

**Whole Brain Literacy Approach to Action Research:
A Focus on Research Problem Identification**

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Abstract

The focus of this article is on the action research problem identification process based on Whole Brain Literacy (WBL). This approach is also used in teaching OD courses since the WBL Model is the underpinning of curriculum and instruction design of the OD graduate degree programs of Assumption University of Thailand. Particularly, in the MMOD Program, the teaching of Action Research is guided by this model and one distinctive feature of action research projects of MMOD students, is the use of the WBL Model. This model is seen as a powerful tool in enhancing the rigor of action research. A sensible and realistic problem definition critical to action research as emphasized by Sekaran and Bourgie, (2010), can be realized through a WBL approach to problem identification. This can be seen in the action researches conducted by OD students. Positive and desirable outcomes in effecting change and transformation in organizations were also reflected in the research outputs of these students.

Keywords: Whole Brain Literacy (WBL), Action Research, Research Problem Identification

Introduction

This article focuses on the research problem identification process in teaching action research in the Master of Management in Organization Development (MMOD) Program. It attempts to demonstrate this process using Whole Brain Literacy (WBL), the model that serves as the underpinning of the OD Programs of Assumption University of Thailand.

The OD graduate degree programs of Assumption University of Thailand aims to create quality programs and opportunities for change leaders and OD practitioners within a culture of agility, responsiveness & passion for service. In terms of curriculum and instruction, these programs are WBL-based by design in its contents, processes, contexts.

The research projects and dissertations of OD graduate students are focused on action research with a variety of topics in varied types of organizations (Tayko, P.R.M. & Preudhikulpradab, S., 2010)

Action Research

Action research is an emergent inquiry process concerned with bringing about change in organizations while developing self-competencies among its members. It is undertaken in a spirit of collaboration (2005, Shani and Pasmore in Coghlan & Brannick).

It is motivated by a quest to improve and understand the world by changing it and learning how to improve it from the effects of the changes made (Bruce-Caro, C. p. 3).

Action research is a cornerstone of organization development. Practitioners doing action research for their organizations find themselves going through the process of diagnosing and assessing their own work as well as that of their colleagues. Initially, an area of focus for development is identified and diagnosed with the objective of taking appropriate actions based on the outcome of diagnosis. The impact of actions taken or the change brought about by these actions is evaluated.

Considering that OD is an on-going process, the outcome of this evaluation is the basis of succeeding OD interventions.

As one conducts an action research, it is important to take note of the four vital factors namely, the context, quality of both process and relationships and the outcomes. (2005, Coghlan and Brannick)

In initiating change process and effecting planned changes in organizations, action research is most appropriate methodology (Sekaran and Bourgie, 2009). The action researches of OD graduate students in Assumption University are geared toward this change process in effecting planned changes in their respective organizations. The

distinctive feature of their researches is the use of WBL since the OD graduate degree programs have been designed and implemented with the use of the frameworks and processes of WBL. Particularly, the MMOD Program is applying the frame and flow of the curriculum in teaching Action Research course. WBL is applied in Action Research Projects conducted by MMOD students as cited in the review of selected studies.

Whole Brain Literacy (WBL) in Action Research

Whole Brain Literacy is a “thinking-through process” extrapolated and developed from the four-brain model of Lynch and Kordis (1988) that enable learners/leaders to engage in tapping “human information processing skill set” in a] decoding, b] discovering, c] discerning, d] determining and e] deciding issues and challenges leading and managing change. (Tayko and Talmo, 2010).

Figure 1 below is a WBL template for Action Research Development Design (Tayko and Talmo, 2010).

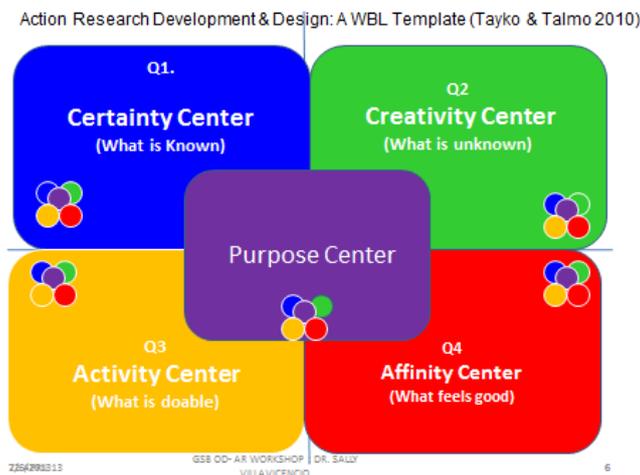


Figure 1 Action Research Development Design: a WBL Template (Tayko and Talmo, 2010)

