

SELF-EVALUATION TOOL FOR COMPLETED ACTION RESEARCH (SET-CAR): AN INNOVATION ENSURING QUALITY CONTROL Fuentes, Ruth L.; Baraquia, Lee G. Completed 2022



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Self-Evaluation Tool for Completed Action Research (SET-CAR): An Innovation Ensuring Quality Control

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Abstract

This study explored the provision of support to researchers with the objective of formulating, validating, and evaluating the implementation of Self-Evaluation Tool for Completed Action Research (SET-CAR) in the Department of Education- Region IX, Zamboanga Peninsula. The study employed the R&D design utilizing ADDIE Model in the development and validation process. This study's primary data sources were the seven (7) expert validators who validated the criterion items of the proposed SET-CAR. Eight (8) teacher-researchers and three (3) research managers shared their experiences with the utilization of the SET-CAR using survey questionnaires. The collected data on the decision of validators was analyzed using percentage of acceptability of the criterion items as descriptive statistics. After careful validation and taking into account the recommendations of expert validators, the proposed criterion items were generally acceptable and accepted with revision. The enhanced criterion items of SET-CAR were deemed appropriate and sufficient in representing the minimum standards for each section of the manuscript. Based on the feedback of teacher-researchers and research managers, the SET-CAR was considered a significant evaluation tool for action research and provided relevant contribution to research quality. Four topics emerged from the thematic analysis of the feedback: (1) SET-CAR provides guidance in doing action research, (2) SET-CAR prompts deeper insights and reflection in research, (3) SET-CAR presents comprehensive and user-friendly content, and (4) SET-CAR promotes an effective way of enhancing manuscripts and research skills. The study recommends exploration of the reliability of the SET-CAR and conducting continuous monitoring and evaluation.

Keywords: action research; development and validation; quality-control; SET-CAR

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This research project has been gratifying due to the support of the Regional Research Committee (RRC) in upholding the advancement of sound educational research practices, evidence-based policy development, and enhancing the Culture of Research in Zamboanga Peninsula. The Department of Education also deserves recognition for providing program support funds through the Basic Education Research Fund (BERF).

Praise and glory be to Jesus Christ, the Almighty God, and Divine Providence for all the strength, grace, and blessings.

Republic Act No. 9155, also known as "Governance of Basic Education Act of 2001," mandated the Department of Education (DepEd) to "undertake national educational research and studies," which can become part of evidence-based decision-making. Studies confirmed that high-quality education research contributes to improving education and reducing educational disparities by informing decisions about staffing, programming, and resource allocation (Kozma 1999, 81). DepEd upholds the vital role of research in improving the delivery of quality basic education services to learners and the quality of governance. With these premises, the department issued DepEd Order No. 39, s. 2016 (Adoption of the Basic Education Research Agenda) and DepEd Order No.16, s. 2017 (Research Management Guidelines) as policies promoting the Culture of Research and managing research initiatives to improve support mechanisms for capacity building, dissemination, and application through the conduct of action and basic research.

Action research is significant because it empowers teachers to improve pedagogical content knowledge, enhances teaching practices, and contributes to a culture of continuous improvement, ultimately leading to better educational outcomes (Manfra 2019, 163). Action research encourages educators to reflect on their practices, set goals for improvement, develop critical thinking and problem-solving skills, and actively promote professionalization (Jingjing 2014, 30; Messikh 2020, 482). Engaging in action research empowers teachers to take an active role in shaping their practices and addressing the unique needs of their students (Laudonia et al. 2018, 480). Through systematic inquiry and reflection, action research encourages teachers to innovate with new instructional approaches (Gibbs et al. 2017, 3).

While action research offers numerous benefits, teachers face challenges that complicate engaging in this process. Teachers often have demanding schedules and heavy workloads (David, Albert, and Vizmanos 2019, 1-6), and balancing research with their workload can be overwhelming, leading to feelings of stress and exhaustion (Tindowen, Guzman, and Macanang 2019, 1787). Research knowledge and skills are lacking in certain educators. Without proper orientation on how to design and implement a rigorous study can be challenging. Engaging in action research requires a set of skills, including literature search, research design, data collection, and analysis (Tindowen, Guzman, and Macanang 2019, 1787).

Despite DepEd's efforts, many educators in public elementary and high schools remain unresponsive in doing action research. Additionally, educators lack sufficient practical knowledge and need more improvement in their abilities to carry out action research (Oestar and Marzo 2022, 99). The complexity of the research process can be overwhelming for teachers who are not familiar with the nature of action research. Hence, some teachers initially feel hesitant or unsure about conducting it.

DepEd- Regional Office IX sought to address these challenges and implement supportive practices to guide the teachers in conducting meaningful action research and contribute to the continuous improvement of the education system. DepEd RO-IX issued the Regional Research Management Guidelines as a localized policy to continuously advance and strengthen the Culture of Research in the region. This policy seeks to assist researchers across the region in systematically reflecting on and evaluating their research projects and improving the quality of research outputs from the school to the regional level.

DepEd's highest number of completed research in the Philippines, 945, was found in DepEd Region IX as of FY 2022, spanning the years 2016 to 2022. These

research manuscripts shall be evaluated by the Regional Research Committee (RRC) using the Quality Control Checklist (QCC) for Completed Action Research and Basic Research (DepEd Memorandum No. 028, s. 2022) before submission for archival in the E-Saliksik Portal. The RRC found it challenging to assess the compliance of action research manuscripts coming from the eight Schools Division Offices (SDOs) based on the identified criteria: Credible, Contributory, Communicable, and Conforming, in addition to the manuscripts' differing formats and sections. It appeared that the researchers urgently needed technical support and guidance to ensure the quality of the research.

DepEd RO IX formulated a Self-Evaluation Tool for Completed Action Research (SET-CAR) as an integral part of the quality control mechanism moving forward. This checklist provides researchers with a comprehensive guide in completing their action research and ensuring that the manuscripts submitted to the regional office constitute quality research output. This self-evaluation tool presents criterion items under each section of the research paper. The researchers need to indicate if they were able to comply with the criterion items or not by putting a checkmark in the appropriate column beside each criterion item. They also need to specify the pages and paragraph number/s where the criterion items are presented and satisfied in the action research manuscript.

SET-CAR can help teachers in several ways when conducting action research. SET-CAR serves as a reflective guide for teachers and prompts them to assess and reflect on the various components of their action research, from identifying the problem to implementing, evaluating the innovation and intervention, and up to the last part of the manuscript. This systematic analysis allows them to identify strengths, weaknesses, and areas for improvement. SET-CAR ensures adherence to research standards and improves research quality by motivating educators to assess their research using explicit criteria. Thus, SET-CAR can be helpful for teachers who may not have formal training in action research methodology.

Overall, SET-CAR can be a valuable tool for teachers engaged in action research. By promoting self-reflection, guiding research planning, and implementation, it can help teachers improve their research skills and align their manuscripts to the Quality Control Checklist (QCC) for Completed Action Research (DepEd Memorandum No. 028, s. 2022). The QCC for action research serves as an evaluation tool to ensure quality of the completed research for acceptance and archival in the E-Saliksik Portal as a repository of studies funded by Basic Education Research Fund (BERF) of the Department of Education (DepEd Order No. 014, s. 2022).

However, it is important to note that SET-CAR is just one tool, and its effectiveness can depend on various factors, such as teachers' prior experience with research, access to support and resources, and the overall school culture towards action research. Hence, this study sought to focus on the validity of the criterion items of the Self-Evaluation Tool for Completed Action Research (SET-CAR) based on the evaluation of the expert validators and gathering the feedback of the teacher-researchers and research managers on the effectiveness of the SET-CAR in helping them evaluate and improve action research manuscript. The use of SET-CAR can have significant policy implications for the Department of Education (DepEd) and its stakeholders in terms of supporting teacher development, addressing challenges and concerns in doing research, and continuously monitoring and evaluating the use of SET-CAR and its impact on teacher research capacity, research quality, and evidence-based decision-making.

Innovation, Intervention, and Strategy

As an integral part of the quality control mechanism, DepEd RO IX formulated a Self-Evaluation Tool for Completed Action Research (SET-CAR). This checklist provides researchers with a comprehensive guide in completing their action research and ensuring that the manuscripts submitted to the regional office constitute quality research output. This self-evaluation tool presents criterion items under each section of the research paper. The researchers need to indicate if they were able to comply with the criterion items or not by putting a checkmark in the appropriate column beside each criterion item. And they also need to specify the pages and paragraph number/s where the criterion items are presented and satisfied.

