Reflections in the Educational Leadership Internship: Bridging Theory and Practice

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Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

Original Research Article

ABSTRACT

The present study explores how graduate students in an educational leadership program in the United States constructed reflections during an internship. An archival review of students' assignments for a class was conducted. A constant comparison analysis which used grounded theory was carried out. Findings suggest there were two major typologies of reflections. For one group, reflections were centered around summarizing, showing appreciation, and offering buzzwords for improvement; a small group centered on capacity for change, showed discontent, and offered an alternative to current practices. Findings suggest reflections in education are of questionable value, and students would be better served by developing reflective capabilities using research methods. A review of the literature compares findings with previous research and theoretical perspectives. There is a discussion and recommendations to improve the reflective process for teachers and educational leaders.

1. INTRODUCTION

Many college and university post-graduate educational leadership programs require an internship to connect theory and coursework to practice [1,2,3,4]. Reflection is considered an important component of the internship, going back to John Dewey who emphasized reflection

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was deliberate, cognitive, and intentional, resulting in intelligent action as opposed to quick thinking and recounting what happened [5,6,7]. Donald Schön has been widely cited in the conceptualization of reflection in educational leadership programs, though the application of his theories to an internship is unclear [8].

Though reflection in education practice seeks to develop a critical examination and improvement in practices, the terminology, concept, and processes are ill-defined and poorly understood [9,10]. There was a gap between expectations of reflections in internships and results [11], and the following study sought to answer three key questions: What is reflection? How do students in educational leadership programs reflect? What is the value of reflections? The results might be useful in planning curriculum and instruction for students in educational leadership programs.

There is a review of the literature which gives a history and state of the field of reflections in education. The data analysis section explains the sampling strategy, methodology, and interpretation. Afterward, there is a discussion and recommendation for future action.

1.1 Review of the Literature

A problem with reflection by teachers and educational leaders was there was a disconnect between defining theories and practice, as organizations might inhibit growth and use of reflection [10,12]. Reflections in education were considered as a method to improve practitioners' competence and self-efficacy during an educational internship. The review finished with an exploration of research into reflection in education.

1.2 Education Practicum

The emphasis on reflection in education accelerated in the 1980s, as researchers sought to apply the development of theory in higher education to the practice outside of the university [13]. The educational practicum was a planned experience to gain real-world skills, and a component was implementing and practicing a cycle of reflections, where educators found mistakes, identified strengths and weaknesses, and reformulated practices for improved performance [14,15]. Actively thinking, considering alternatives, and implementing solutions became a common assignment in educational programs throughout the United States.

School leadership requires ethical decision making, but the call for reflective thinking does not mirror reality, as many school programs predominantly teach theory and spend little time teaching reflective practices [16,17]. In higher education, reflective practices were used in practica, internships, and other field experiences, yet there was little research on the value of either the practicum or the reflection [18]. Reflection appears more a general term, with little substance or validity to prove the utilization and operation of the term in education produced tangible benefits [19,20].

1.3 Reflection

Reflection in education has a long history in US education, dating back to the early 1900s. Educators could profit from reflection, as teachers make more decisions than most professions, with an average of 3,000 per day on top of the uncertainty and angst in the face of reform [21,22]. In 1923, Buermeyer defined reflection as "active, persistent, and careful consideration (pp. 2)" [23], where there was an awareness of a situation and understanding of what happened in relationship to prior knowledge and theories which resulted in change in action [24,25,26]. Dewey suggested a movement from process to product, and reflective analysis meant predicting a new course of action and revising one's theories, beliefs, and assumptions [27,28,29]. There were many suggested methods to reflect, with many studies describing what practitioners do to reflect.

