



The Learning Journey: Developing A Vocational Classroom Curriculum Through After-Action Review (Aar) With Reference to Thailand

Pimploy Pongklad

A Professional Level Teacher, Watlaksipatratuppathum School, The Secondary Educational Service Area Office Samut Sakhon Samut Songkhram

Date of Submission: 06-09-2025

Date of Acceptance: 18-09-2025

Abstract

This research-based best practice presents the development of a vocational classroom curriculum using the After-Action Review (AAR) process for upper secondary students at Watlaksipatratuppathum School, Samut Sakhon, Thailand. Through strategic integration of self-reflective learning cycles, the project aimed to enhance learners' vocational competencies and lifelong learning attributes. The collaboration with Ban Phaeo Vocational College, Samut Sakhon, Thailand contributed to the co-design of a curriculum relevant to the regional context, with measurable outcomes in learner satisfaction and career-readiness skills.

Keywords: vocational Classroom Curriculum, the After-Action Review (AAR), knowledge management

I. Introduction

In alignment with Thailand's National Education Plan (2017–2036) and the educational reform strategies aimed at preparing Thai citizens for the 21st century (Office of the Education Council, 2017), schools are encouraged to innovate curriculum and teaching methods. Watlaksipatratuppathum School was designated a model secondary school in Samut Sakhon province, the central province of Thailand.

The process of knowledge management in the development and refinement of the vocational classroom curriculum at Watlaksipatratuppathum School integrated the After-Action Review (AAR) approach as a core component. This process emphasized gathering insights from multiple educational stakeholders—including students, teachers, parents, and the local community—particularly regarding the enhancement of life skills, vocational competencies, and desirable learner attributes. The approach was grounded in key theories and principles of knowledge management.

Knowledge Management (KM) theory focuses on the systematic collection, organization, and dissemination of knowledge within an institution, encompassing both individual expertise and academic documentation (Gottschalk, 2005). The goal is to ensure that both internal and external stakeholders can access and apply this knowledge effectively for personal and organizational development. Knowledge is typically categorized into two types:

1. Explicit knowledge, which is codified and can be documented, written, and transferred through formal communication.
2. Tacit knowledge, which is derived from personal experience and skills and is often more difficult to articulate or formalize.

To meet community and stakeholder expectations, the school launched a vocational classroom initiative guided by the After-Action Review (AAR), designed to develop students' academic, vocational, and life skills for both immediate employment and continued education.

Purpose of the study

1. To assess student satisfaction and needs regarding the vocational curriculum.
2. To develop a vocational curriculum through the After-Action Review (AAR).

Method

The curriculum development process followed the Knowledge Management (KM) framework (Nonaka & Takeuchi, 1995) and PDCA (Plan-Do-Check-Act) cycle (Deming, 1986). It incorporated three main phases of the After-Action Review (AAR): - Initiation: Engaging stakeholders to define needs.

- Reflection: Facilitated discussions to evaluate previous practices.
- Conclusion: Consolidating feedback into actionable curriculum plans.



Data collection included surveys, group discussions, and in-depth interviews with students, parents, and teachers.

In the context of vocational curriculum development, both types of knowledge must be systematically managed and exchanged between curriculum developers and educational stakeholders. The After-Action Review (AAR) serves as a key instrument in facilitating this knowledge exchange, allowing participants to co-construct new understanding through structured reflection on goals, processes, and outcomes. The After-Action Review (AAR)-based knowledge management process followed three operational stages:

1. Initiation

Meetings were conducted with teaching staff, parent networks, and other relevant stakeholders to communicate the objectives of curriculum development and revision. These sessions also reviewed outcomes from the previous year's curriculum structure. Participants were