The Self-Evaluation Tool for Completed Action Research (SET-CAR) has two parts, namely the Information Sheet and the Checklist. The Information Sheet contains the Research Title, Research Agenda Category, Funding Year, Region/Schools Division Office, School and/or Functional Division Conducted, and Name/Position/Contact Details of the Proponents. The second part presents the checklist which contains the criterion items to be complied and satisfied by the researchers for the following sections of the manuscript: Title, Keywords, Acknowledgment, Context and Rationale, Innovation, Intervention, and Strategy, Action Research Questions, Action Research Method, Results and Discussion, Conclusion and Recommendation, Action Plan, References, and Financial Report.

Putting a premium on the quality of research outputs in promoting the Culture of Research, this innovation establishes the three stages of action research quality control process.

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Stage 1:	1. Formulate the Self-Evaluation Tool for Completed Action				
Development	Research (SET-CAR).				
and Validation	2. Conduct content validation of the developed SET-CAR.				
	3. Incorporate the comments and suggestions of the expert				
	validators for the enhancement of the SET-CAR.				
Stage 2:	1. Researchers conducting action research shall accomplish the				
Self-Evaluation	Self-Evaluation Tool for Completed Action Research (SET-CAR).				
and SDRC	2. The Schools Division Research Committee (SDRC) secretariat				
Evaluation	shall validate the accomplished SET-CAR and make				
	annotations, if necessary, on the completed research.				
	3. Researchers shall accommodate the comments and suggestions				
	of the SDRC to improve the manuscript.				
Stage 3:	1. The Regional Research Committee (RRC) shall evaluate the				
RRC Evaluation	completed research manuscript and the accomplished SET-CAR				
	and make annotations if there are areas for				
	correction/improvement.				
	2. Researchers shall accommodate the comments and suggestions				
	of the RRC to improve the manuscript.				

 Table 1: Action Research Quality Control Process

The ADDIE Model (Analysis-Design-Development-Implementation-Evaluation) in Table 2 was employed in the development and validation of the SET-CAR. Among the array of design models available, the ADDIE model was deemed most suitable for this study. Its adoption ensured that the SET-CAR's development would successfully incorporate high-impact practices and enhance instruction and evaluation (Nichols Hess and Greer 2016, 264).

Phases	Detailed Activities			
1. Analysis	• Identify the purpose of Self-Evaluation Tool for Completed Action Research (SET-CAR).			
	• Analyze the needs and proficiency level of the target users.			
	• Conduct a review of existing evaluation tools or frameworks.			
	• Define the criteria for evaluating the action research.			
2. Design	• Conceptualize the SET-CAR structure.			
	• Define the Scoring or Rating System.			
	• Draft clear and concise instructions on how to accomplish the SET-CAR.			
3. Development	• Develop the SET-CAR based on the design specifications.			
	• Conduct a validation of the developed SET-CAR.			
	• Incorporate the comments and suggestions of the expert validators for the enhancement of the SET-CAR.			
4. Implementation	• Launch the SET-CAR and make it accessible to target users.			
	• Communicate the availability of the SET-CAR.			
	• Establish a support system for addressing user inquiries or			
	issues.			
5. Evaluation	• Gather feedback from teacher-researchers regarding their experience with the SET-CAR.			
	• Analyze the insights of research managers on the effectiveness of the SET-CAR in ensuring research quality.			

Table 2: Development and Validation of SET-CAR Using ADDIE Model

Teachers who engage in research frequently encounter a variety of difficulties (Tindowen, Guzman, and Macanang 2019, 1787). Time limits, resources, support, and the nature of the research process are some of the possible causes of difficulties. The development, validation, and implementation of the SET-CAR can be a valuable tool for teachers in facilitating the conduct of their action research. It can assist educators in developing their research skills and providing direction for the planning and execution of research and packaging the manuscript based on the Quality Control Checklist (QCC) for Completed Action Research (DepEd Memorandum No. 028, s. 2022). The QCC for action research, from which the criterion items of SET-CAR were anchored, functions as an assessment instrument to guarantee the quality of finished research prior to approval and archival in the E-Saliksik Portal, which houses a collection of studies supported by the Department of Education's Basic Education Research Fund (BERF) (DepEd Order No. 014, s. 2022).

Action Research Questions

The primary objective of this research was to formulate, validate, and evaluate the implementation of the Self-Evaluation Tool for Completed Action Research (SET-CAR) as an evaluation tool for researchers in doing their action research in the Department of Education- Region IX, Zamboanga Peninsula for FY 2022-2023.

Specifically, the action research sought to answer the following queries:

1. What is the extent of validity of the criterion items of the Self-Evaluation Tool for Completed Action Research (SET-CAR)?

- 2. How can the criterion items of the Self-Evaluation Tool for Completed Action Research (SET-CAR) be enhanced based on the content validation of the experts?
- 3. What are the feedback of the teacher-researchers and research managers on the effectiveness of Self-Evaluation Tool for Completed Action Research (SET-CAR)?

Action Research Method

Research Design

The study employed the research and development (R&D) design, focusing on development and validation of the Self-Evaluation Tool for Completed Action Research (SET-CAR). R&D design is a predominant source of innovation and progress (Filippetti 2011, 5). It encompasses the systematic process of generating new knowledge and products, translating basic knowledge into practical solutions to specific problems, testing and evaluating potential solutions, and is closely related to sustainable development and educational innovation (Husamah et al. 2022, 89). Therefore, understanding and implementing effective R&D design is essential for organizations to thrive in today's quickly changing environment.

The ADDIE Model (Analysis-Design-Development-Implementation-Evaluation) was utilized in the development and validation of the SET-CAR. The adaptability of the ADDIE model extends beyond the traditional domains, finding valuable application in the realm of R&D design as well. Its implementation and the presentation of quantitative and qualitative data gathered in this inquiry guaranteed that high-impact practices would be successfully incorporated into the SET-CAR's development and improvement after the validation process.

Participants and/or other Sources of Data and Information

This study's primary data sources were the seven (7) expert validators who validated the criterion items of the proposed SET-CAR. The content validators consisted of the following: (1) a Research Director of one of the Higher Education Institutions in Pagadian City, Philippines, (2) a Master Teacher of DepEd-Zamboanga Sibugay Division who published qualitative and quantitative research studies, (3) an educator, research adviser, and editor from one the universities in Muscat, Oman, (4) a College and Graduate School instructor from one of the Higher Education Institutions in Cagayan de Oro City, Philippines, (5) a research teacher of DepEd-Zamboanga del Sur Division who have conducted action research under BERF, (6) a Chief Education Supervisor who formerly managed research in Region IX, and (7) a Master Teacher in Science and those validators coming from DepEd have already conducted action research under BERF. Six of them have doctoral degrees and one is a master's degree holder and all of them have attended related training on research and evaluation.

Eight (8) teacher-researchers and three (3) research managers shared their experiences with the utilization of the SET-CAR. They also provided feedback on the effectiveness of SET-CAR in ensuring research quality. The teacher-researchers were able to accomplish the SET-CAR and submit their completed research to the Schools Division Research Committee (SDRC) as criteria used in selecting participants of this study. The research managers were also chosen based on their experience as SDRC secretariat who validated the accomplished SET-CAR of researchers and made annotations on the completed research manuscript. Additionally, data saturation was

employed to guarantee data sufficiency, demonstrating comprehensive investigation as well as the thorough establishment of the themes and patterns of the qualitative data.

Research Instrument

The three instruments used in this study were the Content Validation Form of the Proposed SET-CAR and the survey questionnaires on Researchers' and the Research Managers' Feedback on the SET-CAR through Google Forms. The first instrument requested the expert validators to validate the content of the proposed SET-CAR by encircling the box before the criterion item corresponding to A - Accept, R - Reject, Re - Revise. They also provided their comments and suggestions on the criterion item.

The validated survey questionnaire on Researchers' Feedback obtained data from the teacher-researchers on their satisfaction, description on the content and usability, perception of the effectiveness, and overall research experience with the use of SET-CAR. Capturing approximately similar contents with the second instrument, the third tool on Research Managers' Feedback focused on description on the implementation of SET-CAR and overall experience in the context of managing research in the SDO.

Data Gathering Procedure

The data collection procedure involved a sequence of carefully carried out actions designed to obtain pertinent data. Firstly, a formal letter was sent to the expert validators for the content validation of the developed SET-CAR. After gathering the responses of the validators, the SET-CAR was enhanced by incorporating the decision of the validators as to accept, reject, or revise the criterion items and accommodating their comments and suggestions.