Researchers suggested steps and methods to reflect since increased popularity of reflective practices in university studies for educators in the 1970s and 80s. Schön outlined four steps: A trigger, a frame, a reframe, and a plan for future action [25]. Other researchers complemented Schön, with calls for a pause, a consideration, and a connection [12,30], group processing and collaboration with feedback [31,32,33], and rubrics and techniques to assist in regular implementation during daily practice [34]. Grimmett [35] stated three actions were needed to operationalize reflections: Considering the action, developing an awareness of alternative views and methods, and reconstructing future endeavors. No researcher clearly listed how a novice practitioner, faced with an experience for

the first time, could both process the experience and internalize the stimuli with limited prior knowledge and skills to refine and reform a model.

Most research suffered from two problems. First, the research was personal and often under the control of the researcher. Secondly, the research seemed to always find reflection was a positive and a prerequisite for progressive self-improvement. Reflection, to most researchers, improved competence [36] through exemplary and effective instruction [37], though there could be different levels of reflection from the activity to one's broader themes of practice [38]. Researchers recounted how reflection improved one's moral and professional service [39,40,41] and improved gradually and incrementally over time [42,43].

Researchers have consistently found positive experiences, and there has been no dearth in designing artificial methods and steps to improve what was an already overly hyped process. Reflection cards [44], reflection catalysts [45], guided methods [46,47], and steps to improve critical reflection [48,49] were commonly prescribed in studies to make reflections an on demand, procedural activity. There was a great deal of theory, but the application of reflection and improved performances of practitioners were two points which were not clear [50]. Many researchers developed frameworks which were little used and had no follow up to develop validity and reliability outside of the specific context studied.

Donald Schön is very popular in education, but his theories cannot be clearly implemented into effective practices [51], and maybe understanding experiential learning might improve reflective practices [52]. There was anecdotal evidence one cannot make leaders through artificial training and activities [53], and reflective practices might not produce improvement and might be harmful under some circumstances [54,55]. The ability to reflect probably happens from a superficial to a deep level and involves the personal, as there must be a consideration of theory and practical knowledge [56,57].

1.4 Problem

Reviewing student reflections has been useful to describe the processes by which students interact between practical and theoretical knowledge [58]. There is a gap between the theory and application of reflection. A review of the literature exposed a possible problem: Researchers found their practices and results of reflective practices were mostly positive and worthwhile, but there was never data to show if there was new behavior and actions with increased value. The lack of negative results and outliers should give pause to a review of the current field.

There were three problems which the research sought to answer for students in an educational leadership program: What is reflection? How do students in educational leadership programs reflect? What is the value of reflections? The results could be used to understand reflections in education and improve educational leadership programs.

2. METHODOLOGY

To answer the research questions, grounded theory is a method which described what happened, what categories and themes emerged, and a theory which had good fit and relevance, was workable within existing categories, and could be modified as theory was developed [59]. Grounded theory builds theory instead of testing theory, and there was a systematic application of coding, memoing, and theory development which uncovered the connection between conditions, actions, and consequences [60]. There was a constant comparison of data and analysis, but the researcher could also test theory if appropriate [61,62]. Ultimately, grounded research works to conclude with a theory which fit the data, had good generalizability, and could be applied in a practical, useful manner [61,63,64].

To remain faithful to Glaser and Strauss's (1967) [62] original intent of grounded theory, an expansive literature review was not conducted until after the initial research was coded and analyzed. The data were coded to organize and report the results, while seeking to not blur the original intent of the participants [65]. There were three waves of analysis: First, there were in vivo, descriptive, and process coding; secondly, there was a development of categories with axial and focused coding; thirdly, there were theming and a narrative with memoing and comparing and contrasting [64,66]. All three steps happened in a spiral, with a constant alternating back and forth and between each step as new data were introduced, coded, and analyzed. Once the researcher reached theoretical saturation, there

was triangulation to examine validity and reliability.

