

# Methodological Issues in Conceptualizing Action Research and Community-Based Participatory Research Framework

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Presented By

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# 1. Abstract

- Methodological issues in conceptualizing a framework for scientific rigor in action research (AR) and community-based participatory research (CBPR) has faced enormous challenges for academic researchers/doctoral students
- Stakeholders of AR/CBPR favor participatory practitioner-based approach
- Research communities with positivist mindset encourage the more traditionally applied research approach
- Fine and thin lines exist between the conceptualization of AR/CBPR projects and traditionally applied research approach

## 2. Methodological Orientation of Applied Research

- Applied research (AppR) is done on people, society, organization, etc.
- AppR is designed to solve practical problems of people, society, organization, agency or company, but mainly driven by a more structured application of scientific method of inquiry
- AppR upholds strict regulation of the positivist mind-set in the facilitation of research design
- AppR supports the separation between thought and action in research investigation
- AppR upholds strict regulation of the logic of validity and reliability in quantitative-oriented paradigm

### 3. Methodological Orientation of Action Research

- AR is not done on people in society, organizational or community setting etc.
- Instead, AR is done by practitioners with stakeholders in organizational or community setting collaborating as agents of social change
- AR is aimed at improving a context-specific/real-life problem and promoting democratic evaluation of action learning solution and reflective practice
- AR is multidisciplinary, multi-method, contextual, and holistic
- AR respects the complexity of context-specific/real-life problem

## 4. Action Learning Solutions

- Multiplicity of real-life challenges require a framework that can bring about action learning solutions
- Action learning solution involves collaborative methods of inquiry structured in creative analysis of reflective thought processes and guided by an appropriate questioning inquiry about problem-solving action, capacity team building and coaching mechanism tailored to organizational learning, systems changes, and professional/community development
- Collaborative methods of inquiry involves the triangulation of three systemic interactive utilities of reflective thinking process: (i) source domain of issues or problem areas, (ii) action learning domain of questioning inquiry, and (iii) action-intention domain about problem-solving action in fostering participatory action (see Figure 1)