After the implementation of the validated SET-CAR to target users for more than a year, the researchers gathered feedback from teacher-researchers regarding their experience with the SET-CAR and analyzed the insights of research managers on the effectiveness of the SET-CAR in ensuring research quality.

The research proponents obtained informed consent, guaranteed data confidentiality and anonymity of sources of information, and explained the goal and significance of the study to participants before inviting them to participate in the study. Crucially, there was no use of force to obtain their consent.

Data Analysis

The collected data on the decision of validators was analyzed using percentage of acceptability of the criterion items as descriptive statistics. The goal of the analysis was to describe the extent of validity of the criterion items of all the parts of the action research manuscript. Thematic analysis was also employed in analyzing the qualitative data concerning the feedback of teacher-researchers and research managers on the SET-CAR.

Results and Discussion

Extent of Validity of the Criterion Items of the SET-CAR. The extent of validity of the criterion items of the Self-Evaluation Tool for Completed Action Research (SET-CAR) refers to the degree to which the items included in the tool accurately and effectively measure what they are intended to assess within the context of completed

action research. In other words, it evaluates the appropriateness and relevance of the criterion items used in the self-evaluation tool to gauge the quality of action research projects.

Table 3 presents the extent of validity of the 4 criterion items in the title of the study, with 86% as the highest acceptability level among the 7 validators. Notably, all the criterion items under the title part of the manuscript were accepted with revisions based on the comments and suggestions of the validators. These outcomes suggest the accuracy and appropriateness of the criterion items used in evaluating the titles of action research projects. Removing all sentence starters that are repeated in each section of the manuscript was recommended by one of the validators. To prevent repeating phrases, it shall be noted at this point that this recommendation was implemented for each of the manuscript's criterion items.

Criterion Item	Accept-	Comments/	Decision	Validated Criterion
	ability	Suggestions of Validators		Item
1. The research title	86%	"Remove all the sentence	Accept	Represents what the
represents what the		starters that are repeating per	with	study is all about
study is all about.		section of the manuscript" (V1).	Revision	_
2. The research title	71%	"Qualify the problem; it is	Accept	Presents the
presents the		quite vague" (V1).	with	innovation,
innovation,		"Emphasize the problem or	Revision	intervention, or
intervention, and		issue as the focus of		strategy to solve the
strategy to solve the		inquiry" (V2).		problem or issue as
problem.				its focus of inquiry
3. The research title	57%	"It would be better if this would	Accept	Contains clear and
presents the		highlight the clarity and	with	concise words
problem/s that will		conciseness of the words in the	Revision	
be addressed in the		title" (V1).		
study.		<i>"If the title presents problem/s that will be addressed in the</i>		
		study, the title may be more		
		than 15 words" (V4).		
4. The research title	86%	"Count acronyms in the title	Accept	Comprises not more
is stated in not more		as 1 word" (V5).	with	than 12 substantive
than 12 substantive			Revision	words (except for
words <i>(excluding the,</i>				acronyms and
of, in, and, to, for,				excluding the, of, in,
into, etc.).				and, to, for, into, etc.)

Table 3: Extent of Validity of the Criterion Items in the Title

The validity of the criterion items in the abstract of the action research suggests the appropriateness and sufficient representation of the 4 validated criterion items from the proposed 5 criterion items. Item 5 of Table 4 posted an acceptability of 100% and the proposed criterion items 2 and 3 were subsumed into 1 based on the validators' remarks and recommendations. The combination of these 2 criterion items focusing on research methods demonstrates the clarity of the main elements of the abstract of the action research.

Table 4: Extent of Validity of the Criterion Items in the Abstract						
Criterion Item	Accept-	Comments/	Decision	Validated Criterion		
	ability	Suggestions of		Item		
		Validators				
1. The abstract shows	86%	"Describes the	Accept	Describes the		
the general statement		objectives/purposes of	with	general statement of		
of the problem or		the research" (V6).	Revision	the problem or		
objective/s of the				objectives/purposes		
action research.				of the research		
2. The abstract	86%	"The focus of # 2 and 3	Accept	Presents the		
identifies the research		should be methods. Just	with	research methods		
participants and/or		enumerate the sub-	Revision	(e.g., research		
other sources of data		sections under the		design, participants		
and information,		methods" (V1).		and/or other sources		
research				of data and		
environment, and				information,		
timeline.				sampling technique,		
3. The abstract	71%	"The abstract presents	Reject	research		
discusses the data		the data gathering	(Subsumed	environment and		
gathering methods		methods" (V6).	with Item	timeline, research		
used including the			2)	instruments, data		
research design,				gathering methods,		
instruments, and				and data analysis)		
data analysis.						
4. The abstract	86%	"Abstract highlights the	Accept	Highlights the		
presents the		summary of the research	with	summary of the		
summary of findings		findings, conclusions,	Revision	research findings,		
and implications of		implications, and		conclusions,		
the completed action		recommendations" (V6).		implications, and		
research.				recommendations		
5. The abstract	100%		Accept	Contains 200 – 250		
contains 200 – 250				words		
words.						

Table 4: Extent of Validity of the Criterion Items in the Abstract

Table 5 displays the point of validity of the criterion items in the keywords of the action research, reflecting 100% acceptability of the 2 criterion items. The accuracy and suitability of the criteria used to assess the keywords connected to action research projects are signified by the validated criterion items.

Criterion Item	Accept- ability	Comments/ Suggestions of Validators	Decision	Validated Criterion Item
1. The keywords capture	100%		Accept	Captures the most
the most relevant aspects of				relevant aspects of the
the study.				study
2. It contains three to five	100%		Accept	Contains three to five
keywords, phrases, or				keywords, phrases, or
acronyms separated by				acronyms separated by
semicolons and arranged				semicolons and arranged
alphabetically.				alphabetically

The extent of validity of the criterion items in the acknowledgment of Table 6 exhibits the 100% acceptability of the 2 criterion items. The accuracy and suitability of

the criteria used to assess the keywords connected to action research projects are signified by the validated criterion items.

Criterion Item	Accept- ability	Comments/ Suggestions of Validators	Decision	Validated Criterion Item
1. The study acknowledges the people who helped or contributed to the completion of the research.	100%		Accept	Acknowledges the people who helped or contributed to the completion of the research
2. The study acknowledges the research funding, sponsoring institution, support staff, or other individuals who have helped complete the research.	100%		Accept	Acknowledges the research funding, sponsoring institution, support staff, and research participants who have helped complete the research

Table 6: Extent of Validity of the Criterion Items in the Acknowledgment

Table 7 reveals the validity of the criterion items in the context and rationale in which the proposed item number 10 was rejected as it was deemed more appropriate under the discussion part of the manuscript. Items 4 and 7 with 100% acceptability were accepted, and the rest of the proposed items were accepted with revision. These results imply that the 9 validated criterion items effectively measure and represent the essential elements of the context and rationale provided in the action research.

Table 7: Extent of Validity of the Criterion Items in the Context and Rationale

Criterion Item	Accept-	Comments/	Decision	Validated Criterion Item
	ability	Suggestions of Validators		
1. The study provides a comprehensive discussion of the identified problem or issue's nature, extent, relevance, and salience.	71%	"Avoid double-barrel questions" (V4). "Elaborate the relevance and salience by citing some legal basis and literature" (V5).	Accept with Revision	Provides a comprehensive discussion of the nature and relevance of the identified problem or issue (e.g., cite some legal basis and relevant literature)
2. The study presents "real" and "existing" issues and challenges identified by its stakeholders.	57%	"How can this be identified by stakeholders?" (V1). "Real and existing are also not the same." (V7)	Accept with Revision	Addresses existing issues and challenges
3. The study emphasizes the need to conduct action research by elaborating the phenomenon and showing an in-depth and critical analysis of the situation.	71%	"Try separating these ideas" (V2). "Specify critical analysis of the situation. (e.g. presents data reports)" (V6).	Accept with Revision	Emphasizes the need to conduct research by showing an in-depth and critical analysis of the situation (e.g., presenting data reports)
4. The research problem is significant and relevant to the needs and welfare of students and other education stakeholders.	100%		Accept	Discusses the significance and relevance of the research problem to the needs and welfare of students and other education stakeholders
5. The review of literature is organized to	71%	"I find it lacking just to convey the research topic" (V1).	Accept with Revision	Presents a well-organized review of literature that

convey the research topic.		"The review of literature supports the identified problem" (V3).		supports the identified problem
6. The study shows a rigorous review of the literature (e.g., citing at least 15 literature sources).	43%	"Go to the primary players of the conversation and not on the # of articles" (V1). "15 in-text citations are enormous" (V2). "Reconsider if it is important to indicate citing 15 literature sources" (V3).	Accept with Revision	Shows a rigorous literature review by citing the key players in the research conversation
7. The main research aims/ objectives are clearly stated.	100%		Accept	States clearly the main research aims/objectives
8. The literature review ends with a synthesis discussing the gaps that make the present study essential to undertake.	57%	"Gaps in AR are not merely found in the literature but from the existing problems" (V2). "Not required for AR" (V6). "Focus on policy implications to planning" (V7).	Accept with Revision	Highlights the policy implications relevant for planning and development
9. The review of literature presents the conceptual and theoretical bases of the study	71%	"Literature is strengthened much in Basic Research" (V2). "Not required for AR" (V6). "Focus on scope and limitation" (V7).	Accept with Revision	Discusses the scope and limitation of the study thoroughly
10. The research discusses the potential contribution of the study to the "conversation" of the topic.	57%	"This is appropriate to the discussion part" (V1). "Incorporate this to policy implications" (V7).	Reject	

