



Reflective Inquiry Practices of Instructional Leaders in Public Schools in Manila, Philippines

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ABSTRACT

Objective - This study aims to explore the reflective inquiry practices of instructional leaders and examine if there is significant difference in the respondents' reflective inquiry practices based on their personal profile.

Methodology/Technique – The survey-questionnaire underwent reliability testing and yielded a result of .936. Appropriate statistical tools such as frequency or mean and ANOVA were used to determine the reflective inquiry practices of the instructional leaders and the significant difference of reflective inquiry based on their personal profile.

Finding – The results indicate that the instructional leaders' level of reflective inquiry practices is high, and it has no significant difference based on their personal profile. However, there exists a significant difference in the respondents' level of reflective inquiry practices according to years of service and educational attainment.

Novelty – Much research has investigated reflective inquiry as a pedagogical practice of teachers, but very few have attempted to study reflective inquiry as a supervisory practice of instructional leaders. There have been no empirical studies that have made use of reflective inquiry in the professional practice of instructional leaders in the local context.

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1. Introduction

Reflective inquiry has long been practiced by instructional leaders in the field of education. Consequently, teachers engage in reflection with oneself, reflection with partners, reflection in small groups, and school-wide reflective practice (Rayford, 2010). Instructional leaders and teachers create journals and portfolios, engage in cognitive coaching and peer coaching, and conduct action research and classroom walk-throughs. Currently, educational supervision has progressed from a controlled or inspectional administration (Memduhoglu, 2012) to a collaborative approach, which includes reflection and coaching (Blasé & Blasé, 2000).

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Supervision, as defined by Yavuz (2010), is a method of teaching and training employees to become aware and act in more conscientious ways. A bureaucratic system of supervision requires the subordinates to strictly adhere to the rules and regulations of the institution. Conforming to the standards that were set by the organization and delivering a quality of service where there is no room for failures are to be expected in this kind of supervision. The goal of supervision in a bureaucratic system is to eradicate errors and correct misbehaviors in the workplace. The mindset that supervision is all about ensuring the compliancy of teachers and giving criticisms to avoid mistakes has evolved over time. The top-down control model that made use of rules, codes, and systematic procedures has shifted to a more progressive and social constructivist practice that gives emphasis on reflection, collaboration, dialogue, and observation (Young, Cavanagh, & Moloney, 2018; Hansen & Lárusdóttir, 2015; Tyagi, 2010).

Section 4 of the Republic Act 9155 in the Philippines defines the responsibility of the school principals as administrative officers and instructional supervisors of the school. The Instructional Supervision: Standards, Procedures, and Tools Manual indicates that instructional leaders consist of the principals, school heads, master teachers, department chairs, and teacher leaders. These instructional leaders are tasked to supervise teachers to obtain support for their professional development. The instructional leaders in the Philippine public schools include the principal and master teachers.

To improve the quality of instruction, teachers with the guidance of their supervisors must engage in the process of reflection which will allow teachers to explore their teaching practices, evaluate performance of students, and apply strategies or methods that will increase the students' academic performance (Disu, 2017). Reflection is a process that involves deep thinking about action and experience that may influence conceptual knowledge, ethical and moral belief, and future courses of action (Ersozlu, 2016; Weiss & Weiss, 2001; Yip, 2006). Daudelin (as cited by Ersozlu, 2016) states that a person who undergoes reflection must take a step back and think critically the past and present events to acquire the right knowledge, skills, and attitude. Lunenburg and Ornstein indicated that reflection enables the teacher and the supervisor to think about their own work by planning, evaluating, and improving their professional practice (Ersozlu, 2016).

