1.1 billion people worldwide still endure multidimensional poverty, with Sub-Saharan Africa being the hardest-hit region (Oxford Poverty and Human Development Initiative & United Nations Development Programme, 2023).

In Ghana, poverty is particularly alarming, with 45.6% of the population experiencing multidimensional poverty and 23.4% facing monetary poverty (GSS, 2020). Studies in Ghana link poverty to various social problems, such as heightened risk

factors for criminal behavior, human right abuse, decline in social and human dignity, and weakened family structures (Asuamah-Yeboah & James Nyarkoh, 2023; Mood & Jonsson, 2016; Wrigley-Asante et al., 2016; Oduro & Amoah, 2022; Taahiru-Swallah, 2021; Dako-Gyeke et al., 2022). Given these socio-economic problems, 21st-century education appears to be a potential transformative tool for equipping Ghanaian youth with essential knowledge, skills, and attitudes to succeed. Literature identify these necessary competencies as 21st-century skills, vital for navigating contemporary socio-economic challenges. With a rapidly evolving global society, individuals are increasingly required to master these diverse skill set to thrive (Zhou, 2023). Developing 21st-century skills is now recognized as essential for both personal and professional success, forming a foundation for overcoming the demands of modern life (Muldagaliyeva et al., 2023). Key domains of these skills, including critical thinking, communication, collaboration, and adaptability, have been extensively highlighted by organizations such as the Partnership for 21st Century Skills and the U.S. National Research Council (Muldagaliyeva et al., 2023; Oluwagbohunmi & Alonge, 2023; National Research Council, 2012). By embedding these competencies into educational systems, schools are increasingly positioned to empower individuals for personal and professional achievements, ultimately fostering socio-economic advancement (Oluwagbohunmi & Alonge, 2023).

The demand for individuals adept at addressing 21st-century challenges has spurred widespread educational reforms globally (Akinwande, 2021; Joynes et al., 2019). Numerous countries, including Ghana, have reformed their education systems to develop learners' 21st-century skills (Aboagye & Yawson, 2020; Ntumi et al., 2023; Yeboah-Hammond et al., 2023). These reforms promote the integration of competencies such as critical thinking, problem-solving, communication, collaboration, leadership, adaptability, and ethical orientation into school curricula (Belyaeva et al., 2022; Akinwande, 2021). In Ghana, the Ministry of Education, in partnership with the National Council for Curriculum and Assessment (NaCCA), has incorporated 21st-century skills into the pre-tertiary curriculum, including Social Studies (National Council for Curriculum and Assessment, 2020; Erol, 2021). This shift has directly influenced teacher education programs, underscoring the alignment of teacher preparation with current educational demands (Amponsah et al., 2023; Coffie, 2019). The initiative seeks to develop graduates who are innovative, problem-solvers, possess critical thinking abilities, and demonstrate both confidence and competence in contributing to Ghanaian society as responsible local and global citizens (National Council for Curriculum and Assessment, 2018).

In Ghana, Social Studies as a discipline aims to cultivate learners' curiosity, critical thinking, and problem-solving skills while developing competencies vital for personal growth and leadership (National Council for Curriculum and Assessment, 2020; Appiah & Owusu, 2023). The pre-tertiary Standard-Based Social Studies curriculum outlines 21st-century skills as core competencies capturing domains like creativity, digital literacy, critical thinking, problem-solving, cultural awareness, global citizenship, communication, and collaboration (National Council for Curriculum and Assessment, 2020). It is

expected that future Social Studies teachers will first acquire and understand these competencies to effectively impart them to their students. These competencies are also envisioned to transcend classroom learning, becoming integral to pre-service teachers' daily lives (Oluwagbohunmi & Alonge, 2023). As Adam (2020) asserts, embedding these core competencies within Social Studies instruction can equip individuals with essential survival skills for today's complex world.