Table 8 discloses the level of validity of the criterion items in the innovation, intervention, and strategy in which the proposed items 1, 2, and 3 were all broken down into two separate criterion items as recommended by the validators. Hence, the proposed items were all accepted with revision. Examining the SET-CAR validated criterion items in the innovation, intervention, and strategy of an action research project dives deep into the heart of the research – the proposed solutions and approaches to the identified problem. These elements form the core of action research and are crucial in the development and implementation of novel solutions to address the identified issue.

Table 8: Extent of Validity of the Criterion Items in the Innovation, Intervention,
and Strategy

Criterion Item	Accept- ability	Comments/ Suggestions of Validators	Decision	Validated Criterion Item
1. The study provides	86%	"Double barrel	Accept with	Provides a detailed
a detailed explanation of the rationale, extent, and limitation of the innovation,		question. Consider separating ideas." (V4).	Revision	explanation of the rationale and extent of the innovation, intervention, and strategy to address the problem or issue
intervention, and strategy to address the problem or issue.				Discusses the limitation of the innovation, intervention, and strategy

2. The activities to be	86%	"It may be stated but	Accept	States the activities to be
undertaken are		not supported	with	undertaken to address the
stated and supported		plausibly. Consider	Revision	problem or issue plausibly
plausibly to address		emphasizing personal		Presents personal reflection
the problem or issue.		reflection on the		to make a compelling case
		innovation" (V4).		for the innovation,
				intervention, and strategy
3. The innovation,	57%	"Related literature	Accept	Presents related literature
intervention, and		only, the term already	with	supporting the innovation,
strategy are based		covers related studies"	Revision	intervention, and strategy
and supported by		(V1).		Discusses the relevance of
related literature and		"Use only the term		the innovation, intervention,
studies.		supported by to avoid		and strategy in terms of
		confusion" (V4).		novelty, authenticity,
		"Discuss the relevance		comparability, and
		and authenticity of the		adaptability
		innovation" (V5).		_ 0

Table 9 indicates the degree of validity of the criterion items in the action research questions in which the proposed item 1 was accepted with revision by separating it into two criterion items as emphasized by the validators. While the other items show 71% acceptability, item 2 has 86% acceptability. The validated criterion items denote the degree to which these indicators effectively measure and represent the essential elements of the research questions posed in the context of action research.

Table 9: Extent of Validity of the Criterion Items in the Action Researc	2h
Questions	

Questions							
Criterion Item	Accept- ability	Comments/ Suggestions of Validators	Decision	Validated Criterion Item			
1. The research questions restate the title or the study's overall goal to identify the target research environment, research participants, and the timeline.	71%	"Too many ideas compounded in one item" (V4). "The study's overall goal is to specify the target research environment, research participants, and the timeline" (V6).	Accept with Revision	Restates the title or the study's overall goal Specifies the research environment, research participants, and timeline in the general statement			
2. The research questions identify the problem/s which the study will address.	86%	"The study presents the issues and challenges to be addressed" (V2).	Accept with Revision	Relates to the issues and challenges that the study will address			
3. The research questions convey the desired change or improvement.	71%	"Change or improvement of the innovations to be specific" (V2). "Improvement along with the innovation, intervention, and strategy introduced" (V6).	Accept with Revision	Conveys the desired change or improvement by highlighting the innovation, intervention, and strategy			
4. The research questions logically specify the variables or the context of the inquiry.	71%	"Expound further to accommodate both quali and quanti studies" (V1). "Context and variables are different" (V6).	Accept with Revision	Specifies logically the variables of the quantitative study or the sub-questions of a qualitative inquiry			

Among the 10 proposed items for the action research method, only item 8 was accepted without revision, and the other items were accepted with revision. The 11 validated criterion items under the action research method section suggest the existence of 5 sub-sections such as research design, participants and/or other sources of data and information, research instrument, data gathering procedure, and data analysis. This part specifies the overall approach and processes how the research will be conducted.

		Method		
Criterion Item	Accept- ability	Comments/ Suggestions of Validators	Decision	Validated Criterion Item
1. The study states the target participants and/or other sources of data and information (e.g., learners, teachers, documents, realia, learners' products, etc.).	86%	<i>"If we can start with design and its appropriateness before going to participants" (V1).</i>	Accept with Revision	Discusses thoroughly the appropriateness of the research design to the nature of the problem, innovation, and its <u>expected output</u> Explains the chosen research design and resulting research procedures that other researchers carrying out related work can understand
2. The study provides a clear rationale for the inclusion of participants in the research (qualitative method) and/or the sample/sampling procedure is appropriately chosen and discussed (quantitative method).	86%	"Qualitative study has a different sampling procedure" (V2).	Accept with Revision	Discusses the chosen sample/sampling procedure and provides a clear rationale for the inclusion of participants and data saturation (for qualitative study)
3. The study provides details about the target participants (e.g., number, characteristics, sampling procedure, etc.) and/or other sources of data and information.	71%	"Information relevant only to the study" (V1). "Seems redundant to no. 1" (V6).	Accept with Revision	Provides details about the participants and/or other sources of data and information (e.g., number, characteristics, etc.)
4. The study provides details of the data gathering methods, the specific kinds of data, how and when they will be collected <i>(e.g., pretest</i> <i>and posttest scores,</i> <i>grades, etc.).</i>	86%	"Pretest and posttest scores, grades, etc. are not much necessary" (V1).	Accept with Revision	Explains the appropriateness of the selected data gathering methods and their alignment with the nature and purpose of the research
5. The study explains the appropriateness of the selected data gathering methods and their alignment with the nature and purpose of the research.	86%	"This could be incorporated in other items" (V1).	Accept with Revision	
6. The research instruments (e.g., test, scale, survey	71%	"Include also the validity and reliability checking" (V1).	Accept with Revision	Describes the validity and reliability of the research instruments (e.g., test, scale, survey

Table 10: Extent of Validity of the Criterion Items in the Action Research Method

questionnaire, checklist,		"The validity and reliability are		questionnaire, checklist,
<i>interview guide, etc.)</i> are		described." (V2).		interview guide, etc.)
described in terms of				Attaches the research
their appropriateness				instruments in the
for obtaining the desired				Appendix
data/information.				
7. The appropriateness	71%	"Transfer to the first part of the	Accept	Discusses thoroughly the
of the research design to		method" (V1).	with	appropriateness of the
the nature of the		"Discusses the	Revision	research design to the
problem and its		appropriateness to the nature		nature of the problem,
expected output is		of the problem, innovation and		innovation, and its
thoroughly discussed.		its expected output" (V6).		expected output
thorouginy discussed.		lis expected output (vo).		εχρετίεα δαιράι
8. The data gathering	100%		Accept	Discusses the data
procedure is thoroughly			-	gathering procedure in a
discussed in a logical				logical order
order.				
9. The ethical standards	86%	"Append the informed consent	Accept	Discusses thoroughly the
of doing research	0070	form" (V7).	with	ethical standards of
(informed consent/		<i>joint</i> (<i>vij</i> .	Revision	research (informed
assent, voluntary			ite vision	consent/assent, voluntary
participation, anonymity,				participation, anonymity,
confidentiality,				confidentiality, protection
protection of intellectual				of intellectual and cultural
and cultural property				property rights, protection
rights, protection from				from harm, etc.)
<i>harm, etc.)</i> are				Attaches the informed
considered in data				assent/consent form in the
gathering.				Appendix
10. The statistical tools	86%	"Discuss the appropriate	Accept	Discusses the appropriate
(descriptive/inferential		statistical treatment" (V7).	with	statistical treatment
statistics) or data			Revision	(descriptive/inferential
analysis <i>(thematic/</i>				statistics for quantitative
content analysis, etc.)				study) or qualitative data
are appropriate to the				analysis (thematic/content
problem/issue and				analysis, process tracing,
aligned to the research				etc.) that are aligned to the
design.				research question and
ucoigii.				-
				design

Analyzing the extent of validity of the SET-CAR criteria in the results and discussion of an action research project delves into the heart of the findings and interpretations derived from the research. Table 11 indicates the 86% acceptability of the 5 proposed items which were all accepted with revision. The 9 validated criterion items signify a detailed examination of the criteria used to evaluate the results and discussion section of action research projects.