Dewey pioneered the philosophy of reflective methods and the theory of inquiry, which paved the way for reflective practice to be applied in educational administration (Willower, 1994). According to Rogers, engaging in reflective practice will help an individual to be in a system of change that will help develop his/her thought processes (Ersozlu, 2016). Reflective thinking is a process that allows learners to undergo cognitive inquiry to understand better and resolve conflicting situations (Weiss & Weiss, 2001). The process of inquiry begins with the identification of the problems and issues which will be analyzed using prior knowledge for the purpose of solving the problem, finding their significance and continuing the improvement of learning (Weiss & Weiss, 2001; Stegman, 2007; Willower, 1994; Blasé & Blasé, 2000). In the supervision of instruction, teachers undergo a sequence of observations which include post-observation conferences in order for the supervisors to provide teachers with necessary conditions, comprehensive knowledge, and adequate training in their field of expertise (Mette, Range, Anderson, Hvidston, & Nieuwenhuizen, 2015; Yavuz, 2010).

During the post-observation conference, teachers and supervisors discuss the observation by reflecting on what has occurred and how events transpired in the classroom. A plan will be crafted to make instructional improvement based on what the teachers and supervisors have reflected in the learning situation (Mette, Range, Anderson, Hvidston, & Nieuwenhuizen, 2015 & Yavuz, 2010). Ersozlu (2016) cited the works of Boucher, Daudelin, and Hill in which they indicated that reflection could also be considered as a tool for leadership to analyze problems and situations encountered in the profession. Hence, the study identified the reflective inquiry practices of the instructional leaders and examined the extent to which they practice reflective inquiry. The study also determined the significant difference in the respondents' reflective inquiry practices based on their personal and professional profile.

The focal point of the study is the evolving practice of supervision of instruction that redound to the persons involved in the application of reflection and reflective inquiry.

2. Literature Review

2.1 Reflective Inquiry

In the current age of educational reform and competition among institutions, administrators have been given arduous tasks to provide education characterized by excellence in quality and optimum results (Wright, 2009; Dalgıç & Bakioğlu, 2014). The competence, abilities, and attributes of the administrators contribute to the accomplishment of the organization. The various tasks, high expectations, and maximum accountability adds up to the pressure and tension that administrators face in their daily work. The lack of proper training programs and unclear policies for the appointment of school administrators have resulted in how principals learn the process of becoming a principal based on their experiences and as they go on with their jobs (Dalgıç & Bakioğlu, 2014). Problems and issues in the organization may come out as results of the huge amount of workload and the inadequate training given to school administrators.

Problems that increase accountability pressures include low test achievement scores, low-performing teachers, student discipline problems, and shortage of resources (Diehl & Gordon, 2016). Even the most effective of principals are not exempted in the problems and issues concerning the school. Principals must expect that problems will continuously arise since the people in the workforce are diverse and have unique characteristics. Each individual has its own culture, beliefs, perception, background, competencies, attitudes, and interest. Conflict will happen if there is a misunderstanding and clash between people's opinions and perceptions. Lipshitz (as cited by Houchens & Keedy, 2009) states that few empirical studies have been conducted to examine how educators approach problems in their profession. According to Schmieding (1999), administrators must possess mental insight to identify the problems and exploratory skills to examine the problems involved in the organization. According to Wright (2009), the negative connotation that was associated with problems, challenges, and conflicts served as a barrier for principals to engage in reflection. Time, trust, and relevancy are conditions that limit reflection (Wright, 2009).

Reflective inquiry is a reconstructive strategy that involves the process of observation, analysis, generation of hypotheses, gathering of data, and drawing conclusions that will transform problematic situation to clarify its meaning, revise practices, and achieve intended goals (Schmieding, 1999; Jones & Jones, 2013; Broderick & Hong, 2011; Aguirre Garzon, 2018). Dewey and Schon developed the concepts of reflective inquiry and reflective thinking. The method that allows a person to engage in making meaning about oneself is referred to as reflective inquiry. Scientific thinking is involved in the process of reflective inquiry. Dewey specified that reflective inquiry allows an individual to turn a subject over in the mind and give it serious and consecutive consideration. Afterwards, conclusions are drawn if the evidence supports the subject.