With this design, the action research process starts with the (1) Purpose Center – articulating the purpose of the study. With clarity of purpose, the process moves toward the Certainty Center, establishing what is known, (a) the current situation of the context

of the study based on diagnosis conducted and (b) determination of the focus of the study. Next, is the (2) Creativity Center where the researcher is exploring the unknown through review of related literature and studies until the conceptual framework is drawn and the action research framework is developed showing the highlights of the Pre ODI, ODI and Post ODI phases. Creativity is reflected in the design of OD interventions to address the concerns indicated in the Pre ODI to arrive at the desired state in the Post ODI. From Creativity Center, the process moves toward the (3) Activity Center where concrete actions are being undertaken. Data are gathered, analyzed and interpreted. Appropriate interventions are implemented. After sometime, the difference between the Pre ODI and Post ODI is determined and the impact of ODI is evaluated.

The last part of the process following the design above is in the (4) Affinity Center guided by the question, what feels good? This refers to the value of the outcome of the research. Conclusions are drawn from the findings of the study and recommendations are concretized. Finally, the process goes back to the (1) Purpose Center to check if the purpose of the research is achieved.

WBL as a model can be used in everyday life and for whatever type of organization. It can be used for designing training modules, in teaching and learning processes, in instruction, in instructional and organizational interventions, in research, etc.

The action research of Limsatitpong, (2012) demonstrates the use of WBL Model in the entire research process enhancing its rigor.

Rigor in action research refers to how data are generated, gathered, explored and evaluated, how events are questioned and interpreted through multiple action research cycles (2005, Coghlan and Bracnnick, p. 27)

Limsatitpong (2012) applied WBL model to diagnose the current situation of the focal system of his study and determine the appropriate OD interventions.

This model was used as guide for data collection, instrumentation and basis for data analysis. In the post ODI phase WBL model was used to evaluate the outcome after ODI. There was a consistent use of this model until conclusions were drawn and recommendations were presented at the end of the study.

Selected Studies Undertaken with the Use of WBL Model

WBL Model has been used in numerous action research studies. The following are reviews of selected studies conducted by OD graduate students of Assumption University who made use of this model.

WBL and Appreciative Inquiry (AI) had a positive impact on students' learning styles namely, feeling, doing and thinking styles. These have also the same impact on all aspects of performance: academic, self-esteem, sense of responsibility and creativity (Disphanurat 2012). A new learning process model was developed as a result of this study to raise the bar of standards and quality in teaching ethics class and other subject areas as well.

Wirudsakun (2012), use brain-based approach to teaching mathematics in Monfort College, Chiangmai. The interventions were founded on WBL. This led to a shift in the students' attitude of indifference to a high level of interest in mathematics resulting to marked improvement in the students' performance in this subject. A similar outcome was shown in the study of Nasathit (2011) conducted in Saint Gabriel's College, Bangkok. This model also generated positive results on classroom management and student behavior in the study conducted by Wannarat (2011).

Limsatitpong (2012), consistently made use of WBL all throughout the action research process he conducted in a multinational car company. The ODI implemented had significant impact on employee engagement and quality customer service both from the employee and customer perspectives.

Soponkij (2009) introduced whole brain appreciative coaching (WBAC) to a mid-size company in Bangkok when he conducted an action research in the Company. With this ODI, the managers' engagement increased by 67.7 % and workers' engagement by 24.4%. Unlike in the past, there was no management turnover for a period of one year. This success was due to the process innovation integrated in ODI (Soponkij, 2009).

These reviews indicated WBL as an effective model for action research conducted by students as part of their graduate degree requirements.

The Researcher

Graduate students doing action research to fulfill academic requirements are confronted with various challenges. One of these is the availability of an organization where an action research can be conducted.

The choice of organization to study varies from one researcher to another. Some researchers are practitioners who are persons of authority and influence in their organization. They could be the owners of a family business and most likely occupy a top management position. They have their company as a subject of their study.