2.1 Sampling

Convenience sampling, where participants were selected because of ease, availability, and similar characteristics [67], was the method used to select the sample. Shenton [68] developed a list of characteristics which should be explicated, so others can generalize and apply findings to other samples. There were six participants in the sample. All students were in a state college in the Midwest of the United States enrolled in a post-master's program called an education specialist degree. The education specialist degree is similar to a doctorate, only students do not complete a dissertation. Students complete 30-graduate hours in the program in leadership and research, with a practicum and a thesis or capstone required. The program did not lead to certification, so the program was geared toward students in public schools, higher education, and other organizations who did not need licensure.

Three of the participants were male and three were female. All students had educational administration experience, and three students worked in higher education and three in public K-12 education. Experience for students was between 10-20 years. All students were in management (for example, a division chair in a high school, director of a department, etc.), with no students in upper leadership positions. There were no courses or requirements in the program on reflective education. The internship was a required course, where students completed 120 hours of direct experience and had to write about 15 experiences, with each experience requiring a reflection. Direct experience was unstructured and at a student's discretion, with the only instruction being to find activities which aligned with a position or function a student desired and involved leadership and management. Students were prompted to think critically, connect with the coursework and literature, and think "If I were the leader." The class was completed during a semester-long course. The education practicum was akin to self-study, with no interaction or dialogue with other students or the instructor. All assignments were due on the last day.

2.2 Data Analysis

An archival review of students' papers was conducted from a class for a post-master's

internship in educational administration. Confidentiality and anonymity were of chief importance [69], so names, locations, and identifiers were stripped from the data. A code was assigned to each participant to obscure identity. Since the sample was small, care was taken when reporting quotes to protect confidentiality. There was no interactivity or post-analytic discussion with students, so there was no threat or possible harm to participants.

All records were initially stored as a pdf file. Each student review was copied and pasted into a Microsoft Excel file, and names were substituted with codes of X1, X2, etc. Using Microsoft Excel, Microsoft Word, and notepads, codes, memos, and themes were developed and analyzed. Wordcloud.com was used to examine themes by word count both by student and across the sample. Afterward, a comparison while conducting the literature review was used to interpret results.

3. RESULTS

A ground theory study was conducted for students in a post-graduate program for educational leadership. The qualitative results were presented, and then there was an interpretation of results. A triangulation of the data was then performed to examine for validity and reliability.

3.1 Qualitative Results

Six students in class wrote reflections on activities for an education leadership practicum. Activities ranged from observing, participating and leading activities. Students wrote about educational administration activities, including financial planning, strategic management, curriculum development, and a myriad of other activities. The only prompt given to students were to write critically about "If I were the leader …." There were 15 reflections per students.

Most students started out summarizing the event. Some examples were the following: X3 stated he "gained perspective into," X2 stated, "The PLC [professional learning community] time allows reflection," and X6 said, "reconsidered best practices." Recounting the events was common for most all students. The next process had a bifurcation.

There were two major groups: students who celebrated and showed appreciation for the

activity, and another group showed discontent. Appreciation ranged from X3 who stated, "I was impressed" and "most interesting" to X2 "I truly believed we did well." X1 probably summed up the appreciation better than anyone: ". . . demonstrated great leadership." Discontent was the center for others, such as X5 stated "some areas of weaknesses" to X4 "need more time." Most students, besides X5 consistently, and X2, X3, and X4 one to two times each, did not express discontent. Discontent was only common for X5. X6 sometimes expressed malcontent, such as "School did not provide a mentorship," and then proceeding to talk about why she wanted to find a new job.

The group on the summarizing and appreciating path almost universally chanted platitudes, buzzwords, and a list of great ideas without any actual implementation. The list included "share a vision," "opportunity to work together," and "utilizing collaborative . . . to facilitate . . . sustaining effective teaming creates a system . . . best practices in teaching and learning." Other buzzwords were processes, leaders, and learning. Of much less importance were the words of perspective, communication, and relationship. Within the process of summarizing, appreciating, and giving buzzwords, there were no actual plans and conspicuously absent were empathy and direct talk about self. X4 summed up the approach: "But, at the end of the day, all was fine."