Weiss and Weiss (2001) conducted a study in which they state that at the heart of reflective practice must be the attitude of inquiry. Reflective inquiry intentionally engages a person in individual or collaborative interrogation of a puzzling situation to create an understanding of its meaning to influence an action. Lyons, Halton, & Freidus (2013) state that self-study is involved in reflective inquiry. In administrator preparation, Stevenson (1993) explored the use of reflective inquiry to give more attention to real problems. Administrators must be active participants in the continual process of systematic inquiry to generate knowledge and make self-critical judgement about their practice (Stevenson, 1993). The study of Schmieding (1999) examined the use of reflective inquiry in nursing administration. Schmieding (1999) has identified the framework that is critical for reflective inquiry using Dewey's principle. Habit, problematic situation, and pervasive quality, reflective inquiry, and resolution are comprised of this framework. According to Schmieding (1999), habit is our guiding principle which influence our thinking and restrict boundaries. A person who notices environmental cues may carry out an action because habit allows us to follow algorithm and makes us sensitive to some stimuli. (Schmieding, 1999; Dimova & Kamarska, 2015).

A certain stimulus may cause disruption in our paradigm or guiding principle which will result in problems. A problematic situation disrupts the environment which can be constructed from situations that are

puzzling and uncertain (Schmieding, 1999). The problematic situation encourages the individual to raise questions to turn indeterminate situation into a determinate one (Dimova & Kamarska, 2015). Schmieding (1999) defines pervasive quality as an internal immediate reaction that stays in a person's mind and is felt when a problematic situation occurs. Once problem is determined, pervasive quality will detect connections and relations (Schmieding, 1999). Reflective inquiry involves the combination and interaction of thought and experiences that are both objective and subjective (Schmieding, 1999; Dimova & Kamarska, 2015).

Schmieding (1999) determined the 4 characteristics of reflective inquiry which are experimentation, influence of past experience, progressive series of back and forth process, and collaborative. Lastly, the final element of the framework is the resolution or the establishment of a new equilibrium in which new facts will be discovered and organized into a unified whole (Schmieding, 1999; Dimova & Kamarska, 2015). The study of Broderick and Hong (2011) presented a system of inquiry to guide teacher's planning and create emergent curriculum. The study presented that the cycle of inquiry which will help teachers to increase their proficiency in planning by using high-level thinking. Educators use the principle of inquiry to rely on reflective practice to plan and identify what to teach and what children will learn in the curriculum.

Lyons, Halton and Freidus (2013) show that the engagement of participants in reflective inquiry results in changes in thinking and action. New knowledge and understandings have surfaced due to the process of reflective inquiry. The day-to-day experiences of the participants and the facilitators has shifted as reflective inquiry contributed critically as a catalyst of change. Earl and Ussher (2016) state that the learning gained from the inquiry process is designed to be shared. They outline 5 ways teachers can approach a study of practice. The first approach is self-study in which one's own practice is being examined to gain knowledge and professional growth. The aim of self-study is to improve personal and professional knowledge. The second approach is autoethnography wherein there is a personal exploration on the culture, privilege, and systemic policy. The third approach is action research which involves teachers solving problems and giving recommendations or interventions for future practice.

The fourth approach is teaching as inquiry which allows teachers to investigate the influence of teaching practice on student learning as defined by the standards. The final approach is spiral of inquiry which involves the organized presentation of intuitions and feelings concerning what is happening for learners. The study conducted by Chui, Chun-Nam Mak, and Li (2013) explored the influence of web blogging on the preparedness and reflective inquiry practice of student teachers. Cochran-Smith & Lytle (as cited by Chui, Chun-Nam Mak, & Li, 2013) have emphasized that student teachers must be trained to be effective practitioners of reflective inquiry who can evaluate self-teaching competencies. The results of the study show that engaging in blogging with web services will increase the student teachers' readiness and degree of reflective inquiry practice.

In the US, the professional standards 4 and 6 of the National Policy Board for Educational Administration emphasize instructional leadership. Standard 4 centers on curriculum and effective instructional practice. Standard 6 highlights the professional capacity of school personnel. Standard 6 states that effective leaders must reflect, study, and improve for their own learning and effectiveness. Vogel (2018) found out in her study that reflection has an effective role in school leadership. The researcher recommended research-based professional development that allow principals to reflect on their practice. Specific policies have been developed to ensure that reflective inquiry is being practiced in schools. Youngs (2001) examines reforms related to professional development in addressing aspects of school capacity (Knowledge and skills of teachers; strength of professional community; coherency of programs; nature of principal's leadership; and quality of resources).