Other researchers are practitioners employed in a company and usually choose to conduct action research in their company.

There are researchers who are full time graduate students and are not currently connected nor affiliated with any company. These are the ones who practically are dependent on companies who will welcome them to conduct action research. Getting a go signal from a company is already a critical achievement of the researcher. Having an organization as the context of the study, enables a researcher to move forward and go through a process of identifying the area of focus where action research will be conducted.

The Area of Focus

What will be the focus of research? This may seem to be a simple question, but more often than not, the process leading to the answer is complex and at times tedious.

Figure 2 below reflects this process using the Whole Brain Literacy (WBL) Model.

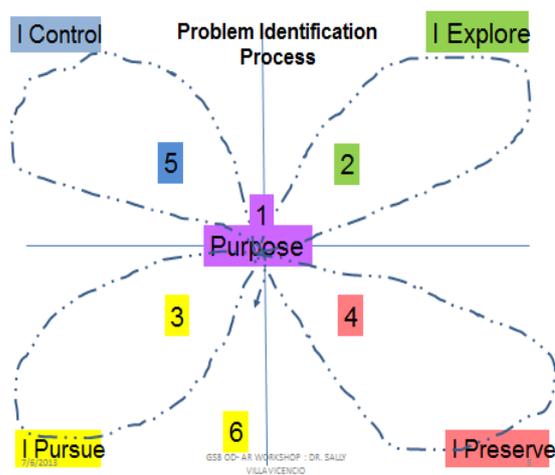


Figure 2 Problem Identification Process Design: WBL Approach

Based on the above design, this process starts with (1) the Purpose of the study, followed by (2) Explore for information, discussion, discernment and dialogue (3D's), then, (3) Pursue for a more defined action, (4) I Preserve – who are involved in the study, (5) I Control – basic criteria that must be observed and finally, (6) back to I Pursue, concretizing the research topic, the challenge of choice for area of focus for research.

In Figure 3 the details of the Problem Identification Process Design is discussed. See Figure below:

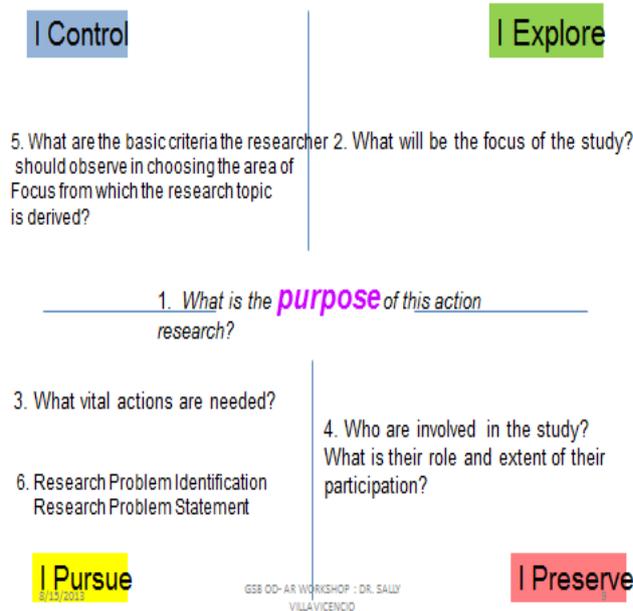


Figure 3 Problem Identification Process

This process starts with the basic question, what is the **purpose** of this action research? Initial answers are broad and may be generic like, to bring about change to the organization, to solve certain problems, to introduce something new, for example. Both the researcher and the management must have a clear and common understanding about the purpose of the action research.

With clarity of **purpose**, the next question follows, what will be the focus of the study? This phase of the process is about **exploration** characterized by information seeking, discussion, discernment and dialogue between the researcher and the company management.

The researcher needs to survey literatures to gain some insights regarding possible areas of focus for research. Simultaneously, the researcher has also to access substantial information about the profile and the current realities of the company and get the feel of how his study could give a relevant contribution to the company. The researcher is then involved in a continuous discussion and dialogue with the management presenting his ideas and insights while being open to the management's initial interests and preferences.

