



# Action research journaling as a developmental tool for health and physical education teachers

Thomas G. Ryan <sup>a</sup>

<sup>a</sup> Nipissing University, 100 College Drive, North Bay, P1B 8L7, Canada

---

## Abstract

At present there is a global need to assume an inquiry stance to address problems to locate solutions, as complex problems surface in all walks of life. With new Health and Physical Education provincial curricula emerging in 2019, the province of Ontario (Canada) is also making inquiry a priority. Educators in Ontario are expected to lead students in inquiry efforts yet in order to do this requires teacher training that is authentic, appropriate and professional. The purpose of this study is to examine how aspects of Action Research (AR) can be used to enhance and improve teaching with its inquiry-based learning elements that complement the role of educators and students alike. Journaling in AR is an analysis mode that can help participants achieve certain resolutions within an educational landscape. AR can infuse and nurture teacher self-development within teacher training while improving interpersonal relationships and developing pedagogy via practical experiences. Teacher change through AR occurs within the interactions, experiences and professional development that seems to imbue teacher training.

© 2017 IJCI & the Authors. Published by *International Journal of Curriculum and Instruction (IJCI)*. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (CC BY-NC-ND) (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

**Keywords:** Action Research; Journaling; Inquiry-based learning; Teacher development

---

## 1. Introduction

Today a person wishing to become a Health and Physical Education teacher in the province of Ontario (Canada) must undertake a two-year program of study culminating with a Bachelor of Education professional degree. Once achieved the Ontario graduate will usually apply to the Ontario College of Teachers and become certified. Once certified a person may be hired to teach in the province of Ontario. The training period in 2020 is both challenging and embraces the traditions long-standing in Ontario education.

One long standing tradition in education is inquiry, the ability to question, and to face both problems and dilemmas as a matter of praxis. Praxis is informed committed action, that gives rise to knowledge rather than just successful action. It is informed because other people's views are taken into account. It is committed and intentional in terms of

values that have been examined and can be argued. It leads to knowledge from and about educational practice. (McNiff, Lomax and Whitehead, 1996, p. 8)

However, being informed and intentional a person needs to be knowledgeable and work to maintain this status by seeking answers, clarifications and coping. A teacher is an inquirer who sees learning as experience and a central element of life itself. Indeed, Socrates stated that a life without inquiry is not worth living (Fadiman, 1978). Within the training of a Health and Physical Education teacher in the province of Ontario, pre-service students are introduced, or at least they should be introduced to the Ontario Health & Physical Education curriculum with its inquiry emphasis (Ryan, 2019).

Inquiry within the current Ontario Health and Physical Education curricular document is a four-part inquiry process linked to four questions and four areas of learning such as: “Knowing Yourself – Who am I?; Exploring Opportunities – What are my opportunities?; Making Decisions and Setting Goals – Who do I want to become?; and achieving goals and making transitions – What is my plan for achieving my goals?” (Ontario Ministry of Education, 2019, p.38). The best approach to address each area is by using the inquiry framework as detailed in Figure one.

**Figure 1**

Inquiry Framework for Health and Physical Education:  
Six Components of Inquiry-Based Learning.



Note: (OPHE, 2015, p. 8).

Knowing what questions to ask can help student teachers, mentoring teachers and students “explore and learn together. Students should have opportunities to participate in a wide range of activities . . . to enable them to develop inquiry and research skills and provide opportunities for self- expression and personal choice” (Ontario Health & Physical Education, 2019, p.56). Questioning is a means to explore, inquire and “research skills are critical to students’ success in all subjects of the curriculum and in all areas of their lives” (Ontario Health & Physical Education, 2019, p.78).

Inquiry and research are at the heart of learning in all subject areas. In health and physical education, students are encouraged to develop their ability to ask questions and to explore a variety of possible answers to those questions. Teachers can support this process through their own use of effective questioning techniques and by planning instruction to support inquiry (particularly in the context of experiential learning. (Ontario Health & Physical Education, 2019, p.82)

The ability to “respond to such questions helps students build their confidence and competence as they develop physical and health literacy. The teacher’s questioning also provides students with a model for developing their own habits of inquiry” (Ontario Health & Physical Education, 2019, p.82). An educator questioning instruction, pedagogy, and students is actually doing something that is very much a tradition in education (Ryan, 2019).