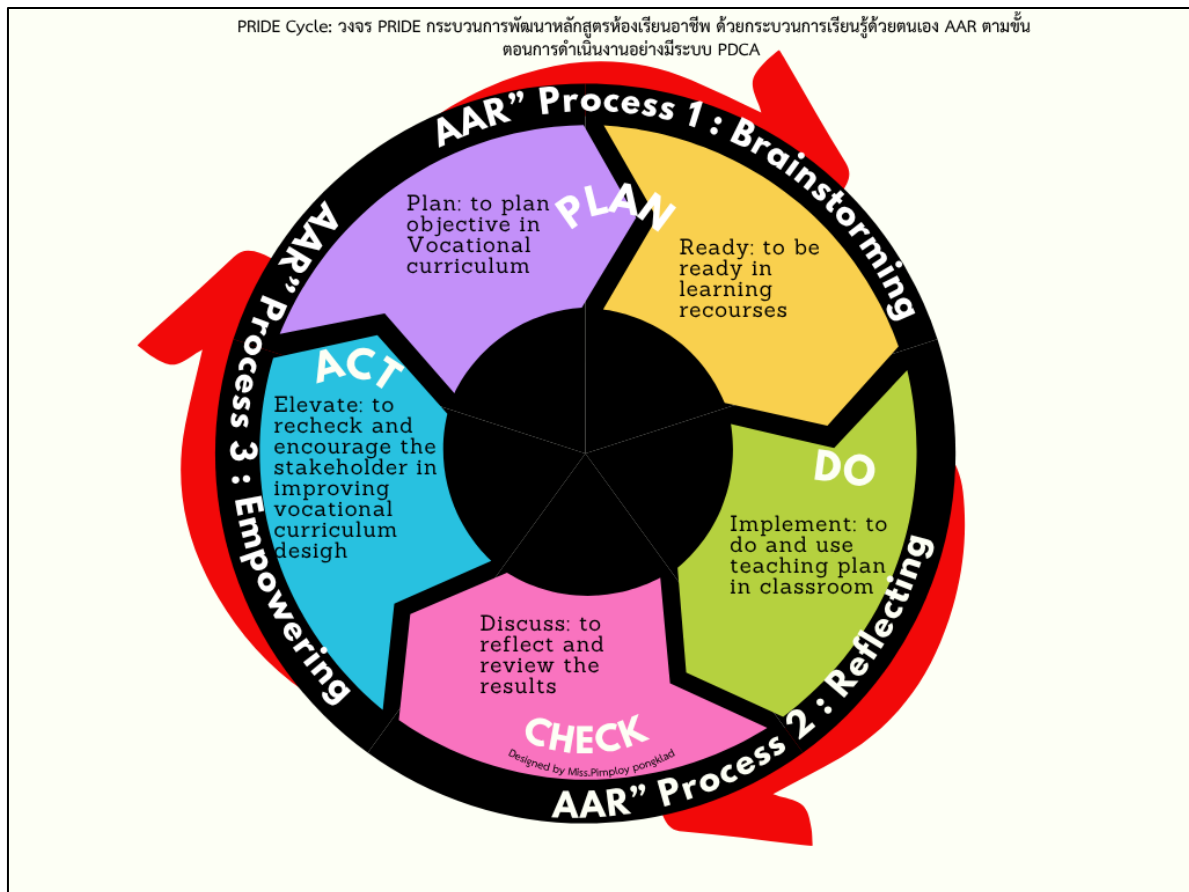
encouraged to share feedback and expectations openly, fostering collaborative learning and joint planning.

2. Reflection

Curriculum developers acted as facilitators, guiding reflective discussions through probing questions and critical evaluation. Key focus areas included curriculum structure, course descriptions, and assessment methods. These sessions emphasized objective, non-biased feedback and promoted constructive suggestions based on actual experiences, enabling continuous curricular improvement.

3. Conclusion

Participants synthesized the key insights gained from the reflection stage, developing a revised implementation plan for the vocational classroom curriculum. This included constructing course outlines, designing instructional units, and drafting a monitoring and evaluation calendar. The goal was to mitigate recurring issues and ensure greater effectiveness in future cycles.



PRIDE Cycle: Developing Vocational Classroom Curricula through Self-Directed Learning (AAR) Aligned with the PDCA Quality System Framework



II. Results

- 83 students participated in the survey, with 73.5% from the vocational track.
- Subject-specific satisfaction levels were high, especially in mechanical, technical drawing, and electrical classes.
- 80.72% of students reported high satisfaction with the learner-centered approach. - 88.47% believed the curriculum enhanced their future career readiness.

III. Discussion

Success factors included:

- Alignment between curriculum and student interests.
- Active participation from professional teachers and vocational advisors.
- Consistent the After-Action Review (AAR) sessions fostering continuous improvement. Lessons learned stressed the need for structured data management systems to store AAR feedback for future planning.

Recognition and Dissemination

The initiative led to invitations for the lead teacher to present at provincial workshops and exhibitions including “Best of SKSS SESA for Active Learning” represented by The Secondary Educational Service Area Office Samut Sakhon – Samut Songkhram, under the Office of the Basic Education Commission (OBEC), Ministry of Education, Thailand. The project became a model for professional skill development through academic and community partnership.