One of the professional development activities being examined is the California Subject Matter Projects. The program provides opportunities by allowing teachers to reflect and collaborate on their practice to acquire new concepts and ideas about their pedagogy. The results of the different studies reveal that the California Subject Matter Projects has influenced teachers' knowledge and skills. The program allows teachers to collaborate and engage in reflective inquiry to address professional community. The California

Subject Matter Projects have minimal effect on the program coherence and continuity of professional development of each school.

In the Philippine public school setting, the traditional role of the principal has been limited to the management of the school building and placement of orders for the learning resources while putting less emphasis on the quality of instruction (Sindhvad, 2009). RA 9155 serves as a framework for instructional leaders to improve leadership roles and promote shared decision making. RA 9155 indicates one of the refined roles of principal which is to support and supervise teacher's instruction with the assistance of the Master Teacher. The master teacher leads school efforts to improve teacher performance. One of the roles of master teacher is organizing the In-service Training, which enables teachers to address training needs by attending workshops and seminars. The study of Sindhvad (2009) addressed the need for improving the capacity of principal to assume roles and responsibilities by engaging in training programs. A school principal training program for public school principals in the Philippines has been designed by the Southeast Asian Ministers of Education Organization Regional Center for Educational Innovation and Technology (SEAMO INNOTECH). The program developed a constructivist learning system by involving principals in hands-on learning activity related to leadership. The program allows opportunities for collaboration and reflection on one's leadership actions.

2.2 Reflective Instructional Leaders' Personal and Professional Profile

Shaked, Glanz, and Gross (2018) examine the performance of male and female principals in their instructional leadership. Hallinger, Li, and Wang (as cited by Shaked, Glanz, and Gross, 2018) report that female principals consistently obtained higher ratings on instructional leadership compared to male principals. The results of the study have indicated the difference between the source of authority of the male and female principals. Based on the study, male principals relied on their ability to make decision and hierarchical authority. On the other hand, female principals used knowledge and experience as their source of authority. The researchers have found out that female principals performed their instructional leadership by maintaining good relationship and collaboration with the teachers. Male teachers seldom described good relationships with colleagues as associated to instructional leadership. The study also points out that female principals emphasized collaboration to solve problems and achieve common goals. The instructional leadership behavior of female principals was brought about by their reflective practice such as collaborating with their teachers in order to address problems.

Tesfaw and Hofman (2014) explored the perceptions of teachers with regards to instructional supervision in secondary schools. The researchers have identified the use of subject area instructional supervision in which subject area supervisors, principals and department heads provide professional support for teachers. The findings have shown no significant difference between the beginning and experienced teachers on the use of clinical supervision, cognitive coaching, mentoring, peer coaching, and professional growth plans. The experienced teachers have most often used reflective coaching.

Portfolio was preferred by both the experienced teacher and beginning teacher as a supervisory practice. The male and female perceptions on the use of the supervisory practice showed no significant difference. Male teacher perceived that cognitive coaching was used frequently than female teachers. The study conducted by Goden, Lumbab, Niez, and Coton (2016) determined the influence of instructional competencies of school heads on the management behavior of teachers in the Philippines. The researchers have emphasized the importance of the role of the head of departments in promoting the learning of students and professional growth of teachers.

The findings have shown the relationship of the profile of the school heads to their instructional competence and management behaviors. In relation to all the variables, only the civil status showed significant relationship to the instructional competencies of the school heads. While in the case of variables about age and number of years, only the number of years as school head showed significant relationship. Further, the above-mentioned researchers stated that the number of years as school heads was directly

correlated with their instructional competencies. In contrast, there is no significant relationship on the management behaviors based on the profile of school heads such as gender, civil status, highest educational attainment, age, and number of years.

