Analysis of Classroom Practices that Preschool Teachers Use to Promote Civic Efficacy

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Analysis of classroom practices that preschool teachers use to promote civic efficacy

By

Muhammad Riaz

A Thesis
Submitted to the Faculty of
Mississippi State University
in Partial Fulfillment of the Requirements
for the Degree of Master of Science
in Elementary Education
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2017
Analysis of Classroom Practices that Preschool Teachers Use to Promote Civic Efficacy

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This research is aimed at determining the classroom environment practices that might lead young preschoolers, 3 and 4 years of age, to assume civic responsibilities that bring a change in the lives of others as a civic member of the community. This study was conducted with 6 preschool female teachers; 2 white Americans and 4 African Americans, at a preschool. The data sources were lesson plans, formative assessments by class teachers, classroom observations, and interviews with the teachers. NVivo Pro, a qualitative research tool, was used to analyze data. Findings revealed that inquiry-based, collaboratively orchestrated, and meaningfully engaged classrooms have significant potential to develop civic efficacy in preschoolers. Systematic, well-thought and wisely planned activities, relevant to the children’s lives, developmentally challenging meaningful tasks embedded in real life context significantly develop in children many skills including inquiry, research, and problem-solving; collective action, reciprocity, and friendship; and responsibility, independence, and community building.

**Keywords**: Inquiry, collaboration, engagement, metacognition, civic efficacy, reciprocity, community skills
DEDICATION

This study was undertaken by the Grace of God Almighty, to elicit His bestowed potentials in the service of humanity to develop a deeper sense of humility, civility, harmony, reciprocity, mutual trust, and civic efficacy among the people around irrespective of caste and creed. First, I dedicate this work to my teachers who always advocated for excellence, co-existence and reciprocity. Next, I dedicate this work to my parents who brought me up with great patience, and to my sagacious and modest wife, Fatima Saba, who provided categorical support to complete this valued endeavor. Also, I dedicate this work to my loving children who sacrificed their intimate fatherly affection for a significant time, and with the hope of inspiring all of them to be inquisitive seekers of knowledge, curiosity driven, and dedicated to self-effacement and to be always helpful to the people around unbiasedly. I trust you ever, my sweet children.
ACKNOWLEDGEMENTS

I feel blessed by God Almighty who bestowed on me courage and His wisdom to help me accomplish this auspicious work for making my contribution to make this world a place worth living by developing children into civic effective and responsible citizens. I am thankful to my mother and father, Fatima Begum and Wali Muhammad, who taught me to speak and to work hard. May their souls be glad to see children being kind to others around them as contributing citizens.

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CHAPTER I
INTRODUCTION

The aim of this study was an investigation, analysis, and understanding of the development of civic efficacy in the preschool classroom environment. Through empirical observations of classroom practices, concepts that augment community-building skills are collaboration among participants, inquiry to solve emergent problems, and facilitation through engagement. The application of academic skills and social skills encourage children to be committed to the concerns of the community by developing respect for self, society, and diversity.

The researcher purposively chose teachers from an early childhood education system to investigate the phenomenon through pre-survey questionnaires, documentation of behavioral artifacts, classroom observations, and teacher interviews. The teachers had one to eight years of teaching experience at preschool, working primarily with children of three and four years of age. The preschool, The Sparkling Stars (a pseudonym), is in the southern part of the United States and is a peripheral to the family studies and child development department of the research university. This selection of school and teachers was specifically chosen for both availability and convenience, and because the center is an accredited and recognized facility with a reputation for excellence in child development. All of the teachers were female; four African-Americans and two white
Americans with an average age of 29 years. The children in the classes they taught were from multiple nationalities and diverse communities.

This chapter consists of the sections: (a) civic efficacy in a multicultural perspective and (b) the purpose of the study. With each section the research sought to emphasize the necessity of civic efficacy to develop informed and conscientious members of society. With this in mind, the civic essentials to be a responsible citizen need to be developed in students; these include thinking scientifically, critically, analytically, democratically, collaboratively, and cohesively. Since early times, education has focused on these concepts at older ages, such as with middle and high school students. However, at the ages of three and four, children experience intensive growth with the unfolding of innate potentials and inherent learning capacities. An individual may be groomed as a civic effective member of society within the classroom environment, which indeed is a miniature social community within the walls and inextricably woven in the social and ecological context.

The purpose of the study was to investigate the evidence of civic goals attained while addressing social studies standards and to explain practices based on current research, knowledge, and skills needed to be instilled in preschoolers through contextual, congenial, and constructive classroom practices. The review of related literature provides background information about a topic in education that has not been understood by many in the public or discipline and provides the foundations of the research questions and informs many of the results.
Civic Efficacy in Multiple Perspectives and Spaces

Civic efficacy is vital to developing democratic values, claiming and defending rights, exercising power, becoming active and responsible citizens, monitoring the political system, proliferating awareness, and protecting the rights of others in a community. The major reasons for low participation in the political spectrum are lack of confidence in decision-making and consideration of individual over collective benefit. High-quality education builds on the foundation of a safe and joyful learning community that absolutely ensures the development of civic efficacy to make the best use of potentials for making a difference in the society in which the individuals are a part. Children should be compassionate and respectful to the rights of self and others, honest, docile to jurisprudence, and motivated to solve new and challenging social problems in the community using their innate potentials, inquisitiveness, and abilities.

Indeed, the principle objective of education at any level is to help master knowledge, skills, and dispositions to overcome problems in society through sustained scientific, collaborative, and empirical wisdom. The development of civic efficacy, an ability to trust one’s own potential to bring a positive change in the life of himself or herself and others in the community, occurs through interactive, integrative classroom practices facilitated with hands-on activities, as these play a promising part in children’s personality development during early years to help them become future civic-oriented individuals for a peaceful community worldwide.

Purpose of the Study

The purpose of this study was to observe, investigate, and underscore the factors that contribute to the development of children of ages three and four into civic effective
individuals who are (1) respectful of self and others, (2) obedient to the rules and laws, (3) respectful to the opinions of others, (4) attentive to the environment, and (5) are motivated problem-solvers, critical thinkers, and democratic members of the diverse global community with faith to bring a positive social transformation as agents of change. To accomplish this as adults, we must practice this as children. Over the past two decades, the concept of global citizenship has been on the rise, and it has aimed at creating responsibility and pragmatic thinking in society. An increase in advanced technology, an overwhelming growth in population, and diverse perspectives in cultures combine to increase an awareness of global citizenship. The escalating impact of globalization calls for the need for civic research in early years. In the best interest of future generations, society needs development of civic efficacy early at ages three and four. It is most beneficial to develop a classroom environment of respectful collaboration, harmonious in social context, peaceful coexistence, scientific inquiry, and purposeful, meaningful, and productive engagement under the auspices of seasoned and visionary adults who ensure the grooming of young minds into civic-efficient individuals equipped to thrive in a global community.

This study focused on the day-to-day activities of teachers in early childhood classrooms and an investigation of teachers’ observational notes on children’s daily routines, practices, and interactions in the classroom environment. As a part of the teachers’ daily routines, they documented behavioral artifacts, created lesson plans and instruction, and kept records of the students’ agency of civic rituals inside and outside the classroom in creative and free play.
This study was important for multiple reasons; it examined best practices for creating a cohesive environment and an authentic social experience in the classroom as an extension of the greater community of global world. Moreover, the study helped to develop situations where three and four-year-old children exhibited inquiry skills, collaboration, insightful perspective, empathy, friendship, interdependence, and respect for diversity as an inclusive global citizen. The pervasively acclaimed constructs and empirical standards that develop civic efficacy among preschoolers were viewed in this study of 3 and 4-year-old school children through inquiry, collaboration, and engagement.
The first part of the review focuses on the concept of democratic citizenship and its requirements. The second part summarizes the studies that indicate empirical evidence in collaborative studies across content and context. The third part elaborates on the need for inquiry to delve into reason and logic of problems and their solutions using human and material resources. The last part clarifies two inter-related concepts of serving others and engagement in the society.

Collective actions lead to cooperation and participation in the community. Martens and Gainous (2013) stated that political scientists found civic education to improve the democratic capacity of children, yet little research has been done in this field. To determine how educators teach civic efficacy aimed at preparing students as responsible and democratic citizens, they found that active learning, and video teaching were the most important ways that children learn, but limited and open classroom climates help develop civic efficacy. An open and welcoming classroom climate is most beneficial when combined with traditional teaching. Textbooks, readings, memorization, and worksheets are least appropriate for early childhood education. Rather, hands-on activities that are developmentally suitable, meaningful to children’s lives, preconceived and preplanned have been found to be productive for children. Part of this involves high-order questions that lend themselves to discussions that develop confidence and self-
efficacy in the classroom. Critical thinking, empathy, gainful perspectives, and collective actions are vital for making democratic decisions and problem-solving.

In previous interactive environment research beginning with the interactionist approach, Pagano (1978) posited that children are always on the move to perform, which helps teachers integrate their developmental strengths into the pedagogical stream. This desire helps teachers to achieve an ultimate target of transforming children into effective and productive members of society. Swanson (1991) stated that the national goals depend on public recognition of their importance and sustained collaborative effort. The importance given to the goals and social interactions help children socialize and participate as members of the community, a focal point of early years interventions.

Mohr, Zygmunt, and Clark (2012) found that early childhood programs help children prepare to negotiate and interact both with children and adults. The early years interventions help reduce the risk of separation as children are attached to one another for fun and play together. Further, McLeod (2000) found that moral development honed an active citizen and yielded contextualized knowledge and cognitive skills learned from news media use, interpersonal communication, and active participation in school and community volunteer activities. In contrast with a top-down approach, being actively engaged with family, peers, teachers, and the media developed moral skills in children that are essential for an efficacious citizen. Mackey (2012) described children’s involvement in an environmental curriculum as displaying their competence and confidence through knowing, deciding, and acting in supportive early childhood scenarios led them to purposeful action.
Developmental growth and self-regulation is a prime goal of education. Ludick (2002) related Montessori ideas and concepts of the community to examine practice and theory, the importance of work, social cohesion, and imagination by linking early childhood and adolescence and suggested that it enhances spiritual development, individual value, and preparation to understand the time in which they reside. Developmental education encompasses four themes: action and interaction, development, integration, and observation over an extended period. Interactive participation, independent role-taking, and democratic decision-making are fundamentals to building a robust community within the school. Pike (2009) stated that citizenship education is not simply learning about citizenship but learning for active citizenship to produce committed citizens. A culture of collaborative participation is an essential element of democratic citizenship, and interpretive and reflective communities are the core of citizenship education.

The interactions and social cognitive approach by Vygotsky (1978) helped to orchestrate a community with self-accountability and a self-reflective approach to children’s early years. The interactions of child-child, child-teacher, child-family, and child-environment have a dual effect on both ends. The interaction has reflexivity, and this influences every individual with varied degree and impact. In a yearlong school with wide civic learning in Philadelphia, Brasof and Spector (2016) concluded that the citizenship themes of community-building, rules, choice and voices, American identity, leadership, rights and responsibilities, conflict and compromise, and youth activism can be taught through a constructivist approach and across class collaborations by implementing a youth-adult governance model; this creates civic efficacy. The children’s
interactions with adults and other disciplinary experts make them wiser and curious about the environment and keen to learn in-depth knowledge for future successful lives.

Lewis, Maras, and Simonds (2000) found that cooperation and group work with attention to individual differences, children’s individual preferences for a group, and diverse group experiences emphasized citizenship development. Cooperation and competition, in groups and alone, also affected them both positively and negatively, respectively. Pyle and Bigelow (2015) examined the challenges teachers face as they negotiate academic learning and age-appropriate developmental practices such as play, and suggested that more research is needed for this purpose.

**Inquiry**

Serriere (2014), in a study at Dewey Elementary with six students, emerged with the notion that civic efficacy can be developed through orchestrating curriculum by asking questions, working in diverse groups, and practicing civic skills in social contexts. Policies and practices can evolve to develop civic efficacy through social spaces and processes. The scientific approach and critical perspectives develop political insight to make logical decisions using sustained wisdom as an informed global citizen. With this in mind, an inquiry approach has a discursive and dialogic nature to develop critical and analytical thinking in individuals. In turn, this helps scaffold individuals to mindful and logical decisions. Willemse, ten Dam, Geijsel, van Wessum and Volman (2015) found collaborative inquiry based on the curriculum developed teachers’ sense of citizenship and awareness. Practical wisdom and teaching citizenship education demand time, empiricism, hands-on activities, and collaboration. Community-driven persistent
questions dealing with emergent issues and taking steps using culturally responsive strategies make a difference in developing civic trends and social justice.