While it is widely acknowledged that Social Studies can impart invaluable 21st-century skills, their practical application in real life context remains underexplored. Previous studies by Oluwagbohunmi and Alonge (2023), Hati (2021), and Erol (2021) have primarily focused on the integration of 21st-century skills into the Social Studies curriculum and instructions. However, these studies do not address whether pre-service Social Studies teachers have acquired these skills to a satisfactory level and how they employ them in their daily activities. This study address this critical gap by evaluating the extent to which pre-service Social Studies at the University of Education, Winneba have acquired 21st-century skills and how they apply these skills in the socio-economic context. The study was guided by these study questions 1. To what extent have pre-service Social Studies teachers acquired 21st-century skills fostered through Social Studies? 2. In what ways do Pre-service Social Studies teachers employ 21st-century skills in their daily living?

2. THEORETICAL FRAMEWORK: SEN'S CAPABILITY THEORY

This research is guided by Amartya Sen's Capability Theory, which provides a multidimensional framework for assessing wellbeing by evaluating individuals' 'capabilities' and 'functionings' (Gasper, 2002). Within this framework, capabilities represent the significant freedoms or abilities individuals possess, enabling them to live in a manner that aligns with their subjective perception of a dignified life (Frediani, 2010; Gasper, 2002; Rajapakse, 2016). According to Gasper (2002), functionings can be understood as what an individual manages to do or be, involving the utilization of the capabilities they command, depending on the outcomes they value or have reason to value (Gasper, 2002; Rajapakse, 2016). Alkire (2003) presents a more simplified notion of functionings, describing it as an umbrella term for the things people recognize to be important and may value doing or being.

The conception of capabilities and functionings by Gasper (2002) and Alkire (2003) suggests that while capabilities refer to the opportunity set or abilities, functionings pertain to achievements. Furthermore, it appears that an individual's actions and states of being are not independent of their ability to achieve or become what they consider worthy for life or survival, although the reverse may not necessarily hold true. This may partly elucidate why Amartya Sen prioritizes the assessment of wellbeing within the domain of capabilities rather than functionings. Sen (1992) posits that socio-economic wellbeing stems from a lack of capabilities, and thus, mitigating socio-economic deficiency necessitates augmenting individuals' abilities to engage in activities that enhance their socio-economic wellbeing.

Frediani (2010) offers a novel interpretation of Sen's Capability theory, emphasizing the active conversion of resources (tangible and intangible) into actual functionings within an individual's capability space. This space encompasses choices, abilities, and opportunities, where resources are transformed into achieved functionings. This study expands on this perspective by highlighting the importance of not only possessing 21st-century skills but also effectively applying and transforming them into tangible outcomes that contribute to improving wellbeing. These skills empower individuals to leverage their capabilities effectively within their capability spaces (Belyaeva et al., 2022; Akinwande, 2021). By refining these competencies, individuals can translate their capabilities into concrete achievements that enhance their socio-economic well-being. Therefore, this research, through the lens of Sen's capability theory, examined how acquiring and utilizing 21st-century skills enable individuals to improve their overall well-being in the dynamic socio-economic landscape of the 21st century.

3. MATERIAL AND METHODS

3.1 Research Design

This study employed descriptive survey design. The design was employed to examine the 21st century skills in Social Studies in relation to their contribution to improving the socio-economic well-being of students.

3.2 Population of the Study

The study focused on pre-service Social Studies teachers at the University of Education, Winneba (UEW), specifically those in their second, third, and final year. The accessible population for this study comprised second, third, and final year Social Studies students who were present during various lecture periods throughout the data collection phase.

3.3 Sampling Methods

The enrollment data from the Department of Social Studies Education at the University of Education, Winneba (UEW) for the 2023/2024 academic year served as a sampling frame, encompassing a total of 1,987 students across the selected academic levels. The study employed proportionate stratified sampling to ensure a representative sample of the respondents. This approach was chosen to ensure that an unbiased and accurate sample was obtained, ultimately contributing to reliability and validity of the research findings (Bhardwaj, 2019). Subsequently, the sample size of 333 was determined using Yamane (1967) formula with 5% margin of error. The researcher then categorized the students into their respective year levels (strata). The number of respondents needed from each year level to maintain the correct proportions was estimated. Finally, a random number generator was used to select a total of 333 respondents. Table 1 below shows the breakdown of the sample across the different year levels.