The group which had discontent spoke about a gap in what happened and what action would remedy the gap. There was talk about a consuming empathy, where the student felt a letdown and saw the chance to make a difference. There were "opportunities," a need to "gather perspectives," and "if it were to change." Discontent was about what the person and the situation could needed to become better. The ownership was about self throughout, with talk about "communication was not clear" and how there was wasted time because of "no background knowledge." Whereas the former group was absent in their narratives, the group which highlighted a gap and action found fault with self as much as the process. X5 lamented learning something at a presentation which "should not have been new information."

Action was at the center of the second group's conclusion, and the difference from the first group was acute. The second group made statements about problems and gaps every time:

"The next step is performance evaluations," "gather information," "biggest obstacle is to mandate training," and "seek feedback." The action was quite different than the buzzwords of the first group, like needing "courage," "I would provide a goal each week," and "I need to challenge myself." Throughout the reflections, the action spoke about changes and the felt problems, while the buzzwords of hopes and dreams cascaded in a never-ending fashion which often repeated in subsequent reflections.

There was a noticeable difference in experience between the students who reflected to find a gap and action versus students focused on showing appreciation and telling buzzwords. The group which owned problems, found a gap in what was with what could be, and developed an action plan had more leadership experience at a higher level. Even though there was a difference, the high-level group had students move in and out, but the movement was rare and short lived. Not all experienced students, though, owned problems and found a gap. One student with high-level experience got stuck on appreciation and buzzwords more than speaking about a gap.

3.2 Interpretation

Two major groups stood out in the analysis: the cheerleader-reporter and the satisficer. Each group mentioned the activity or the vehicle, and the driver, or the leader, was most always absent from the cheerleader-reporter. The cheerleader-reported followed a script of being a summarizer, an appreciater and a buzz worder. For each reflection, the cheerleader-reporter did not move beyond speaking about how great the activity and the leaders were. A lack of planning was the norm, with students speaking more of glorification and contentment than a critical eye to what transpired. Strikingly, the students were absent from most reflections, showing a complete lack of introspection and inward consideration. There was no movement or plans, for students had overly positive, glowing pictures of everything.

Compared to the cheerleader-reporter, the satisficer started with the belief of a capacity to change oneself (the driver, or leader) and the situation (the vehicle). Whereas the cheerleader-reporter seemed to never make a decision, the satisficer made decisions which were in direct contrast to optimizing results. Unlike a maximizer, who considered several alternatives and weighed pluses and negatives, the satisficer

picked decisions which solved the problem but showed no evidence of optimizing. The capacity, or power, was shown in the ownership and inclusion in the narrative. Discontent was expressed, but students funneled the discontent to the gap about self and the situation. The gap cataloged mistakes and problems. What could be done better was the focus. An action plan was made to remedy the frailties and shortcomings. For most satisficers, one could feel the hurt and how lack of understanding caused problems and misdirection. Yet, the pain did not hinder the satisficers, as rebirth and regrowth were pictured as the end results.

The dyads of the cheerleader-reporter and the satisficer were many, but three dyads stood out. First, the cheerleader-reporter had a fixed mindset, whereas the satisficer had a growth mindset. Cheerleaders-reporters were static, anchored firmly to the current position and possessed a self-view of optimism and a lack of need for any improvement. Satisficers unmoored themselves and had a growth mindset, seeing a need to right wrongs and lead self and the organization toward a new direction.

Secondly, there was a dyad of valuation. The satisficers spoke of a hard valuation, such as people disappointed, failing to understand a policy, and how a plan was not aligned with goals and the vision of the organization. Cheerleader-reporters spoke in generalities, all positive. The lack of a diagnostic value meant cheerleader-reporters did not weigh pros and cons, negatives and positives, and the effect on staff members. Something lacking from both groups was examining outside models and perspectives.