For students, inquiry develops research skills, critical thinking, meta-cognition, problem-solving, and decision-making. Insightful questioning and critical evaluation help students to analyze and enculture a habit of critical thinking and groom them into effective citizens who can participate and play viable roles in the democratic process. An inquiry process helps solve problems through researching the alternative solutions, exploring in-depth information about the issues, explaining the problem in terms of authentic evidence, and sharing with others to execute the plan. This inquiry process develops insightful wisdom to solve problems in the community. Chang Rundgren and Rundgren (2016) argued that inquiry-based science education with socio-scientific inquiry-based learning increases the results in teaching techniques and reduces the need for further training. According to Pescatore (2007), analyzing newspaper articles helps students determine authors’ biases and missing points of view to consider the reliability of the sources. It provides them an opportunity to do literary analysis, which will lead to student activism and responsible civic citizens. In other words, engaged students become engaged citizens. It is evident that inquiry imparts self-regulation and logical wisdom that is an essential component of an effective citizen. One more study conducted by Nicholson and Kroll (2015) found that oral inquiry and descriptive review helped students develop leadership skills, disposition, and critical reflection. With logical and impartial leadership, discussions create positive results. These all are necessary skills that can be encultured during childhood by parents, teachers, and early care and education providers.
Children are curious and young scientists by nature; they ask questions, take ownership of their environment, and interact with others as well as develop individuality. A study conducted by Wang, Kinzie, McGuire, and Pan (2010) found that children explore and learn about their environment through inquiry. Technology enhances students’ knowledge through hands-on activities.

A study conducted by Swick (1996) found that inquiry emphasizes interpretation, a quality feature for teachers, students and parents. Such inquiry could help children understand diversity and reasons behind problems and could assist them in making logical and wise decisions based on practical wisdom.

Children are energetic and perform actions with their own hands; this develops scientific thinking while testing their self-initiated question to prove their curiosity. A study by Preston (2016) demonstrated that hands-on activities encourage curiosity and scientific thinking. Further, a problem-based approach engages children to test familiar objects in new situations, thus stimulating children’s curiosity and scientific thinking in their accomplishments. Civic citizenship requires students to solve real-world problems by doing hands-on activities in order to make a difference in the community. In addition, a study by Walker (2015) on service learning provided ample opportunities in literacy activities as children engaged in inquiry while solving real-world problems.

**Collaboration**

Participation in shared collaborative activities make participants socialized, optimistic, cooperative, and civic effective, and they are more likely to volunteer and participate in political activism in the future. Pagano (1978) described four interactionists’ themes of growth through action and reaction, growth within the
developmental stages, growth through integration of social and cognitive skills, and growth through observation by both teacher and children. These interactions help children make decisions and solve problems through involvement in effective thinking, feeling, and acting. Further, it scaffolds children to become citizens by providing guidelines for managing conflict situations. Moreover, an adult role in the promotion of citizenship development is vital (i.e., children’s parents and teachers).

Senge, Cambron-McCabe, Lucas, Smith, and Dutton (2012) showed that team learning helps to foster and build better communities. Further, people in the local community feel that their fates relate to others, and this scenario is prevalent in almost all communities across the world. Michels and De Graaf (2010) concluded that participatory citizenship was taking responsibility in public affairs and civic engagement if participatory policymaking was adopted. Baker (2013) described three characteristics of learning active learning, creating and thinking critically, and playing and exploring. Active citizenship can be fostered by the themes of membership, obligation, and participation underpinned by effective learning, playing and exploring, active learning, and critically creating and thinking.

In the last decade, the importance of family and community collaboration is also of prime importance to meet the challenges of low achievement and retention rates, specifically in the poor and marginalized parts of U.S. communities. To educate the young generation, a collaborative effort of families and communities can bring a change with partnership approaches (Sanders and Epstein, 1998). Indeed, the classroom is a site of power and citizenship where the teachers play the role of governors with students as responsible citizens, exercising civic respect, impartiality, tolerance, loyalty, and civic
rationality through cross-curriculum activities. Furthermore, civic virtues and duties are pertinent along with content teaching through reading, writing, speaking, and calculating as insight-guiding building blocks (Bray and Chappell, 2005). Lin, Lawrence, Snow, and Taylor (2016) found that discussions of controversial issues related to politics, society, and science in classrooms enhance self-efficacy among students because they develop confidence in discourse, conflict management, gainful perspective, solution development, and problem-solving skills. Lewis (2001) found that classroom discipline promotes a sense of responsibility for the protection of learning and safety rights in the classroom. Productive techniques such as discussions, rewards for good behavior, and involvement in decision-making are recommended instead of coercive measures in the class. Early, Maxwell, Burchinal, Bender, Ebanks, Henry, and Vandergrift (2007) found that teachers’ qualifications are not sufficient for children’s academic gains, but the teachers’ professional development activities with greater student interaction will help the quality of education in classrooms.

Another advantage of collaboration is it develops resilience in children, and children take ownership of their responsibility, use group strengths, and become engaged individuals. Further, collaboration empowers, strengthens, and engages family strengths that allow communities to achieve civic efficacy by enhancing resilience and creating an environment to protect youth from risk and chaos, low achievement, and social delinquency. Empirical evidence regards the creation of a collaborative environment to build participants’ strengths that eventually produces effectiveness using community-wide collaboration (Linquanti, 1992). Nutbrown and Clough (2009) found that inclusive environments present citizenship through participation using students’ individual voices.
Children’s concerns and ideas call for action. The children’s views, concerns, opinions, identity, and self-esteem develop a sense of inclusiveness in early years. The inclusion of children in identification and exploration of issues important to them promotes a positive sense of inclusiveness, developing pedagogies of citizenship and enacting vocal practice. Overall, effective collaboration directs students to become responsible by an equal division of labor and teamwork, an essential component of the collaborative design. Shier, Méndez, Centeno, Arróliga, and González (2014) found that in early years, more active and collaborative training fosters positive changes in children’s social and emotional competence. Shier, Méndez, Centeno, Arróliga, and González (2014) concluded that children who achieve effective advocacy are self-empowered and work in coordination within groups. Collaboration in the classroom compels students to adopt independent discourse with minimal assistance from teachers, and helps them develop peer perspective skills (Pawson, 2016), and increases their knowledge and practical skills to trust their peers for mutual help. One more advantage of collaboration is that students become reflective practitioners and formulate learning communities that build confidence in stakeholders through direct involvement (Parahakaran, 2016) in practical ventures.

In an empirical study conducted by Cicconi (2014), technology tools helped students collaborate and grew their empowerment through more knowledgable others (Vygotsky, 1978). Furthermore, technology is more likely to develop collaborative efforts beyond the territorial and geographical borders of the classroom to build a global community. To conclude, collaboration helps young people become civic-efficient citizens when established in the early years of children’s lives, prompting knowledge, skills, and dispositions for a lifetime.
Engagement

Engagement in the civic society to operationalize knowledge and dispositions for the well-being of humanity, by irrespective of faith, family orientation, gender, and geographic origin can help develop civic efficacy in children. According to Delli-Carpini (2000), developing active engagement needs motivation, opportunity, productive ability, and new technology to create an environment of collaboration for civic efficacy. A thoughtful and purposeful immersion of students in learning activities in collaboration with others from the community can engage students. Young people are generally least interested in civic and political affairs, less trustful of the political system, less convinced that they can bring a change, and feel unable to solve problems in their communities (Billig, Root & Jesse, 2005). Community participation and academic civic knowledge can affect the situation in a positive manner.

Weller (2003) argued that to promote future responsible citizens, teenagers should be encouraged to carve out their own spaces of citizenship in schools and communities. Curriculum tailored according to the teenagers’ needs, aspirations, and related to their own experiences develops citizenship skills in children. Levkoe (2006) concluded that a participatory approach in teaching promote transformative learning and fosters agency in children. Participation and community organization develop civic virtues and critical thinking. Participation in small-group projects helps people participate in a wider society. Levy, Journell, He, and Towns (2015) found that using the internet, specifically blog-focused classes, developed greater political interest, internal political efficacy and self-efficacy.
A study conducted by Lenzi, Vieno, Sharkey, Mayworm, Scacchi, Pastore, Santinello, Lapp, and Fisher (2009) argued that positive youth involvement in the community development promotes reciprocity in individuals and communities. Voight (2015) found that the student voices create a positive climate through participation in community to explore difficulties, causes of the difficulties, and advocate for a solution. Having a voice in the decision-making process inspires children to act diligently. The children function as representatives to maximize engagement and develop positive school atmosphere. The democratic environment in which students take part in discussions of fairness and a democratic school climate is associated with higher levels of civic engagement. The democratic classroom environment is strongly related to stronger intentions to participate in society in the future.

Shelley and Martin (2015) found childhood play as propounded by Piaget and Vygotsky as easy to recognize and suggested a longitudinal study in diverse contexts to consolidate its potential. Razza, Bergen-Cico, and Raymond, (2015) found that mindfulness-based yoga interventions promote effective self-regulation among preschool children. The at-risk students benefitted the most from this. Hester, Hendrickson and Gable (2009) concluded that praise, planned ignoring, and improved teacher-student relationships in the classroom might create positive learning communities.

In a study conducted by Dudley and Gitelson (2002), they concluded that political literacy and activism are complex phenomenon and need rigor in design and explorations of new venues in order to understand the activities and interactions that influence young minds to choose participation in their actions. Blackwell and Yost (2013) focused on the prediction that the integration of technology changes a teacher-centered classroom to a
student-centered environment. Teachers need to improve digital age learning assessments and experiences that boost digital age citizenship and responsibility and engage in professional development.

Checkoway (2011) argued that civic engagement and psychosocial well-being are related. Psychosocial well-being includes positive intentions, optimism, supportive social relationships, purpose in life, and proactive minds for the future growth of the nation. The focus is on the cure, not finding faults with the individuals, society, and systems, for creating a better world. Further, the author stated that civic engagement promotes positive youth development, strengthens voluntary service, and engages young people to bring a social change.

Nowak-Fabrykowski (2010) argued that a caring disposition can be taught. By using a qualitative method, the author sent questionnaires to kindergarten teachers in the United States cities of Cleveland, Ohio and Buffalo, New York. The result showed how teachers model and practice caring in the classroom and during curricular activities. Ethical awareness, caring and compassion can be taught through modeling.

In a study, “Young people as competent community builders” Finn and Checkoway (1998) argued that children increase confidence when they are considered confident, and do amazing tasks, and copy elders in their daily experiences. Further, youth need to be active in solving problems, planning, and providing services at the community level.

Berkowitz and Hoppe (2009) described that everyone possesses unique qualities as gifted students that provide rich opportunities to foster and develop ethical and pro-
social competencies to adopt and hone character-building. Voice in decision-making and opportunities for collaboration foster an urge in children to bring a social change.

Caldarella, Williams, Hansen, and Wills (2015) found improvement in efficacy among students in Class Wide Function-related Intervention Teams (CW-FIT), a behavioral intervention program in which early childhood teachers increase praise and decrease reprimand, and, in turn, students increase on-task behavior and have fewer classroom disruptions. The intervention program was based on positive behavior principles: socially appropriate communication skills, differential reinforcement with group interdependence, individual interventions using self-management and help cards, and functional assessment.

To conclude the research review, collaborative pedagogies, scientific inquiry based-instructions, integration of learning with life-defined issues, and engaging the learners to use their voice and choice can all help to develop democratic, socially agile, patriotic individuals who think critically. These learners are able to solve problems, are respectful of diversity, and react as docile and accommodative to rules as law-abiding civic efficient citizens. Teaching instructions need to be value-based, integrative, active, reflective, meaningful, collaborative and challenging in nature. Holistic and individualistic, purposeful and well-planned activities may inspire civic efficacy starting in the early years. Inquiry, collaboration, and engagement strategies are helpful in creating a classroom environment with the potential to produce globally aspired democratic and altruistic civic effective citizens. There are few interventional studies in citizenship education. Most descriptive and causal-comparative studies are available in the social discipline. The reported findings of many studies around the globe focus on
citizenship through established empiricism in the fields of inquiry, collaboration, and engagement.

