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Scholarly Inquiry Model: A Springboard for Student Learning

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Abstract

The paper investigates the scholarly inquiry approach of teaching student learning improvement of respondents in terms of inquiry structure approach, inquiry open-ended approach, inquiry problem-based approach, and inquiry guided approach. It also explores the extent of scholarly inquiry springboard learning improvement of student respondents in the aspect of planning inquiry, retrieving information inquiry, project process inquiry, and creativity skills inquiry.

Quantitative descriptive research design is employed in the study and utilizes purposive sampling techniques in gathering data. The study comprised One Hundred Twenty-Five (125) respondents only.

Results show that inquiry structure approach utilizes the course module for students to find solution to societal issues and process, inquiry open-ended approach in teaching motivates to increase learning and creative thinking, inquiry problem-based approach in teaching as an active learning technique suitable for teaching scholarly inquiry-based approach to students as centers of learning, and inquiry guided approach in teaching initiates guided learning process in advanced and experienced for sources in a distinct instructional learning offers direction, standard planning inquiry-based activities of learning integration, retrieving information inquiry assists students to retrieve and organize information through skills and strategies, project process inquiry establishes the teaching system in forming student critical thinking, culture and ability, and creativity skills inquiry provides scientific investigation and analysis of data involvement process in scholarly inquiry module as springboard learning of students.

Introduction

Scholarly inquiry model is considered a springboard for student learning. It engages student discipline in actively investigating for searching understanding knowledge especially on societal issues, problems, and challenges. It identifies generated problems and issues relevant to content process, interpretation, collection of data, and questions to provide solutions on the issues and problems. It specifies on scholarly model discipline in generic approaches for teaching and learning. It is a program designed for students preparing research writing properly. It provides exploration on inquiry-based learning and approach (Hupe, 2022, pp. 2-18) [10]. On the other hand, the scholarly inquiry model depends on implication of the module and readiness for students. They need to be motivated to explore learning experiences. Scholarly inquiry integrates knowledge and influences the faculties in various techniques and technology in teaching to better equip students with the best learning experience. It discovers ideas to enrich the learning enhancement of students as the centers of learning. It aims to identify various issues in the society for students to write and give possible solutions. Exploring ideas and innovation process assesses impact of scholarly inquiry as to deal with behavior, knowledge, and attitude of student toward the module. Integration of knowledge in scholarly inquiry develops and explores knowledge of student innovation of learning because they are being guided properly in the learning process. This includes finding ways and solutions to issues, gaps, and challenges during the process of writing an article as they emphasize critical thinking on scholarly model inquiry. Issues, challenges, gaps determine innovation learning of students (Mallillin, *et al*., 2020) [23].

On the other hand, scholarly inquiry-based learning is a pedagogical approach for students as the centers of learning. It processes the knowledge, understanding, and construct of student learners. It uncovers the subject of first-hand experience through the investigation process, asking questions, drawing of evidence-based conclusions in collaboration with the module.

It supports scholarly-inquiry approaches for student achievement. It originates from the discipline of the scholarly inquiry process of learning. It advocates an authentic and effective approach to teaching and the process of learning. It provides direction to instruction teaching and effective strategy methods. It highlights the design of scholarly integration for student support and engagement as to socio-emotional skills, higher order of thinking, and problem-solving ability. This includes various domains of learning as part of strategy and techniques in teaching. This is designed for the different activities in the scholarly inquiry model of learning. It is very timely for students to explore critical thinking and innovation for scholarly inquiry and in-depth learning. It provides different activities on the domains of learning as to affective, psychomotor, and cognitive teaching (Mallillin, 2020, pp. 1-11) [16]. Similarly, scholarly inquiry approach pedagogy provides structure in teaching to better equip students in exploring innovation and critical thinking learning processes. It explores ideas and academic performance in dealing with psychomotor, affective, and cognitive domain of learning. The approach manages students and in-depth learning for scholarly inquiry module analysis and level of comprehension details. It deals with attitude, behaviors, knowledge, and skills of students' academic performance (Mallillin, et al., 2021).

Moreover, the models of scholarly-based inquiry learning are focused in an open inquiry guided learning process, structure, and confirmation. It guides students on proper techniques and styles in writing through citations, references, and searching in the google engine for possible topics to be explored in the society. It is a teaching method for inquiry-based learning to provide students a better opportunity to learn in the classroom. It leads students to explore and investigate questions for the research process. It confirms students for proper structure in the scholarly inquiry writing process. It measures performance of students and teaching based on the output of the module. This relies on the faculty who manages to incorporate the learning process of innovation and creative thinking among students. Scholarly model inquiry learning is equipped with the trends of teaching in shaping and molding the learner's mind. The standard process is based on competency of faculty in teaching and learning process which includes contribution of discipline and distinction success of the module (Mallillin, & Mallillin, 2019) [22]. In contrast, it examines learning and teaching intervention of scholarly inquiry module implementation processes such as student performance, learning activities, direct instructions, learning reflection, and student interest as part of the module. It contributes to identifying teaching and learning intervention in adapting the model teaching theory in the educational setting as to faculty being resourceful, effective, honest, creative, adaptable, enthusiastic, and talented. The scholarly inquiry model encourages teachers to provide better learning for students, open communication on inquiry in sharing knowledge and opinion inside the classroom (Mallillin, 2022, pp. 99-121) [19].