Table 1: *Proportional allocation of the sample*

| Year/Level | Number of Students | Proportion | Sample |
|--------------|--------------------|---|--|
| Second | 635 | $\frac{635}{1987} \times 100 = 31.95\%$ | $\frac{31.95}{100} \times 333 = 106.4$ |
| Third | 520 | $\frac{520}{1987} \times 100 = 26.17\%$ | $\frac{26.17}{100} \times 333 = 87.1$ |
| Final | 832 | $\frac{832}{1987} \times 100 = 41.87\%$ | $\frac{41.87}{100} \times 333 = 139.4$ |
| Total | 1987 | | 333 |

source: enrollment data from the department social studies education (2023/2024)

3.4 Data Collection Method

To collect data for the study, the researcher developed a questionnaire and administered it directly to ensure that all respondents completed it on the same day, achieving a 100% response rate. The questionnaire was divided into three sections. The first section gathered demographic information, focusing on respondents' gender and academic level. The second section consisted of eleven items assessing respondents' acquisition of 21st-century skills, using a scale from Very High (VH), High (H), Moderate (MD), Very Low (VL), to Slow (S). The final section, which included ten items, examined how pre-service Social Studies students applied 21st-century skills to support their socio-economic well-being, using a Likert scale to measure responses.

3.5 Validity and Reliability

To ensure the validity and reliability of the data collection instrument, an expert review was employed. The questionnaire was then pre-tested by administering it to 50 students of the Department of Basic Education at the University of Education, Winneba, who specialized in Social Studies. The pre-test sample was used because they were receiving training as pre-service Social Studies teachers, thus sharing common disciplinary characteristics with the study's respondents who were also Social Studies students. Table 2 shows that the reliability of the instrument was evaluated using Cronbach's alpha, which yielded a coefficient of .8. Bonett and Wright (2015) assert that Cronbach's alpha serves as a measure of how effectively a set of items assesses a singular construct. A Cronbach's alpha value of .70 or higher is generally considered acceptable, indicating that the instrument consistently measured the intended construct (Izah et al., 2023; Gottems et al., 2018).

Table 2: Internal Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .8 | 22 |

source: field survey (2024)

3.6 Data Analysis

The data was analyzed using both descriptive and inferential statistics. For research question one, the analysis included frequencies, percentages, mean, and standard deviation, along with one-sample t-tests to provide a comprehensive examination of the data. For research question two, frequencies and percentages were used to effectively summarize and interpret the data.

4. RESULTS AND DISCUSSION

4.1 Level of 21st century skill acquisition

To address the first research question, this study assessed the extent to which pre-service Social Studies teachers have developed 21st-century skills integrated into their education. Table 3 presents the descriptive statistics of their skill acquisition levels, applying a decision rule for interpretation: a mean score of 4.1 to 5.0 indicates "Very High," 3.1 to 4.0 signifies "High," 2.1 to 3.0 reflects "Moderate," 1.1 to 2.0 denotes "Low," and a score of 0.1 to 1.0 represents "Very Low." As seen in Table 3, critical thinking, with a mean score of 1.8 (SD = 0.8), is not sufficiently developed among the pre-service Social Studies teachers in this study. Although the standard deviation suggests some consistency in responses, the low mean indicates a general lack of confidence in critical thinking abilities. Similarly, problem-solving skills show a mean of 1.7 (SD = 0.8), emphasizing a further gap in essential competencies. Despite 46.5% and 37% of respondents rating this skill as high and very high, respectively, the low average score implies an overall deficiency. Creativity and innovation, with a mean of 2.0, sits just at the threshold of the "Low" category. However, a standard deviation of 1.0 reflects more variability in responses, possibly indicating differing understandings or applications of creativity among respondents. Communication and collaboration also have low mean scores of 1.9 (SD = 0.9), signalling limited acquisition. Although over 76% of respondents rated these competencies as high, the mean scores show that overall confidence in these areas remains insufficient. This suggests a gap between individual high ratings and general skill levels.