**Summary**

The literature review provided a general perception of civic efficacy through inquiry, collaboration, and engagement. There are three domains, according to the review of literature, which are inextricably connected: collaborative efforts, inquiry, and civic engagement. Inquiry spurs the urge to research and wish to seek knowledge about a problem whereas collaboration, working together, helps to materialize and resolve it. The engagement and motivational volition takes the heart of lifelong commitment to the community. Inquiry, collaboration, and engagement, are interwoven in the fabric of civic community like blood in the human body. Each of those constructs, inquiry, collaboration, and engagement are researched and discussed individually to show a gap in multiple research studies. Further, all of the studies indicated the evidence that the constructs of inquiry, collaboration, and engagement have the potential to inculcate citizenship skills in elementary and high school classes. There is a dearth of qualitative studies within the field of early childhood education or preschool settings that can address the development of civic efficacy in preschoolers. Furthermore, there is an overlap between these three terms which can be better understood in an empirical context.

This study addressed three research questions: (a) How are inquiries, asking authentic questions, at work to develop preschoolers into young citizens, able to resolve real-life problems using their curiosity, innovation, and critical thinking? (b) What are the collaborative practices in place in preschool classrooms that create cohesion, reciprocity,
and friendliness in preschoolers? (c) What are the conventions and empirical evidences, such as, taking responsibility in a classroom community, helping others equitably and taking perspectives as altruistic and promising members of a civic community in preschool classrooms? Further, minor considerations are part of the discussion on holistic, life relevant, and inclusive classroom practices, such as, classroom discussions, mutually agreed on and consensual decision-making, collective deliberations on persistent classroom issues, and interactions with the sporadic classroom environment that help develop civic efficacy in young preschoolers.
CHAPTER III
RESEARCH METHODS

This chapter is comprised of five sections: (a) research design, (b) research questions, (c) sample, (d) qualitative procedures, and (e) methodological limitations and fidelity. The research design states the fundamental fabric of the research scheme, including how the sample was chosen, entry accessed, and research conducted. The research questions were identified after completing the literature review and provided direction to collect data. The qualitative procedures section is comprised of descriptions of the researcher’s role, data collection, and data analysis. The methodological apprehensions and fidelity section reports the lens of both the researcher and study participants as well as concerns about the reliability of the study, and attempts to address these apprehensions.

Research Design

This study was a qualitative study of six preschool teachers in the southern region of the United States of America. The children in the classroom that the teacher taught were ages three (n=14) and four years (n=16) and from diverse families: Asian American, African American, Asian, White, and Hispanic. The preschool is a part of a research university in the southern part of the U.S. The preschool used state-directed Early Learning Standards (ELS). Mixed methods were used in congruence with age appropriate and interest-based schooling using safe manipulatives and learning centers from morning
to evening with a two-hour nap between 12:00 to 2:00 pm. Six teachers were selected from a pool of ten from the preschool. The criteria for choosing the teachers were purposive for convenience and time.

The researcher contacted the director of Sparkling Stars, the preschool, through introduction by the academic and research advisor. Data were gathered through semi-structured interviews, a pre-survey questionnaire with teachers, observation of the classroom environment and community building methods in the classrooms, outdoor games, formal and non-formal teacher meetings with children and parents, and through learning and teaching materials such as lesson plans, teachers’ observation diaries, portfolios, and the curriculum in place.

Finally, there were three data sources: teacher-recorded monthly observations in portfolios and lesson plans, classroom observations, and teacher participants. The interviews were digitally recorded and transcribed the same week to avoid any loss of nuanced information. Each teacher was interviewed for 40 minutes, totaling 240 minutes each. Each teacher was interviewed separately and confidentiality was maintained to meet the research ethics in place. The interview transcripts were verified by the teacher for content and theme validity. Further, classroom observations, interviews, lesson plans, and portfolio observations were coded by focusing on the theoretical and thematical perspectives. The themes were inquiry, collaboration, and engagement. Figure one illustrates the domains and subthemes used for analysis during the study.

The literature review indicated a gap in understanding of how teachers develop an environment for preschoolers to help them (1) learn civic efficacy skills, (2) collaborate with others to develop a classroom community, (3) solve persistent problems in the
classroom using inquiry skills, and (4) engage in responsibility taking, perspective taking, ownership of civic obligation, independent working, and community skills to become effective citizens. The literature manifested that there are three areas, inquiry, collaboration, and engagement, where teachers of preschool children can instill civic efficacy, knowledge, skills, and attitudes in the early years at preschool ages three & four years.

**Research Questions**

Data collection was guided by the following research questions:

1. What classroom practices and policies are used to help children develop inquiry skills?
2. How do teachers foster community and collaboration?
3. What mechanism is available in the classroom environment that engages children to behave like effective responsible citizens?
Figure 1. The Domains and Subtheme During the Study

Note. The review of literature, data collection, and analysis emerged with sub-themes as; inquiry (research, metacognition, and problem-solving), collaboration (collective action, reciprocity, and friendship), and engagement (responsibility, independence, and community skills).

Sample

Six teachers in the study were selected purposely and from the available pool of teachers at the preschool. The total number of teachers at the preschool was fourteen with multiple ethnicities and varied teaching experience at preschool ranging from one to eight years. All of the teachers had degrees in early childhood education from internationally recognized institutions. Ages of classroom children were 6 weeks through 5 years. The research approval from the Internal Review Board (IRB) was sought before entering the site for data collection (see IRB approval Appendix A). The teachers for the study were selected from only three and four year old preschool classrooms. The teachers
were briefed about the intent, purpose, and duration of the study before they were invited to participate in the study. They participated in the study after signing their willingness (see consent form Appendix B). The preschool, Sparkling Stars had a myriad educational amenities and facilities which were at the teachers’ and children’s disposal and met the required national standard as prescribed by the state and district standard curriculum.

**Qualitative Procedures**

The study was divided into three phases. The first phase was the initial research phase. A literature review and initial face-to-face interaction were conducted with teachers to get background knowledge, skills, and experience for the study. The purpose of the first phase was to gain basic knowledge about the teachers, the child development center, and the teaching methodology and the environment in general. The first phase also included learning the teachers’ general views of civic efficacy and surveying the teaching resources. Further, during the first phase, the researcher sought to learn the overall environment in practice and course of instruction in place, as well as the artifacts of learning and ongoing assessment practices at the preschool.

The second phase was the data collection. The researcher distributed (1) the pre-survey questionnaire to teachers, (2) observed classes, (3) reviewed lesson plans, (4) and conducted both initial and subsequent interviews. The collected artifacts included (a) monthly portfolios of observational assessments performed by the teachers and (b) weekly lesson plans. The information gathered was formatively analyzed on a daily basis. Because of the data collection, new insights were incorporated in the literature review and subsequent interview questions were refined. Further, some new reviews of research pertinent to the study were explored to learn the factors and practices that contribute
towards the development of civic efficacy in children. For the study, interview field note sheets, observation data sheets, and an archival matrix were used to organize data according to the sequence and organization of the research questions. The data sheets created the triangular effect that protected internal validity.

The researcher used the matrix to collect data using various qualitative methods. Each research question was shortened to a research domain. Within each domain, interview questions were developed. Also, features were created to guide observation. Finally, archival data were collected to support the survey, observation, and interview data. The frequency table was articulated showing the sources of data collection (Figure 2).

![Research Domains with Subthemes Frequencies Data Source Wise](image)

**Figure 2.** Research Domains with Subthemes Frequencies Data Source Wise

Note. The detailed frequencies segregated using NVivo that indicate the data source wise emerging themes with their impact. The observation across the domains shows higher frequency than lesson plans and portfolios.
The interviews were conducted in the third phase with each teacher separately. The teachers were asked for their availability, and a schedule was finalized in consultation with the preschool director; both of which provided a conducive interview environment. The interviews were digitally recorded and transcribed on the same week for accuracy. The research questions and domains guided and disclosed new insights that were incorporated in the subsequent interviews. Data collection was updated so the analysis could draw well-reasoned inferences and conclusions of the study.

**Researcher’s Roles**

The researcher is from a public-school background in South Asia and has trained more than four thousand elementary school teachers. Since 1996, the researcher has been involved with elementary schools. Further, he worked as an evaluator and assessment specialist in the state education department and acted as coordinator of the assessment in social studies for three years. In addition, he worked with international consultants to design and implement assessment in the state for five years. The principle investigator established a model for early childhood classrooms and trained numerous teachers for utilizing learning centers. The researcher has deep connections with many individuals who have taught social studies and civics at elementary schools for an extensive period of time. The researcher did emphasize the notion that the ultimate goal of developing civic efficacy through a multiple-faceted classroom environment, democratic and scientific disposition, and collaborative problem-solving approach is not impossible and uncommon.
Data Collection

The researcher collected data through four different methods: (a) semi-structured questionnaire survey, (b) semi-structured interviews with teacher participants, (c) observation of classroom practices and strategies, and (d) monthly portfolio observational assessments made by the teachers as archival documents.

Semi-Structured Survey

A semi-structured survey containing sixteen items from each domain was administered. The domains were inquiry, collaboration, and engagement. All six teachers who were purposively selected were given the pre-survey questionnaire before the classroom observations to seek insight into the classroom practices and visions of the teachers. Moreover, the researcher needed to know about activities in the classrooms that create an environment of civic efficacy for the children. The teachers were also requested to return the questionnaire within a week’s time before the descriptive interviews began. The reason for one week’s time was to allow the participants to use their learned, observed, and experienced empirical wisdom about their classroom practices, especially those that contributed to civic efficacy in preschoolers. The survey responses were recorded in the sheet matrix for comparison and analysis to estimate how the concept of civic efficacy can influence the students.

Interviews

Interviews were conducted with teachers on a mutually convenient timeframe to get their responses to their classroom experiences. All six teachers were allowed ample time to think, predict, recall, and connect their professional knowledge about child
psychology that contributes to the development of preschoolers into citizens with habits of civic efficacy that is achieved through classroom rules and a self-structured cooperative community in the classroom environment. Each teacher was interviewed separately to maintain confidentiality. The interviews were digitally recorded by the researcher, allowing maximum time for the respondent to participate. The interview questions were orchestrated and aligned with the research domains of inquiry, collaboration, and engagement. The interview transcripts and recordings were available to all teachers for clarity. Further, each interview question was articulated and aligned with research questions which evolved out of the literature review and survey responses conducted with the teachers before observation sessions in the classrooms. The interview aimed to allow teachers to share their practiced empirical accounts, eliciting the nuanced phenomenon in preschool classroom settings that help children form knowledge, skills, and dispositions to be strategic, civic-efficient global citizens. In the beginning, the interview questions were semi-structured but eventually transformed into less structured questions as the study proceeded. The interview data clearly identified the areas for observation and exploration of the archival data repertoire: the syllabus recommended for preschoolers at three and four years of age, daily decisions about study topics using student preferences, voices and choices, and teachers’ portfolio observations.

**Observations**

There were four classes in which two of them were comprised of three-year-old children, and two were comprised of four-year-old children. There was one teacher with three-year-old students, and two teachers with four-year-old students. In addition, there were university lab graduate students and classroom assistants, with a director for both
parts of the building. The informal interviews guided the researcher to identify the observation areas, specifically those that elicit information aligned with the research questions and domains of research. The observation sheets evolved through the review of literature, informal interviews, personal experiences, and insightful inferences. The observations were conducted over an extended period of the spring 2017 semester. The times of the observations were 7:30 a.m. to 5:30 p.m. with the exclusion of a two-hour nap from 12:00 p.m. to 2:00 p.m. each day of the week. Each class was observed once for entire day. The observation started 7:30 a.m. and ended at 5:00 p.m. The nap time from 12:00 to 2:00 p.m. was not included in the observation. The total observation time for all four-classes was 30 hours.

During the classroom observations, evidence of civic efficacy was noted. The observations were conducted while the teachers were engaged in their routine classroom procedures. The researcher recorded observations of the phenomenon that contributed to useful and sustained practices in preschoolers as collaborators, problem solvers, helpers, and contextually engaged classroom community members. The purpose of the observations was to deepen understanding of information gained from interviews, documents, and personal experiences about the evolution of civic efficacy among preschoolers. The observations were conducted in congruence with the theoretical perspectives: interactions, knowledge constructions of self and civic efficacy, and metacognitive focuses of child-child, teacher-child, child-individual, child-small group, and child-whole group interactions and involvement. The researcher analyzed on a daily basis to get an insight into the phenomenon in the classroom context.
Archival Data

Archival data consisting of artifacts and assessments were gathered to provide supplementary data for the triangulation matrix using inquiry, collaboration, and engagement with data from the pre-survey questionnaires, classroom observations, and teachers’ interviews. The researcher identified archival data such as lesson plans and portfolio observations noted by the teacher. The lesson plans were prepared by the respective class teachers every week. The portfolio observations were noted once a month by the teachers of each individual child on the basis of early learning standard (ELS) as formative assessment. These were used to authenticate the information from the pre-survey questionnaires, teachers’ interviews, and classroom observations.