Similarly, the benefits of scholarly inquiry practice the skills of students in research areas as part of the curriculum course module. It reflects the goal of progress towards writing research, communication, and answering possible inquiry-based learning. It helps students to identify the gaps, issues, and challenges on the basic understanding of scholarly inquiry-based learning. It prompts deeper creative thinking

on the topic to be explored. It helps to discover complex topics and creative thinking. It involves facilitation, planning, and iteration improvement. It benefits students especially on the proper implementation of the learning process in teaching pedagogy as a springboard for learning. It presents the trends in teaching scholarly inquiry models in the educational setting. It explores design in teaching pedagogy, academic competency and design process of scholarly inquiry model. It collaborates learning among students. It improves flexibility of learning based on the needs of students as the centers of learning. It also enhances professional skills of faculties adequacy for learning dynamic improvement (Mallillin, et al., 2020) [23]. It provides a diverse pedagogy in teaching scholarly inquiry that can be understood and explored by students. It prepares teachers to be vigilant and observant in the teaching and learning process. As educators, planning, controlling, leading, and coordinating are necessary parts of scholarly inquiry development in the academic performance of the learners. It helps students to be effective in the springboard of learning. It develops benefits in scholarly inquiry in promotional content set in the modules. This has to do with the content knowledge of scholarly inquiry (Kim, 2022, pp. 61-79) [14].

Lastly, scholarly inquiry springboard of learning offers and develops assessment and lesson aligned standard of learning, classroom tested resources as to formative assessment process, and student-centered instructions. It supports teachers to differentiate various tools and resources in teaching and learning. It assists students to be ready from all challenges in the learning process which features various instructional skills, resources, and teaching management. It provides adjustment on the learning process based on the needs of students as the centers of learning. It is an interactive program for scholarly inquiry modules that can be accessible for interactive learning. It facilitates teaching to customize lessons and plans to report progress, group discussion, small group discussion, pair group discussion to correlate standards in teaching and learning. It contributes to the professional development of faculty teachers and skills in the right approach to education and learning such as acquiring knowledge skills, reflection skills, standard requirement skills, effective skills, and observed model skills in teaching and learning (Mallillin, & Laurel, 2022) [21]. Hence, it deliberates blended teaching sustainability of learning scholarly inquiry perspectives. It is a lifelong process of sustainable development in education as part of the integral policy of scholarly inquiry model. It examines implementation and deliberation, learning engagement and performance of students. It adopts a dimension of scholarly inquiry model in learning facilitation. It combines teaching technology in discovering the issues, gaps, and challenges for scholarly inquiry model teaching and learning. It leads to engagement of creating student centered learning (Chen, 2022) [6].

Statement of the Problem
1. What is the scholarly inquiry approach of teaching student learning improvement of the respondents in terms of
   1.1 Inquiry structure approach,
   1.2 Inquiry open-ended approach,
   1.3 Inquiry problem-based approach, and
   1.4 Inquiry guided approach?

2. What is the extent of scholarly inquiry springboard learning improvement of student among the respondents in the aspect of
   1.1 Planning inquiry,
   1.2 Retrieving information inquiry,
   1.3 Project process inquiry, and
   1.4 Creativity skills inquiry?

3. Is there a significant correlation between the scholarly inquiry approach of teaching student learning improvement and the extent of scholarly inquiry springboard learning improvement of students among the respondents?

Hypothesis:
There is no significant correlation between the scholarly inquiry approach of teaching student learning improvement and the extent of scholarly inquiry springboard learning improvement of students among the respondents.

Research Methods
Quantitative research description is utilized in the study. It measures and quantifies the scholarly inquiry approach of teaching student learning improvement of the respondents in terms of inquiry structure approach, inquiry open-ended approach, inquiry problem-based approach, and inquiry guided approach. It includes measures of the extent of scholarly inquiry, springboard learning improvement of students among the respondents in the aspect of planning inquiry, retrieving information inquiry, project process inquiry, and creativity skills inquiry. It also tests the significant correlation between the scholarly inquiry approach of teaching student learning improvement and the extent of scholarly inquiry springboard learning improvement of students among the respondents. It describes the important characteristics of quantitative research (Duckett, 2021, pp. 456-463) [7].

Sampling Techniques
Purposive sampling is utilized in selecting the sample size and population of the scholarly inquiry model process. It involves knowledge and systematic research data collection and organization. It interprets and analyzes the sample population set criteria of the study. It is innovative and creative in providing the sampling techniques and population size. It provides systematized inquiry to control the description of the sample population and size in the phenomenon of the study. It is the process to analyze and utilization of collected information and understanding of the sampling techniques. It defines proper gathering of samples on scholarly inquiry models as springboard learning and procedures (Obilor 2023) [24].