Then, what actions are needed? This preliminary diagnosis and data gathering need to **pursue** a more defined action of analyzing the organization's strengths, weaknesses, opportunities, threats, aspirations and results (SWOT/SOAR). This facilitates a closer look at the current situation, functioning and performance of the organization, its goals and long term future direction, as well as its external environment. This analysis would help indicate possible focus areas for research.

In making a choice, the researcher must pay attention to another important consideration - who are involved in the study? What is their role and extent of participation? Action research as a collaborative effort requires quality participation from the practitioners.

Finally, what are the **basic criteria** the researcher should observe in choosing the area of focus from which the research topic is derived? Below are the criteria in selecting a research topic:

1. relevant to the student's major field or specialization; relevant to OD;
2. significant to knowledge and practice;
3. reflective of the background, interest and competence of the researcher;
4. addresses the need of the company for change/ solve certain problems;
5. feasible and within the time and resources available.

With the criteria shown in Figure 4, the choice of the topic for research must consider the relevance of the study in the emerging futures with exponential technologies ie. ICT development is unprecedented. The researcher's interest must also blend with the interest/need of the company.

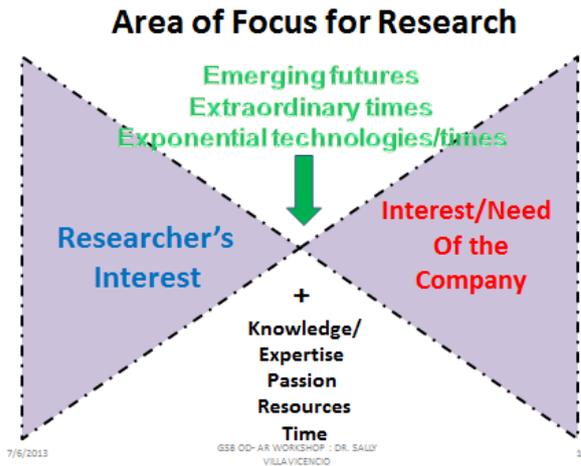


Figure 4 Criteria in Choosing Area of Focus for Research

Given the above criteria, it is important to note that the most potent driving force in conducting research is the researcher’s sustained interest in the study, fueled by his passion to see it through to completion. Finalizing the topic for action research is indeed a challenge of choice for the researcher.

Figure 5 below reflects an image of one being in the crossroads confronting the challenge for choice

The Challenge of **CHOICE**



Figure 5 The Challenge of Choice

It is a challenge of choice of which way or which option to take. The choice must be founded on the following: (1) the researcher’s knowledge about the organization, (2) the researcher’s prevailing knowledge of the topic of interest, and (3) relevant findings from previous researches or studies. A literature review should help the researcher to

identify and highlight variables related to the study. The critical factor for the choice of a research topic is the approval and support of the management.

One of the most difficult aspects of research and one of the least discussed - is how to develop the idea for the research project as reflected by the image below in Figure 6.

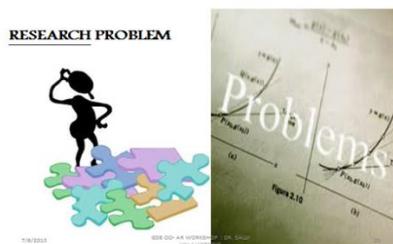


Figure 6 The Research Problem

Where does a research topic come from? Experience of practical problems in the field, literature in specific fields, influence of one's background, culture, education, experiences are all rich sources where research topics could come from. Initially, the researcher may come up with broader problem areas as their focus of study. It is from these areas that research topics can be identified as shown in Figure 7 below.

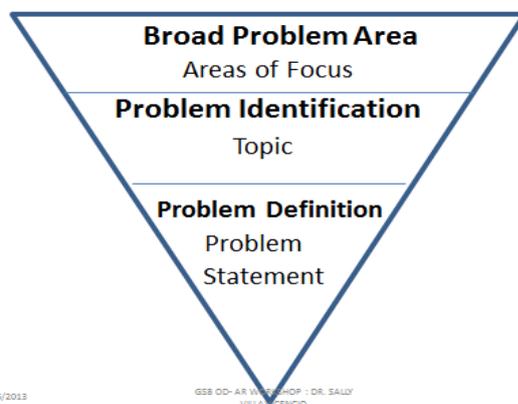


Figure 7 The Problem Area

Referring to Figure 7, starting from broad problem area, the researcher chooses a research topic from which a research problem is defined with a statement of research problem indicating the main purpose and scope of the study. Sekaran and Bougie (2009) underscore that a sensible and realistic problem definition and creative ways of collecting data are critical to action research.