Sixty consecutive lesson plans from each teacher were reviewed for analysis. For the six teachers, three hundred and sixty lesson plans were reviewed in total. The teachers use a school-provided template for lesson plans in laptops at the preschool.

Two portfolios for each teacher were used that had been compiled for their classrooms as evidence of their students’ accomplishments. This was an ongoing Early Learning Standards (ELS) assessment provided by the state standards. All portfolios contained formative assessment data for fall 2016 and spring 2017 semester. Thus, twelve portfolios, two for each teacher, twelve in total were examined for their descriptive assessment based on the ELS standards.

Archival data were used to collect less vivid and conspicuous data that could not be easily observed to support the information gathered through surveys, interviews, and observations. These included portfolios (log/observational notes) that teachers maintained as formative and procedural assessments to inform them of the effectiveness
of their classroom practices in a temporal sequence and natural occurrence to assess the Early Learning Standards (ELS).

Gathering data from varied sources including surveys, interviews, observations, and archival data allowed the researcher to see a clear phenomenon of civic efficacy in action. This triangular matrix data collection minimized the researcher’s preference, and bias added reliability to the data collected for the final analysis, and provided for full description.

**Data Analysis**

The data were organized and analyzed applying a matrix congruent with research questions to the research domains of inquiry, collaboration, and engagement holistically. As a result of the analysis, the researcher identified the recurrent themes and patterns that surfaced after the formative analysis. The entire data were organized manually and investigated for examples of civic efficacy. Also, the entire data set was analyzed and processed to identify common themes using NVivo, a qualitative data analysis software. Those patterns and themes, after converging and diverging procedures, provided the foundations for the findings and discussion.

The data were coded into research themes by creating the nodes inquiry, collaboration, and engagement. Then each of these research themes inquiry, collaboration, and engagement, were coded for subthemes. The inquiry data were coded for sub-themes to determine the frequencies of research, metacognition, and problem-solving. The collaboration data were coded for subnodes of collective action, reciprocity, and friendship. Lastly, engagement data were coded into the subthemes such as responsibility taking, independence, and community building. This thick data collection
and analysis eliminated bias by using triangulation. The three data sources, archival data (portfolios and lesson plans), observation, and interviews were repeatedly analyzed across sources and themes to establish internal consistency and validity to minimize bias.

**Methodological Credibility**

To establish credibility, individual teachers, school staff, and the researcher developed a rapport to mitigate bias during observations and interviews to understand the subtle themes inextricably embedded in the social context. The working and conducive relationships were developed during interviews to seek in-depth understanding of the research construct. While analyzing data and compiling findings, the researcher’s extensive teaching experience was eliminated from the data.

**Lens of the Researcher**

While analyzing the data, the researcher employed a transactional approach to mine multiple sources and triangulation methods to reduce potential bias. The triangular matrix helped the researcher to review the research domains inquiry, collaboration, and engagement across three data sources: archives, interview, and classroom observation. To avoid ambiguity, emergent open inquiry was used to understand the context and address bilingualism issues. The teachers were asked frequently about nuances of the construct. Multiple data collection and identification of common themes among the three research domains addressing the research questions simultaneously helped the researcher understand the contextual clues. Objective analysis performed manually and using NVivo, a qualitative analysis tool, helped reduce personal preference.
Lens of Study Participants

The researcher applied various strategies to remove potential bias among participants, and spent extended time observing the classes to avoid erroneous information. To validate or invalidate assumptions, the researcher used multiple data sources to approve or disprove the claims articulated during the interviews, document explorations, and classroom observations. Moreover, a pre-survey questionnaire was conducted to study responses to the open-ended prompts quantitatively. Before the initiation of the study, participants were debriefed about the intent, terminology, and purpose of the study.

Credibility and Transferability

The study, data collection, and analysis were designed and planned using standard research ethics. The triangulation analysis method monitors the subjectivity, and participant checks maintained the credibility of the study. The major element of the study was extended interviews and surveys to cross-check the responses. The interviews were transcribed daily to maintain accuracy and objectivity of the information gathered. The vast accumulation of descriptive data supported the transferability of the findings. The researcher managed a convenient and purposive sampling of participants who comprehensively and diligently responded to detailed survey questions and answered insightfully to the interviews according to the research domains and dimensions of the study.
CHAPTER IV

RESEARCH FINDINGS

This study focused on three research domains: inquiry, collaboration, and engagement. The thematic chart (see Figure 3 below) emerged as a result of data collection and analysis. Inquiry largely emerged with three sub-themes: research, metacognition, and problem-solving. Collaboration came up with sub-themes: collective actions, interdependence, and friendship. Finally, engagement included three sub-themes: responsibility taking, independence, and community building. Further data analysis revealed for recording results; each research theme was coded for frequencies of examples and instances of vivid representation within the data. Findings of each domain are presented here.

Inquiry

Inquiry is an ongoing and inherent engagement to explore the alternatives and possibilities to solve problems related to community. Inquiry is classified into three themes: research, metacognition, and problem solving, which emerged through the research literature and data derived in the complex social context of the preschool setting. The inquiry subthemes were tabulated subthemes and data sources wise (see Table 1).
Through the classroom observations of six teachers, the researcher documented many instances of inquiry and discovery-learning phenomenon using research and monologue (metacognition, self-talk), and problem solving.

Figure 3. Developmentally Accumulated Research Themes Chart During the Entire Study
Table 1  
*Inquiry Node Categories with Theme*

<table>
<thead>
<tr>
<th>Data Source/Nodes</th>
<th>Research</th>
<th>Metacognition</th>
<th>Problem Solving</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio ELS</td>
<td>49</td>
<td>29</td>
<td>24</td>
<td>102</td>
<td>19</td>
</tr>
<tr>
<td>Lesson Plan</td>
<td>23</td>
<td>46</td>
<td>52</td>
<td>121</td>
<td>23</td>
</tr>
<tr>
<td>Observation</td>
<td>68</td>
<td>57</td>
<td>60</td>
<td>185</td>
<td>35</td>
</tr>
<tr>
<td>Interview</td>
<td>39</td>
<td>33</td>
<td>55</td>
<td>127</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
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<td>165</td>
<td>191</td>
<td></td>
<td></td>
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<tr>
<td>%</td>
<td>33</td>
<td>31</td>
<td>36</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The teachers posed developmentally challenging questions to extend the children’s knowledge by engaging their prior knowledge. The early classes were the talking and working classes. The teachers involved children in practical research and observation to broaden their horizon of understanding as little scientists; for example, during the classroom observation that was observed at the plant section of the playground, two children observed a mint plant and a strawberry plant that the class teacher had sown a few weeks prior for them. The children learned and classified items into categories as real scientists do to solve problems. Once the researcher observed children performing during the outdoor play period. One child used a telescope to see an aeroplane in the sky while playing in the playground. Another child asked the teacher about global position system (GPS) as discussed earlier in the morning during the class. The researcher also heard four children talking outside. One child said, “We are hunting...
for the bugs and the beetles”, and one of the children brought a fly to the researcher and asked to check its wings. The children were full of inquiries to hypothesize, investigate, discuss, and draw their conclusions on the day-to-day scientific phenomenon inside and outside the classroom.

**Research Skills**

The interview data with six teachers narrated multiple examples of ways teachers promote inquiry skills in their classrooms that encourage children to learn critical thinking and problem-solving skills. Kathrine stated that she encouraged children to ask questions. “We expose them to questions. We tell them to ask questions. We ask them if anybody has a question. So, it is like a free environment; we teach them in a friendly environment, you have the right to ask questions.” Also, the children study nature using scientific equipment and instruments as little scientists to investigate the natural phenomenon. Beth said “In science, we are learning about bugs. We have books that have different facts about bugs, and they are looking at and examining a bug and will say that it has six legs. How do we know that it has six legs?, and they count the legs and we have a book about it and they get the book out and get the facts? You told us it has six legs; however, a spider has eight legs.” The students are encouraged to take responsibility as investigators. Beth said, “A little girl was in the insect section yesterday. If I would say do you want me to help, she wouldn’t seek help. I watched her, but she did not ask me for help. We try to encourage them to do things at their own. That is very important, and they will learn to be independent.” To summarize, the children ask questions, and this habit makes them more curious about the world around them as civic efficient citizens early in life.
The archival data collection in the portfolio showed the teachers’ observations and formative assessments that indicate children’s research and investigation skills. For example, a teacher wrote this note in the portfolio: “John [a pseudonym child] looked through the microscope while in the science center. I [the teacher Taylor] showed the children an astronaut walking on the moon. John began to ask questions about stars, for instance, their clothes.” She also wrote, “William [a student] was looking at the bugs through a magnifying glass in an activity.” To partially conclude, the teachers recorded students’ inquiry as ongoing assessment to evaluate the Early Learning Standards (ELS) that children innovate and make decisions to address their curiosity and inventiveness as a part of their problem-solving skills.

The lesson plan is like a lens through which a teacher hypothesizes, plans, and executes the actions in the classroom environment. Planning lessons in advance determines the achievement of the predetermined goals in alignment with state standards. The lesson plan record presented many instances of inquiry such as brainstorming by the teacher to invite the curiosity of the students in the classroom environment. For instance, the teacher, Taha, planned multiple questions: “What do they think they would find on another planet? What would they take with them if they travel to space?” In another lesson plan, the teacher Kathy wrote “We are going to learn about all the different materials, various transportation vehicles that are made from (rubber, metal, plastic, glass etc.) and asked the children, who can sort the shape blocks the quickest?” To summarize, the lesson plans also showed instances but less examples of metacognition, the awareness about ones’ own thinking process.
Metacognition

Metacognition, thinking about thinking, triggers intrapersonal thinking in children through self-reflection that helps children internalize thoughts and imagination. Children figure out patterns, recognize similarities and differences, and make connections with prompting by adults. Once the teacher said, “So going back to the insect, we’re talking about insects, and they might ask something about ladybug, and I’ll ask something like ‘What other types of bugs do you see outside?’ and they’ll say something like ‘we see butterflies’ or name other bugs and ask ‘is that an insect’. It helped children corroborate new knowledge in multiple ways to connect the known to unknown and to find a solution to a problem through innovative thinking. The teachers allowed many opportunities for children to use metacognitive activities to access their own thinking processes for an in-depth insight to find the solution to the problems. The teachers encouraged children to reason and to think about their own thinking to resolve the problems. The teachers helped children reconsider and rethink their own thoughts by developing perspective taking. Further, they encouraged children to take responsibility for their actions and to think subconsciously before taking actions and educated risks. The teachers encouraged the children to respond to open-ended questions, allowing them to self-reflect and build on possible answers to a single prompt using their own internal thought process and abstraction. The teachers engaged students in social discourses, discussions, and self-reflection to help them visualize their inner thoughts of others’ feelings using their senses through repetitive and intermittent questions and prompts.

The children involved themselves with practical thinking, experimenting, evaluating, deciding, and sharing with their friends in groups. The children learned in a
social setting and held discussions about their wonders and internal questions. To partially summarize, the children were intrigued and used “what” and “how” questions to explore, engage, and construct their own knowledge through repetitive thinking, experience, and hands-on activities.

For example, during the classroom observation, the researcher viewed, two children who were intrigued by a plane in the sky, and were engaged in watching them making two smoke trails behind plane using telescopes. At another point, the researcher observed children were engaged in questioning and thinking critically and discussing with their friends about gray hay on the ground. The children discussed with their friends their observations and thoughts; for example, one child showed another child stings and pinches of the scorpion using a plastic toy as a teaching aid in the classroom. One child told another child, while playing with a toy bee, that the bee dies when it stings once.

Children are little engineers as they observe, collect, design, create, redefine, and reconstruct their own structures. One time, the researcher observed that one child observed, rethought, and reconsidered to build a structure again. The child then constructed the figure while he was playing with wooden blocks at the drawing center.

To conclude, children are capable of thinking abstractly, reflecting on their own learning to develop and construct through metacognition and reflective thoughts.