Socrates provided educators with a system of questioning where everything is questioned and truth was approached only through dialogues or the play of minds (Ryan, 2013). Many dialogues can be thought of as art, open to criticism, especially when the interchanges are documented and given further consideration (Ryan, 2013). Human interchanges constitute pedagogy which is grounded and understood as the “interactions between teachers, students, and the learning environment and the learning tasks” (Murphy, 2008, p. 35). It is through these interactions that pedagogy may be questioned as teachers in-training and in-service educators reflect upon (Schon, 1983) authentic problems (Dewey, 1897). These prudently developed questions and authentic problems are explored recursively (Kolb & Kolb, 2005) to realize solutions or coping mechanisms, in the case that a problem is not solved. This planned and playful process connects cognitive and affective modes as well as physical action, in order to play with problems (Piaget, 1990). When combined, these modes and planned moves in the curriculum transport participants into the role of an Action Researcher (Ryan, 2018).

### *1.1. Purpose*

The purpose of this study is to examine how journaling within Action Research can be used to enhance and improve pre-service teaching with its inquiry-based learning

elements. Pre-service teachers who adopt an inquiry stance in training often alter their approach by integrating inquiry-based instruction within planning and revisions. An introduction to journal writing is a means to promote reflection, while supporting professional development and ongoing revision of practice.

## 2. Methodology: Action Research as a Tool

More and more, educators are realizing that Action Research (AR) is a process that allows and supports the exploration of teaching experience to realize “clarity and understanding of events and activities and use those extended understandings to construct effective solutions to the problem(s)” (Stringer, 2007, p.20). When a person assumes “inquiry as stance’ as a grounded theory of action that positions the role of practitioners and practitioner knowledge as central to the goal of transforming teaching, learning, leading, and schooling” (Cochran-Smith & Lytle, 2009, p.119), action researchers become professional developers of their own praxis (Ryan, 2018).

Action Research is a “systematic procedure completed by individuals in an educational setting to gather information about and subsequently improve the ways in which their particular educational setting operates, how they teach, and how well their students learn” (Creswell & Guetterman, 2019). AR “is not a panacea for all ills and does not resolve specific problems but provides a means for people to more clearly understand their situations and to formulate effective solutions to problems they face” (Stringer, 2014, p. 8). Kemmis (2009) believes AR,

is a critical and self-critical process aimed at animating these transformations through individual and collective self-transformation: transformation of our practices, transformation of the way we understand our practices, and transformation of the conditions that enable and constrain our practice. Transforming our practices means transforming what we do; transforming our understandings means transforming what we think and say; and transforming the conditions of practice means transforming the ways we relate to others and to things and circumstances around us. (p.463)

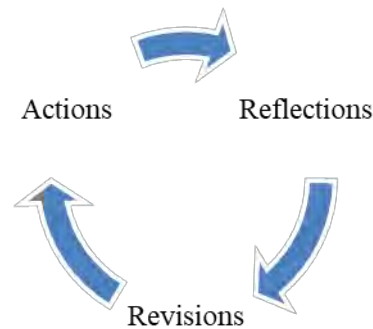
AR is cyclical and recursive as researchers reflect, identify, examine and act upon their findings. Action research allows educators the opportunity to be more effective in their teaching and in the development of their students (Ryan, 2018). Key features of AR seem to apply specifically to educators:

1. The recognition of the capacity of people living and working in particular settings to participate actively in all aspects of the research process; and
2. The research conducted by participants is oriented to making improvements in the practices and their settings by the participants themselves (Kemmis, McTaggart, & Nixon, 2014, p.4).