Digital literacy, essential for surviving in the 21st-century society, shows a mean score of 2.0 (SD = 0.9), revealing a significant gap in digital readiness critical in today's technology-driven society. While some respondents rated themselves highly, the low mean suggests a general deficiency that could impact their ability to effectively integrate digital tools into teaching and socio-economic activities. The competencies of cultural identity and global citizenship are similarly underdeveloped, with mean scores of 1.8 (SD = 0.7) and 1.9 (SD = 0.9), respectively. The lower standard deviation for

cultural identity implies a more consistent recognition of limited competence, whereas global citizenship shows greater variability. Both low means reveal missed opportunities for fostering a globally aware and culturally responsive social environment. Lastly, leadership, personal development, and compassion each exhibit mean scores of 1.8, further emphasizing low acquisition levels. With an overall average mean across all competencies of 1.9 and a relatively uniform standard deviation of 0.9, the findings indicate a consistent pattern of low skill acquisition.

Table 3. Descriptive Statistics of 21st Century Skill Acquisition

| 21st Century Skills/Core Competencies | H | VH | MD | L | VL | Mean | SD | Remark |
|---|------------|-----------|-----------|----------|-----------|-------------|-----------|---------------|
| Critical thinking | 139(41.7) | 140(42) | 51(15.3) | 1(0.3) | 2 (0.6) | 1.8 | 0.8 | Low |
| Problem solving | 155(46.5) | 122 (37) | 53(15.9) | 1(0.3) | 2 (0.6) | 1.7 | 0.8 | Low |
| Creativity and Innovation | 137 (41.1) | 90 (27) | 88(26.4) | 8 (2.4) | 10(3) | 2.0 | 1.0 | Low |
| Communication | 118(35.4) | 136(41) | 72(21.6) | - | 7(2.1) | 1.9 | 0.9 | Low |
| Collaboration | 124(37.2) | 144(43) | 50(15) | 7(2.1) | 8 (2.4) | 1.9 | 0.9 | Low |
| Digital Literacy | 123 (36.9) | 113(34) | 85(25.5) | 8(2.4) | 4 (1.2) | 2.0 | 0.9 | Low |
| Cultural Identity | 131(39.3) | 147(44) | 53(15.9) | 1(0.3) | 1(0.3) | 1.8 | 0.7 | Low |
| Global Citizenship | 146(43.8) | 87(26.1) | 91(27.3) | 4(1.2) | 5(1.5) | 1.9 | 0.9 | Low |
| Leadership | 138(41.4) | 128(38) | 57(17.1) | 3(0.9) | 7(2.1) | 1.8 | 0.9 | Low |
| Personal Development | 129(38.7) | 150(45) | 51(15.3) | - | 3(0.9) | 1.8 | 0.8 | Low |
| Compassion | 136(40.8) | 147(44) | 41(12.3) | 1(0.3) | 8(2.4) | 1.8 | 0.8 | Low |

| | | | |
|--------------------------------|------------|------------|------------|
| Mean of mean/Mean of SD | 1.9 | 0.9 | Low |
|--------------------------------|------------|------------|------------|

source: field survey (2024)