During interviews with the six teachers, many examples emerged that helped children engage in cognition as they were provided with opportunities to think about their own thinking and make thoughtful decisions. For example, the teacher Betty claimed that when there is a conflict “We pull the children out the area to decide how we can fix this. We ask the children, ‘What do you think that can work for both of you that you guys
will be happy, and how can we fix this?’ A teacher exclaimed at another point that “repetition, repetition, repetition is something that they [the children] are exposed to daily. So, it is just repetition that they are repeatedly doing, and this allows them to be able to do it.” The children make their associations while learning as a community worker to deal with a problem together. As the teacher, Taylor stated in her interview, “They are learning from each other, they are all so different. They all talk about different things, so mostly they learn from each other.” The child’s play is the child’s work. Once the teacher told about children what they said, “We can do it [children said to the teacher]. How do you think we should build it? Do you think we should use the soft blocks or the hard blocks?” In another instance, “If they are doing artwork, we ask them about their picture, what are you drawing and the conversation will be about that. If they are building structures in the box center, we ask them what are they building? Why did you decide to build it that way? We ask open-ended questions while they are doing their daily activities and tasks.” The teachers help children learn to take different perspectives as one teacher stated in her interview. “So, you know, I’m just asking them questions about how they think that makes that person feel if they were in that person’s shoes. However, they will sympathize, you know, they’ll come and tell, but I don’t think they’ll really feel what that person feels. They come to an agreement after reasoning.” To conclude, the archival data showed that teachers foster independence using children’s curiosity and vitality to help children develop into independent and effective citizens.
Problem Solving

Problem-solving is a cognitive and critical thinking process that helps children make decisions using higher order thinking skills. Further problem solving is a mental mechanism of connection, making the unknown become known using thoughtfulness and interpretive genius. The classroom environment might help children become responsible by applying a gradual release of responsibility with minimal scaffolding in a social context. The teachers involved children’s interest, curiosity, and passion for working using multiple resources inside and outside of the classroom. Moreover, the teachers provided sufficient time for students to reflect on their own thinking and metacognition to decide the matters after thoughtful deliberations.

To conclude, the teachers asked children to engage, explore, predict, experiment and take responsibility to implement a plan of action. The teachers helped children use cause and effect, reflective thinking, and critical thinking skills to decide in a complex situation how to solve problems in the community. The children took responsibility as members of the classroom community using a chore chart in the classroom from the beginning of the year. The children took tasks as challenges and tried to solve them individually without the help of teachers. This developed self-confidence, leaving them to be efficient and civic-efficacious citizens.

The responsibility-taking skills observed in the classroom indicated the emergence of preschoolers into civic efficient and responsible individuals of the classroom community. The researcher observed that teachers asked questions and gave children plenty of time to respond, think, and recall. When the teacher showed pictures of transportation and asked them to classify which goes in the sky, road, and water, the
children engaged in questioning and thinking critically and discussed with a friend. Children showed curiosity about boats, canoes, and types of fishing boats and nets to catch fish. Indeed, the children took ownership of their responsibility by doing multiple tasks they had learned over time. For example, at “Read a Book Time” every child picked a book of his or her choice and started reading silently. The researcher also noted that children were engaged in the metacognitive process of reading. Further questioning by the teacher prompted the children to explain the inner thinking of their minds; for example, the children were asked by the teacher, “what are you building?” They replied, “We are building a city.” Metacognitive problem-solving is common, an indication of internal thought processing. For example, the teacher, Taylor, asked children if they knew how maps help to locate places. After a pause, the teacher stated, for example, Global Positioning Service (GPS) in mobile phones help people find a place. Mobile phones navigate to go and reach to the specific place following directions. It helps children make sense of the importance in their lives. To conclude, children learned to be responsible, effective, informed members of the classroom community by doing multiple authentic and life-related tasks in the classroom environment.

The interviews with teachers exhibited evidence of the children’s problem-solving skills. For example, Lily, a teacher, once told the researcher about problem-solving that she used redirections, a strategy to reflect back and reconsider the action. For example, if two children had a problem, teachers redirect the situation. The teacher initiated talks about ways children could have done it better by taking alternative ways to do next time. Teachers also invited children to predict the answer before they solved the problem. Once, Kathy asked children while doing sink or float experiment in the class, “Here we
have a pencil. Do you think that it is going float? Ok, put the pencil in the water. Let’s see what happens. The teacher put pencil in the water and observed. Oh! the pencil dropped to the bottom. Why do you think it dropped? Why do you think it dropped to the bottom?. They may think it is heavy or there may be not enough water in the bowl?"

Further, the teachers asked the children to reason. For example, once the teacher replied, “If they’re [the children] building something, we ask them why did you put that block there, what happens if we take that block away. When they give us information, we ask questions to go along with that, with that activity.” To solve problems, a teacher illustrated that “An example is right there. When someone gets hit, we talk about it. We also teach them how to resolve conflicts on their own as they get older in the classroom, so they start seeing that these should not have been said all this.” For example, a toy doesn’t work, the children would look for batteries first and asked, “Does this have batteries? or something like that”.

The researcher also noted instances of the activities in the portfolios that show responsibility. At one time, the researcher noted in the portfolio a child who participated in a mat game matching a number of objects according to number shown. Also, noted in the portfolio, children use a variety of tools like a phone, a cash register, and a keyboard. “They drew a picture and was able to tell me that it was a robot.” A child was playing with the puzzle and when stuck, refused to seek help. He organized the pieces again till completed. The children showed their determination to accomplish any task. They learned to be responsible for themselves and for others as civic efficient community members.
The researcher found instances of responsible behavior in teacher lesson plans. For example, one teacher planned to divide the children into four groups, telling them through demonstration that they were going to create their night by switching off the lights and swirling scarfs and moving around to pretend to be like twinkling stars. The teacher also encouraged children to be creative, and told how stars had different movements not like them. In another example the teacher provided each of the child with a precut hot air balloon shape and basket shape and asked them to have design their own hot air balloons and attach the baskets to them. They made their hot balloons. In essence, the children were prepared for future engineering pursuits to solve problems. As an example, a teacher asked her (the child) to make two trains of equal length using the same six blocks. Then asked her how many blocks were in each train. The teachers use many hands-on activities, such as “compare and contrast all the different balls you used in the game. Which is the biggest, and which is the smallest? Which one is soft, which one is hard? Which one bounces? Give the children egg cartons and jellybeans to sort by color. Because of these types of activities, children are prepared to solve real-world problems, such as, the children made an airport using the various blocks in this center. In conclusion, the teachers plan and implement their instructions in the classrooms to inspire responsibility and commitment as civic-effective citizens.

**Collaboration**

Collaboration is working collaboratively in harmonious and mutual cooperation that is defined by collective actions, interdependence, trust, and friendship. Collective actions create reciprocity and interdependence that transforms associations into ongoing friendships. Further, collective actions bind each to the other to respect rules, to sacrifice,
and to be respectful of others. A collaborative environment impacts individuals’ knowledge, skills, and disposition. Recurrent and consistent routines help evolve collective activism, reciprocity, and friendship as a habit of mind. The table two elaborates the subthemes and their frequencies. The table manifested collective action more than the other two subthemes, reciprocity and friendship (see Table 2).

Table 2  
Sources and Nodes for Collaboration Subtheme/ Source Wise

<table>
<thead>
<tr>
<th>Data Source/Nodes</th>
<th>Collective Action</th>
<th>Reciprocity</th>
<th>Friendship</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
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<tr>
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<td>36</td>
<td>112</td>
<td>32</td>
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<tr>
<td>Lesson plan</td>
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<td>0</td>
<td>56</td>
<td>16</td>
</tr>
<tr>
<td>Observation</td>
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<td>21</td>
<td>97</td>
<td>27</td>
</tr>
<tr>
<td>Interview</td>
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<td>32</td>
<td>16</td>
<td>86</td>
<td>25</td>
</tr>
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<td>Total</td>
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<tr>
<td>%</td>
<td>49</td>
<td>30</td>
<td>21</td>
<td></td>
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</tr>
</tbody>
</table>

Collective Action

The teachers build communities of students for multiple reasons: to help themselves, to follow the rules, to live as a family, to have a mutual understanding, and to group them without discrimination of sex and color. All of these reasons build team spirit to complete class chores, prompt reflective discussions, inspire friendships and harmonious work, and urge them to be responsible. All these actions bind them together into a member of a larger family of interconnected individuals and help them take up their personal and collective responsibilities as active members of the classroom community.

Children are guided by their natural curiosity and keep themselves actively gathering information and developing attitudes necessary to be an effective member of the classroom community. They listen and talk to each other following the mutually-
designed classroom rules such as keeping low voices, walking in class, and being respectful. They learn to wait, talk, take turns, work in harmony, and share. The children help each other in the decision-making process to do the work collectively.

The classrooms are arranged into various places for work: the block section, the home section, dramatic play, the science corner, the music section, the art center, and books. These sections represent the world around them within the society outside the classroom.

While observing, the researcher found multiple instances that manifested the collective actions in three and four-year-olds at work. During one observation, the boys cleaned collectively the objects they spread out in the center in the areas they played. At another time, the children were working like young people. Three children were working together at a center like a community of workers to fix a machine. At one more time, the researcher noticed four children were engaged in preparing vermicelli using clay dough of various colors together. The children loved to work as they saw the world happening around them. The children acted like adults to be considered and appreciated as members of the classroom community. The consistent routine helped children form effective habits. During the observation, the researcher noticed self-regulation and self-driven habits displayed daily in classroom rituals.

Numerous examples emerged during interviews with the classroom teachers. In an interview with the teacher, Lilly, she stated that “Each family, each child, comes to the preschool setting and brings a different history, a different attitude, a different character. So, we put all of the kids in the classroom together to make them able to adapt and learn beyond what they are familiar with.” The teacher explained, “People are different, but we
teach children to respect one another, chances are they would work better together, will be able to communicate better, will be open to one another better, and will be able to share with one another better if we know how to respect one another.” Therefore, respect played an important role in relationship-building. Another participant teacher told the researcher, “throughout the week, we do activities in which we have to work together to get the job done. In doing that, the teacher added that communicating with each other, giving their own input and thoughts outside their ideas to work together to solve the problem or make the project work. The teachers developed an environment to get the children work together in as a classroom community.

The archival data, the portfolios, and the lesson plans indicated multiple instances of collective actions. For the lesson plans, the teachers based each plan on a weekly theme. The researcher found notes in portfolio observations of students’ activities noted by the teacher such as “Ali [pseudonym] has improved playing with most of his friends instead of himself, participate in group activities building blocks, and actively played with blocks with his peers.” This showed that children, with time, shifted their activities from individualistic to collective actions if provided with a consistent and regular classroom environment as social cognitive learning. At one more place in the teacher’s observations noted in the portfolio, the teacher wrote that “Lisa (a pseudonym) demonstrated her ability to engage in play with fellow peers, contributed to the group discussion, and identified classroom rules such as don’t hit, be nice, walk in the classroom.” The teachers assessed students’ cooperative skills.

Teachers claimed cooperative actions such as “children will gather together and connect to each other by holding one another’s waist. The children will walk around the
playground and say ‘choo-choo’ like a train”. In this case, the children had an extended opportunity to play together in an open space within a community. There was one more example planned in a lesson plan that stated that “As a group, we will engage in play outdoors using a parachute.” Students were collaboratively engaged in the collective action of flying parachutes like in real life to augment their agentive role play. In summary, portfolio and lesson plans indicated the collaborative actions of the children in their classroom community.

**Reciprocity**

Reciprocity and interdependence are human instincts to influence each other by giving and taking, exercising interdependence using interpersonal skills, and acting to bring a desirable change in collective lives in the community. Reciprocity incites from within to work for one another to influence and be influenced by others in a group by offering and receiving assistance. The feelings of collective goodness in the company of one another in the community helped children feel positive about self and others. Reciprocity demanded higher order interpersonal skills based on shared affiliations, mutual help, assistance, and respect to make a harmonious community in the classroom environment.

During the observation, the researcher noticed that many examples manifesting reciprocity, interdependence, and mutual help were common in and out of the classroom. For example, at one time, the researcher observed everyone collected everything as a collective responsibility and helped each other to wrap up things after the classwork was over. As they lived together the entire day, children loved to help. Once, the researcher observed, children were playing outside with toy mowers, and one child said, “We got a
job of mowing the grass, gotta go for that.” One more example of the classroom community at work occurred at lunch time. Like a family, everyone had lunch together; the staff, teachers, class assistants, and teacher assistant were observed working and doing things for each other. Further, the children love to help each other accomplish tasks. For example, the researcher observed one child engaged in tower-making with blocks with the help of his friend. The children behaved as if they were members of a connected family and destined to help each other in the classroom environment.

Many instances that indicated reciprocity and interdependence in the classroom environment were found during interviews with the teachers. For example, one of the teachers, Kathy, claimed that “We teach children respect. People are different, if but we respect one another, chances are they will work better together, will be able to communicate better, will be open to one another better, and will be able to share with one another better if we know how to respect one another.” To create a community, respect, mutual needs, and agency were practiced in the classroom environment with structured and organized activities led by an experienced teacher. On one more occasion, Taylor, a teacher, described how the teachers help children take up their roles in the class, “We talk about the different rules and roles in the classrooms, there are different roles in each center, and the kids know the roles.” The reciprocity and interpersonal skills learned at an early age might make children better citizens in the future as the teachers proclaimed that they help each other on their own and take initiatives in reciprocity and interdependence.