## 5. Collaborative Methods of Inquiry

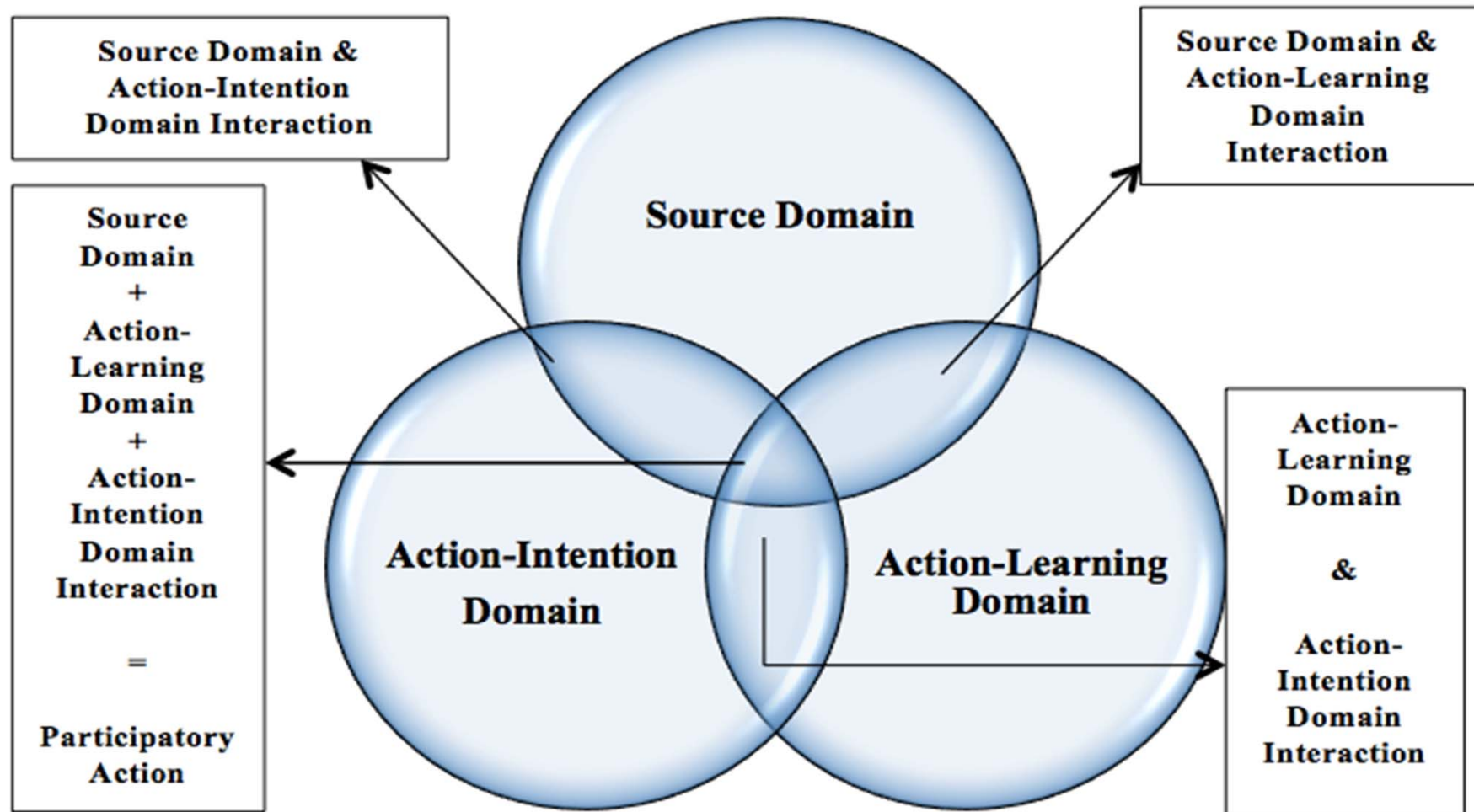


Figure 1. Three systemic interactive utilities of reflective thinking process in fostering participatory action, retrieved from page 160 in Tetteh, 2015, ALARj 21(1), 148-176.

## 6. Creative-reflective Thought Processes

- Creative-reflective thought processes serve as a “creative-reflective methodology” in the identification, development, and usefulness of metaphors for sense-making concerning action learning experiences
- Creative-reflective methodology (CFM) is composed of the context of action learning that becomes actionable and measurable
- Therefore, the CFM can be viewed as the composition of an actionable learning framework (ALF) plus a measurable action framework (MAF) to foster the collaborative inquiry processes
- When action learning becomes actionable and measurable, it creates a framework for creative-reflective thought processes that can aid collaborative inquiry to produce social change (Tetteh, 2015)



## 7. Methodological Directionality Recommendation

- Recommendation for a methodological directionality in conceptualizing AR/CBPR is imperative within the research community
- Recommendation favors the participatory practitioner-based methodological framework for conceptualizing AR/CBPR
- Creative-reflective methodology (CRM) provides a more suitable model of the participatory practitioner-based methodological framework for conceptualizing AR/CBPR
- Tetteh's (2015) communal photosynthesis (CP) metaphor model offers a participatory practitioner-based methodological framework for the facilitation of the CRM

## 8. Logic of the Photosynthesis Metaphor

- Of the many natural and physical objects used as source-domain metaphors to give meaning to human activities, plant photosynthetic processes are the most cyclically collaborative, inclusive, interdependent, interactive, and participatory activities that constitute direct mutual benefits to humanity and the plant communities
- Photosynthetic process embodies action processes, so can constitute an activity-based process for use in the participatory action-learning framework

## 9. Orientation of the Photosynthesis Metaphor

- The prefix *photo* in photosynthesis means “light,” and *synthesis* means “putting together; photosynthesis simply means “to put together with light”
- The metaphor of *light* portrays the creative-reflective thought processes of sense-making
- The metaphor of *synthesis* depicts collaborative action for knowledge production
- The function of “putting things together” indicates an activity that fosters collaboration, interaction, and participation

## 10. Communal Photosynthesis Metaphor

- Communal photosynthesis (CP) metaphor is an activity-based framework of creative-reflective methodology for the facilitation of ALAR participatory cycle
- CP metaphor ALAR participatory cycle is a spiral framework for problem identification, collaborative action, reflective thought process, creative evaluation, and knowledge production that can contribute to a unified understanding of living educational theory of professional practice
- CP metaphor employs the five photosynthetic processes or elements—carbon dioxide, water, sunlight, carbohydrate, and oxygen—as the source-domains of CO<sub>2</sub>WSCO cyclical metaphors (see Table 1)