Thirdly, the cheerleader-reporter saw situations as all you see was all there was. There were no other alternatives or models. Satisficers believed there were not only shortcomings, but self-learning was incomplete and could be used to improve self and the organization. Part of the problem was once cheerleader-reporters graded a situation excellent, there was no reason to continue to examine or reflect what happened. Growth through failure was recognized by satisficers but not cheerleader-reporters.

The cheerleader-reporter label was aptly descriptive, but the term satisficer needed clarification. Satisficers were part strivers, as the discontent and gap meant the student wanted to bring improvement. Satisficer was chosen because students who saw capacity, had discontent, found a gap, and expressed action

never reflected on more than one alternative. Satisficers, in contrast to maximizers, developed a course of action by considering one solution which would solve the current problem. There was no evidence decisions and future results were evaluated and weighed to select an optimal action versus one which would satisfice.

A unifying theory ties both the cheerleader-reporter and the satisficer together: *Each student as reflector was an Übermensch, either already exalted or one step away.* The focus was either on the vehicle or some simple change for the driver. Students did not have to apply much effort to solving problems, though for most there never were any problems. Though researchers and theoreticians clamor for reflection, a critical view of a situation either did not appear in the narratives or were minimalistic, with quick thinking and easily managed action. Deeper themes of leadership were absent, and there were no examples of self-questioning, doubting, or clarifying over decisions for either group. Both groups were at the pinnacle and had no discernible use for feedback or different perspectives to develop anything more than one alternative. No student ever discussed self-rumination or introspection. Each student possessed his or her own rules, and the only contemplation beyond cheering what was done was grasping on what was readily available for quick fixes.

The Übermensch as reflector insulated the self from either being a part of problematic situations nor exposing flaws and weaknesses which were more than situational and easily repairable. Graduate students in a post-master's program were generally good students with dedication of a year of study after a master's degree. Many students planned to enter doctoral programs after graduation. One can theorize the post-master's students had a self-view of competence, dedication, and an above-average ability. By reflecting back the Übermensch, the students avoided a 360-degree perspective which would yield one's fallibility as self and professional. The cheerleader-reporters did not examine leadership vicariously, but satisficers did consider leaders through vicarious appropriation. Whereas theoreticians suggested reflection could improve practices, most students either wrote about firming up one's views or making superficial, first-order change. A key conclusion for all students reflecting was no clear connection to show reflective analysis either improved practices or resulted in change.

3.3 Triangulation

Triangulation is a process to check for validity and reliability of the interpretation by checking results against theory, methodologies, researchers, and data analysis techniques as well as offering thick descriptions and practicing reflexivity [70,71]. Thick descriptions were used for each group to describe the reflections and emergent theory. Reflexivity was practiced by comparing results to the original reflections to ensure the analysis was grounded in the data. By using triangulation, researchers examined if the research either converged or diverged, and if convergence was found, the results were strengthened [72]. Two approaches were utilized to examine the interpretation: theoretical perspective and data analysis.

3.4 Triangulation: Theory

Many theorists have found similar results across many disciplines, suggesting confirmability and reliability of the findings. Reflection included many different processes, and comparison of practices with research could increase self-efficacy, but most reflections encounter decisions which lack complexity [6,10,73]. Others have found stages similar to the findings here, from considering the context with ownership (summarizing, appreciating, and capacity), analyzing the task (finding a problem with the problem), and developing solutions and alternatives (buzz wording, finding a gap, and developing an action plan) [74,75,76,77]. Like other theorists and researchers, reflection starts with a problem, consideration of the situation, and an end plan. How the details played out, such as in the present study, were not explained.

Reflection can be differentiated from thinking by looking at how participants frame what one knew and what could be done, and reflection can be either cursory (like cheerleader-reporters) or move to a higher, more meaningful level (like satisficers) [78,79]. Personal learning and feedback have been found to improve reflections [80,81], which corroborated the condition in the current study where participants did not regularly receive feedback or a focus on transformative personal learning showed little erudition. Without feedback or a focus on personal learning, many of the reflections focused on descriptions and demonstrated little critical thinking [19,82]. There was not one way to reflect, and the value and results varied based on numerous variables and

contexts. Past researchers align strongly with the findings of the present study.