Within the archival record of the sample teachers in their portfolios, the researcher found many instances of evidence showing interdependence and reciprocity such as when one child in the class worked with his friends and made a house for his toy
frog with seashells. The children worked together on collective projects of their mutual interest and passion. Another child, William, and his friends created an airplane with large sticks. The children solved riddles and puzzles with the teacher and their friends and developed decision-making skills collaboratively in the classroom community.

The lesson plans manifested many instances of pragmatic instruction created by the teacher such as “divide the children into four groups, tell them through demonstration they are going to create their own night through swirling scarfs, and moving around.” The children worked together to do a common and collective task while depending on each other in the group. This offered a scaffold to develop self-efficacy. In summary, working together helped children learn from each other and foster interpersonal skills of relying on mutual dependence.

**Friendship**

Friendship is a feeling of trust, togetherness, and respectfulness to others, sacrificing self for the sake of others as a civic community. Friendships allow for personal gains for others in the group, thinking about others first, and being respectful to the shared goals to be a civilized and decent member of a community.

The teachers created an environment of care, respect, mutual understanding, and collaborative ambiance to solve academic, social, emotional, and virtual problems in the classroom by playing a dynamic and multi-tasking role throughout each class day. They solved their arguments and skirmishes by negotiations, metacognitive talks, and self-reflective thinking strategies. Teachers reminded students to be respectful of belongings, people, and plants around them. They used verbal, spatial, and directive measures to enculture civic efficacy in the children for a better future. To further illustrate, the
teachers assigned children various duties to be helpful to others, saying sweet and soft words with each other and apologizing for inappropriate behavior. The teachers always insisted on children being friends with everybody and extending cooperation without any bias and prejudice.

Students were energetic and full of vigor during early years. They did multiple chores and performed responsibilities throughout the day to build trusting relationships among their peers individualistically and collectively. They learned to develop perspectives through the prompts of teachers by repetition. The children saw each other as equals and had a short span of attention and focus as they forgot fights and again played together in harmony. The children were bias-free and non-antagonistic in nature; only outside influences made them become so. The children learned from each other through observation, self-learning, self-correction, and reminders by adults or friends in the context. They discussed with each other about everything they observed, heard, felt, tasted, and smelled with peers. Mostly, the girls felt comfortable discussing matters with females and the boys with males. They shared with each other what they loved and appreciated and acknowledged each other through prompts by adults or teachers during arrivals and departures. They liked to feel good, played in the company of friends, and made plans to play in their favorite center by making their own choices ahead of time and claiming the desired center. They also followed rituals of mutual respect as they waited for their breakfast, lunch, and snacks together in a civilized manner. With a prompt, they felt sorry for being hurtful to others, used metacognition and reflective thinking.

The classroom observations showed many examples of friendship and mutual likeliness. During one observation, three girls sat under one blanket before taking a nap
like siblings and friends do to manifest their affiliations and trust. Once, at departure, one child hugged the teacher, and waved and said goodbye to everyone in the classroom on her mother’s prompting. In addition, the boys and girls liked to invite and play with the same gender, such as the boys and girls sat at a separate table for breakfast. Further, two girls played together in the home living center. To further solidify this notion, one male child asked the other boy to come and look while he was playing in the shaded area outside in the playground. To conclude, the children created their own communities, friendships, and affiliations in the classroom setting based on their shared interests, common pursuits, and personal passions.

The interview data highlighted experiences that help children build relationships, friendships, and associations if rules are designed aimed at developing such behaviors. The teacher Molly stated that “One of the classroom rules is to use kind voices so, whenever we need to talk to someone, we try to explain to the children when you talk to someone it should be a nice kind voice.” The teachers emphasized to be polite in the classroom, which has a transformative effect and expanded outside of the classroom. The teacher Katie said, “I think when people are comfortable, they are more willing to adjust to a different environment. If you are comfortable, you are lot more willing to talk, willing to play with others, and more willing to share with others. So, it is a level of comfort we have to offer each other to make each other feel important and make each other feel like they are respected.” To make someone feel important, comfortable, and safe helps to internalize the social behavior and civic norms of the community early in the preschool years to build their habits of mind.
The archival data exploration showed the least amount of evidence in the lesson plans for the development of civic efficacy. In the portfolio assessment, the researcher noted that “Emily [a student] is very kind and respectful to her peers,” and “she invited her friend to come to the art center to make a bracelet together.” Once the teacher noted about Ali, a three-year-old child, that “he talks a lot with his friends in the class. He is using polite words.” The teachers assessed and recorded students’ friendly behavior. To conclude, the data showed many ways that teacher fostered a collaborative environment.

**Engagement**

It is the responsibility of an independent individual to make a difference in the lives of self and others; this requires being a committed, collaborative, and congenial member of a civic community, which are the obligations of civic engagement. Engagement is a long-term commitment that takes time to control one’s actions, responsibilities, social rituals, and shared values as a responsible member of the community. Engagement entails responsibility taking, independence, and community skills. The frequencies of engagement domains with data sources are elaborated in detail (see Table 3).

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<th>Sources/Node</th>
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<th>Independence</th>
<th>Community skills</th>
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<td>8</td>
<td>44</td>
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</table>
Responsibility

Responsibility means taking ownership of the consequences of the effort one exerts to perform a task. Responsibility is transformative and requires agentive commitment, self-discipline, and a deliberate routine to accept ownership of the tasks to fulfill the conditions of social justice and mutual respect for completing task. Duty, accountability, and independence are general themes of responsibility. Responsibility is feeling about one’s obligation as an agile and civic member of the community to perform duties.

The teachers knowingly helped children become responsible in developmentally appropriate ways and provided opportunities and time to think, reflect, and reconsider their decisions in the classroom community. They helped children by providing minimal scaffolding to assist them to become independent problem-solvers and decision-makers.

During the classroom observation, the researcher found multiple instances that developed responsibility, independence, and community skills in children. The children played their roles like real life individuals. During one observation, two children wore camping clothes and jackets with binoculars to play in the home living section. The children also worked together in small groups and communities as for example when four children were engaged in preparing vermicelli using clay dough of various colors. In another instance, to further illustrate, two children used dust as a gas and filled their mowers and then said that then it would go faster and quicker than before. Also, boys engaged in collecting plants and shoveled like farmers in outdoor play. In another observation, four children while playing together and Ali said, “We are hunting for bugs
and beetles”. Joe (a student), also worked with his friends and made a house with seashells for a toy frog. Another group of children enjoyed counting money at the cash register. The children believed and learned in groups and shared their feelings through conversation and social discourse.

There were many examples, the researcher found, in the interviews that indicated the development of responsibility. For example, every child must do a certain task in the class as a member of the community. There was a chore chart in the classroom, and everyone knows their personal, academic, and social responsibilities. As one of the teachers described during the interview, they have many roles in the class for children to play as a member of the classroom community. One teacher pointed out that there is “A lot of role-playing. Each day we must role play about how something works. We help children and guide them on how to act in a situation.” To help children understand the community workers who work for the community, teachers bring community workers into the classroom to let children interact with them to get firsthand experience for example the police officer, the firetruck driver with equipments, and they get to play with the tools for on the firetruck and children see the people uniforms, the teacher explained. As a result, the daily rituals and understanding community work helps children learn civic efficacy.

Children imitate and mimic to learn and transfer knowledge, skills, and dispositions, through adults assigning various responsibilities at home or school. For example, during the classroom observation, it was noted that girls pretended to be mothers in the dramatic play center. Children also like using and play with the cash register for counting money. The teacher noted in her portfolio about a child “What do
you want to be when you grow up, William [a student] said, “a construction worker.” He replied. The children also work collectively in the classroom; for example, the researcher observed at the time of cleanup, children cleaned up all blocks and did not stop until all were put away.

The lesson plans and portfolio observations included the actions and statements noted by the teacher in her portfolio a response of a child “I want to be a space pilot” and, “I want to be an astronaut.” Further, the teachers used real-life examples such as to make a space shuttle out of refrigerator cardboard and turned two baskets on the side of the box to imitate rocket boosters. Next, she put two chairs inside the box for an astronaut to sit. Before the arrival of the students, the teacher put the rocket in the dramatic play area. Then to develop responsibility and ownership in children, she asked children to help her decorate the rocket. Then teacher cut a slit all the way through the paper towel roll, cut out wings from the cardboard and stick them in the slit. Finally, the teacher decorated and designed the rocket to fly into space. To conclude, the evidence indicated the development of critical thinking and metacognition that led to self-regulation and independence, both of which are essentials of a civic efficient citizen.

The teachers encouraged children to take responsibility for their class, and they gave them choices. They offered many choices to select from to amplify their self-initiation for the transformation of action. In other words, they allowed children to do their own activities according to their choice. They also allowed them to form their own groups to work in the centers and play outside. They encouraged the students to work dependently by putting a star as a reinforcement on the kindness chart when they helped
other child. Teachers encouraged and appreciated the children’s effort publicly and recorded this on their note cards as an evidence.

The students were allowed to act at their favorite play and workstations, but they had to follow the rules that were mutually decided at the beginning of the school year. The children were given freedom to decide at every step. The children behaved in ways that more likely provided them praise and appreciation. There was a help chart in the classroom that encouraged children to do their favorite duties within the classroom as a member of the classroom community.

During the observations of the preschoolers, the researcher observed every child collected their things as a responsibility and helped each other to wrap up things. One child helped bring food for others. Some places already specified became a place to sleep for nap. At the prompt of the teacher, one girl, Kinza, cleaned the floor after lunch and put all stuff in the trash. Before outdoor play, the children made their own beds for nap and brought their pillows and blanket from their own racks which were meant for their self-management skill development. Everyone washed their hands before going to bed without prompting. Everyone set his bed for a nap at noon without teachers’ help. Children performed actions independently without prompt from the teacher which seemed a routine. The children knew their responsibilities. These evidences show the independent responsibility taken in the classroom that is an essence of civic efficacious citizens.

During interviews, the researcher noted many examples of responsibility. One example focused on their belongings. One teacher said, “another thing is teaching how to take care of their toys, costumes at dramatic center, so we [the teachers] teach them how
to be responsible and take care of things and belongings. Later, when they become adults, they would need them to use.” The teacher said at an other point “they [the children] are the responsible for their own decisions. If they [the children] change their minds, the teacher said “This is the choice you made you have to stick here until time for you to move around”. The routine and schedule is helpful to build the habits of mind of the children.

While reviewing the documents, the researcher found many instances that taught children responsibility. For example, one child, David, “Uses a variety of technology tools; a phone, a cash register, a keyboard. He may then chose to look at books in the library.” In another instance, “William [a student] was looking at bugs through a magnifying glass in an activity. He then was looking at sensory bottles and asked, what is floating inside? He engaged in self-play and moved from one center to the other.” At another time, it was noted that a child did not seek help but did the task alone and “refused to seek help” when he could not move forward. He organized pieces again and did until it was completed; this showed his determination. The instances were noted clearly to indicate the independent and self-geared actions by the students, such as “Beth [the student] can use the iPad and needs no help training. She informed me that she has one at home, and she played a matching game.” An ongoing, formative assessment made by the teacher revealed that the children learned independence as a result of an effective classroom environment that groomed the children into independent citizens capable of doing their jobs independently.
Independence

The lesson plans indicated multiple examples of the teachers’ plans to teach the children independence. For instance, in a lesson plan, the teacher Katie “planned to let children engage in constructing props on their own. For science, put peel-off stickers of the planets on the window of the room and discuss them. Brainstorm what they think they would find on the other planet. What would they take with them if they travel to space? Let the children repeat the experiment for themselves. Have materials on hand so children can experiment in small groups.” The teachers planned activities and allowed choices to help children decide their own actions. For example, the teacher would ask each child to draw a picture of their favorite boat. If time allowed, children would display their pictures with their names on them. The examples from the lesson plans indicated evidences of the children as artists, engineers, and authors who can play productive roles in the lives of others in the community they live.

Community skills are joint activism in the pursuit of collective wellbeing in the community on the bases of shared interests. It includes the welfare of others and thinking about others’ interests first and taking perspective. Citizenship skills such as critical thinking, participation in community work, selfless work and assistance for others, and conflict management through mutual discourse and negotiations are the hallmark of a vibrant community. The skill of developing community is viewed as positive activism in the pursuit of collective wellbeing using perspective.