## 11. Typology of the Communal Photosynthesis Metaphor

<b>CO2WSCO Cyclical Metaphors</b>	<b>Participatory Typology of Key Explanation</b>
<b>CO2</b>	<b>Source material/property (the phenomenon of experience)</b>
<b>Water</b>	<b>Live/life giving flow (meaning of the human experience)</b>
<b>Sunlight/sunshine</b>	<b>Light so we can see (innate worldview of individuals/people)</b>
<b>Carbohydrate</b>	<b>Energy from insight/covert views or tacit knowledge (newly constructed dynamic understanding of the revised worldviews of stakeholders)</b>
<b>Oxygen</b>	<b>Life sustenance (change or systemic transformation from the participatory action learning process)</b>

Table 1. Participatory Typology of Key Explanation of the CO2WSCO Cyclical Metaphors, retrieved from page 159 in Tetteh, 2015, ALARj 21(1), 148-176.

# 12. Communal Photosynthesis Metaphor Model

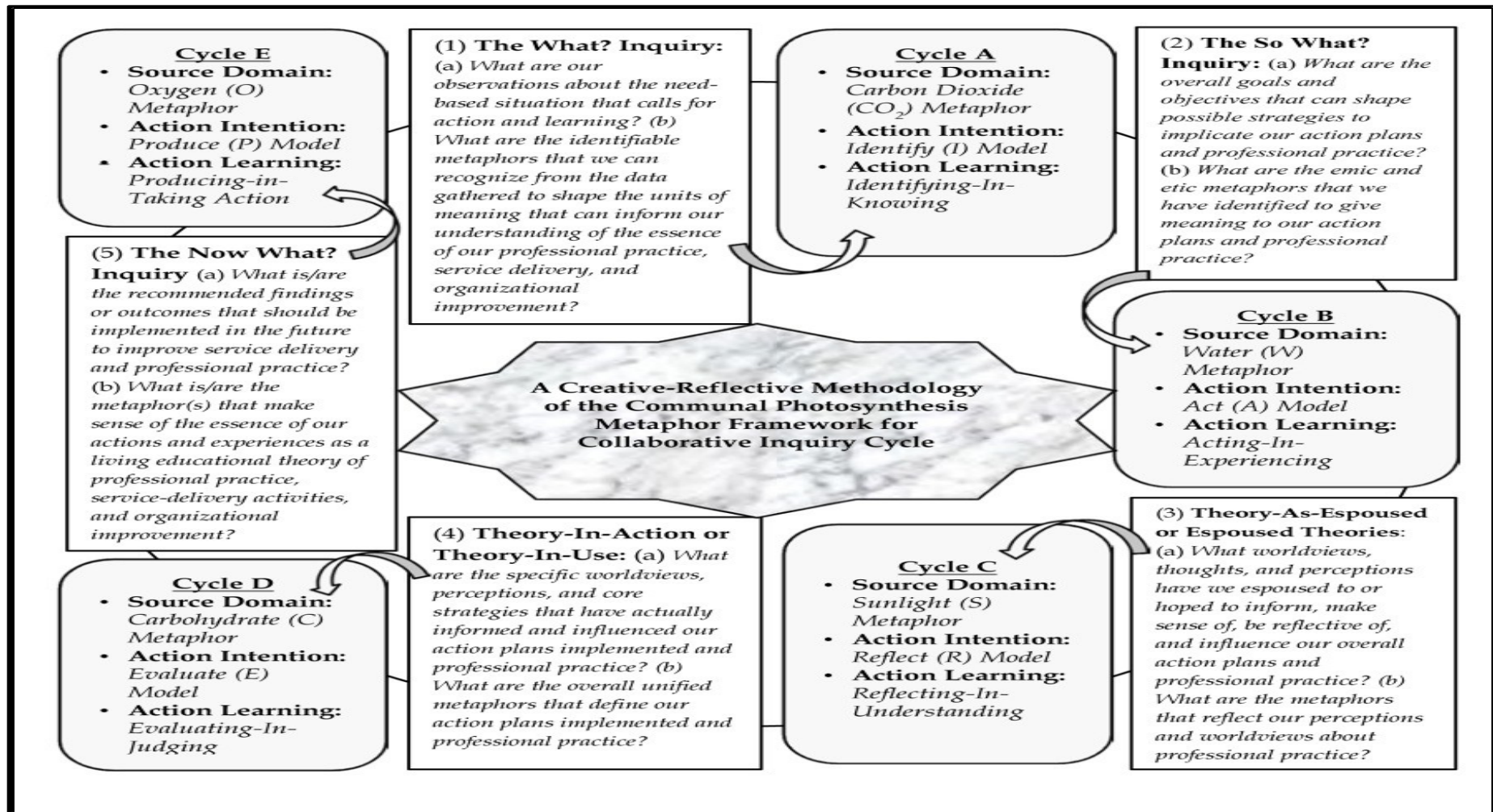


Figure 2. The spiral framework of the communal photosynthesis (CP) metaphor composing the source-domains CO<sub>2</sub>WSCO of cyclical metaphors corresponding to the action-intention domains IAREP model of cyclical metaphors as participatory action research (PAR) cycles, retrieved from page 163 in Tetteh, 2015, ALARj 21(1), 148-176.

## 13. What is Action Research from a Methodological Standpoint? # 1

- AR is a collaborative approach to inquiry utilizing multiple research techniques and evaluation of action planning and learning processes within a cyclical framework\*
- The “collaboration” is based on inputs from stakeholders via needs-assessment committee (NAC), needs-assessment reports (NAR), needs-assessment studies (NAS), professional field of practice or simply those whose interests are at stake.

## 14. What is Action Research from a Methodological Standpoint? Cont. # 2

- The “approach” disseminates a value-laden modality of the AR/PAR family chosen and applicable cyclical framework of action planning and learning processes.
- These include the following: Action learning, action research, action science, appreciative inquiry, community-based action research, clinical inquiry research, and conventional AR.



## 15. What is Action Research from a Methodological Standpoint? Cont. # 3

- Also, include the following: cooperative inquiry, critical AR, dialogical AR, evaluative inquiry, collaborative management research, learning history inquiry, and living theory inquiry.
