Building the Disposition of Reflection through the Inquiry-focused School Library Program

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The goal of educators to cultivate reflective thinkers is enhanced through the inquiry-focused school library program proposed by Kuhlthau. The authors present reflection, an essential component of inquiry, as a disposition that can be “caught, taught and acquired” through a process of modeling in a school library environment which is designed to support the development of this essential critical thinking skill. A framework for strengthening the disposition of reflection is presented, based on Dewey’s and Schön’s work on reflection and Bransford, Brown and Cocking’s work on learning. The stages of reflection and inquiry are compared to dispositions-in-action, indicating their potential for enhancing student learning and understanding. Guidelines and practical suggestions are recommended for teaching reflection in a learner-, knowledge-, and assessment-centered school library program.

Introduction

A parable describing how two mice and two “littlepeople” responded to change (Johnson, 2002) illustrates the disposition of reflection. The two mice and two littlepeople live in a maze, and they spend their lives looking for cheese. The mice’s cheese supply, which had been dwindling for months, now was depleted. When there had been more than enough cheese, the mice inspected their cache every day, so the mice were not surprised when the cheese was depleted, and they were prepared to jump into action in search of new cheese. The littlepeople, however, felt they deserved their cheese and arrogantly assumed that their status and their cheese would always be there. They had not noticed the dwindling cheese supply, and they were unprepared. The mice realized that “things change and they are never the same again. This looks like one of those times. That’s life! Life moves on. And so should we” (Johnson, 2002, p. 45). The moral of this parable is: “If you do not change, you can become extinct” (Johnson, 2002, p. 47). Through a reflective process, an essential component of inquiry, we empower students to formulate questions, understand problems, evaluate a given situation, and, yes, recognize changes in their “cheese supply.”
This paper discusses dispositions, reflection, and the Information Search Process and Guided Inquiry as foundational for a school library model that promotes the dispositions of learning, knowing, reflecting which are outlined in the National Research Council’s (2000) framework, How People Learn: Brain, Mind, Experience, and School. The paper concludes with an examination of the American Association of School Librarians’ dispositions in action that relate to reflection and the implications of dispositions in action for research and practice.

What are Dispositions?
Reflection is a disposition essential to the process of inquiry. The concept of dispositions began with Aristotle (trans. 1938). Aristotle’s view was that “everyone has a potential to live a moral life” (Freeman, 2007, p. 17). Aristotle describes this as an ethical virtue, or hexis (state, condition, or disposition)—a tendency or disposition, induced by our habits, to have appropriate feelings (Kraut, 2005). The key concepts presented by Aristotle are the notions of potential and of disposition or tendency to act (Freeman, 2007). In Concept of Mind, Ryle (1949) presents dispositions as attributions that we make about people after witnessing their behavior. That is, someone is said to be disposed to a certain behavior only after the behavior is witnessed. Arnstine (1967) maintains that learning is the process of acquiring and changing particular kinds of disposition.

The focus on dispositions in education in the United States emerged in the 1980s from the movement to establish and raise student and teacher standards in response to national concern about educational quality. The term dispositions seemed to appear suddenly when “in the 1990s, without fanfare or much discussion, teacher educators began talking about dispositions” (Freeman, 2007, p. 3). It was during the decade of the 1990s that “the traditional formulation of the domains of teacher education—knowledge, skills, and attitudes—was recast as knowledge, skills, and dispositions” (Freeman, 2007, p. 3).

Katz and Raths (1986) are credited with introducing the notion of dispositions as a goal in teacher education. They defined professional dispositions of teachers as a “pattern of acts that were chosen by the teacher in particular contexts and at particular times” (p. 7). Later, Katz (1993) proposed that dispositions were a tendency to exhibit frequently, consciously, and voluntarily a pattern of behavior directed to a broad goal.

The notion of dispositions moved to the forefront in school librarianship with the release in 2007 of the Standards for the 21st-Century Learner by the American Association for School Librarians (AASL). These standards consist of four strands—skills, dispositions in action, responsibilities, and self-assessment strategies. Although the dispositions identified in the 2007 AASL standards are intended for students, they serve as the de facto dispositions for school librarians, who, in best practice, model these behaviors for students (Jones & Bush, 2009).