To achieve this, teachers developed very cordial and friendly relationships with the children’s parents by greeting them in the mornings and saying a farewell, modeling these behaviors as habits to follow. In the classroom, the language that teachers use
shows cohesion. The pronoun “we” develops a sense of community and togetherness. They allow the children to form their affiliations to play and work together within the classroom and outside in the playground. The teachers encouraged children to help each other and speak kind words with each other, so they behave as decent members of the community, the classroom.

The children followed the rules that they had decided at the start of the school year, and these were visible on the wall for easy repetition and remembrance. They helped each other without prompt and sympathized with their friends when they were distressed. The children practiced democratic thinking and attitudes while doing tasks and deciding about class matters collectively. They respected the opinions and thoughts of others and facilitated them in small groups of the classroom community. They helped, respected, and honored each other’s points of view as young citizens of the classroom community.

The children in the classroom environment used a collective and cohesive approach. For example, the researcher observed children and teachers talked “we” in the classroom for working together. This developed cohesion. At another time, the researcher noted “three [children] worked together at a center to immitate a community of workers making a house with blocks. Another time, the researcher observed four children were engaged in preparing vermicelli using play dough of various colors. Not only the students, but also the teachers exhibited cohesion. For example, three teachers collaborated to function as a collaborative unit of the class with perfect coordination as they joined together to architect a huge butterfly with colorful paper with black dots in it for a butterfly related lesson to teach to children. It was an exemplification and live
modeling for the children to learn through observation how things are made. This helps children learn to coordinate and cooperate with each other. The working of the teachers cooperatively also helped in making good relations between the school and society. The researcher noted “the teachers greeted parents on arrival in the morning and exemplified for children to model an evidence of community.” The teachers also worked together to create a positive atmosphere that engaged the children. One teacher said to a child, “I am proud of you.” This builds confidence through acknowledgement. Because of this confidence, the researcher observed that children loved to show their work done in the classroom to their parents and friends what they accomplished during the class time. The observation data included many examples that showed the qualities of good citizen skills as a result of an engaged classroom environment.

During the interviews, the researcher found many examples that helped children develop community skills. For instance, the teacher, Taylor said, “each family, each child, they come to the preschool setting and bring a different history, a different attitude, a different character, so we put all the kids in the classroom together to make them able to adapt and learn beyond what they are familiar with.” Teaching civic and community skills are part of the curriculum, and it was performed significantly in the classroom. One teacher said, “this week we are talking about recycling. We need to keep our room clean because there can be a social problem as dirty water, you know, those different things. Teaching them how to keep the environment clean, you know, this is what happens if we keep our environment clean and show different pictures of what happens when trash is everywhere, so, you know, that probably helps.” The interviews confirmed the evidences
collected through other sources that children might learn responsibility, independence and community skills in a conducive classroom environment.

**Community Skills**

Social interaction plays an important role in garnering civic rituals among its members in the community. For instance, the children were noted by the teacher as “engaged in positive interactions and shared blocks with classmates during block center, interacting with others and separating from others easily, taking turns and sharing with others, listening carefully and answering the question, and participating in the conversation with good vocabulary during group time.” Further, the children resolved their small conflicts using reflective talks. One teacher observed and noted in the portfolio that, “Ali [a student] is good at resolving conflicts with others.” Moreover, the children developed abilities to think collaboratively and critically as the teacher noted about another student, “Rob knows classroom rules well and reminds others to follow like walking feet inside the room. He has improved with playing most of his friends instead of himself, and participating in group activities like with building blocks. Once I heard Rob was speaking with Joe and engaged in a conversation asking ‘why’ and ‘how’ questions.” Another example indicated that the children followed rules, reminded others, participated in classroom discussions, and displayed careful and respectful attitudes toward others and their belongings. One teacher noted “I observed Erin and the rest of the class contribute to the group discussion, showing how to treat others’ belongings with care and when to use them, and further, she identified classroom rules like don’t hit, be nice, walk in the classroom.” The ongoing assessment data along with the interviews and
portfolios showed that children learned civic skills and community-building attitudes and behaviors in the classroom.

Group work and equal opportunity to participate during classroom rituals had been planned in the lesson plans as well. One teacher wrote, “divide the children into four groups, tell them through demonstration that they are going to create their own night by switching off the lights and swirling scarves and moving around like stars as play. Let children rotate in another group. Every child should have a chance to be the sky, a star, a shooting star, and a comet.” In another instance, the teacher planned for the children to work collaboratively, “The class may work together or individually connecting roads and ramps to drive a variety of transportation on. Discuss the children’s thoughts about the reason for this. Yes, air is really there even though we cannot see it. It does take up space.” The lesson plan instructions showed the development of community in the classroom in a conducive environment. Engagement fosters responsibility, independence, and socially approved community skills for preschoolers via the classroom environment.
The purpose of this study was to investigate the practical instances of how early childhood teachers develop young preschoolers into effective citizens. The review of literature indicated three aspects, inquiry, collaboration, and engagement, that develop civic efficacy among learners. The research questions were answered using empirical examples from the early childhood classroom. The questions were (a) what classroom practices and policies are used to help children develop inquiry skills?; (b) how do teachers foster community and collaboration?; and (c) what mechanism is available in the classroom environment that engages children to behave like effective responsible citizens? The study concluded that the classroom environment has catalyst potential and promising prospects to transform preschoolers into civic effective citizens who cater their actions for self and others in proximity. Employing inquiry and discovery approaches, collaborative strategies and sustained secure civic engagement in the classroom environment can develop civic efficacy in children at three and four years of age. The children can enhance civic rituals and hone civic efficacy skills such as inquiry, asking critical and significant questions through metacognition, and reflective thinking. They learn problem-solving, critical thinking, collaboration, working in harmony with others exercising interdependence, and reciprocity. Further children learn independence, altruism and perspective taking, empathy, responsibility taking, and community-building
skills. These skills are all possible by thoughtful, wisely planned, and consistent rituals in the classroom environment. These skills and dispositions flourish in an environment of respect for children’s physical, emotional, psychological, and community needs. Three constructs that run simultaneously are inquiry, (considering a significant question), collaboration (working together interdependently using reciprocity), and engagement (employing the learned knowledge and skills to make a difference in the lives of others).

The three constructs of inquiry, collaboration, and engagement overlap in meaning and objectivity. They complement each other in entirety and maintain their cohesion as shown in figure 4 below. This figure elaborates that these three constructs operationalize in concord. The initiation of an essential and significant question triggers the urge to collaborate and engage for solution of the problem. This process starts with a question (inquiry) and enters in collaboration with environment, skills, and individuals who engage themselves to civic well-being and efficacy. These three factors are interdependent and coincided to sustain each other.

The results of the study revealed significant findings consistent with past empirical studies. The three constructs overlap and are congruent, inseparable and interdependent. Children are more inclined and susceptible to engage and perform actions using mutual collaborations and inquiries following their curiosity. Engagement excelled the other two constructs with slightly higher inquiry than collaboration. The coded entries frequency count showed 29% inquiry, 27% collaboration, and 44% engagement after analyzing all the data sources.
Figure 4. The integrative process of civic efficacy

There were more examples of engagement than the others. Children are always on the move and never tire from working and doing activities. Inquiry was slightly more than collaboration; this indicates the curious nature of the children to increase their knowledge. The reason that the frequency of collaboration and inquiry are nearly equal to each other might be due to the children’s desire to work together in groups.

Analysis indicated that teachers do more to support civic efficacy than what is written in their lesson plans. The children’s classroom activities show more practical efficacy than intended in the instructional plans. The lesson plans fall short of the real situation in the classroom. The time, interest, and amazement varies between the lesson plan and real classroom environment. The children learn to engage more through helping others, working together in small groups, and being proactive as members of the
classroom community in an environment that is physically, psychologically, and socially safe. They learn to respect friends, follow classroom rules, and care for belongings. The children at this age show only sympathy and not empathy but are not likely to understand the perspectives of others on their own. Children use their imaginations. They ask more and more questions regarding “what,” “who,” and “how” from the adults around them. They do ask higher order question that address metacognition and reflective thinking for example “Why’ questions.

Inquiry

Inquiry, asking critical questions, supports problem solving processes by using inventiveness and natural curiosity. Preschool teachers believe reflective thinking, metacognition, discourse, and problem-solving skills help children learn to be civic-effective and productive members of the community and can play a role in bringing a change in their lives through empiricism. Children learn practical skills better when they are exposed to developmentally appropriate cognitive challenges to explore, know, and solve problems related to their interests and lives. Children inquire and investigate better in groups, especially with those whom they have better affiliations and associations. The teachers plan more inquiries in the lesson plans, but the children inspire more wonderings for what they think is meaningful, exciting, or interesting. The teachers ask children questions for multiple purposes, for instance, reminding rules, exploring previous knowledge, connecting the unknown to the known, developing courage, and reflecting on their actions. The teachers use inquiry as a fundamental instrument to start metacognition and perspective taking which facilitate activism and pragmatism that develop in children to excel and be an agent of change for the people around them. Through inquiry, the
teachers develop civic efficacy by teaching children research, metacognition, and problem-solving skills in the classroom environment.

Inquiry promotes research skills, through exploring reality to solve real world problems. Inquiry also includes investigation, scientific thinking, initiative, creativity and corroboration of the learned and prior knowledge to solve emergent life related issues. Further, inquiry encompass risk taking, self-evaluation, and meaningful pattern finding processes through metacognition. The teachers use these tools to harness the doubts and uncertainties of the children by a repetitive process of inquiry day in and day out.

To benefit best from inquiry skills, teachers need to be inquisitive and data driven by recording specific behaviours of individual students. The research process demands higher order thinking and ultra-perseverance so teachers need to activate the prior knowledge of children to advance them to the next level using their voices and choices. The likeminded children might be grouped together to work on a shared project as it happens in real world situations. Moreover, as we live on the brim of technology and scientific invention, the teacher should read to children about the uses of relevant scientific exploration tools to prepare children for future use. Lastly, the teacher may introduce the use of the internet verbally to catch the natural curiosity of the children to develop a lifelong scientific attitude which ultimately will inculcate the characteristics of effective citizenship in children.

This research is important because scientific thinking and research has been brought into the spotlight for preparing children to be ready to cope with the challenges of the 21st Century. This research is also pertinent because in this world of aggressive competition, knowledge explosion, and technological progress, children need to be
experts in research to know and evaluate information, analyze primary and secondary sources, and solve problems. This is also important and fundamental to meet the needs of 21st Century engineering skills, where the emphasis is placed on the cultivation of inquiry, research, and problem-solving skills. Focused questions delve into problem-solving using the scientific process of engaging, exploring, explaining, extending, and evaluating. Because of this, inquiry is an infinite process of observation, thinking, reflecting, and designing plans to solve problems. The inquiry skills learned at early ages would benefit children for a longer period of time as studies have shown. It is necessary to develop young children into scientists, engineers, mathematicians, and disciplinary experts in analytical and practical scientific knowledge, skills, and dispositions to solve problems as effective citizens.

Inquiry should be the focus of teaching and planning because well-thought out plans can lead children to active participation in the making of a democratic, progressive, and science-oriented society that is determined to solve recurrent and emergent problems. Inquiry across disciplines might be more beneficial for future generations as technology is prominent in the lives of the children. The children must be given opportunities to select their own topics for which to collect information so that they become experts in a field of intrigue as lifelong pursuits.

**Collaboration**

Collaboration means working together to achieve a shared goal, decided after mutual deliberation. Collaboration helps develop collective thinking and cumulative actions, interdependence, and mutual understanding as civic testimony. Collective thinking has been at the core of group integrity and cohesion. The act of collaboration
encompasses multiple constructs such as collective action, mutual respect and equity, conformation of shared rules, and cooperation. Collaboration also entails reciprocity, giving and taking, interpersonal relations, reciprocal influence, and mutual dependence. Moreover, collaboration bears sacrificial attitude to others, respect for the voice and choice, persuasion skills, and a sense of togetherness and shared vision.

The teachers are a sign of a bright future for future generations. The teachers and adults set a progression of steps for the children that serve as a trail for them to navigate future physical, social, and emotional problems. The practical measures that can be considered and instated in the classroom environment to develop civic efficacy in children include collective disposition, interdependence, and friendship. Collaborative meetings of teachers, students, parents, and staff promote the wellbeing of a classroom environment conducive to flourish a robust community of civic efficient citizens. The children should be encouraged to plan and design their own inquiries within small groups after collective negotiations and discussions and evaluating the advantages and disadvantages of the actions through unanimous deliberations.