- In addition, organizational development, participatory evaluation, participatory research, participatory action research, participatory monitoring and evaluation, and practical action research, as well as practitioner research, and reflective practice inquiry, etc.

## 16. What is Action Research from a Methodological Standpoint? Cont. # 4

- The “inquiry” disseminates the context-specific problem suitability for the logic of methods of collaborative inquiry characterized by democratic, equitable, liberating, and enhancing action processes.
- They are thus used to generate problem resolution and knowledge production toward transformational change or social change.

## 17. What is Action Research from a Methodological Standpoint? Cont. # 5

- The “multiple research techniques” provide problem-based justification for the logic of methods of inquiry used within the AR cyclical framework in facilitation of:
  - i. Collaborative problem analysis based on action planning intervention*
  - ii. Context-specific problem-solving based on action learning intervention*
  - iii. Promotion of democratic (program) evaluation of actionable learning process*
  - iv. Advancement of social change or contextual transformation based on measurable actions*
  - v. Knowledge production of action learning and reflective practice improvement, enhancement, advancement, and measurable outcomes*

## 18. What is Action Research from a Methodological Standpoint? Cont. # 5

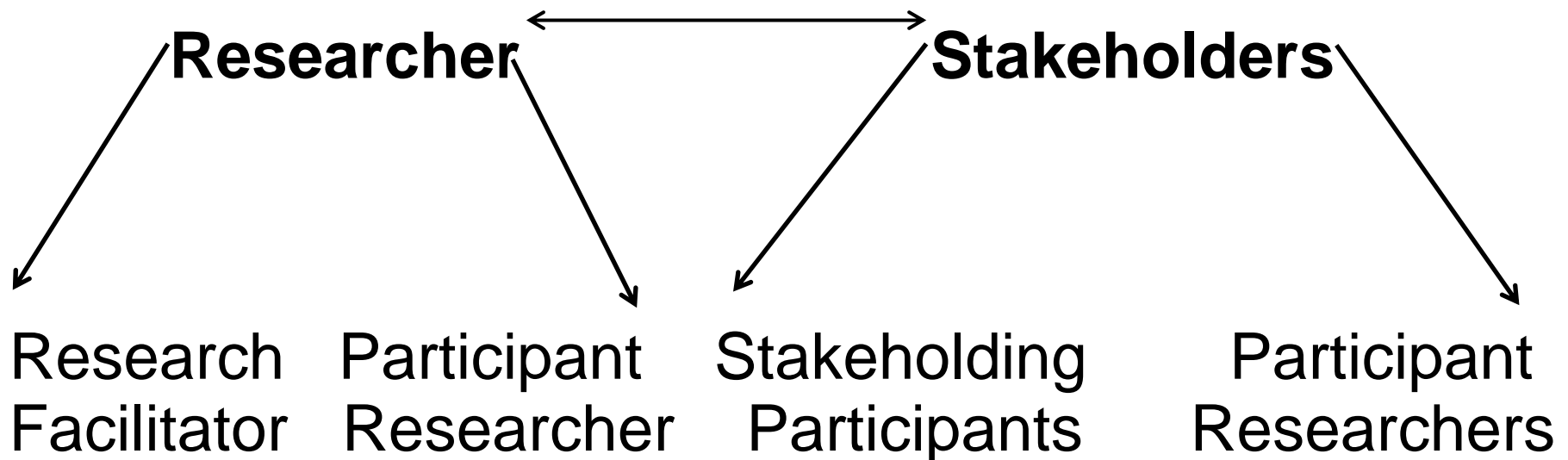
- The “evaluation of action planning and learning processes” account for the intervention of the actionable learning framework (ALF) + the measurable action framework (MAF) conceptualized to bring about positive social change
- The “cyclical framework” provides interactive cycle of action planning and learning activities, cycle of change processes, action and learning circles, and modeling of continuous action research activities.
- It also includes reflective action and evaluation processes, and participatory learning processes to inform thought and action of stakeholders toward practical solution-oriented inquiry for social change.