3.5 Triangulation: Data

Data triangulation seeks to ascertain if the emergent theory can be applied to another similarly situated data set. If the theory aptly describes other similar situations, there is trustworthiness and credibility to the findings. A second set of data was analyzed using the constant comparison method. The difference was the codes from the first study were used during the analysis. There was an openness to finding further themes, and any divergent information was of primary importance. To understand the data collection, the sample was described, and research procedures outlined. Finally, there was an interpretation.

The following sample came from a previous class. Directions were similar to the other sample, with a call for a critical reflection and consideration if the person were the leader. Students did not receive feedback, as all assignments could be handed in on the last day. Some students asked questions along the way, but all students had free rein to write reflections as each one saw fit. There was no interaction and rewriting of reflections.

There were eight students in the sample. All students were in an education specialist program, and the internship required 120 hours. Four students worked in K-12 public schools, three students worked in higher education, and one student worked for a non-profit organization. Three students were female and five were male. To protect anonymity and confidentiality, two methods were employed: Students were encoded as Y1 to Y8, and names and places were changed. Care was taken to not change the original intent.

A truncated method to analyze the data was used. Two reflections from each student ended up being analyzed, as there was theoretical saturation. Microsoft Word, Microsoft Excel, and Wordclouds.com were the programs used. Three steps, starting with in vivo and descriptive, axial, focused, and substantive coding, were used, along with memoing and constant comparison to develop a theory. At the end, the data were checked against the original records.

With little variance, the analysis of the second data set confirmed and suggested transferability

of the theory of reflectors as an Übermensch. Three key themes emerged, with one offering a slight divergence from previous findings. Six of the eight students who wrote reflections were cheerleader-reporters. All the participants started with a summary, though Y6 and Y8, the satisficers, were much more cursory. Y2 stated, "I learned a lot" and "The way the provost planned and timed it was perfect," while Y1 was "very pleased." Y3 continued as an appreciater, stating the leader "exemplified great leadership." Y5 and Y7 explicitly stated an "appreciation" of the "positive events" in all activities.

Buzzwording, for the cheerleader-reporters, was the point of the reflection. Students did not explicitly state how each one was a part of the situation, which suggested a lack of capacity and ownership. Even if there was ownership, there were no problems. Y4 stated, "When all stakeholders come together," and others spoke of admired leaders continuing the current course of action, replete with words of teamwork, strategy, and other buzzwords. There were neither hard valuations nor concrete plans for either the vehicle or the driver. Y3 summed the lack of concrete actionable reflections best: "As a leader, I will promote …." Yet, Y3, like other cheerleader-reporters, never changed course in other reflections except a string of great ideas listed which resulted in no action.

There was a divergence, which clarified the emergent theory of Übermensch as reflector. Students who were cheerleader-reporters in this sample were in awe and showed a genuine, sincere appreciation for learning under novel experiences. Two examples showed this effect clearly. Y5 stated "I learned a lot," and then he spoke about the utility of the activity. Y7 stated she "learned a lot" and the activity "reinforced her" beliefs. The convergence was students could not refine and reconstruct a new experience which bred unfamiliarity. Yet, reflections of new experiences cannot be dismissed when the personal learning centered on summarizing as a dominant way of learning. Understandably, students could not dig deeper and be critical when a novel situation overwhelmed one's sense of making meaning of the world.