The study of Matias (2011) determined if there is significant difference on the level of supervisory skills of the principal in terms of their profile in the Division of Rizal, Philippines during the school year 2010-2011. The profiles of the principals include the age, sex, educational qualification, and administrative experience. The findings suggested that age had a great effect on how principals perform their duties in curriculum and instructional supervision and planning, assessing and reporting teaching learning outcomes. The results of the study have shown that the assessment on the level of supervisory skills of the principals in the different aspects with respect to sex was not significant. The findings indicate that the level of supervisory skills of the principals in curriculum and instructional supervision; organization and personnel management; planning, assessing and reporting teaching learning outcomes; school plant, resources and facilities management; personal, social growth and professional development; and school community linkages and public relations with respect to their educational qualification was not significant. The findings presented that the level of supervisory skills of the principals in curriculum and instructional supervision; and personal, social growth and professional development have significant difference with respect to their administrative experience.

2.3 Theoretical Framework

According to John Dewey (as cited by Dimova & Kamarska, 2015) inquiry involves the directed transformation of an indeterminate situation into a determinate situation in order to covert the original elements into unified whole. An indeterminate situation is one that is characterized by complexity, uncertainty, and ambiguousness. Dimova & Kamarska (2015) described the five logical steps in reflective process. The first stage is felt difficulty in which questions have surfaced due to shortage of information. The second stage is localizing and defining of the complexity which allows an individual to define the problem. In this stage, suggestions could be drawn out to determine if these could be accepted or rejected. The third stage is suggesting a possible solution wherein assumptions and hypotheses will be discussed. A possible solution could be established during observation. The fourth stage is the development through thinking over the aspects of the assumption. In this stage, facts and ideas have been developed through continuous observation. The last stage involves observation and experimentation in order for the facts to correspond to the hypotheses. The Reflective Inquiry Model guided the researcher in the construction of the questionnaire to determine the reflective inquiry practices. Some of the elements that were taken from the model were utilized to formulate the subcategories in the questionnaire.

The reflective practice cycle by York-Barr, Sommers, Ghere, and Monthie (2016) is continual cycling forward and backward to produce deeper practice knowledge. The cycle begins with grounded in purpose in which an individual determines the “why” to reach the desired results. There are thought cycles in between the purpose and results that enables an individual to move back and forth in previous cycles so as to assess if they remain grounded on the purpose. The first thought cycle is presence which entails that a person is open and actively engaged. The second thought cycle is inquiry in which questions are being voiced out to challenge the norms of practice. The third thought cycle is insight which involves the processing of the thoughts. The last thought cycle is action which involves the creation of improved outcomes and intended results. Finally, results and outcomes will be generated which will be the basis for future reflective practice. The stages of the reflective practice cycle described were used to categorize the survey questionnaire.

3. Research Methodology

This study utilized mean and standard deviation to examine the extent to which instructional leaders practice reflective inquiry and ANOVA to determine the significant difference in the respondents' reflective inquiry practices based on their personal and professional profile.

The respondents of the study were the instructional leaders in the public elementary schools in the Division of Manila. The respondents were chosen using non-probability sampling methods and purposive sampling based from the following criteria. The respondents (1) were instructional leaders (e.g. principal and master teacher) in the elementary level; (2) were from public schools in the Division of Manila; (3) were assuming administrative or supervisory position for at least a year and willing to participate; and (4) gave importance on the reflective inquiry practice of instructional leaders. 149 respondents were able to participate in the survey.

The survey questionnaire was patterned after the works of Faghihi & Sarab (2016), Egleston, Castelli, & Marx (2017), and Matsuo (2016). The survey consisted of 5-point Likert Scale ranging from 1= never to 5= always which described the extent in which the instructional leaders practice reflective inquiry. The demographic profile of the instructional leaders which includes their age, gender, educational attainment, and years in service were included in the questionnaire. Education experts were requested to validate the instrument. The survey-questionnaire underwent reliability testing and yielded a result of .939.

The researcher secured endorsements from the superintendent of the Division of Manila. Permission was sought from the principals of the different public elementary institutions in the Division of Manila. The instructional leaders were notified about the purpose of the study and appointment to administer the survey was arranged. The researcher discussed the directions of the questionnaire. The survey questionnaire was distributed to the instructional leaders to determine their reflective inquiry practices. The data collection started from November 2019 until the first week of March 2020.