What is Reflection?
Reflection, the focus of this article, is an integral component of inquiry that informs and transforms knowledge and action (Risko, Roskos & Vukelich, 2002). Dewey (1933), who drew on the ideas of Plato, Aristotle, Confucius, Buddha, and others, is acknowledged as the originator of the twentieth century concept of reflection. He considered reflection to be a special process of problem solving or thinking to resolve an issue (Dewey, 1944). He viewed reflection
as “an active and deliberative cognitive process, involving sequences of interconnected ideas which take account of underlying beliefs and knowledge” (Hatton & Smith, 1995, p. 34). This problem solving or thinking enables the individual to develop “habits that render our action [conduct] intelligent” (Dewey, 1944, p. 44).

Although there is wide agreement that reflection is a special form of thought (see, for example, McNamara, 1990; Waxman, Frieberg, Vaughan & Weil, 1988), Dewey also spoke of “reflective action” as problem solving to implement solutions once problems have been thought through. Hatton and Smith (1995, p. 34) write that “Reflective action is bound up with persistent and careful consideration of practice in the light of knowledge and beliefs, showing attitudes of open-mindedness, responsibility, and wholeheartedness.” Dewey (1933) and Schön (1983; 1987) describe a cyclical approach to reflective thinking that is graphically represented in Figure 1.

![Figure 1. Reflective Thinking Model](image)

Dewey’s reflective process begins with problem identification. The second step is to take a step back to frame or reframe the problem. Dewey (1933) refers to this as contextualizing the problem by providing location and definition. Eby and Kujawa (1994) suggest dissecting the problem through observation, reflection, data gathering, and consideration of moral principles.
This second step can be thought of as trying to make sense of the problem and to search for possible solutions. Routine solutions are made and tested by subsequent observation, by further experimentation, if necessary, and by judgments. “These features provide the mental picture of the thought processes entertained by the reflective practitioner [or student] in an attempt to define a problem” (Taggart & Wilson, 2005, p. 6). The third step is to make predictions and identify possible solutions to the problem. In the fourth step, solutions are tested, which Dewey (1933) likened to the scientific method. The final step, evaluation, consists of a review of the previous attempts to solve the problem and reflection on the consequences of the solution. If the solution is not successful, the problem undergoes further reframing and the process is repeated.

Schön (1983; 1987) agrees with Dewey that reflection is a necessary part of action. Schön (1983, p. 54) writes, “Phrases like ‘thinking on your feet,’ ‘keeping your wits about you,’ and ‘learning by doing’ suggest not only that we can think about doing but that we can think about doing something while doing it.” Schön describes an experiment into the process of discovery by Inhelder and Karmiloff-Smith (1974) in which children balanced blocks on metal bars. Some of the blocks were plain wooden while others were weighted, requiring children to adapt and integrate new understanding into what they were doing. At first, children attempted to balance the blocks regardless of their weight. Gradually the children made corrections to their thinking to develop what Inhelder and Karmiloff-Smith describe as a “theory-in-action,” which Schön (1983, p. 59) calls “reflecting-in-practice.”

Reflecting-in-practice (also called reflecting-in-action) involves simultaneous reflecting and doing while the action is being undertaken and is bounded by the “action-present,” which Schön (1983, p. 62) describes as the “zone of time in which action can still make a difference to the situation.” A second type of reflection, “reflection-on-action,” involves looking back upon an action after it has taken place (Hatton & Smith, 1995). “We reflect on action, thinking back on what we have done in order to discover how our knowing-in-action may have contributed to an unexpected outcome” (Schön, 1983, p. 26).

**What is the Information Search Process?**

Kuhlthau (2004) proposed a process approach for library and information services based on her research in the 1980s on students’ information process experiences. As a practitioner, Kuhlthau (2007, p. 16) had wondered, “Was the library providing an environment for constructing new knowledge? Or was it merely providing materials and resources?” Traditional library and information services had focussed on providing materials and resources rather than on information seeking within the process of learning. Kuhlthau’s research identified “distinct stages in the Inquiry Process, and some stages are more difficult for students than others” (Kuhlthau, Maniotes & Caspari, 2007, p. 17)

The Information Search Process consists of multiple steps beginning with task initiation when students first receive an assignment. The steps were identified in *Seeking Meaning: A Process Approach to Library and Information Services* (Kuhlthau, 2004) and revised slightly for *Guided Inquiry: Learning in the 21st Century* (Kuhlthau et al., 2007). These steps [revisions in parentheses] are topic selection (selection), prefocus exploration (exploration), focus formulation (formulation), information collection (collection), and search closure (presentation), and starting writing (assessment). In *Seeking Meaning*, Kuhlthau suggests the importance of
assessment; however, it is in her later work, *Guided Inquiry* (2007) that assessment, which is similar to reflection, becomes the seventh step to the Information Search Process and replaces the previous starting writing step. This indicates a reconsideration of the importance of assessment and reflection in the Information Search Process.