There were two students who were satisficers. Y6 and Y8 were satisficers (examples included Y6 stating her new strategy was "not working" or "perhaps need more practice"; Y8 stated her approach "was a mistake" and "research directly contradicted" her experience). Both spoke about immediate and future changes. All changes showed an empathy, such as Y8 stating she needed to be "more sensitive." While there was change, all change was first order. There was concern for how to change the activity, or vehicle, and the driver, themselves and others, was directly considered. Yet, showing capacity with discontent and seeking to remedy a gap simply and quickly always ended in simple, first-order change versus optimization. Like the Übermensch as reflector, everyone felt they had the knowledge and skills above those around them. Any outcomes of actions were not reported, and there was no data to support the replacement decision was better than the previous.

4. DISCUSSION

The methodology and triangulation of data provided three themes for use of reflection in educational internships. First, there was an illusion of reflection, with the Übermensch being a way educators lacked critical reflection. Secondly, the lack of research basis needs rectified. Finally, there are recommendations to improve reflections.

Schön and others stated the notion novices could not reflect appropriately, as students lacking experience can neither draw on a knowledge base to interpret events nor naturally use past practices to reflect [58,83,84]. Despite programs and advances in research, cognitive errors and poor reflective abilities persist, with the problem the conclusions of reflections might be choices which lack consideration of alternatives and empirical validation [25,85,86,87]. Problems can be classified as simple, complicated, and complex or a function of directive and adaptive leadership [88,89], but reflections seem to never move beyond a strictly technical-rational sphere which can be easily diagnosed and solved. Reflections might be like the Übermensch: Lacking in deliberate thinking and either showing appreciation or making decisions *reductio ad absurdum*. One never witnessed what kind of decisions were considered or how one was critical or deliberate. Without an outside source and a contentious deliberation, critical reflections were usually positivist experiences with little erudition beyond an either/or reflection which might substitute one poor decision for another.

While Cottrell (2017) [90] pointed out everyone has some experience, research suggested

results vary widely between researchers and suffered from limitations with generalizability and transferability [91]. Most findings of reflections were optimistic, easily reduced to steps, lacked experimental controls, and were positive, possibly more about the desires of the authors than the participants [92,93,94,95,96,97]. A gap in effectiveness beyond platitudes existed, with statements experiences mattered, but the how or why was mysterious [98,99,100,101]. The findings of reflections as descriptive, beyond this study and another one [82], should be expected for novices but was not reported in most research.

A lack of divergent findings in reflection research was found; most research can be summarized as reflections make practitioners better. No research was located which showed random control trials with rigorous, systematic controls and an effect size. Even all the positivist studies failed to report action which resulted from reflections. There was the possibility reflections were banal, as outcomes and new practices were only projected and not shown after the fact. The lack of results meant reflections were generally reflections-about-action versus implementation.

Recommendations are reflections as regularly practiced need discontinued, alternatives need developed, and new research directions explored. Reflections were framed as individualistic but operationalized as standardized steps, yet educational programs failed to show the difference between how reflection bridged the gap between theory and practice [86,102,103,104,105]. The process of reflection can be stymied by practitioners viewing the endeavor as a possible means of surveillance and punishments, as reflections call for leaders to expose weaknesses and incompetence, with the participants' past experiences the driving force in many reflections [106,107,108,109].

A problem with individual reflections was participants lack perspective which avoided the pain of self-questioning and uncertainty, entrenching what one already knows [110,111]. Reflections have also been found to possibly lead to rumination and an inability to make a decision, as many guides and programs in reflections lack clear aims [112,113,114]. The lack of clarity in application of reflection to education [115] also struggles from a lack of personal self-awareness [116].

What has been proposed has been done in other fields, so an important consideration, adopted from the literature of health capability [117] could transform action research into a meaningful academic endeavor. Reflection capability must be constructed and measured by agency and functioning. First, practitioners must establish one's own capacity as meaning makers of the self and the world. Agency also means practitioners who reflect see within themselves the ability to change the world. Secondly, practitioners must make meaningful decisions with measurable outcomes. Different levels of capabilities need defined. Most all studies are short on outcomes, so the shift of action research as a function of reflection capability gives a framework for reflections to change from what might be a largely iterative process to a productive mechanism.