4. Results

Table 1. Profile of the participants

Gender	Frequency	Percent
Female	107	71.8
Male	42	28.2
Age	Frequency	Percent
<=40	41	27.5
41-50	62	41.6
>=51	46	30.9
Education	Frequency	Percent
Bachelor's Degree	68	45.6
Master's Degree	67	45.0
Doctorate	14	9.4
Years of Service	Frequency	Percent
10 or less	20	13.4
11-15	39	26.2
16-20	18	12.1
21-25	17	11.4
Over 25	55	36.9

Table 1 shows the profile of the participants. Approximately 72% of the participants are female (n = 107), 41.6% are 41 to 50 years old (n = 62), 45% have Master's degree (n = 67), only 9.4% have doctorate degree (n = 14), and 36.9% of the participants have more than 25 years of service (n = 55).

Table 2. Descriptive statistics and reliability coefficients of reflective inquiry

	Reflective Inquiry	Mean	Std. Deviation	Cronbach's Alpha
	Rationale	4.55	0.54	0.865
1.	I reflect on my work by confirming the purpose of our organization.	4.56	0.60	
2.	I reflect on my work by showing long-term vision.	4.51	0.61	
3.	I relate the responsibilities to the organization's goals and objectives.	4.58	0.62	
	Presence	4.60	0.41	0.725
4.	I provide an environment where open communications are valued.	4.64	0.52	
5.	I have the presence of mind during the interactive process of reflection.	4.64	0.54	
6.	I talk about my work experiences and seek advice/feedback in the collaborative reflection.	4.58	0.57	
7.	I am open to experiencing possible difficulty in the workplace	4.56	0.59	
	Inquiry	4.27	0.54	0.843
8.	I think of inconsistencies and contradictions that occur in my practice.	4.12	0.87	
9.	I identify problems at work.	4.40	0.67	
10.	I ascertain causes of problems and failures.	4.33	0.67	
11.	I think of unusual classroom events as potential research topics.	4.13	0.76	
12.	I define the complexity of the problem in order to draw out solutions	4.34	0.68	
13.	I discuss assumptions and hypotheses to solve problems	4.29	0.70	
	Insight	4.33	0.66	0.871
14.	I discuss to colleagues how my assumptions, values, and/or beliefs affect my work.	4.34	0.66	
15.	I discuss our assumptions, values, and/or beliefs at the beginning of our assignments	4.33	0.73	
	Action	4.33	0.50	0.888
16.	I participate in workshops/conferences related to instructional leadership	4.64	0.53	
17.	I read books, articles, and journals related to effective instructional leadership to improve my performance.	4.36	0.70	
18.	I generate solutions to problems and prevent failures.	4.46	0.63	
19.	I develop facts and ideas through continuous observation	4.39	0.63	
20.	I have a file where I keep the accounts of my supervision for reviewing purposes.	4.45	0.64	
21.	The teachers and I have taken formal courses on reflective inquiry in any teacher education	4.10	0.82	
22.	I read professional reading materials related to reflective inquiry	4.18	0.74	
23.	I implement certain policies related to the practice of reflective inquiry	4.17	0.75	
24.	I frequently conduct observation and experimentation to solve problems in the workplace	4.17	0.69	
	Overall	4.39	0.43	0.939

Table 2 shows the descriptive statistics and reliability coefficients of school leaders' level of reflective inquiry. The reliability coefficients of reflective inquiry and its components have acceptable values ($\alpha > 0.70$) indicating that the indicators are contributing significantly in measuring each component and the overall reflective inquiry of the teachers. The average mean for each indicator and component are between 3.500 and 4.499 indicating that school leaders have very satisfactory level of reflective inquiry. The dimension of reflective inquiry with the highest mean is presence (mean = 4.60, sd = 0.41) followed by rationale (mean = 4.55, sd = 0.54).

Table 3. Test of difference in the school leaders' level of reflective inquiry according to gender.