To validate the findings and inferences drawn from the descriptive statistics presented in Table 3, a series of one-sample t-tests were performed. The criterion value of 3.0 was used as the minimally acceptable level for comparison. To address the issue of multiple comparisons, the Bonferroni correction was applied, resulting in an adjusted significance level of 0.01 (0.05/11). This adjustment was necessary to minimize type I errors, especially since multiple tests were conducted without pre-specified hypotheses (Armstrong, 2014; Lee & Lee, 2018). The one-sample t-test results presented in Table 4 indicate significant findings across all evaluated 21st-century skills, with mean scores notably below the benchmark of 3.0. Specifically, critical thinking shows a mean score of 1.8 (SD = 0.8) and a t-value of -29.333, indicating a highly significant difference with a p -value=.00. Similarly, problem solving achieved a mean of 1.7 (SD = 0.8) with a t-value of -29.890, also p -value=.00. The pattern continued across other competencies, including creativity and innovation (mean = 2.0, SD = 1.0, t = -17.139), communication (mean = 1.9, SD = 0.9, t = -26.444), and collaboration (mean = 1.9, SD = 0.9, t = -29.632). The consistently negative t-values, combined with highly significant p-values (p =0.01), strongly corroborate the conclusion that pre-service teachers' acquisition of 21st-century skills is significantly low. These findings support the descriptive statistics, highlighting a pervasive inadequacy in 21st-century skill acquisition.

Table 4. One-Sample Test results for various 21st century skill acquisition level

| Test Value = 3.0 | | | | | | |
|---------------------------|-------------|-----------|----------|-----------|------------------------|------------------------|
| | Mean | SD | t | df | Sig. (2-tailed) | Mean Difference |
| Critical thinking | 1.8 | 0.8 | -29.333 | 332 | .000 | -1.2342 |
| Problem solving | 1.7 | 0.8 | -29.890 | 332 | .000 | -1.2823 |
| Creativity and innovation | 2.0 | 1.0 | -17.139 | 332 | .000 | -.8709 |
| Communication | 1.9 | 0.9 | -26.444 | 332 | .000 | -1.1862 |
| Collaboration | 1.9 | 0.9 | -29.632 | 332 | .000 | -1.2733 |
| Digital literacy | 2.0 | 0.9 | -18.949 | 332 | .000 | -1.0270 |
| Cultural identity | 1.8 | 0.7 | -24.520 | 332 | .000 | -1.0961 |
| Global citizenship | 1.9 | 0.9 | -21.925 | 332 | .000 | -1.0901 |
| Leadership | 1.8 | 0.9 | -21.139 | 332 | .000 | -1.0360 |

| | | | | | | |
|----------------------|-----|-----|---------|-----|------|---------|
| Personal development | 1.8 | 0.8 | -29.404 | 332 | .000 | -1.2102 |
| Compassion | 1.8 | 0.8 | -22.174 | 332 | .000 | -1.1321 |

source: field survey (2024)

significant at $p = .01$ (2-tailed)

4.2 Pre-service Social Studies teachers' Application of 21st-century skills in their daily living

The results in Table 5 show that pre-service Social Studies teachers actively incorporate 21st-century skills in managing socio-economic aspects of their lives, reflecting strong engagement with critical thinking, digital literacy, creativity, collaboration, and empathy. These competencies, which include problem-solving, resource management, and interpersonal relationship-building, are crucial in navigating daily challenges and promoting economic resilience. A significant majority of the pre-service teachers utilize critical thinking and problem-solving skills to make well-informed decisions in financial management. Specifically, 58.3% agree and 40.8% strongly agree that they leverage these skills to plan and manage resources effectively. In line with this, 57.4% agree and 39% strongly agree that they apply these skills to develop coping mechanisms to alleviate economic hardships. This emphasis on critical thinking and problem-solving demonstrates their proactive approach to overcoming financial constraints.

Digital literacy also plays a prominent role in the lives of these pre-service teachers. Over half (56.5%) report using digital platforms for income-generating activities such as online businesses and sports betting, while 60.1% consistently purchase essential items online. This trend highlights how digital tools are seamlessly integrated into their financial and personal activities, signifying their adaptability to modern technology for economic sustainability. Entrepreneurial skills, as seen in creative and innovative endeavours, are also prevalent among these teachers, with 55.9% agreeing and 28.5% strongly agreeing that they often employ creativity in entrepreneurial pursuits. Additionally, the majority of these pre-service teachers recognize the importance of building networks and social support systems. Nearly half (48%) agree and 42.9% strongly agree that they establish supportive relationships with friends, neighbours, and vendors for financial and material assistance when needed. This networking approach provides a safety net, demonstrating how interpersonal connections are vital for socio-economic well-being.