**Inquiry: The Vehicle that Promotes Reflection**

The challenge of the inquiry-focused school library program is to provide an educational environment that prepares students to be reflective and ready for change, even though we are not quite sure what the specific challenges of the future might be. How do school librarians nurture students to become reflective? The school librarian develops reflective students by: “Focusing on creating learning opportunities that are student-centered and successfully prepare students for their adult years by understanding and honoring the dynamics of learning; by recognizing that, for students, schooling must be a time of curiosity, exploration, and inquiry, and memorizing information must be subordinated to learning how to find information to solve real problems” (Brooks & Brooks, 1993, p. 9).

Guided Inquiry, an extension of Kuhlthau’s Information Search Process, is an ideal process for developing reflective thinkers who can solve problems. Guided Inquiry is a team approach that leads students in a process to gain deeper understandings of subject area curricular content and information literacy concepts, as well as to pursue personal initiatives. Guided Inquiry is founded upon sound pedagogical theory designed to prepare students for the challenges of the new information society (Kuhlthau et al., 2007). This cognitive process, with intentional learning (Bereiter & Scardamalia, 1989) as the ultimate goal, supports students in finding and analyzing information as needed or desired.

Through Guided Inquiry, teachers and school librarians expand upon instructional strategies designed to help students gain new knowledge by further addressing how students find answers, share the knowledge they have discovered and learned and, most significantly, reflect on their actions and findings. The opportunity for educators, as a team, to focus on helping students construct new knowledge and share this knowledge with a community of learners, while encouraging students to reflect on what they have done and how they did it, form the essence of Guided Inquiry (Kuhlthau et al., 2007). The process, as a whole, promotes reflection leading to transference of knowledge, thereby creating ultimate learning through intelligent action.

Dewey’s (1933) reflective process and Kuhlthau’s (2004) Information Search Process share several key steps leading to cognitive and affective changes. The first several steps of both frameworks invite students to grapple with problems and the exploration that ensues. In the latter steps students create new understandings. A form of reflection—evaluation and assessment—is the final step in each framework.

**The Goal: Reflective Thinkers**

The goal of school librarians is to create learning opportunities whereby students become reflective thinkers and problem solvers. Teachers and school librarians need to nurture reflective thinking by modeling reflection since dispositions are best “taught, caught, and acquired” through modeling (Jones & Bush, 2009, p. 10). However, Marcos, Miguel, and Tillema
(2009), in their review of the teacher reflection research, found that few teachers are able to reflect. For example, McLellan (2004) in a study of 40 teachers reported that only two percent were aware of the cyclical steps in reflection: Identifying a problem; setting a goal; solving the problem; and evaluating the results. Tillema (2006), in a study of teacher beliefs about teaching and learning, found that only ten percent of teachers referred to a cyclical reflective process. Butler, Novak, Jarvis-Selingder, and Beckingham (2004), in a study of teacher professional development, none of the ten teachers studied over a two-year period were able to establish clear goals and evaluate results of their practice; however, when teachers were taught reflective strategies they were able to set clear goals and evaluate results.

If teachers (or school librarians) are ill-prepared to practice reflection, they cannot model it for students. This creates a dilemma since students need models to emulate reflection. Student development and an emphasis on reflection require that further inquiry and research into the school librarian’s ability to model reflection be conducted since reflection is an integral component of inquiry.