	Female (n = 107)		Male (n = 42)		F-value	p-value
	Mean	sd	Mean	Sd		
Rationale	4.52	.57	4.63	.46	1.181	.279
Presence	4.61	.40	4.60	.44	.003	.958
Inquiry	4.26	.52	4.29	.61	.136	.713
Insight	4.33	.63	4.35	.73	.023	.880
Action	4.31	.49	4.37	.52	.481	.489
Reflective Inquiry	4.37	.41	4.42	.48	.358	.551

Table 3 shows that both male (mean = 4.42, sd = .48) and female (mean = 4.37, sd = .41) have very satisfactory level of reflective inquiry. Analysis of variances (ANOVA) revealed that there is no significant difference in the school leaders' level of reflective inquiry according to gender, F-value = .358, $p > .05$. Considering the different components, both female and male leaders obtained highest level in the aspect of presence and rationale, while they are lowest in inquiry.

Table 4. Test of difference in the school leaders' level of reflective inquiry according to age

	<=40 (n = 41)		41-50 (n = 62)		>=51 (n = 46)		F-value	p-value
	Mean	sd	Mean	sd	Mean	sd		
Rationale	4.52	.65	4.54	.51	4.59	.48	.230	.795
Presence	4.60	.42	4.56	.42	4.67	.39	.922	.400
Inquiry	4.22	.49	4.22	.58	4.38	.53	1.448	.238
Insight	4.35	.62	4.26	.69	4.41	.64	.763	.468
Action	4.35	.48	4.25	.53	4.40	.46	1.313	.272
Reflective Inquiry	4.38	.42	4.33	.44	4.47	.41	1.328	.268

Table 4 shows that school leaders who are 51 years old and above have very satisfactory level of reflective inquiry (mean = 4.47, sd = .41), the same with those who are 40 years old and below (mean = 4.38, sd = .42) and those who are 41 to 50 years old (mean = 4.33, sd = .44). Analysis of variances revealed that there is no significant difference in the school leaders' level of reflective inquiry according to age, F-value = 1.328, $p > .05$. Considering the different components, school leaders from different ages obtained very satisfactory level in each component.

Table 5. Test of difference in the school leaders' level of reflective inquiry according to years of service

	6-10 (n = 20)		11-15 (n = 39)		16-20 (n = 18)		21-25 (n = 17)		Over 25 (n = 55)		F-value	p-value
	Mean	sd	Mean	sd	Mean	sd	Mean	sd	Mean	sd		
Rationale	4.60	.55	4.61	.61	4.43	.51	4.71	.48	4.48	.51	.943	.441
Presence	4.59	.39	4.62	.41	4.43	.48	4.74	.34	4.61	.41	1.285	.279
Inquiry	4.19	.55	4.40	.48	3.92	.54	4.43	.45	4.26	.57	3.120	.017

Insight	4.28	.62	4.37	.71	4.06	.70	4.62	.60	4.33	.61	1.708	.151
Action	4.39	.46	4.39	.49	4.03	.68	4.43	.40	4.32	.46	2.113	.082
Reflective Inquiry	4.39	.37	4.46	.43	4.12	.51	4.53	.36	4.37	.41	2.595	.039

Table 5 shows that school leaders have very satisfactory level of reflective inquiry according to years of service. Analysis of variances revealed that there is significant difference in the school leaders' level of reflective inquiry according to their years of service, $F\text{-value} = 2.595$, $p < .05$. The reflective inquiry highest mean was obtained by school leaders who are 21 to 25 years old (mean = 4.53, $sd = .36$) while the lowest mean was obtained by those who are 16 to 20 years old (mean = 4.12, $sd = .51$). Considering the different components, significant difference was observed in the school leaders' level of inquiry ($F\text{-value} = 4.120$, $p < 0.05$).