Collaborative efforts extend beyond personal support networks to more formal initiatives, with 47.1% of respondents agreeing and 29.4% strongly agreeing that they collaborate with others to establish initiatives aimed at socio-economic improvement. This inclination toward community-oriented projects highlights the importance placed on teamwork and collective efforts to foster socio-economic growth. Similarly, in their daily interactions, these pre-service teachers often exhibit empathy by providing essentials like food and clothing to those in need, with a combined 96.4% agreeing or strongly agreeing on showing empathy through material support. Finally, resource-sharing among peers is another notable aspect of these teachers' economic coping strategies, as evidenced by 52.9% who strongly agree and 36.9% who

agree that they pool resources to meet basic needs. This pooling strategy underscores their reliance on collective problem-solving to maintain a balanced socio-economic status.

Table 5: Frequency of 21st-Century Skill Application in Socio-Economic Activities

| Statement | Agree | Strongly Agree | Disagree | Strongly Disagree |
|--|--------------|-----------------------|-----------------|--------------------------|
| I often leverage on my critical thinking and problem-solving skills plan and make appropriate decisions on spending and managing resources. | 194(58.3) | 136(40.8) | - | 3(0.9) |
| I employ critical thinking and problem solving skills to develop effective coping strategies to overcome/reduce economic hardship | 191(57.4) | 130(39) | 8(2.4) | 4(1.2) |
| I use digital tools/platforms for income generating activities (online business or job, sports betting and others) | 188(56.5) | 89(26.7) | 41(12.3) | 15(4.5) |
| I consistently access and purchase essentials from digital platforms (eg. food, cloths, health services etc.) | 200(60.1) | 75(22.5) | 47(14.1) | 11(3.3) |
| I often utilize my creative and innovative abilities for entrepreneurship. | 186(55.9) | 95(28.5) | 41(12.3) | 11(3.3) |
| I have developed personal network/relationship with people (friends, neighbors, vendors, roommate etc) whom I often seek support (financial, material, or social) when necessary. | 160(48) | 143(42.9) | 20(6.0) | 10(3.0) |
| I work with an organization that prioritizes improving the socio-economic wellbeing of people (paid, voluntary, or collaborative) | 154(46.2) | 91(27.3) | 72(21.6) | 16(4.8) |
| I have collaborated with other people/agencies to establish an organization or initiatives that prioritize improving the socio-economic wellbeing of people (the focus could be skills and entrepreneurship training, economic empowerment, education empowerment, | 157(47.1) | 98(29.4) | 63(18.9) | 15(4.5) |

relief initiatives etc.).

| | | | | |
|--|-----------|-----------|--------|--------|
| I often show empathy to individuals who lack some essentials (food, clothing, water, accommodation etc.) | 143(42.9) | 178(53.5) | 6(1.8) | 6(1.8) |
|--|-----------|-----------|--------|--------|

by giving gifts (monetary, or material).

| | | | | |
|--|-----------|-----------|-------|---------|
| My friends and I combine resources (food or money) to ensure that we survive on campus or at home. | 123(36.9) | 176(52.9) | 20(6) | 14(4.2) |
|--|-----------|-----------|-------|---------|

source: field survey (2024)

4.3 Discussion

The results reveal a significant gap in the preparedness of pre-service Social Studies teachers to effectively address complex socioeconomic issues. Specifically, the study uncovered a marked deficiency in their acquisition of 21st-century skills, which are essential to the Social Studies discipline. These findings diverge from those of Anter and Bulonos (2022), Hamzeh et al. (2022), and Hero (2022), who observed variability in students' proficiency, with certain skills being well-developed while others were only moderately or poorly attained. In contrast, this study found that all assessed 21st-century skills among respondents were uniformly low. The underdeveloped foundational skills, such as critical thinking, problem-solving, and digital literacy, suggest a limited capacity for these individuals to adapt to and navigate the complex challenges of contemporary economies and societies. As noted by Mustafazada (2024), these core competencies are crucial for analyzing multifaceted issues, making informed decisions, and leveraging digital skills that are increasingly vital for personal and professional success in a competitive, innovation-driven global economy.