The School Library Model: Guidelines for Teaching Reflection

Libraries and information services provide access to their resources in two ways: basic access and enhanced access. Basic access includes selection, acquisition, and organization of sources and is essential and foundational to the library. Enhanced access includes intellectual access “to the ideas, and process of seeking meaning” (Kuhlthau, 2004, p. xv). Kuhlthau (2004, p. 115) describes five levels, or roles, of mediation and education that librarians can provide to support intellectual access: organizer, locator (lecturer), identifier (instructor), advisor (tutor), and counselor. It is at the counselor level that school librarians are most involved with student learning and reflection by ensuring the following:

> Process intervention that accommodates the user’s thoughts, actions, and feelings in each stage of the information search process. Emphasis is on the process of learning from a variety of sources of information. The primary objective is to prepare users for future situations of learning from information access and use through knowledge of and ability in the process of information seeking. (Kuhlthau, 2004, p. 124)

Regardless of good intentions, many learning opportunities stop short of providing opportunities for students to become reflective thinkers unless educators are working at the counselor level. Bransford, Brown, and Cocking (2000) identify an ideal learning environment consisting of four interconnected components that mutually support one another to foster learning: learner-centered, knowledge-centered, assessment-centered, and community-centered. Each is described more fully below as a framework for the school librarian to create an environment that focuses on inquiry and enables students to become reflective thinkers. Figure 2 on page 35 is a graphic representation of this learning environment.

Community-centered Environments

Communities support student learning through collaborative efforts to promote learning, knowledge, and assessment. The community can be the school, classroom, state, nation, or
The school library environment can affect the larger school environment when school librarians and teachers collaborate to prepare students for 21st century workplace environments in which teamwork, problem-solving (Monteil-Overall, 2006), and reflection are deemed vital.

The foundational characteristics of school and school library communities that promote learning, reflection, and inquiry are:

- Recognizing that learning is influenced by the context in which it takes place. Shared norms, such as valuing learning, holding high standards, and understanding the importance of inquiry and reflection, help to build community. “Norms such as these increase people’s opportunities to interact, receive feedback, and learn” (Bransford, Brown, & Cocking, 2000, p. 154).
- Acting fairly and impartially, which Sockett (2006) identifies as a moral dispositional imperative for teachers, by recognizing that all students can learn.
- Understanding and accepting the student’s world because much of what a child knows and learns occurs outside the school. School librarians can use this knowledge to create inquiry-based learning opportunities that focus on understanding and solving issues and problems experienced by students.
- Networking with other community resources such as public libraries, museums, and experts to broaden student understanding (Kuhlthau et al., 2007). Students learn from experts that thinking is not rote memorization of facts but understanding of large concepts that are applied within context and condition of the situation.
- Learning is a social event. Learners are motivated when they see that their inquiry is useful and will help others such as tutoring younger children, making presentations to outside audiences, and learning to work effectively in groups (McCombs, 1996). Feeling that one is
contributing something to others appears to be especially motivating (Schwartz, Lin, Brophy & Bransford, 1999).

**Learning-centered Environments**

Learning-centered school library environments are constructivist and reflective: “Learning takes place through a combination of acting and reflecting on the consequences” in order to gain deep understanding that is transferable to many situations (Kuhlthau, 1999, p. 15). In learning-centered environments, teachers and school librarians respect and pay careful attention to the knowledge, skills, attitudes, and beliefs that learners bring to the educational setting. “Overall, learner-centered environments include teachers [and school librarians] who are aware that learners construct their own meanings, beginning with beliefs, understandings, and cultural practices they bring to the classroom” (Bransford, Brown, & Cocking, 2000, p. 136). Key characteristics and strategies of learner-centered environments that promote learning, reflection, and inquiry are:

- **Knowing students.** Students bring background knowledge, preexisting understandings, and experiences to the learning situation. In some situations, it is possible for students' preexisting knowledge about a topic to be incorrect and impede learning and this knowledge needs to be “unlearned.” School librarians who know their students and understand their interests are more likely to collaborate with teachers to provide engaging learning opportunities.

- **Being a “cultural broker”** who “thoroughly understands different cultural systems and knows how to build bridges or establish linkages across cultures that facilitate the instructional process (Gay, 1993, p. 293).

- **Respecting students** for their unique personalities and gifts. Demonstrating respect for and appreciation of students includes providing a diverse collection containing authentic materials on a broad range of topics and cultures.

- **Creating a safe environment** so students may learn and make mistakes without fear or penalty and have time within their information seeking to delve deeply into the topic.

- **Encouraging students to share and reflect on materials, ideas, and concepts** facilitates learning and reflection. School librarians model reflection for students.