Criterion Item	Accept- ability	Comments/ Suggestions of Validators	Decision	Validated Criterion Item
1. The discussion of results reiterates the research problems.	86%	"Address the research questions comprehensively" (V3)	Accept with Revision	Addresses the research questions critically and comprehensively
2. The discussion of results explains the meaning of the findings and why they are essential.	86%	"Explain the meaning of findings based on the research questions" (V4).	Accept with Revision	Presents accurate findings in line with the research questions and results of the data analysis (i.e., using tables or figures)

3. The discussion of results conveys the findings to similar studies.	86%	"What if findings are not similar to existing studies? It does not mean that the discussion is poor because findings are not similar to other studies" (V2).	Accept with Revision	Explains the meaning of the results and why they are essential Links the findings to previous research or provides an explanation of new results Reports new results and knowledge that are falsifiable
4. The discussion of results presents the theoretical implication (potential contribution of the study to the existing knowledge by confirming or refuting a theory) and the practical implication (potential contribution of the study in real-life contexts, future research, or practice in general) of the findings of the study.	86%	"Discuss also the contribution of the study to the teachers, researchers, and other stakeholders" (V5).	Accept with Revision	Discusses the theoretical implication (potential contribution of the study to the existing knowledge or theory) and the practical implication (potential contribution of the study in real-life contexts, future research, or practice in general) of the findings of the study Discusses the contribution of the results to the professional development of the researchers, colleagues, decision- makers, or the welfare of other education stakeholders
5. The study recognizes the scope and limitation of the action research findings.	86%	"Present also future directions of the research" (V1).	Accept with Revision	Recognizes the scope and limitation of the research findings Presents directions for future research

Determining the extent of validity of the SET-CAR criteria in the conclusion and recommendations of Table 12 shows 100% acceptability of the 5 criterion items. This outcome denotes the degree to which these criterion items effectively measure and represent the essential elements of the outcomes, findings, and interpretations in the context of action research.

 Table 12: Extent of Validity of the Criterion Items in the Conclusion and Recommendations

Accommentations					
Criterion Item	Accept- ability	Comments/ Suggestions	Decision	Validated Criterion Item	
1. The conclusion and recommendations highlights the summary of the findings based on the research questions	100%		Accept	Highlights the summary of the findings based on the research questions	
2. It describes the effectiveness and appropriateness of the innovation to the problem under study	100%		Accept	Describes the effectiveness and appropriateness of the innovation to the problem under study	
3. The conclusion and recommendations summarizes the study's	100%		Accept	Summarizes the study's contribution to knowledge (theoretical	

contribution to knowledge (theoretical implication) and improvement of practice (practical implication)			implication) and improvement of practice (practical implication)
4. The conclusion and recommendations shows the reflection and intention of the researcher/s to apply their learnings to improve existing practices	100%	Accept	Shows the reflection and intention of the researcher/s to apply their learnings to improve existing practices
5. It recommends policy inputs/ formulation/ reformulation based on the findings of the study	100%	Accept	Recommends policy inputs/formulation/ reformulation based on the findings of the study

With 86% acceptability, Table 13 denotes that 1 validator suggested to revise the proposed criterion item for action plan. The validated criterion item specifies the comprehensive plan of the steps and strategies researchers will employ to implement the chosen innovation and intervention, addressing the identified problem and achieving the research goals.

Table 13: Extent of Validity of the Criterion Items in the Action Plan

Criterion Item	Accept-	Comments/	Decision	Validated Criterion			
	ability	Suggestions of Validators		Item			
1. The study	86%	"The study presents a clear	Accept	Presents a clear and			
presents a clear and		and feasible comprehensive	with	feasible comprehensive			
feasible action plan.		action plan" (V6)	Revision	action plan			

Table 14 reflects the 86% acceptability of the proposed criterion item for references. The validated criterion item specifies the completeness and correctness of the references, by citing all the sources in the in-text citations.

Table 14: Extent of Validity of the Criterion Items in the References

Criterion Item	Accept-	Comments/	Decision	Validated Criterion
	ability	Suggestions of Validators		Item
1. The listed	86%	"Stress also on the	Accept	Acknowledges the
references		completeness coupled with	with	sources correctly and
acknowledge the		correctness" (V1)	Revision	completely and
sources properly, and				presents the in-text
the in-text citations				citations appropriately
are presented				following the 17 th
correctly following the				edition of the Chicago
Chicago Manual of				Manual of Style (CMOS)
Style (CMoS) as				as modified by DepEd
modified by DepEd.				

Table 15 reveals the 100% acceptability of the 2 proposed criterion items for financial report. The validated criterion item requires documentation of the details and breakdown of research costs and adherence to the funding needs and deliverables based on BERF guidelines.

Criterion Item	Accept- ability	Comments/ Suggestions of Validators	Decision	Validated Criterion Item
1. The financial report documents and communicates the details and breakdown of research costs.	100%		Accept	Documents and communicates the details and breakdown of research costs
2. The financial report reflects items and costs that adhere to the funding needs of the research and BERF guidelines.	100%		Accept	Reflects items and costs that adhere to the funding needs of the research and BERF guidelines

Table 15: Extent of Validity of the Criterion Items in the Financial Report

The Enhanced SET-CAR. After the content validation process, the criterion items of the developed SET-CAR were enhanced. Validating the content of the SET-CAR is essential to ensure that the tool produces reliable and accurate results, maintains its credibility, and contributes meaningfully to the improvement and development of action research practices. Table 16 presents the checklist to be accomplished by researchers of DepEd-Region IX and to be evaluated by research managers to ensure the quality of the completed action research manuscript.

Table 16: Self-Evaluation Tool for Completed Action Research (SET-CAR)

Research Title:

Research Agenda Category:	Check <u>only one</u> main research theme: [] Teaching and Learning [] Child Protection [] Human Resource Development	Check <u>up to one</u> cross-cutting theme, if applicable: [] DRRM [] Gender and Development [] Inclusive Education
Funding Year:	[] Governance	
Region/Schools Division Office: School and/or Functional Division Conducted: Name/Position/Contact Details [Author 1/Lead Proponent] Name/Position/Contact Details [Author 2] Name/Position/Contact Details [Author 3] Date of Evaluation:		

Instructions: Put a checkmark in the appropriate column beside each criterion item. If your answer is YES, specify the pages and paragraph number/s where the criterion items are presented and satisfied.