It is this professional improvement and development mode that supplements pre-service education classes and serves teachers in training who can use AR as a tool to examine, process and filter teaching experience (Ryan, 2018). AR is premeditated and often methodical via a series of commitments “grounded in the ontological ‘I’ of the researcher, and uses a living logic; that is, researchers organize their thinking in terms of what they are experiencing at the moment” (McNiff & Whitehead, 2006, p. 42). Inquiry-based learning is “. . . a system of learning that supports the development of students' problem solving and critical thinking skills, which is crucial for them in everyday activities” (Maxwell, Lambeth, & Cox, 2015, p.3). Within teacher training each strategic recursive step brings about new insights by looking within the moment of experience and equally back upon experiences (reflection) of teaching, for example, Figure two details one AR step/phase that can be repeated again and again, recursively over time.

**Figure 2.**

One Action Research Cycle/Phase/Step



(Ryan, 2007).

The challenge for pre-service educators is to capture, note, and reflect upon actions that happen quickly in new and unfamiliar, complex teaching environments. However, AR “can transform teachers, the classroom, and the school community” (Ward & Millar, 2019, p.42). A pre-service teacher (student-teacher) as action researcher benefits from new understandings, as can be seen in the following AR report developed by a student, as part of a classroom assignment within an Ontario Faculty of Education teacher training program. The pre-service teacher was completing a practicum at a school and they had an opportunity to document their own professional development while completing a Faculty of Education class assignment. The student-teacher was teaching a grade nine Health and Physical Education class and had an opportunity to Act, Reflect and Revise

praxis over time. What follows are one source of data, the reflective accounts of a student-teacher.

### 2.1. AR Reflective Journal

#### **Action:** Lesson #1 Grade 9 Boys “Decathlon”-3000m

##### **Plot-expectations:**

- Initially I expected students to perform at a higher level than they were actually capable of.
- I did not allow for the appropriate amount of time required to maximize students’ activity time.

##### **Setting- environment:**

- In the gym the students were off task initially.
- There were various distractions to contend with: The other grade 9 girls’ class, the loft workout room where senior students were working out.
- I had a few verbal reminders for students to focus their attention on me, and one proximity management strategy.

##### **Characters-profile:**

- Grade 9 students were new to the school, still learning the rules and regulations, 4 IEP students, however, did not seem to be an issue with this subject.

#### **Reflections:**

##### **My perspective:**

- I would have all the students run at the same time next time as a few students took a long time to complete the 3000 m.
- The students waiting for their partners were cold, inactive, and often off task.
- After warm-up and stretching there was not much time left in class to do anything else.
- I need to have better management of class initially before beginning the task. I need to take more time and be clear on the task to ensure students are on the right track.
- I need to address any late students.
- I need to have a better scoring system with students’ names on them - borrow ahead of time from associate.
- On the positive:
- I spoke well with a voice that carried. For instance, we share gym time with grade 9 girls!
- The students once on task were listening well and participated well.
- I did not have any major management issues outside in the field.
- I had all the materials I needed (was prepared mostly!)
- I was prepared for any students with asthma problems, kept it for JP when he needed it.

- The students I usually had to watch were all on task.
- I used humour and patience well with class.
- Students asked appropriate questions.
- I had students help with equipment at the beginning and end of class.
- I had a grade 12 TA in the class with me who was given some responsibilities with a few “identified” students in case there was a need for additional help that I could not provide.

**Revisions:**

- I took a little more time preparing the class before moving onto the next task.
- I spent more time making sure if a student was late it was addressed.
- I used more nonverbal strategies to stop off task behavior.
- I stopped my “discussion” abruptly and waited until students were quiet and listening again.

**Action: Lesson #2 Grade 9 Boys “Decathlon”-400m**

**Plot-expectations:**

- Initially I expected students to perform at a higher level than they were actually capable of, run faster etc.

**Setting- environment:**

- In the gym the students were off task initially.
- I had a few verbal reminders for students to focus their attention on me, whistle used outside when students were required to gather around so I could speak to them more effectively.