## 19. Methodological Directionality of Action Research # 1

- The “Action” component in AR is directed at collaborative or participatory action, action planning, action learning, and problem-solving action
- The “Research” component in AR is directed at contribution to local and global knowledge production of action learning and social change for those whose interests are stake

## 20. Methodological Directionality of Action Research # 2

- The “Participation” directionality between the “Action” and “Research” components in AR/PAR is researcher engaging in a participatory relationship with stakeholders, composed in Figure 3 below:



# 21. Methodological Directionality of Action Research # 3

➤ The directionality of positionality in AR cycle has been addressed by Herr and Anderson (2014) to reflect the covered areas in Table 2 below [<sup>1</sup>A flawed and deceptive version of this is when an insider studies his or her own site but fails to position himself or herself as an insider to the setting (outsider within):

Insider (1) _____ (2) _____ (3) _____ (4) _____ (5) _____ (6) Outsider			
Positionality of Researcher	Validity Criteria	Contributes to:	Traditions
1. Insider <sup>1</sup> (researcher studies own self/practice)	Anderson & Herr (1999), Bullough & Pinnegar (2001), Connelly & Clandinin (1990) Heikkinen, Huttunen & Syrjälä (2007)	Knowledge base, Improved/critiqued practice, Self/professional transformation	Practitioner research, Autobiography, Narrative research, Self-study
2. Insider in collaboration with other insiders	Gordon (2008), Heron (1996), Saavedra (1996)	Knowledge base, Improved/critiqued practice, Professional/organizational transformation	Feminist consciousness raising groups, Inquiry/Study groups, Teams
3. Insider(s) in collaboration with outsider(s)	Anderson & Herr (1999), Heron (1996), Saavedra (1996)	Knowledge base, Improved/critiqued practice, Professional/organizational transformation	Inquiry/Study groups
4. Reciprocal collaboration (insider-outsider teams)	Anderson & Herr (1999), Bartunek & Louis (1996)	Knowledge base, Improved/critiqued practice, Professional/organizational transformation	Collaborative forms of participatory action research that achieve equitable power relations
5. Outsider(s) in collaboration with insider(s)	Anderson & Herr (1999), Bradbury & Reason (2001), Heron (1996)	Knowledge base, Improved/critiqued practice, Professional/organizational transformation	Mainstream change agency: consultancies, industrial democracy, organizational learning; Radical change: community empowerment (Paulo Freire)
6. Outsider(s) studies insider(s)	Campbell & Stanley (1963), Lincoln & Guba (1985)	Knowledge base	University-based, academic research on action research methods or action research projects

## 22. Methodological Directionality of Action Research # 4

- The model of positionality framework in AR cycle has been addressed by Reason and Bradbury (2008) as First, Second, Third-Person Research/Practice model
- Greenwood and Levin (2007) as a Cogenerative AR model
- They can thus be illustrated or depicted by a concept map, mind-map or visual map to portray the framework for the researcher positionality in a AR/PAR study