Criterion Items	Yes	No	Specific pages and paragraph
-----------------	-----	----	---------------------------------

			number/s where the items are presented and satisfied
Title			
1. Represents what the study is all about			
2. Presents the innovation, intervention, or strategy to solve the problem or issue as its focus of inquiry			
3. Contains clear and concise words			
4. Comprises not more than 12 substantive words (except for acronyms and excluding the, of, in, and, to, for, into, etc.)			
Note: At least 3 criterion items must be marked YES to indicate compliance with this part.	Complied	Not Complied	
Abstract			
1. Describes the general statement of the problem or objectives/purposes of the research			
2. Presents the research methods (e.g., research design, participants and/or other sources of data and information, sampling technique, research environment and timeline, research instruments, data gathering methods, and data analysis)			
3. Highlights the summary of the research findings, conclusions, implications, and recommendations			
4. Contains 200 – 250 words			
Note: All criterion items must be marked YES to indicate compliance with this part.	Complied	Not Complied	
Keywords			
1. Captures the most relevant aspects of the study			
2. Contains three to five keywords, phrases, or acronyms separated by semicolons and arranged alphabetically			
Note: All criterion items must be marked YES to indicate compliance with this part.	Complied	Not Complied	
Acknowledgment			
1. Acknowledges the people who helped or contributed to the completion of the research			
2. Acknowledges the research funding, sponsoring institution, support staff, and research participants who have helped complete the research			
Note: At least 1 criterion item must be marked YES to indicate compliance with this part.	Complied	Not Complied	
Context and Rationale	1	r	ı
1. Provides a comprehensive discussion of the nature and relevance of the identified problem or issue (e.g., cite some legal basis and relevant literature)			

3. Emphasizes the need to conduct research by showing			
an in-depth and critical analysis of the situation (e.g.,			
presenting data reports)			
4. Discusses the significance and relevance of the			
research problem to the needs and welfare of students			
and other education stakeholders			
5. Presents a well-organized review of literature that			
supports the identified problem			
6. Shows a rigorous literature review by citing the key			
players in the research conversation			
7. States clearly the main research aims/objectives			
8. Highlights the policy implications relevant for planning			
and development			
*			
9. Discusses the scope and limitation of the study			
thoroughly	Osmuliad	Nat	
Note: At least 8 criterion items must be marked YES to	Complied	Not Complied	
indicate compliance with this part.		complicu	
indicate compnance with this part.			
Innovation, Intervention, and Strategy			
	1	1	
1. Provides a detailed explanation of the rationale and			
extent of the innovation, intervention, and strategy to			
address the problem or issue			
2. Presents personal reflection to make a compelling case			
for the innovation, intervention, and strategy			
3. Discusses the limitation of the innovation, intervention,			
and strategy			
4. States the activities to be undertaken to address the			
problem or issue plausibly			
5. Presents related literature supporting the innovation,			
intervention, and strategy			
6. Discusses the relevance of the innovation, intervention,			
and strategy in terms of novelty, authenticity,			
comparability, and adaptability			
comparability, and adaptability	Complied	Not	
Note: At least 5 criterion items must be marked YES to	complica	Complied	
indicate compliance with this part.		F	
Action Research Questions			
1. Restates the title or the study's overall goal			
2. Specifies the research environment, research			
participants, and timeline in the general statement			
		┨────┤	
3. Relates to the issues and challenges that the study will address			
4. Conveys the desired change or improvement by			
highlighting the innovation, intervention, and strategy			
5. Specifies logically the variables of the quantitative study			
	Complied	Not	
5. Specifies logically the variables of the quantitative study or the sub-questions of a qualitative inquiry	Complied	Not Complied	
5. Specifies logically the variables of the quantitative study	Complied	Not Complied	

Action Research Method			
1. Discusses thoroughly the appropriateness of the			
research design to the nature of the problem,			
innovation, and its expected output			
2. Explains the chosen research design and resulting			
research procedures that other researchers carrying			
out related work can understand			
3. Provides details about the participants and/or other			
sources of data and information (e.g., number,			
characteristics, etc.)			
4. Discusses the chosen sample/sampling procedure and			
provides a clear rationale for the inclusion of			
participants and data saturation (for qualitative study)			
5. Describes the validity and reliability of the research			
instruments (e.g., test, scale, survey questionnaire,			
checklist, interview guide, etc.)			
6. Attaches the research instruments in the Appendix			
7. Explains the appropriateness of the selected data			
gathering methods and their alignment with the nature			
and purpose of the research			
8. Discusses the data gathering procedure in a logical			
order			
9. Discusses thoroughly the ethical standards of research			
(informed consent/assent, voluntary participation,			
anonymity, confidentiality, protection of intellectual and			
cultural property rights, protection from harm, etc.)			
10. Attaches the informed assent/consent form in the			
Appendix			
11. Discusses the appropriate statistical treatment			
(descriptive/inferential statistics for quantitative study)			
or qualitative data analysis (thematic/content analysis,			
process tracing, etc.) that are aligned to the research			
question and design			
	Complied	Not	
Note: At least 10 criterion items must be marked YES to		Complied	
indicate compliance with this part.			
Results and Discussion			
1. Addresses the research questions critically and			
comprehensively			
2. Presents accurate findings in line with the research			
questions and results of the data analysis (i.e., using			
tables or figures)			
3. Reports new results and knowledge that are falsifiable			
4. Explains the meaning of the results and why they are essential			
5. Links the findings to previous research or provides an			
explanation of new results 6. Discusses the contribution of the results to the			
professional development of the researchers, colleagues, decision-makers, or the welfare of other education			
stakeholders			
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	-		
7. Discusses the theoretical implication (potential			
contribution of the study to the existing knowledge or			
theory) and the practical implication (potential			
contribution of the study in real-life contexts, future			
research, or practice in general) of the findings of the			
study			
8. Recognizes the scope and limitation of the research findings			
9. Presents directions for future research			
	Complied	Not	
Note: At least 8 criterion items must be marked YES to indicate compliance with this part.		Complied	
indicate compliance with this part.			
Conclusion and Recommendation			
1. Highlights the summary of the findings based on the research questions			
2. Describes the effectiveness and appropriateness of the innovation to the problem under study			
3. Summarizes the study's contribution to knowledge		<u> </u>	
(theoretical implication) and improvement of practice (practical implication)			
4. Shows the reflection and intention of the researcher/s to			
apply their learnings to improve existing practices			
5. Recommends policy inputs/formulation/ reformulation			
based on the findings of the study			
Saboa on the intange of the staay	Complied	Not	
Note: At least 4 criterion items must be marked YES to indicate compliance with this part.		Complied	
Action Plan			
1. Presents a clear and feasible comprehensive action plan			
	Committeed.	Not	
Note: This criterion item must be marked YES to indicate compliance with this part.	Complied	Complied	
References			
5		1	
1. Acknowledges the sources correctly and completely and			
presents the in-text citations appropriately following			
the 17 th edition of the Chicago Manual of Style (CMOS)			
as modified by DepEd	Compliad	Nat	
Note: This criterion item must be marked YES to indicate compliance with this part.	Complied	Not Complied	
Financial Report			
1. Documents and communicates the details and		├	
breakdown of research costs			
2. Reflects items and costs that adhere to the funding needs of the research and BERF guidelines			
Note: All criterion items must be marked YES to indicate	Complied	Not Complied	
compliance with this part.			
	1		

Feedback on SET-CAR from Teacher-Researchers and Research Managers. The use of the Self-Evaluation Tool for Completed Action Research (SET-CAR) represents a valuable approach in the realm of action research. Gathering feedback from researchers and research managers on the effectiveness of SET-CAR and how significant this tool is for action researchers to reflect on their projects. Additionally, feedback on how the tool contributes to knowledge generation and contribution to research quality is crucial. The thematic analysis of the feedback on SET-CAR generated four themes, namely (1) SET-CAR provides guidance in doing action research, (2) SET-CAR prompts deeper insights and reflection in research, (3) SET-CAR presents comprehensive and user-friendly content, and (4) SET-CAR promotes an effective way of enhancing manuscripts and research skills.

Theme 1: SET-CAR provides guidance in doing action research. SET-CAR plays a crucial role in guiding researchers through the action research process by providing clear criteria, facilitating the writing process, providing a roadmap, and encouraging continuous improvement. By embracing SET-CAR's guidance, Teacher-Researchers (TR) were able to navigate the complexities of action research and enhance the quality of their work based on the transcripts presented below.

"It gave me clear criteria of what to achieve in every part of my AR" TR-1. "SET-CAR gives me the idea of how to craft each part of the AR. It gives me less hassle in thinking what should be put on every part of the paper" TR-2. "SET-CAR guided me in doing my research by serving as my research's roadmap" TR-3. "The tool was very helpful for me to be guided in my action research" TR-4. "The self-evaluation tool has guided me in refining my research" TR-5. "The self-evaluation tool guides me in accomplishing my action research" TR-7. "The SET-CAR was invaluable in guiding my action research" TR-8.

The Research Managers (RM) confirmed how SET-CAR guides researchers in completing their action research.

"It ensures that their research is in accordance with the DepEd standards" RM-1. "The SET CAR provides guidance to researchers in crafting their research work, encompassing technical formatting and content. By outlining specific elements to be evaluated, these tools offer clarity to reviewers, helping them focus on key aspects of the manuscript" RM-2.

"It gives the right direction to the researchers" RM-3.