Expansion and Application

The model was adopted in 2024–2025 using the Credit Bank system to enhance cross-institution collaboration (Office of the Vocational Education Commission, 2023). Ongoing curriculum co-design, real-world practice integration, and data-driven evaluation ensure its adaptability and sustainability.

The development of the vocational classroom curriculum through the After-Action Review (AAR) framework was implemented using the PDCA (Plan–Do–Check–Act) quality management cycle to establish a structured and continuous learning process grounded in real-world experiences. The development process consisted of the following five stages:

1. Planning (Plan): Needs Assessment and Goal Setting

The curriculum planning process began with a context-based needs assessment involving students, parents, the surrounding community, and the curriculum development network with Ban Phaeo Vocational College. The objective was to design a curriculum aligned with student needs and local economic development directions. Data collection tools included questionnaires, parent network discussion forums, and in-depth interviews. Additionally, feedback from previous curriculum iterations was reviewed using the After-Action Review (AAR) approach.

2. Curriculum Design (Extended Planning Phase): Prototyping the Vocational Curriculum Structure

Collaborative brainstorming and knowledge-sharing sessions were held between vocational subject teachers from Ban Phaeo Vocational College, Samut Sakhon, Thailand. and teachers from Watlaksipipatratuppathum School, Samut Sakhon, Thailand. AAR Phase 1 (Initiation) was conducted to gather insights and provide recommendations for drafting the initial curriculum structure.

The curriculum design was based on relevant professional standards and included subject areas such as “Introduction to Gasoline and Diesel Engines” (Grade 10/2), “Technical Drawing” (Grade 11/3), and “Electrical and Electronic Work” (Grade 12/2), as offered by Ban Phaeo Vocational College. Course descriptions, learning outcomes, instructional units, and practical learning activities were developed in alignment with occupational standards. The teacher team coordinated closely with the college and external curriculum experts from the Secondary Educational Service Area Office Samut Sakhon–Samut Songkhram.

3. Pilot Implementation (Do): Collaborative Teaching with Educational Partners

The vocational curriculum was piloted in actual classroom settings with upper secondary students enrolled in the vocational learning track. Teaching activities were co-delivered by instructors from Ban Phaeo Vocational College in an integrated learning model. This allowed students to gain real-life experience through hands-on practice at professional training sites. Student activities and learning outcomes were documented systematically and subsequently analyzed through the AAR process.

4. Evaluation and Reflection (Check): Using AAR to Review Outcomes

The AAR process was employed to reflect on the implementation outcomes of the vocational curriculum. Teachers, students, and other



stakeholders participated in collaborative reflection sessions to assess the effectiveness of the curriculum. Discussions focused on identifying successful elements, areas needing improvement, and the underlying causes of any discrepancies between planned objectives and actual outcomes.

This reflective analysis provided a comprehensive understanding of the curriculum's strengths and weaknesses, and facilitated the co-creation of both explicit knowledge (documented learning) and tacit knowledge (experience-based insights). The process aligned with AAR Phase 2—Reflection, supporting evidence-informed decision-making for future curriculum iterations.

5. Continuous Improvement (Act): Applying AAR Data to Future Curriculum Development

Insights derived from the AAR process were used to inform revisions to the curriculum, initiating a new cycle of planning and development. The outcomes from AAR Phase 3—Conclusion—were fed into the next “Plan” phase of the PDCA cycle.

Teachers collaboratively revised the curriculum structure, learning activities, and instructional strategies to enhance flexibility, responsiveness, and relevance. This iterative process not only increased the curriculum's adaptability to student needs and local contexts, but also strengthened the culture of continuous improvement and professional learning within the school community.

IV. Conclusion

The After-Action Review (AAR)-based approach to vocational curriculum development has proven effective in equipping students with practical skills, enhancing satisfaction, and fostering a culture of continuous improvement. The collaborative model holds promise for scaling to other schools seeking to integrate vocational education with real-world applicability.

References

- [1]. Deming, W. E. (1986). *Out of the Crisis*. MIT Press.
- [2]. Gottschalk, P. (2005), Strategic knowledge management technology, Idea Group Publishing
- Nonaka, I., & Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press.
- [3]. Office of the Education Council. (2017). *National Education Plan 2017–2036*. Ministry of Education, Thailand.
- [4]. Office of the Vocational Education Commission. (2023). *Credit Bank System Implementation Guide*. Ministry of Education, Thailand.