## 23. Methodological Directionality of Action Research # 5

- The transitional cycle of directionality in relationship to the positionality can utilize multiple, balanced or cautiously a combination of predominate and subordinate ways based on the logic of the context-specific problem being explored:
  - i. Problem-led way
  - ii. Action-led way
  - iii. Researcher-led way (but with inputs from NAC/NAR/NAS or professional field of practice and professional literature)\*
  - iv. Stakeholder participation-led way
  - v. Participant researcher-led way (but with inputs from NAC/NAR/NAS or professional field of practice and professional literature)\*

## 24. Implications of Research Methods in AR # 1

- AR is not applied research
- AR rejects separation between thought and action
- AR rejects the notion that AR must be solely qualitative research
- AR is not case study research design

## 25. Implications of Research Methods in AR # 2

- However, the logic of the case study research design is mostly used in AR because:
  1. AR is context bound and thus closely related to the essential logic of case study research
  2. Case study provides the most flexible framework in facilitation of AR and program evaluation projects
  3. Case studies used in AR should aimed at providing practical solutions and knowledge productions in response to the context-specific problem
  4. “Cases [case studies] and case narratives occupy a central place in the [action] learning processes associated with becoming a competent AR practitioner” (Greenwood & Levin, 2007, p. 2).

## 26. Implications of Rigor in Action Research # 1

(with some inputs from Greenwood & Levin, 2007; Herr & Anderson, 2014; McNiff, 2014)

- Credibility and Validity in AR are tested in ACTION in respect to the context-specific problem resolution and knowledge production that effect change in terms of:

**A) Workability or Outcome Validity:** Checking whether the “actions taken” in AR process result in a practical solution or achievement of action-oriented outcome to the context-specific problem.

**B) Sensibility, Rhetorical or Process Validity:** Checking for ways that the soundness of appropriate research methodology is responsive to the extent that problems are framed and solved in a manner that sense-making can be made out of the tangible results in contributing to ongoing learning of stakeholders and system of professional practice.

## 27. Implications of Rigor in Action Research # 2

(with some inputs from Greenwood & Levin, 2007; Herr & Anderson, 2014; McNiff, 2014)

**C) Believability or Confirmability:** Checking whether knowledge produced from the “actions taken” is capable of convincing participants and nonparticipant stakeholders of the field of practice, or checking for the evidence that the procedures described actually took place.

**D) Usability:** Checking how the outcome of the action inquiry can be integrated or adapted to further advance useful purposes.

**E) Trans-contextual or Transferability Credibility** (*from internal to external credibility or simply contribution made to local setting can be transferred to global knowledge production*):

Checking the possible ways to model the outcome of the AR’s situational solutions contributed to the local setting can then be transferred to global knowledge production; or the possibility that the outcome of the study can be applied to other context.

## 28. Implications of Rigor in Action Research # 3

(with some inputs from Greenwood & Levin, 2007; Herr & Anderson, 2014; McNiff, 2014)

**F) Dialogic Validity:** Checking for the validation of new or emerging knowledge during and after the action intervention through critical and reflective dialogue with the stakeholding participants of the study.

**G) Catalytic Validity:** Checking the degree to which the action learning process inform thoughts and actions and empowers stakeholding participants to shape or transform the knowledge base, alter attitudes or behaviors, or contributes to capacity building or skills' enhancement.

**H) Democratic Validity:** Checking ways that collaborative efforts underscore the participatory action of stakeholders involved in the AR/PAR process to the extent that results or outcome of the action intervention are germane to the local setting of the research undertaken.

## 29. Implications of Rigor in Action Research # 4

(with some inputs from Greenwood & Levin, 2007; Herr & Anderson, 2014; McNiff, 2014)

**I) Credibility:** Checking for the plausibility and integrity of the study.

**J) Dependability:** Checking for the research procedures that are clearly defined and open to stakeholder scrutiny.

**K) Content Validity:** Checking whether or not action undertaken actually achieves what it was intended to accomplish.

**L) Educational Validity:** Checking whether the practicality of action taken actually aimed at encouraging those whose interests are at stake to collaboratively reflect and make relevant choices about how they should act transparently among themselves in the quest for initiating positive change.



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**Contacts:** If you would like to provide feedback or comment about my AL/CBPR presentation or perhaps for further discussion, and/or help with ALAR research topic using either the CP metaphor model, heuristic inquiry or any qualitative research, participatory action research, program evaluation, and/or quantitative research, as well as in particular, mixed methods research, please provide your contact information below:

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