Theme 2: SET-CAR prompts deeper insights and reflection in research. SET-CAR transcends the realm of mere evaluation. It serves as a powerful tool for deep reflection, widening research perspectives, and transforming insights into action. By promoting critical reflection and actionable knowledge, SET-CAR empowers researchers to unlock invaluable insights that drive positive change and enrich the entire field of action research. The transcripts of the feedback from Teacher-Researchers (TR) are presented below.

"As a newbie in research, the SET-CAR widened my understanding of how to write my action research properly" TR-3.

"It helped me obtain deeper insights and helped me set targets for future research improvement" TR-5.

"It helps me reflect what is lacking in my action research and promotes critical thinking" TR-7.

"It fosters a structured approach to self-assessment, leading to deeper insights" TR-8.

The Research Managers (RM) established how SET-CAR promotes deeper insights and reflection among researchers.

"It provides common understanding of what to include and look for in the manuscripts" RM-2.

"SET-CAR promotes deeper insights and widens perspectives among researchers" RM-3.

Theme 3: SET-CAR presents comprehensive and user-friendly content. SET-CAR aspires to be a comprehensive and user-friendly tool that empowers researchers to critically evaluate and learn from their action research projects. The comprehensiveness and user-friendly nature of SET-CAR are achieved through structured organization of the manuscript, clear guidelines, reflective checklists, a user-friendly format, and adaptability to different contexts. The following presents the feedback teachers engaged in action research.

"It is clear, concise, and very friendly" TR-1.

"The content is comprehensive and easy to understand" TR-2.

"Its content is comprehensible while its format is easy to accomplish making it friendly to neophytes in research" TR-3.

"This tool was created comprehensively, and it makes us successful in conducting our research" TR-4.

"The SET-CAR stands out for its comprehensive content and user-friendly approach" TR-6. "The self-evaluation tool guides me in accomplishing my action research" TR-7.

"Its strength lies in its detailed criteria, enabling researchers to systematically assess each aspect of their work" TR-8.

The Research Managers (RM) accentuated that the SET-CAR provides a structured framework to evaluate research output, ensuring a comprehensive and systematic review.

"It comprises a comprehensive set of criteria or parameters that cover various aspects of the action research. It is easy to use as it provides statements for researchers to evaluate their work" RM-1.

"The content of the SET CAR is relevant since the criterion items are based on the requirements set by DepEd CO per research management guidelines and quality control mechanisms. By using the tool in the evaluation of manuscripts, reviewers can ensure a more rigorous and comprehensive assessment of research manuscripts, ultimately contributing to producing quality research outputs. It is highly usable not just to the researchers but also to research coordinators at the school, district, division, and regional levels, as it provides a common understanding of what to include and look for in the manuscripts" RM-2.

"It is a complete package if you are going to conduct AR" RM-3.

Theme 4: SET-CAR promotes an effective way of enhancing manuscripts and research skills. SET-CAR promotes an effective way of enhancing manuscripts and honing research skills by providing guidance in manuscript development, enhancing clarity and coherence, promoting methodological rigor, fostering continuous improvement, and facilitating self-review. Through these mechanisms, SET-CAR contributes to the production of high-quality action research manuscripts and the continuous growth of researchers' skills based on the quotes from the participants below.

"Indeed, very effective. My manuscript became more comprehensive and technical. With SET-CAR, I was able to improve my research skills" TR-1.

"SET-CAR is very effective in helping me evaluate and improve my action research" TR-3. "The SET-CAR was effective. It allows me to see my shortcomings in my action research paper" TR-4.

"It helped me form better writing habits that will help me produce better work" TR-5. "The SET-CAR is considered highly effective in aiding researchers to evaluate and enhance their action research. The SET-CAR has been instrumental in refining my research approach by providing a structured evaluation framework" TR-6. *"It is effective because you have the AR framework. It becomes the blueprint for conducting AR" TR-7.*

The Research Managers (MR) underscored the effectiveness of SET-CAR in enhancing manuscripts and research skills of researchers.

"Very effective! It ensures that their research is of quality" RM-1.

"The SET CAR is highly effective and significantly aids researchers in assessing and enhancing their action research endeavors. It serves as a quality assurance tool, ensuring that all essential elements of action research are met. The SET-CAR serves as a valuable tool for me as a research manager in the evaluation process and in providing technical assistance to the researchers" RM-2.

"SET-CAR is a very useful guide in enhancing AR" RM-3.

The content validation process ensured the validity of the criterion items of the Self-Evaluation Tool for Completed Action Research (SET-CAR). Overall, SET-CAR offers huge help for researchers and research managers in assessing the compliance of the action research manuscripts to specified standards of the Department of Education. It also addresses the problem in DepEd-Region IX of receiving manuscripts from the 8 Schools Division Offices with different formats and sections. The criterion items of the checklist help the researchers comply with and satisfy the minimum standards for the following sections of the manuscript: Title, Keywords, Acknowledgment, Context and Rationale, Innovation, Intervention, and Strategy, Action Research Questions, Action Plan, References, and Financial Report. Hence, this innovation and intervention ensures the quality of action research outputs.

Based on the results of this inquiry, the use of SET-CAR in doing action research affords guidance to researchers, addresses researchers' difficulties in doing research, affords a mechanism to assess and reflect on the research process, exposes strengths and areas for improvement, and promotes continuous improvement. These positive outcomes support the policies promoting the Culture of Research and managing research initiatives to improve support mechanisms for capacity building and action research advocacy based on DepEd Order No. 39, s. 2016 (Adoption of the Basic Education Research Agenda) and DepEd Order No. 16, s. 2017 (Research Management Guidelines). The implementation of this quality-assurance mechanism in Zamboanga Peninsula affirms the significance of embracing action research contributing to a culture of continuous improvement for teachers (Manfra 2019, 163). Moreover, the results provide empirical evidence that action research encourages educators to reflect on their practices, set goals for improvement, develop critical thinking and problem-solving skills, and actively promote professionalization (Jingjing 2014, 30; Messikh 2020, 482).

Studies pinpointed that public school teachers lack sufficient practical knowledge and need to improve their abilities to carry out action research (Oestar and Marzo 2022, 99). The feedback of the researchers validated this circumstance as they accentuated the significance and relevance of the SET-CAR in guiding them in with the research process, engaging in reflexive critique, and honing their research skills and their completed manuscript. By and large, SET-CAR is a valuable tool for teachers, researchers, and research managers in ensuring quality control of action research.

Conclusion and Recommendations

The study aimed to formulate, validate, and evaluate the implementation of the Self-Evaluation Tool for Completed Action Research (SET-CAR) as an evaluation tool for

researchers in doing their action research. After careful validation and taking into account the recommendations of expert validators, the proposed criterion items were generally acceptable and accepted with revision. The enhanced criterion items of SET-CAR were deemed appropriate and sufficient in representing the minimum standards for the following sections of the manuscript: Title, Keywords, Acknowledgment, Context and Rationale, Innovation, Intervention, and Strategy, Action Research Questions, Action Research Method, Results and Discussion, Conclusion and Recommendation, Action Plan, References, and Financial Report. Based on the feedback of teacherresearchers and research managers, the SET-CAR was considered a significant evaluation tool for action research and provided relevant contribution to research quality. Four topics emerged from the thematic analysis of the SET-CAR feedback: (1) SET-CAR provides guidance in doing action research, (2) SET-CAR prompts deeper insights and reflection in research, (3) SET-CAR presents comprehensive and userfriendly content, and (4) SET-CAR promotes an effective way of enhancing manuscripts and research skills. Based on these findings, it is clear that using SET-CAR in action research provides researchers with direction, addresses challenges they face while conducting research, provides a framework for evaluating and reflecting on the research process, highlights areas of strength and weakness, and encourages ongoing improvement.

Considering the results of this inquiry, the following recommendations were forwarded:

- 1. Explore the reliability of the criterion items of the SET-CAR.
- 2. Conduct continuous monitoring and evaluation of the use of SET-CAR and make necessary improvements, if needed.
- 3. Explore the effectiveness of SET-CAR by gathering quantitative data and using statistical methods and analysis.
- 4. Incorporate stakeholder perspectives on evaluating the effectiveness of SET-CAR.
- 5. Policymakers can rely on the empirical findings of this inquiry to inform their decisions and focus on evidence-based interventions for inclusion in policy frameworks.