Reflection does not have to be a go-it-alone experience with the danger of circularity [118], where a practitioner reaffirms one's rules of the world without the chance to face unknown unknowns. There appears to be no good answer to the following question: How can a novice continuously derive deep, far-reaching insight in each experience? Group and collaborative reflection experiences, with direct instruction on reflection, might show promise [119,120], as leaders can be taught to express shortcomings and frailties reframed as learning opportunities. Self-study, combined with collaborative decision making, would produce an iterative process and improve teamwork [121,122], so students do not reflect back what one already knows and believes. Reflection capability must have agency, but without a mechanism to develop meaningful outcomes, the process will have little effect.

One way to bring all recommendations together coherently would be to make reflection capability use action research [123] embedded in every class, so students build experiences connecting the theoretical to the practical each step of the way through defined steps and modeling [124]. Norton (2009) [110] found action research can be overwhelming for teachers, as decisions on data collection and methodologies can be difficult to manage. A way to focus educational leaders would be to use a truncated method of action research [125], such as starting with a hypothesis, owning the capacity to change and improve, and following three steps of having a problem with the problem, finding a gap, and developing a measurable action plan. The ability to conduct action research, like reflection, can be

facilitated if one collaborates and gains contrasting, divergent information to change one's personal and professional orientation.

Ixer [126] lamented the lack of validity and reliability in reflection studies, and he questioned even the terminology as misguided. Developing an expansive, well-informed perspective [127] requires time and freedom of operation which most teachers and leaders do not have [128]. Action research, with defined methods and outcomes, could arguably be developed to transform reflection from an ill-defined, poorly researched concept to a methodology where teacher-as-reflector becomes teacher-as-researcher using reflective capabilities.

5. LIMITATIONS

Qualitative research can establish validity and reliability by considering four dimensions: credibility, dependability, confirmability, and transferability [68,129,130]. Forero et al. [131] stated confirmability and credibility can be established through triangulation, which was conducted by using data and theoretical perspectives. Dependability was established by providing a systematic method to collect data, code, and develop categories and themes. Triangulation suggested if others sought to replicate this study, there would be similar findings. Finally, transferability was limited by the sample being post-master's degree students in an educational leadership program with a variety of experiences. Still, master's students would be similarly situated, so comparisons could be made to novice leaders and ones who desire to serve as leaders.

Care should be taken in generalization, as the sample was small and from one university. There was no feedback or discussion with students, so what students wrote and what the students did might be incongruous. Lastly, future research could examine why a small percentage of students show critical reflection skills while most practitioners plateau early. A similar effect has been found for teachers [132]. Finding what characteristics defined the group which was critical might be useful.

6. CONCLUSION

Leadership is a collective experience, and while reflections can take many forms, there is an individual, personalized interpretation which depends on experience and education

[75,133,134]. While reflection is a personal journey [135], educational leadership programs must be concerned with developing reflective practitioners who can be transformative. The myriad meanings of reflection [136] does not easily translate into an improved, richer practice for participants unless reflections are recast through reflective capabilities as research-in-action, with action research which measures goals and objectives.

Beauchamp [137] stated reflection has not been clearly linked with improved practices, but context and identity were important to understanding reflections. Novices struggle making sense of context and often avoid interjecting the self into discussions, making most reflections positive, cheerful exercises without clear indicia of consideration of alternatives. There is lack of evidence reflections, versus action research, leads to change and measurable outcomes. To improve practices, methods such as research-in-action, centered on action research or other methodologies, could improve teacher and leadership performance if formally taught, modeled, and practiced within a collaborative framework. Reflection capability could reawaken Dewey's original intent of product over process.

CONSENT AND ETHICAL APPROVAL

As per international standard or university standard guideline participant consent and ethical approval has been collected and preserved by the authors.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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Peer-review history:
The peer review history for this paper can be accessed here:
http://www.sdiarticle4.com/review-history/62074