The adapting of lesson plans can be practiced by the teacher who can take a flexible role in the management of a learning situation and upgrade the lessons as an ongoing process. Group discussions on meaningful topics should allow children’s choices and voices into the classroom environment; they will feel acknowledged, appreciated, and well-respected so that they can hone collective, reciprocal, and altruistic skills necessary to be independent, agile, and proactive civic citizens of a global community. In the wake of an obsessive craze for technology in youth, teachers need to look for all possibilities of virtual collaboration with the assistance of parents and caregivers. To
raise the children as effective citizens, the collaboration of all kinds, physical, social, and virtual should be incorporated as early as the age of three and four years of age to weld them with the real adult world.

**Engagement**

Engagement as defined as assuming task and responsibility, socializes and helps children become responsible, independent, and productive members of the community. Engagement encompass multiple constructs; commitment, self-discipline, resoluteness, onslaught and formative independence, and rigor. Moreover, engagement transfers to an empathetic attitude, self-confidence, roleplaying, activism in altruistic behavior, social association, and lifelong commitment to goodness toward others around as an effective citizen.

Classrooms are places for social experimentation and training of the children to make them ready for taking the role of effective citizens. Teachers do more than plan in their lesson plans and they record their observation as ongoing assessment. Teachers assign multiple duties to children on a daily basis to develop a sense of responsibility. Classrooms are an extension of home and a transit between real world and home, teachers connect multiple community workers to their preschool students. Once a farmer brought cows to the preschool and demonstrated for the children how to milk and feed the cows. Further, teachers helped children use milk to make butter. Police officers, fire fighters, and doctors, the community workers and official personnel, are frequently invited to the school to orient children with their equipment and procedures to serve the community. The children are exposed to every possible responsibility likely to be adopted as an effective citizen in their future.
The teachers, through their leadership skills, can bring about a healthy learning environment. Participation in small-group projects helps people play their role in the wider society. Moreover, engagement develops resilience in children, and they take ownership of their responsibility, use group strengths, and become engaged individuals to play the appropriate roles as efficacious members of the community. Practical wisdom and teaching citizenship education demand time, experimentation, collaboration, and exchange of ideas among mates, and teachers benefit also. The community-driven questions concerning current issues and culturally responsive pedagogy make a difference in developing civic trends and courses of action. Along with research skills, inquiry-engaged children learn self-regulation and self-discipline. Inquiry imparts this self-regulation and logical wisdom as essential characteristics of a civic-proficient citizen. The environment in which adolescents take part in discussions of fairness and democratic school climates is associated with higher levels of civic engagement and responsibility taking. To conclude, engagement of children in classrooms might help develop the civic efficacious skills of responsibility, independent role-playing, and community skills through which children become agents of change in the community.

The preschool teachers believed that to be engaged children should always have their hands on a task, and they are quite justified that an empty mind yields negative results. The teachers deduced that the children learn to solve problems if they are continuously engaged. The children are active and smart, and they are always developing their mental and physical growth. The researcher’s observations and teachers’ portfolio assessment coincided that children are more engaged and committed. Children learn to be responsible, independent, and civilized when engaged to perform some duties as
individual and productive members of the community. The classroom environment helps children practice life skills, knowledge, and dispositions needed. The art of living within society is practiced in the scaffolding of a teacher in the class. Teachers teach children necessary skills to be civic efficient citizen and productive members of the society.

**Conclusion**

This research illustrated how preschool teachers can develop (1) inquiry skills that include research skills, metacognition, and problem solving; (2) collaborative skills such as working together cooperatively, reciprocity, and friendly, and (3) engagement that includes effective citizenship skills, responsibility taking, ownership of duty, independence, and community building in an early childhood classroom environment. The findings demonstrate that inquiry transforms children into investigators and researchers who gather information to build on their knowledge, skills, and dispositions. Because of this, teachers need to expose children to real life exploration and real-world problems rather than theoretical constructs. Teachers should provide children with opportunities to conduct sustained inquiry into self selected topics. Secondly, the findings show how children can learn to work in teams and practice reciprocity to form a classroom community. Teachers should design learning activities that can be accomplished in groups to support collective action in the classroom environment that will contribute to civic efficacy in the future. Lastly, the research demonstrated how teachers can encourage responsibility, independence, and cooperation through creating a learning environment that focuses on supporting collaboration, inquiry, and engagement. Most importantly, this research demonstrates how teachers can develop civic effective
citizens for the future. As the children of today are the adults of tomorrow, it is important to begin developing citizenship skills in the preschool classroom.
REFERENCES

Baker, F. S. (2013). Responding to the challenges of active citizenship through the revised UK early years foundation stage curriculum. *Early Child Development and Care, 183*(8), 1115-1132.


APPENDIX A

IRB APPROVAL
NOTICE OF APPROVAL FOR HUMAN RESEARCH

DATE: March 09, 2017
TO: Rizik, Mohammad, MS, Curriculum Inst. & Special Ed.
FROM: Roberts, Jodi, IRBPP Officer, MSU IRBPP

PROTOCOL TITLE: The classroom environment impact on civic efficacy in preskolotes
PROTOCOL NUMBER: IRB-17-043

Approval Date: March 09, 2017 Expiration Date: December 31, 2018

This letter is your record of the Human Research Protective Program (HRPP) approval of this study as exempt.

On March 09, 2017, the Mississippi State University Human Research Protective Program approved this study as exempt from federal regulations pertaining to the protection of human research participants. The application qualified for exempt review under 45CFR 46.101(b)(1).

Exempt studies are subject to the ethical principles articulated in the Belmont Report, found at www.hhs.gov/ohrp/regulations-and-policy/belmont-report/.

If you propose to modify your study, you must receive approval from the IRBPP prior to implementing any changes. The IRBPP may require the exempt status at that time and request an amendment to your application as non-exempt research.

In order to protect the confidentiality of research participants, we encourage you to destroy private information which can be linked to the identity of individuals as soon as it is reasonable to do so.

The MSU IRB approval for this project will expire on December 31, 2018. If you expect your project to continue beyond this date, you must submit an application for renewal of the IRBPP approval. IRBPP approval must be maintained for the entire term of your project. Please notify the IRBPP when your study is complete. Upon confirmation, we will clear our files pertaining to your study.

If you have any questions relating to the protection of human research participants, please contact the IRBPP by phone at 325-1904 or email irb@research.msstate.edu.

We wish you success in carrying out your research project.

Roberts, Jodi

Review Type: EXEMPT
IRB Number: 17-043
APPENDIX B

PARTICIPANTS CONSENT
Informed Consent Form for Participation in Research for Exempt Research

Title of Research Study:

The Classroom environment impact on civic efficacy in preschoolers

Researcher: Muhammad Riaz, Mississippi State University

Research Supervisor: Dr. Kenneth. V. Anthony, Department of Curriculum Instruction and Special Education, Mississippi State University.

Procedure

The purpose of the study is to investigate how class environment affects civic efficacy in preschoolers. What kind of classroom environment scaffolds preschoolers’ character building to learn knowledge, skills, and dispositions to become civic efficient citizens? The study will include classroom observations, lesson plan reviews, teachers’ interviews, a survey questionnaire about teaching experience and reflections, and classroom observational portfolios. The interviews will be audio and video recorded and transcribed. Later, they will be presented to the interviewees to confirm the responses for both content and intent of the insight shared. The interviews will take 40 minutes and the survey questionnaire will take 30 minutes to complete. The survey questionnaire will be handed over and collected in person and the teacher will return them in a week time. No names or personally identifiable information will be asked during the interview. No minor under the age of 18 years is included in the study.

Voluntary Participation
The information will be kept confidential. The pseudonyms (fake names/numbers) will be used to conceal the original names of the participants. Participation is voluntary and refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. Further, you may discontinue your participation at any time without penalty or loss of benefits. There are no physical or other risks involved in the research. The research results will be reported using pseudonyms (fake names/numbers) to keep personal identity confidential.

Questions

If you have any questions about this research project, please feel free to contact the researcher, Muhammad Riaz at 662-694-2095, Email mr2062@msstate.edu.

Please take all the time you need to read through this document and decide whether you would like to participate in this research study. If you agree to participate in this research study, please sign below. You will be given a copy of this form for your records. Thanks for your cooperation and benevolence in advance.

_________________________________________  ______________________
Participant Signature                Date

_________________________________________  ______________________
Investigator Signature                Date
Note: -Please read the statement mark the one and exemplify using your best insight as a professional. Not at all equals 0, sometimes equals 1, usually equals 2, Always equals 3. The scale measures with increasing frequency with highest value equal to 3.

Collaboration

Question 1
I encourage team work among students to work together in groups.

0-Not at all
1-sometimes
2-Usually
3-Always

How do you encourage team work? Provide example(s):
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Question 2
I encourage students to collectively help keep class clean.

0-Not at all
1-sometimes
2-Usually
3-Always

How do you encourage students to collectively help keep environment clean? Give example(s):
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Question 3
I establish a community in the class aimed at helping each other to solve problems.

0-Not at all
1-sometimes
Question 4

I encourage students to take personal responsibility as a member of a class community.

0-Not at all
1-sometimes
2-Usually
3-Always

How do you encourage students to take personal responsibility as a member of a class community? Give example(s):

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Inquiry

Question 5

I encourage students to ask questions to fuel their curiosity and to construct knowledge.

0-Not at all
1-sometimes
2-Usually
3-Always

How do you encourage students to ask questions to fuel their curiosity and to construct knowledge? Give example(s):

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Question 6

I hold students responsible to think critically in order to find a solution to an apparent social problem.

0-Not at all
1-sometimes
2-Usually  
3-Always  
How do you hold students responsible to think critically in order to find a solution to an apparent social problem? Give example(s):
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Question 7
I encourage critical reflection/review to find a logical solution to problems.
0-Not at all
1-sometimes
2-Usually
3-Always
How do you encourage critical reflection/review to find a logical solution to problems? Give example(s):
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Question 8
I bring children to a garden to interact with the environment and to reflect on their observation.
0-Not at all
1-sometimes
2-Usually
3-Always
How do you help children to interact with the environment and to reflect on their observation? Give example(s):
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Service Learning  
Question 9
I organize lessons to integrate knowledge with social practices for authentic learning.
0-Not at all
1-sometimes
2-Usually
3-Always
How do you organize lessons to integrate knowledge with social practices for authentic learning? Give example(s):
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Question 10

I promote students to engage in community service to help the people in need.
   0-Not at all
   1-sometimes
   2-Usually
   3-Always

How do you promote students to engage in community service? Give example(s):
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Question 11

I motivate students to help people around them in distress.
   0-Not at all
   1-sometimes
   2-Usually
   3-Always

How do you motivate students to help people around them in distress? Give example(s):
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Question 12

I encourage students to volunteer to help others around them in order to make a difference.
   0-Not at all
   1-sometimes
   2-Usually
   3-Always

How do you encourage students to volunteer to help others around them in order to make a difference? Give example(s):
________________________________________________________________________
Question 13
I require students to apply what they learned in the classroom to social settings.
   0-Not at all 
   1-sometimes
   2-Usually 
   3-Always  
How do you emphasize students to apply what they learned in the classroom to social settings? Give example(s):

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
______________________________________

Question 14
I develop a democratic environment that helps students to take responsibility in classroom.
   0-Not at all 
   1-sometimes
   2-Usually 
   3-Always 
How do you develop a democratic environment help students to take their responsibilities in classroom? Give example(s):

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
_________________________________________

Question 15
I develop an environment in the class to help students to be proactive and future oriented individuals.
   0-Not at all 
   1-sometimes
   2-Usually 
   3-Always 
How do you develop an environment in the class to help students to be proactive and future oriented individuals? Give example(s):

________________________________________________________________________
________________________________________________________________________
Question 16

I encourage students to plan strategies to solve a problem using acquired knowledge.
   0-Not at all
   1-sometimes
   2-Usually
   3-Always

How do you encourage students to plan strategies to solve a problem using acquired knowledge? Provide example(s):________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
INTERVIEW QUESTIONS FOR TEACHERS

Classroom environment impact on civic efficacy in preschoolers

1. How do you develop classroom rules to create a community in the classroom? Give examples from your classroom experience.

2. How do you formulate inclusive groups in the classrooms to solve a problem? Share examples from your professional practices.

3. How do you use students’ curiosity using inquiry to solve a problem? Provide instances from your experience.

4. How do you encourage students to ask questions and take up leadership roles in class? Give examples from the class.

5. How do you integrate classroom learning to solve real world problems? Provide instances from your teaching experience.

6. How do you get children to consider the perspective of others? Give examples from your classroom experiences.

7. How do you get children to come to a consensus to solve a problem? Share examples from your personal teaching experiences.