Statement of the Research Problem

The research problem must be stated precisely, accurately and clearly. It can be one main statement followed by specific research questions.

- There must be at least one research question pertaining to each phase of OD
- The research problem should be defined in terms of the data that can be obtained through the variables that are reflected in the problem statement

A well-articulated statement of the research problem is a vital consideration at the initial stage of the research process. This determines the efficacy of the research process and the quality of research output as well.

In the earlier discussion, WBL was presented as a model which can be used effectively in the process of research problem identification until the research problem statement is articulated.

Various studies conducted in varied types of organization demonstrated that using WBL model in action research provides the researcher the means to go through the research process, mindful of various perspectives which resulted to positive and desirable outcomes.

Conclusion

The use of WBL is one distinctive feature of action research projects of the students in the MMOD Program. The Action Research course serves as preparation for

students doing action research as a final major requirement of the Program. One aspect that this course emphasizes is the Research Problem Identification Process based on WBL. As Sekaran and Bourgie (2010) underscored, a sensible and realistic problem definition is critical to action research.

The various action research outputs of MMOD students cited earlier showed that WBL approach to action research in general, and action research problem identification in particular, is a powerful tool in enhancing its rigor. Positive and desirable outcomes in effecting change and transformation in organization were also realized.

References

- Brown, D. & Harvey, D (2006). Organization development. NJ: Pearson Education, Inc
- Bruce-Caro, C. (2000). Action Research Facilitator's Handbook. Tx: National Staff Development Council.
- Coghlan, D. & Brannick, T. (2005). Doing action research in your own organization. Thousand Oaks, CA: Sage Publications.
- Cummings, T. T. and Worley, C. G. (2005). Organization development and change. Ohio: South Western College Publishing.
- Disphanurat, T. (2013). Enhancing and enriching students' learning styles and performance through Whole brain literacy (WBL) and appreciative inquiry (AI) interventions: A case study of ethics classes, Assumption University. Doctoral Dissertation. Assumption University, Bangkok, Thailand.
- Limsatitpong, P. (2012). Enhancing employee engagement and quality customer service: A case study of service parts supply and dealer support (Toyota Motor, Thailand). An unpublished Action Research Project. Assumption University, Bangkok, Thailand.
- Locke, L., Silverman, S and Spirduso, W. (2004). Reading and understanding Research. Thousand Oaks, CA: Sage Publications.
- Nasathit, T. (2011). The initial impact of instructional development intervention on teaching style, learning style and students' performance: A case study of

mathematics subject primary 4 room 5 and 7. An unpublished Research Project. Assumption University, Bangkok, Thailand.

Scherer, J. & Alban, B.(2010). On the shoulders of the giants: the origins of OD. In(Rothwell, W., Stavros, J., Sullivan R. & Sullivan A.(Eds) in Practicing Organization Development(pp. 84 – 85).CA: Pfeiffer.

Sekaran U. & Bougie, R. (2010).Research methods for business. A skill building approach. NY: John Wiley & Sons Ltd.

Soponkij, U. (2010). The ODI Impact of Leadership Styles, Shared Values and Skills on Employee Satisfaction Elements and Employee Engagement: A Case Study of a Mid-Size Company in Thailand. Doctoral Dissertation, Assumption University, Bangkok, Thailand.

Tayko, P. R.M. & Talmo.M. (2010), Whole brain literacy: key to holistic education and success in today's world. Dasmariñas City: I-T Partners & Linkages Inc.

Tayko, P. R. M.& Preudhikulpradab, S. (2010). OD home. An output of strategic planning workshop, Assumption University.

Wannarat, N. (2011). Enhancing classroom management and student's behavior in art club of primary 6 at Saint Gabriel's College for the academic year 2011. An unpublished Action Research Project, Assumption University, Bangkok, Thailand.

Wirudsakon, T. (2012). Improving student's performance through whole brain base teaching approach: A case study of mathematics class in grade 11, Montfort College, Chiang Mai. An unpublished Research Project. Assumption University, Bangkok, Thailand.