**Characters-profile:**

- Students were aware of the next event, most were not really keen on it(outside, cold, running again)

**Reflections:**

**My Perspective**

- Students were all listening well. Minimal management issues. A.D. had one remark which I quelled with proximity.
- All the students participated in the warmup, stretching and 400m, all on task.
- Great attitudes of the students. Lots of cheering on during the races.
- Students all were aware of safety issues after the run; needed to keep moving, stretch again if needed, puffer for J.P.
- Several students were engaged in the activity, asking lots of questions, wanting to know “did I get Gold? Silver? Etc.
- We had to share the field with the grade 9 girls. At times there were a few problems with their proximity to us.

**Revisions:**

- Next time I would be more aware of the use of lanes in the 400m, outdoor track did not have any lanes, so there was a slight disadvantage for some of the

students, where they were supposed to be lined up.

- Next time I will speak to the other teacher in advance to prevent any overlap of events, also for safety issues (running into lanes, walking across the long jump track etc.)

**Action: Lesson #3 Grade 9 Boys “Decathlon”800m**

**Plot-expectations:**

- Initially students were expected to run the 200 m. I changed this to 800m as we needed a middle-distance run. Students were unprepared for this so a little bit of complaining involved.

**Setting-environment:**

- in the gym the students were in squads again asking a lot of questions this time regarding world records etc. I told them honesty since I had just changed the event, I did not have the information but would provide it tomorrow. Students were satisfied with this explanation.
- I had a few verbal reminders for students to focus their attention on me again.
- I used a whistle outside when students were required to gather around so I could speak to them more effectively which proved once again to be quick and efficient.

**Characters-profile:**

- Students were not aware of this next event, most were not really keen on it (outside, cold, running again and windy)
- Used humor to lighten the mood.

**Reflections:**

**My Perspective:**

- In general, students listened well to the teacher (me) Followed instructions well.
- All students warmed up and stretched, all on task.
- Heats of 6 were good but realized I could stagger them to complete the race more efficiently, so students were active a greater part of the time instead of waiting for the next race to begin.
- There were a few students who did not want to compete in any event after the 800 m. I encouraged them to try a few to try and see if they could improve their results, so to keep on task, active.
- My voice was clear.
- Management was fine, a few comments “from the peanut gallery”, I used proximity to control those, a few aside verbal comments to them.
- B.O. is considered a “behaviour” student, yet I have not felt it an issue in my class! He is very eager to please, asks lots of relative questions to the class and situations we encounter in the decathlon.
- Students have accepted my authority as a teacher.

**Revisions:**

- I would like to be more prepared with my knowledge so I can answer questions such as world records etc for the 800m. However, I do feel it is important to be



honest with students if you do not know the answer.

- I would like to use the whistle more often outside, it is a great management tool, quick and responsive.
- For those students who were inactive during the runs I would like to get them involved in another task while they are waiting. Maybe try having them help time, gather equipment more often, another practice event.

**Action: Lesson 4: Grade 9 Boys Track and Field Unit Test**

**Plot-expectations:**

- Unit test to write for students. To complete test and then finish any decathlon event outstanding.
- Given consequences of talking/looking at other test papers.

**Setting- environment:**

- in the gym the students were anxious regarding test, gave them verbal instruction of their parameters and positive comments that they would do well, I would repeat questions etc.
- I had a few verbal reminders for students to focus their attention on test.

**Characters-profile:**

- Students were aware of the test.
- No special requirements for identified students.

- **Reflections:**

**My perspective:**

- Students were on task! No problems with test, students listened to instructions well, were quiet, completed test.
- My voice was clear when giving the test, students asked questions when appropriate (Could you repeat that question please?)
- I asked several students after the test how they felt they did: varied responses but most felt they did well. I am anxious to see their results.
- I noticed that a lot of students left their decathlon tables to the end. They did remember my instructions that their results needed to be in table format. Most students were eager to improve on their jumps, shot put, and discus. No repeats on any running event.
- Students enjoyed the decathlon; I gave them a lot of positive comments and encouragement.

**Revisions:**

- An aside: today was a dress down day at the school. I wore jeans today, but I realized that in Phys ed it is not appropriate. (We ask students to wear proper attire!) I will remember this as I need to be a model for the students. I did not receive a comment from any of the students but felt this to be a point to remember.