Table 6. Test of difference in the school leaders' level of reflective inquiry according to educational attainment

	Bachelor's Degree (n = 68)		Master's Degree (n = 67)		Doctorate (n = 14)		F-value	p-value
	Mean	sd	Mean	sd	Mean	sd		
Rationale	4.51	.53	4.54	.57	4.76	.38	1.236	.294
Presence	4.57	.42	4.59	.41	4.84	.30	2.639	.075
Inquiry	4.15	.55	4.30	.52	4.71	.36	7.012	.001
Insight	4.19	.65	4.40	.66	4.68	.50	4.068	.019
Action	4.22	.50	4.36	.49	4.66	.40	5.236	.006
Reflective Inquiry	4.29	.43	4.41	.42	4.72	.25	6.236	.003

Table 6 shows that school leaders have very satisfactory level of reflective inquiry according to educational attainment. ANOVA revealed that there is significant difference in the school leaders' level of reflective inquiry according to educational attainment, $F\text{-value} = 6.236$, $p < .05$. The reflective inquiry highest mean was obtained by those who are Doctorate degree holder (mean = 4.72, $sd = .25$) while the lowest mean was obtained by those who are bachelor's degree holder (mean = 4.29, $sd = .43$). Considering the different components, significant difference was observed in the school leaders' level of inquiry ($F\text{-value} = 7.012$, $p < .05$), insight ($F\text{-value} = 4.068$, $p < .05$), and action ($F\text{-value} = 5.236$, $p < .05$). School leaders who are doctorate degree holder obtained significantly higher level of inquiry (mean = 4.71, $sd = .36$), insight (mean = 4.68, $sd = .50$), and action (mean = 4.66, $sd = .40$).

5. Discussion

The results of the study indicate the high level of frequency of instructional leaders to engage in reflective inquiry in order to address troubling situations. It is interesting to note that the highest dimension of reflective inquiry among the respondents is presence. Instructional leaders are open and actively engaged in group discussions and professional meetings. The most common reflective inquiry practices among instructional leaders are talking about work experiences and seeking feedback in the collaborative reflection. On the other hand, the dimension of inquiry is the lowest dimension in the reflective inquiry practices. This dimension involves instructional leaders thinking of inconsistencies in their practice, identifying problems at work, defining the complexity of the problem, and discussing assumptions and hypotheses to solve problems. It can be implied that instructional leaders rarely voice out questions in order to challenge the norms of practice. Questions are formed to clarify, probe for understanding, and build connections among perspectives (York-Barr, Sommers, Ghore, and Monthie, 2016).

There is no significant difference between the reflective inquiry practice of instructional leaders according to gender and age. The result seems to reflect the study of Barbuto, Fritz, Matkin, and Marx (2006) in which

gender had no significant effect on the rating of transformational leadership behaviours. There was significant effect on the leaders' age and the transformational leadership rating which is in contrast with the findings of this study. Leaders in the 46 and above age group act as role models, establish strong relationship, and encourage new thinking patterns. On the other hand, there is significant difference between the reflective inquiry practice of instructional leaders according to years of service and educational attainment. This is supported by the study of Issa (2014) which specified that educators who have advanced degrees and have met the administrative certificate requirement were likely to practice transformational leadership. In transformational leadership, educators promote inquiry and critical thinking by examining assumptions, seeking different perspectives in problem solving, and suggesting new ways in the completion of tasks. Moreover, educators who qualified for the administrative certificate training demonstrated less passive or avoidant leadership.

6. Conclusion

Reflective inquiry allows instructional leaders to engage in investigations to solve instructional problems in schools. Most instructional leaders in the elementary level of the Division of Manila practice reflective inquiry to a high extent. This high level of reflective inquiry suggests that instructional leaders are adapting to present changes brought about by the K-12 program, which compels instructional leaders to engage in reflective, innovative, and collaborative activities. Professional profile of instructional leaders such as years of service and academic achievement contribute to the high level of reflective inquiry. The higher the academic achievement and the more years of service, the higher the reflective inquiry practice of instructional leaders. Identifying instructional leaders' level of reflective inquiry is essential as this may have impact on the teaching competence of teachers and academic performance of students. It is recommended for instructional leaders as well as teachers to advance more professionally by attending various seminars and pursuing higher degree such as master's and doctorate. Findings of the study shall help the Department of Education and policy makers to implement policy in order to establish a norm in which reflective inquiry is being practiced in learning communities.

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