**Knowledge-centered Environments**

In knowledge-centered environments, teachers and school librarians “take seriously the need to help students become knowledgeable by learning in ways that lead to understanding and subsequent transfer of knowledge” (Bransford, Brown & Cocking, 2000, p. 136). An expectation of inquiry is that students will be inquiring and reflective in other aspects of their life. Transfer plays an important role in assessing the quality of the learning experience. Key characteristics and strategies of knowledge-centered environments that promote learning, reflection, and inquiry are:

- **Teaching for deep understanding rather than rote memorization and shallow understanding.** The school librarian as counselor, dialogues with students to understand that “information seeking is viewed as a process of construction rather than a quest for right
answers” and that information seeking is “a creative, individual process that is dynamic and unique for each person” (Kuhlthau, 2004, p. 119).

- Teaching with intentionality. “Attention must be given to what is taught (information, subject matter), why it is taught (understanding) and what competence or mastery looks like.” (Bransford, Brown, & Cocking, 2000, p. 24) Tasks are not only engaging; students understand what is being taught, why it is being taught, and what competence looks like (Marzano, Pickering & Pollock, 2001).
- Providing ample time for learning. Recognizing that learning cannot be rushed because “the complex cognitive activity of information integration takes time” (Bransford, Brown, & Cocking, 2000, p. 35).
- Presenting broad concepts because de-contextualized knowledge reduces transfer. Teachers and school librarians need to broaden the lesson whenever possible to have students reflect on how principles and broad concepts relate to different situations. Abstract representations and the presentation of broad concepts promote learning and transfer.
- Helping students monitor their progress by asking questions such as what is being taught, why is this being taught, and how will I know when I have learned and understood.
- Understanding that knowing when, where, and how to use information and knowledge is enhanced by use of contrast and comparisons. For instance, enhancing learning by comparing how databases and search engines are similar before describing how they are different.
- Recognizing that transfer is an active, dynamic process of learning rather than passive end-product. Transfer occurs when students understand the subject thoroughly and practice applying what they have learned, first to similar situations and then to dissimilar situations (Bransford, Brown & Cocking, 2000).
- Scaffolding of new learning. This involves: interesting the child in the task; reducing the number of steps required to solve a problem by simplifying the task; helping the child to understand the goal of the learning; identifying for the child the gap between what he or she has produced and the ideal; controlling frustration and risk in problem solving through clear instructions, monitoring and supporting student learning; demonstrating an ideal version of the act to be performed (Bransford, Brown, & Cocking, 2000).
- Using strategies to encourage reflection, including thinking aloud, discussions, cooperative learning, brainstorming and consensus building, role-playing, and questioning (Choi, Land & Turgeon, 2005).

Assessment-centered Environments

A key principle of an assessment-centered environment is that teachers and school librarians provide continuous opportunities for feedback and revision within learning goals. Key characteristics and strategies of assessment-centered environments that promote learning, reflection, and inquiry are:

- Providing feedback is integral to reflection (Bransford, Brown & Cocking, 2000) and a “critical tool to help students determine their strengths and weaknesses and work on improvements” (Harada & Yoshina, 2005, p. xviii). Opportunities for feedback should occur regularly as part of the learning situation.
• Helping students to reflect on and assess their own learning. Feedback is more helpful when students have opportunities to revise their thinking during a project (i.e., reflection-in-action); “assessment is not evaluation; it is infused throughout the learning and teaching experience rather than limited to final outcomes” (Harada & Yoshina, 2005, p. xviii).

• Listening to students as they talk about the work and exchange ideas with peers that provide insight.

• Conducting post or exit surveys after a large project or unit of study; asking students to share what they learned, liked, disliked or would have done differently.

• Reflecting on students’ comments and using this valuable information to plan and meet the needs of future students.

A dispositional model for inquiry-focused school library instruction that incorporates reflection based on Figure 2 Perspectives on Learning Environments is represented in Figure 3. In this figure, the inquiry-based school library program is the community in which students develop and strengthen the dispositions (or behaviors) of learning, knowing, and reflecting. It is these dispositions (behaviors) that we want students to exhibit as a result of creating an inquiry-focused school library program. Inquiry is a vehicle that can dispose students to be learners, knowers, and reflectors. Through an enculturation model described by Tishman, Jay, and Perkins (1993), students learn information skills, become sensitive to using the information search process, and are inclined to be inquiring in myriad situations. It is this triadic process of skills and abilities, sensitivities, and inclinations that creates the environment in which the dispositions of knowing, learning, and reflecting are nurtured.