- I did not mark any tests; however, I will request if I can do this on my next placement.
- Surprisingly I enjoyed teaching this class the most. Looking forward to November.

**Action: Lesson #1 Grade 10 Co-ed Baseball**

**Plot-expectations:**

- Skills and drills of baseball, scoring in baseball lesson on blackboard.
- Students were split in their knowledge and capabilities of baseball

**Setting- environment:**

- in the gym the students were off task initially, I asked them to be respectful and listen while I spoke as I would to them.
- Students were in their squads initially.
- Lots of nonverbal looks when students were talking.
- I had a few verbal reminders for students to focus their attention on me after initial request. Moved one student.
- Moved outside after skills and scoring concepts were demonstrated.

**Characters-profile:**

- Students were not very interested in playing ball, or listening to the concepts of it, used humor to engage them.

**Reflections:**

**My Perspective:**

- Initially I found it difficult to describe a few concepts just using the blackboard.
- I felt my knowledge of the subject matter was not as clear as I would have liked it to be, nevertheless I was honest with the class to say I had learned a few new concepts of baseball recently as well.
- My demonstrations using students seemed to be more effective. C.B. is our “resident expert” and I was pleased to have him participate in explaining more thoroughly certain concepts.
- My associate also was able to assist me when I felt there was a need for it.
- After asking a few times to listen and be honest and respectful, my management of the class was much better. The students were listening well and respectful in the gym.
- My attempt at letting them “play impromptu pick up soccer” at the beginning of the class was not successful. The students said they didn’t know what to do. I told them to watch for another “impromptu pick up” next class at the beginning of the period.
- Participation was full, although some students still do not want to show much effort.
- An attempt will be made to speak to 2 students who felt they did not want to participate properly today.

- My voice was clear and concise.
- My lesson plan once revised flowed well from one task to another in transition.
- I felt more comfortable today overall with my responsibilities as a teacher.

**Revisions:**

- I will take more time to explain concepts and have more knowledge of my lesson.
- I will try to demonstrate to students' concepts using more drills to teach a new skill.
- I will take my time and not try to rush the material so that students can play right away.
- I have decided to use my own management strategies even though they may differ slightly from that of my associate teacher.

**Action: Lesson #2 Grade 10 Co-ed Baseball**

**Plot-expectations**

- Review of skills of baseball, scoring in baseball lesson on blackboard continued.
- Review material for upcoming test the next day.
- Option of baseball or ultimate after lesson plan for students.

**Setting- environment:**

- in the gym the students were off task initially again I asked them to listen up to review the material for test next day.
- Lots of nonverbal looks when students were talking.
- Moved outside after skills and scoring concepts were demonstrated to play ultimate and baseball.

**Characters-profile:**

- Students were split with choice of baseball and ultimate.
- Lots of profanity used during ultimate game, reminded them of it, they usually were not even aware of it.
- One student always worried the other team was cheating. I assured him they were not, and they required self-regulation of refereeing as in the nature of this sport.

**Reflections:**

**My perspective:**

- Preparing students for testing is a valuable staple before each unit test.
- Students often will not volunteer that they are not sure of what is going on. Today students were well informed and should be prepared for tomorrow's test.
- Since it is the end of the unit and it is a baseball/ultimate unit I found the students appreciated a choice to play either in the second half of the period.
- Repetition of the skills and scoring is essential for students who have little baseball background, students would finally admit that they did not understand something when they realized they were being tested on it.

- I realize that I learned some new scoring skills and strategies.
- Visual demonstration proved to be the best teacher with all the baseball unit.
- Students were often using the verbal scoring on their own, self-refereeing, and asking their own questions during game plays.

### **Revision:**

- I would let a few more things go while outside on the playing field, let the students interact as they may unless there was an issue which required my intervention.
- I will have a better knowledge of material before I teach it again!
- I would probably ask students to stay in their squads right from the start of a blackboard lesson (alphabetical - squads) to minimize off task behaviour.
- I find the Grade 10's especially Co-ed to be a challenging age group, I will have to use a lot of more humour and patience.