Action Plan

Detailed Activities	Target Date	Persons Involved	Materials Needed	Budgetary Requirement (Optional)	Source of Funds
A. Before the Impler	nentation				
1. Development of the SET-CAR	Feb. 2022	Research Focal	Laptop	None	N/A
2. Validation of the SET-CAR	Feb March 2022	Validators	Laptop	None	N/A
3. Pilot Testing of the SET-CAR	Feb March 2022	Research Focal Researchers	Laptop Printouts	None	N/A
4. Refining the SET- CAR	Feb March 2022	Research Focal	Laptop	None	N/A
5. Orientation and Rollout	March 2022	Research Focal Researchers SEPS-PR	Supplies Laptop Projector	78,000	MOOE
B. During the Imple					1
1. Integration of the SET-CAR in action research quality control process	April-Dec. 2022	Researchers RRC SDRC SEPS-PR	Laptop SET-CAR	None	N/A
2. Monitoring the implementation process	April-Dec. 2022	Research Focal	Laptop	None	N/A
3. Establish a support system for addressing user inquiries or issues.	April-Dec. 2022	Research Focal	Laptop Guidelines	None	N/A
C. After the Impleme			· · · · · · · · · · · · · · · · · · ·		1
1. Gather feedback from teacher- researchers and research managers	JanDec. 2023	Research Focal Researchers SEPS-PR	Laptop Interview Guide	None	N/A
2. Compilation and analysis of the data	JanDec. 2023	Research Focal	Laptop	None	N/A

References

- David, Clarissa C., Jose Ramon G. Albert, and Jana Flor V. Vizmanos. 2019. "Pressures on public school teachers and implications on quality." *Philippine Institute for Development* Studies (PIDS), No. 2019-01. https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidspn1901.pdf
- DepEd Memorandum No. 028, s. 2022. Adopting Tools to Improve Quality Management of Completed Research at the Department of Education. Department of Education, Philippines.
- DepEd Order No. 39, s. 2016. Adoption of the Basic Education Research Agenda. Department of Education, Philippines.
- DepEd Order No. 16, s. 2017. Research Management Guidelines. Department of Education, Philippines.
- DepEd Order No. 014, s. 2022. Adoption of E-Saliksik: The DepEd Research Portal. Department of Education, Philippines.
- Filippetti, Andrea. 2011. "Innovation modes and design as a source of innovation: a firmlevel analysis." European Journal of Innovation Management 14, no. 1: 5-26. <u>https://doi.org/10.1108/14601061111104670</u>.
- Gibbs, Paul, Patricia Cartney, Kate Wilkinson, John Parkinson, Sheila Cunningham, Carl James-Reynolds, Tarek Zoubir et al. 2011. "Literature review on the use of action research in higher education." *Educational action research* 25, no. 1: 3-22. https://doi.org/10.1080/09650792.2015.1124046.
- Husamah, H., Hadi Suwono, Hadi Nur, and Agus Dharmawan. 2022. "Global trend of research and development in education in the pandemic era: A systematic literature review." *Research and Development in Education (RaDEn)* 2, no. 2: 89-100. <u>https://doi.org/10.22219/raden.v2i2.23224</u>.
- Jingjing, Hao. 2014. "On action research and professional development of college English teachers." In 2014 International Conference on Economic Management and Social Science (ICEMSS 2014), pp. 30-33. Atlantis Press. https://doi.org/10.2991/emss-14.2014.7.
- Kozma, C. M. 1999. "Turning data into information." *Managed care interface* 12, no. 2: 81-82.

https://www.sciencedirect.com/science/article/abs/pii/S0003999318300479.

- Laudonia, I., Mamlok-Naaman, R., Abels, S., & Eilks, I. 2018. Action research in science education – an analytical review of the literature. *Educational Action Research*, 26, 480 - 495. <u>https://doi.org/10.1080/09650792.2017.1358198</u>.
- Manfra, Meghan McGlinn. 2019. "Action research and systematic, intentional change in teaching practice." *Review of Research in Education* 43, no. 1: 163-196. https://doi.org/10.3102/0091732X18821132.
- Messikh, Djihed. 2020. "A systematic review of the outcomes of using action research in education." *Arab World English Journal (AWEJ)* 11, no. 1: 482-488. <u>https://doi.org/10.24093/awej/vol11no1.32</u>.
- Nichols Hess, Amanda, and Katie Greer. 2016. "Designing for engagement: Using the ADDIE model to integrate high-impact practices into an online information literacy course." Communications in information literacy 10, no. 2: 264-282. https://doi.org/10.15760/COMMINFOLIT.2016.10.2.27.
- Oestar, Jennifer, and Crystal Marzo. 2022. "Teachers as researchers: Skills and challenges in action research making." *International Journal of Theory and Application in Elementary and Secondary School Education* 4, no. 2): 95-104.

https://www.researchgate.net/publication/364954616_Teachers_as_Researche rs_Skills_and_Challenges_in_Action_Research_Making.

Peterson, Christine. 2003. "Bringing ADDIE to life: Instructional design at its best." Journal of Educational Multimedia and Hypermedia 12, no. 3: 227-241. https://www.learntechlib.org/p/2074/.

Republic Act No. 9155. 2001. Governance of Basic Education Act of 2001. Philippines.

Tindowen, Darin Jan, Joy Guzman, and Domer Macanang. 2019."Teachers' conception and difficulties in doing action research." *Universal Journal of Educational Research* 7, no. 8: 1787-1794. <u>https://doi.org/10.13189/UJER.2019.070817</u>.

Financial Report

The table below shows the cost expended before, during, and after the conduct of this action research.

General Descriptions	Quantity	Unit	Unit Price	Total Estimated Costs
Short Bond paper (sub. 20)	1	ream	275	300
Ink for printer	4	bottles	250	1,000
Meals and Snacks for Validators	7	pcs	1100	7,700
Total				9,000

Appendix

Informed Consent and Research Instruments

Researchers' Feedback on the Self-Evaluation Tool for Completed Action Research (SET-CAR)

Dear Participants:

We are evaluating the effectiveness of the Self-Evaluation Tool for Completed Action Research (SET-CAR). Please provide the feedback using this form. Your participation will be greatly appreciated.

Yours truly,

LEE G. BARAQUIA, EdD

Education Program Supervisor, PPRD

email address:

Privacy Notice: By signing to this, you consent to the collection of the following information: gender, age, highest educational attainment, position, and no. of years in DepEd service and other data. All information will not be shared with any third-party entity. By attending this, you hereby grant the absolute right and permission to use your data for research purposes only.

Gender: 0 Male 0 Female

Age: vears old

Highest Educational Attainment:

- 0 Bachelor's Degree
- 0 Master's Degree
- 0 Doctorate Degree

Position:_____ School/Office: No. of years in DepEd service: ____years

- No. of Research Funded by BERF:
 - 1. On a scale of 1 to 10, how satisfied are you with the use of the Self-Evaluation Tool for Completed Action Research (SET-CAR) in doing your research?
 - 2. How did the Self-Evaluation Tool for Completed Action Research (SET-CAR) guide you in doing your research?
 - 3. How would you describe the content and usability of the Self-Evaluation Tool for Completed Action Research (SET-CAR)?
 - 4. How effective is the SET-CAR in helping you evaluate and improve your action research?
 - 5. In what ways did the SET-CAR enhance your overall research experience, and would you recommend it to other researchers?

Research Managers' Feedback on the Self-Evaluation Tool for Completed Action Research (SET-CAR)

Dear Participants:

We are evaluating the effectiveness of the *Self-Evaluation Tool for Completed Action Research (SET-CAR)*. Please provide the feedback using this form. Your participation will be greatly appreciated.

Yours truly,

LEE G. BARAQUIA, EdD

Education Program Supervisor, PPRD

email address: _____

Privacy Notice: By signing to this, you consent to the collection of the following information: gender, age, highest educational attainment, position, and no. of years in DepEd service and other data. All information will not be shared with any third-party entity. By attending this, you hereby grant the absolute right and permission to use your data for research purposes only.

Gender: 0 Male 0 Female

Age: ____years old

Highest Educational Attainment:

0 Bachelor's Degree

- 0 Master's Degree
- 0 Doctorate Degree

Position:____

- 1. On a scale of 1 to 10, how satisfied are you with the use of the Self-Evaluation Tool for Completed Action Research (SET-CAR) in doing research?
- 2. How did the Self-Evaluation Tool for Completed Action Research (SET-CAR) guide the researchers in doing their research?
- 3. How would you describe the content and usability of the Self-Evaluation Tool for Completed Action Research (SET-CAR)?
- 4. How effective is the SET-CAR in helping the researchers evaluate and improve their action research?
- 5. In what ways did the SET-CAR enhance your overall experience in managing research, and would you recommend it to other research managers?