Figure 3: A Dispositional Model of the Inquiry-focused School Library Program
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The AASL Reflective Dispositions in Action

Many dispositions in action from Standards for the 21st-Century Learner (AASL, 2007) parallel Dewey’s framework of reflection (1933) and Kuhlthau’s Information Search Process (2004) and can be aligned to produce a set of guidelines for incorporating reflection as a part of inquiry-based learning in the school library.

The standards identified below stand as examples of observable student behaviors that align with Dewey’s and Kuhlthau’s frameworks (see Table 1).

Table 1 Examples of AASL Observable Student Behaviors Aligned with Dewey’s Reflection Cycle and Kuhlthau’s Information Search Process

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<thead>
<tr>
<th>Observable Student Behaviors</th>
<th>Dewey</th>
<th>Kuhlthau</th>
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<tbody>
<tr>
<td>Display initiative and engagement by posing questions and investigating the answers beyond</td>
<td>Problem</td>
<td>Initiation</td>
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<tr>
<td>the collection of superficial facts (AASL Standard 1.2.1)</td>
<td>Problem-framing</td>
<td>Exploration</td>
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<tr>
<td>Demonstrate adaptability by changing the inquiry focus, questions, resources, or strategies</td>
<td>Problem-framing</td>
<td>Initiation</td>
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<tr>
<td>when necessary to achieve success (AASL Standard 1.2.5)</td>
<td>Experimentation</td>
<td>Exploration</td>
</tr>
<tr>
<td>Use both divergent and convergent thinking to formulate alternative conclusions and test them</td>
<td>Experimentation</td>
<td>Formulation</td>
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<tr>
<td>against the evidence (AASL Standard 2.2.2)</td>
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<tr>
<td>Maintain openness to new ideas by considering divergent opinions, changing opinion or conclusions when evidence supports the change, and seeking information about new ideas encountered through academic or personal experiences (AASL Standard 4.2.3)</td>
<td>Problem</td>
<td>Initiation</td>
</tr>
<tr>
<td></td>
<td>Problem-framing</td>
<td>Exploration</td>
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<td></td>
<td></td>
<td>Formulation</td>
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Recommendations for Future Research

The intended purpose of this paper was to establish a foundation for a framework for developing and strengthening the dispositions of reflection. The authors reviewed the contributions of Dewey (1933; 1944) and Schön (1983; 1987) regarding reflection, of Kuhlthau (2004) regarding the information process, of Bransford, Brown, & Cocking (2000) on learning, as well as additional related research. The value of reflection in preparing students to become lifelong learners, able to make meaning of their experiences, was clearly supported in the review of
the literature. How can educators develop and apply this knowledge and understanding to their instruction? By what means do educators develop the disposition of reflection in practice?

Participatory action research (PAR), as defined by Kemmis and McTaggart (1988), may offer a path to developing the dispositions identified through this review. Practitioners, by examining what they do in relationship with others within the school community, can develop a deeper, broader understanding and that process can enhance future practice. Further studies are needed that engage practitioners in the field, collaboratively examining their practices, emphasizing relevant self-assessment in learning, knowing, and reflecting.

Findings of the literature review suggested that a majority of educators may not have an understanding of the cyclical approach to reflective thinking that is required for effective teaching. Relevant self-assessment on the part of educators could serve to rectify this problem. Further studies are needed that involve practitioners identifying problems specific to their particular needs and setting goals that target those problems. Participatory action research (PAR) that aims at solving specific problems and evaluating the results, with a focus on the performance of educators and those with whom they interact could help educators assess their own strengths and weaknesses. PAR, led by university researchers working with practitioners, is an ideal vehicle for use in defining strategies to assist educators in the pooling of their talents, drawing on the strengths and skills of each member, in a united effort to propel their own investigative interests and enhance their own efforts.

Often, in schools, there is a separation of grade levels, departments, and subject matter that hinders collaboration, and, as a result, teachers often find themselves working alone. Observation and interviews with practitioners, investigating the multiple roles of teachers and school librarians in relation to Kuhlthau’s five roles of mediation and education and in relation to the building of the dispositions needed for inquiry-based learning, could assist in identifying how educators could work together to cultivate students who are reflective thinkers. Future research in this area should be designed to enrich the body of knowledge about teaching reflection as a disposition and as a component of inquiry-based learning.

References


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