### **Action: Lesson #3 Grade 10 Co-ed Baseball/Ultimate Test**

#### **Plot-expectations**

- Test skills of baseball and ultimate verbal test, written answers.
- Scoring, game situations, general knowledge tested.
- Do test without talking, complete and hand in.
- Free time would be student's choice of game.

#### **Setting- environment:**

- in the gym the students were acting up a lot, even though a test was to be written.
- Gave them parameters of test, reminded them they were in Grade 10 and they should know what was required of them during a test.
- Lots of nonverbal looks when students were talking, waited for them to be quiet before I started.

#### **Characters-profile:**

- 12 students were away today.
- Told them I would repeat questions several times if needed.
- B.B and N.C were testing me with questions unrelated during the test or speaking out with the answers.
- I asked them to be quiet or I would take their paper away.

### **Reflections:**

#### **My perspective:**

- Hard to keep them on task (some felt they should ask a few "questions" during test.
- I spent too long getting them ready for the test. Next time I will get straight to the point.

- 12 students were away today, I am not sure if they would get the same test.
- Students were not prepared although they knew the test was today. (No pen, no gym clothes)
- Was a great learning experience, I felt I was almost losing them for 5 minutes while I waited for them to be quiet.
- I was not sure how far I would go if students continued to talk (would I really take away their test?)

### **Revisions:**

- This is my toughest class with management.
- Next time I will be more direct in my approach with expectations.
- I found that humour really worked well in engaging students to participate in the class both verbally and physically.
- 3 students can be destructive presences in this class. I will have to find a way to reach them. (Interests outside the class??)
- I will have to be a bit more patient with this class and remember they are still finding their way.
- Nonverbal proximity seems to help a lot, I will try and use this much more in November.

### **In Summary**

Throughout my practice teaching I believe I had some excellent results with management strategies. To prepare myself for my next session in November I want to work on the following key elements:

- I would like to be more prepared when it comes to the content of the lesson plan, use my resources more effectively, ask my associate for more help if required.
- I would like to have a consistent routine with the students upon entering the gymnasium. I find there is too many distractions (the upper loft weight room, other classes running at the same time).
- I would like to have an initial 5-10-minute game or warm up immediately upon entering the classroom to “get the ants out of their pants” and have them look forward to it each class.
- There seems to be trouble with some students who do not have the proper “gym clothes”, I would like to try and find out why they don’t bring them or want to.
- My grade 10 class is a challenge with management with 3 students in particular, how do I engage them? Would finding out what interests them help?
- During the next session I would like to incorporate students more when demonstrating drills or new skills.
- I would like to use proximity more often with students instead of verbal requests when students are off task.
- Above all I want the students to enjoy being in my class, participate and feel they can come to me for help or just to talk.

(Ryan, 2005).

### 3. Findings

As detailed in the journal entry above, over a period of days this student-teacher acted, reflected and revised based on experience, reflection and knowledge of teaching. In each lesson reported in the daily journal a problem or question served “as a mechanism and catalyst to engage actively and deeply in the learning process” (Blessinger & Carfora, 2015, p. 5). Planned revisions were eventually implemented in minutes via corrective actions. This trial and error approach helped this student-teacher reduce the pressure and stress they perceived standing in front of, and leading a class (Ryan, 2018). Being a professional educator is often an awakening and there is an ongoing need to professionally develop. Professional development “should be developed so that it reduces rather than increases such pressures” (Keegan, 2019, p.127), over time in a deliberate manner. As shown here, students can be taught how to reflect within the moment (Schon, 1983), or reflect long after teaching, to document and communicate in a manner that enhances praxis.

As pre-service students’ build self-confidence they begin to reflect authentically. This journaling within AR instigates feedback that can empower new teachers to overcome professional challenges. Reflection via journaling enables growth and poise. This mode of inquiry is “constructivist in nature because it allows the student to take greater ownership of her/his learning by allowing them a means by which to construct their own knowledge rather than just having that knowledge merely spoon-fed to them by others” (Blessinger & Carfora, 2015, p. 5). It seems obvious that AR must be carried out by an educator, “it must become embedded in the teacher’s daily teaching practice and developed over time” (Keegan, 2019, p.128). In the above journal the student-teacher makes reflective decisions to improve classroom communications, change implementation strategies and behave differently when confronted with certain situations in the future.