Furthermore, the limited development of communication and collaboration skills among pre-service Social Studies teachers raises serious concerns about their capacity to participate meaningfully in professional networks, drive community initiatives, and engage effectively with stakeholders on societal issues. These 21st-century skills are essential not only for addressing local and global socioeconomic challenges but also for fostering values such as tolerance, cooperation, and social cohesion, all of which are foundational to economic and social stability (Velez, 2012; Joynes et al., 2019). The general deficiency across these competencies suggests that current training programs may not sufficiently prepare pre-service Social Studies teachers for roles that extend beyond traditional teaching. Bozkurt (2020), in evaluating an undergraduate Social Studies teaching program in Turkey, found that while 21st-century skills were listed as intended learning outcomes, they were not effectively integrated into actual learning processes. This points to a broader issue in higher education, where there is often a disconnection between curriculum objectives and real learning

experiences. This misalignment suggests that outdated teaching practices may create systemic barriers to the development of 21st-century skills.

Although the study revealed that 21st century skills are inefficient among pre-service Social Studies teachers, the study found that they integrate various 21st century skills in managing the socio-economic aspects of their lives, particularly in critical thinking, digital literacy, creativity, collaboration, and empathy. The engagement of these pre-service teachers with critical thinking and problem-solving skills is evident in their approach to financial decision-making. A substantial proportion actively employs these skills to plan and manage resources, which indicates a proactive strategy for addressing economic hardships. This focus on thoughtful resource management underscores their resilience in the face of financial constraints. Again, digital literacy plays a pivotal role in their socio-economic adaptability. The study revealed that many pre-service teachers utilize digital platforms for income-generating activities, including online businesses and other e-commerce. This reflects their ability to leverage modern technology for economic sustainability. Additionally, a notable percentage expresses that they apply creativity in entrepreneurial ventures, highlighting the critical importance of innovation in identifying and seizing economic opportunities.

The establishment of social networks and supportive relationships is also vital in their socio-economic strategies among the respondents. Many pre-service teachers recognize the necessity of building connections with peers, neighbours, and vendors to secure financial and material assistance. This networking approach serves as a crucial safety net, illustrating the role of interpersonal relationships in enhancing socio-economic well-being. Furthermore, these pre-service teachers engage in collaborative efforts that extend to community-oriented initiatives aimed at socio-economic improvement. Many reported their commitment to teamwork and collective action in fostering community growth. Their empathetic behaviours, such as providing food and clothing to those in need, reinforce their dedication to social support, with nearly all respondents indicating a willingness to assist others materially. The resource-sharing practices among peers further illustrate their economic coping strategies, revealing a reliance on collective problem-solving to maintain a balanced socio-economic status. By pooling resources, they exemplify the significance of collaboration in addressing shared challenges and emphasize the interconnectedness of their socio-economic experiences. These findings, within the lens of Amartya Sen's Capability Theory underscore the significance of influence of 21st century skills in empowering individuals to leverage their capabilities effectively within their capability spaces (Belyaeva et al., 2022; Akinwande, 2021). The study have shown that individuals who possess 21st century skills to some extent can translate these capabilities into concrete achievements that can enhance their socio-economic well-being.

5. CONCLUSION

The findings of the study revealed a significant deficiency in the acquisition of 21st-century skills among pre-service Social Studies teachers. All the assessed skills, including critical thinking, problem-solving, creativity and innovation,

communication, collaboration, digital literacy, cultural identity, global citizenship, leadership, and personal development, were found to be at notably low levels. However, the study also found that pre-service Social Studies teachers actively apply 21st-century skills in managing the socio-economic aspects of their lives. This reflects a strong engagement with critical thinking, digital literacy, creativity, collaboration, and empathy, suggesting that these skills are being utilized in real-world contexts despite the overall low proficiency in the formal assessment of these competencies.

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