The reflective journal is but one means to capture experience that can be examined, reviewed and revisited over time. Action research as detailed herein utilizes a systematic procedure in an educational “setting to gather information about and subsequently improve the ways in which their particular educational setting operates, how they teach, and how well their students learn” (Creswell & Guetterman, 2019, p. 124). The student gradually was able to grasp the cyclical nature of this research mode as reflection led to a new ability to examine and act upon findings.

Our AR mode provided an opportunity for the student to be more effective in their teaching and in the development of their students (Creswell & Guetterman, 2019). This

AR was a small-scale personal research project adapted to improve teaching and it was a tool to empower.

#### **4. Discussion**

In teacher training within an Ontario Faculty of Education students are required to complete theory classes and teaching practicum in schools with teachers who mentor, observe and judge these student-teachers. Student teachers have many questions about teaching and through classroom theory and experience in practicum student-teachers emerge with many of the questions answered, while locating coping mechanisms for questions left unanswered. Each praxis issue is, at that moment in time, a sizeable problem or barrier in the way of success and this perception creates anxiety for the teacher in training who is trying to succeed both in Faculty of Education classes and the teaching practicum, to become an Ontario certified educator.

Admittedly, AR is “not expected to be generalizable. It is intended to focus on an identified area of improvement in an individual classroom or in a particular school” (Ward & Millar, 2019, p.43). AR can be a shared process with other educators and as a group the professional development moves each participant forward, however, “teachers often find that some solutions identified by classroom researchers relate to their own circumstances; because of common foundations” (Ward & Millar, 2019, p.43). AR is a tool that can be used to prompt and cue the student-teacher to strive and focus upon key developmental goals. Indeed, AR “can be a transformative tool for the environment and the curriculum, as well as for the child, the teacher, and the community” (Ward & Millar, 2019, p.43).

#### **5. Conclusions**

AR is an iterative process of planned action, reflection (Zuber-Skerritt, 2018) and revision that occurs over time (Ryan, 2018). It is “concerned with developing practical knowing in the pursuit of worthwhile human purposes” (Reason & Bradbury, 2008, p. 4). A.R. fuses action while coupling “theory and practice, in participation with others, in the pursuit of practical solutions” (Reason & Bradbury, 2008, p. 4). A.R. is appealing, pliable, and inclusive as it seems to complement educational landscapes with it act, reflect and revise routine. Most importantly, an action researcher “addresses a specific, practical issue and seeks to obtain solutions to a problem” (Creswell, 2012, p. 577). A.R. is used “to improve the practice of education, with researchers studying their own problems or issues in a school or educational setting” (p. 592).

The AR journal in this article demonstrates a need to reflect on self in relation to others which is a fundamental developmental task within teacher training that impacts self-development in a professional manner. Making sense in a practicum is a recursive cyclical exercise that is strategic and systematic within a particular context embedded in the education landscape. The teacher in this article takes actions, reflects upon these experiences and plans next steps or actions as a pedagogy which is something that helps pre-service teachers professionally develop and revise teaching plans, actions and decisions while in training to be a Health and Physical Educator. The AR journal herein was a means to discover, decode, and process experiences to build self and professionally develop. This act of writing is a means to sort, identify and bolster evolving pedagogy.

## References

- Blessinger, P., & Carfora, J. M. (2015). *Inquiry-based learning for multidisciplinary programs: A conceptual and practical resource for educators*. Bradford: Emerald Publishing.
- Cochran-Smith, M., & Lytle, S. L. (2009). *Inquiry as Stance: Practitioner Research for the Next Generation*. New York, NY: Teachers College Press.
- Creswell, J.W., & Guetterman, T.C. (2019). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (6<sup>th</sup> ed.). Pearson.
- Creswell, J. W. & Garrett, A. L. (2008). The “movement” of mixed method research and the role of educators. *South African Journal of Education*, 28(3), 321-333.
- Dewey, J. (1897). My Pedagogical Creed. *School Journal*, 25.
- Edwards, S. (2015). Reflecting differently. New dimensions: reflection-before-action and reflection-beyond-action. *International Practice Development Journal*, 7(1). [fons.org/library/journal.aspx](https://doi.org/10.1080/17513758.2015.1052888)
- Fadiman, C. (1978). *The lifetime reading plan*. New York, N.Y.: Thomas Y. Crowell.
- Ivankova, N. V. (2015). *Mixed methods applications in action research: From methods to community action*. Thousand Oaks, CA: Sage.
- Keegan, R. (2019). Unleashing the powers within: Delving into our own talents to provide effective CPD. *Physical Educator*, 76(1), 110–134. <https://doi.org/roxy.nipissingu.ca/10.18666/TPE-2019-V76-I1-7718>
- Kemmis, S. (2009). Action research as a practice-based practice. *Educational Action Research*, 17(3), 463-474.
- Kemmis, S., McTaggart, R., & Nixon, R. (2014). Introducing critical participatory action research. *The action research planner* (pp. 1-31) Springer.
- Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in Higher Education. *Academy of Management Learning & Education*, 4(2), 193-212.
- Maxwell, D. O., Lambeth, D. T., & Cox, J. T. (2015). Effects of using inquiry-based learning on science achievement for fifth-grade students. *Asia-Pacific Forum on Science Learning & Teaching*, 16(1), 106-136.



- Murphy, P. (2008). 'Defining pedagogy'. In K. Hall, P. Murphy & J. Soler (Eds.), *Pedagogy and practice: culture and identities* (pp. 28-39). London, UK: SAGE.
- Ontario Ministry of Education (OME). (2019). The Ontario curriculum grades 1-8: Health and physical education [Program of Studies]. <http://www.edu.gov.on.ca/eng/curriculum/elementary/2019-health-physical-education-grades-1to8.pdf>
- OPHEA. (2015). Inquiry-based learning in Health and Physical Education: A resource guide for educators. [https://teachingtools.ophea.net/sites/default/files/pdf/ibl\\_guide.pdf](https://teachingtools.ophea.net/sites/default/files/pdf/ibl_guide.pdf)
- Piaget, J. (1990). *The child's concept of the world*. New York, NY: Littlefield Adams.
- Reason, P., & Bradbury, H. (2008). Introduction. In P. Reason & H. Bradbury (Eds.), *The SAGE handbook of action research: Participative inquiry and practice* (2nd ed.), pp. 1-10. Thousand Oaks, CA: Sage.
- Ryan, T. G. (2005). *The reflexive physical educator*. Calgary, AB: Temeron Books/Detselig.
- Ryan, T. G. (2013). The scholarship of teaching and learning within action research: Promise and possibilities. *i.e.: inquiry in education*, 4 (2), 1-17.
- Ryan, T. G. (2018). Action research in the faculty of education. In the *Oxford Encyclopedia of Educational Research, Measurement, and Evaluation*. 373-381. Thousand Oaks, CA: Oxford Publications.
- Ryan, T. G. (2019). Black student achievement, engagement and inclusion in physical education. *International Journal of Physical Education*, 56(1), 1-12.
- Schon, D. (1983). *The reflective practitioner*. London: Maurice Temple.
- Siminica, M., & Traistaru, A. (2013). Self-directed learning in economic education. *International Journal of Education and Research*, 1(12), 1-14.
- Tennyson, R. D. (2010). Historical reflection on learning theories and instruction design. *Contemporary Educational Technology*, 1(1), 1-16.
- Ward, G., & Miller, M. (2019). Action research: A tool for transformation. *Montessori Life*, 31(3), 38-43.
- Zuber-Skerritt, O. (2018). An educational framework for participatory action learning and action research (PALAR). *Educational Action Research*, 26(4), 513-532.

---

### Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the Journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (**CC BY-NC-ND**) (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).