Participants of the Study
The subjects of the study are the college students from the selected Higher Educational Institution (HEI) in the private University in the Philippines. They are officially enrolled in Scholarly Inquiry subjects as part of the curriculum in the General Education modules. The study comprised One Hundred Twenty-Five (125) respondents only.

Results
1. What is the scholarly inquiry approach of teaching student learning improvement of the respondents in terms of inquiry structure approach, inquiry open-ended approach, inquiry problem-based approach, and inquiry guided approach?

Table 1: Inquiry Structure Approach in Teaching

Indicators	WM	I	R
1. It is the sequential process to assist the learners in investigating real-world problems.	3.73	A	5
2. It is a kind of inquiry-based learning utilized in the course module for students to find solutions to societal issues and processes.	4.21	SA	1.5
3. It provides goals and clear assessment on objectives and motives of the course as to performance, product and presentation.	3.37	MA	6
4. It designs the module lesson to provide instruction and accountable lessons of student creative thinking.	4.08	A	3
5. It maps the necessary opportunity of the lesson through activity inquiry classroom lessons explicitly.	4.21	SA	1.5
6. Reflects rapidly the critical part of inquiry scholarly structure in the module for effective learning process.	3.89	A	4
Average Weighted Mean	**3.915**	A	
Standard Deviation	**0.326**		

Table 1 presents the weighted mean and the corresponding interpretation on the scholarly inquiry approach of teaching student learning improvement of the respondents in terms of inquiry structure approach.
It shows that "It is a kind of inquiry-based learning utilized in the course module for students to find solution to societal issues and process", and "It maps necessary opportunity of the lesson through activity inquiry classroom lesson explicitly", with a weighted mean of 4.21 or Strongly Agree which means that inquiry structure approach in teaching is highly observed. On the other hand, it also shows that "It provides goals and clear assessment on objectives and motives of the course as to performance, product and presentation", with a weighted mean of 3.37 or Moderately Agree which means inquiry structure approach in teaching is limited. The overall average weighted mean is 3.915 (SD=0.326) or Agree on scholarly inquiry approach of teaching student learning improvement in inquiry structure approach as observed among the respondents.

Table 2: Inquiry Open-Ended Approach in Teaching

Indicators	WM	I	R
1. It is free from an open-ended inquiry based-learning approach of teaching and learning that challenges critical thinking of students.	3.38	MA	6
2. It is a type of learning to explore student freedom and interest in studying utilization in-depth viewpoints.	3.81	A	3.5
3. It motivates an increased learning approach for open-ended inquiry and creative thinking of students.	4.20	SA	1
4. It emphasizes the process of investigating problems in scholarly inquiry learning.	3.81	A	3.5
5. It fosters appropriate knowledge student generated learning and challenges student centered approach.	3.69	A	5
6. It provides a full inquiry learning process in shaping and thinking as to formulation of the problem, hypothesis, and conclusion.	4.00	A	2
Average Weighted Mean	3.815	A	
Standard Deviation	0.278		

Table 2 presents the weighted mean and the corresponding interpretation on the scholarly inquiry approach of teaching student learning improvement of the respondents in terms of inquiry open-ended approach in teaching.

It shows in the table that "It motivates to increase learning approach for open-ended inquiry and creative thinking of students", with a weighted mean of 4.20 or Strongly Agree which means inquiry open-ended approach in teaching is highly observed. On the other hand, it also shows that "It is free from an open-ended inquiry based-learning approach of teaching and learning that challenges critical thinking of students", with a weighted mean of 3.38 or Moderately Agree which means inquiry open-ended approach in teaching is limited. The overall average weighted mean is 3.815 (SD=0.278) or Agree on scholarly inquiry approach of teaching student learning improvement in terms of inquiry open-ended approach in teaching as observed among the respondents.

Table 3: Inquiry Problem-Based Approach in Teaching

Indicators	WM	I	R
1. It is an inquiry-based approach to solving world problems and application of learning process.	3.57	A	5
2. It is an active learning technique suitable for teaching scholarly inquiry-based approaches suitable to students as centers of learning.	4.24	SA	1
3. It requires disciplinary knowledge and a teaching-based approach on problem solving skills, and critical thinking in a real world safe context.	3.36	MA	6
4. It provides background on dilemma and authentic context on inquiry problem-based approach and support in learning.	4.00	A	3
5. It defines learning objectives, outcome support and implementation through inquiry-based approach processes.	4.18	A	2
6. It encourages student inquiry-based learning to explore, share ideas, guided learning, and critical thinking.	3.81	A	4
Average Weighted Mean	3.86	A	
Standard Deviation	0.347		

Table 3 presents the weighted mean and the corresponding interpretation on the scholarly inquiry approach of teaching student learning improvement of the respondents in terms of inquiry problem-based approach in teaching.

It shows in the table that "It is an active learning technique suitable for teaching scholarly inquiry-based approach suitable to students as centers of learning", with a weighted mean of 4.24 or Strongly Agree which means inquiry problem-based approach in teaching is highly observed. On the other hand, it also shows that "It requires disciplinary knowledge and teaching-based approach on problem solving skills, and critical thinking in real world safe context", with a weighted mean of 3.36 or Moderately Agree which means inquiry problem-based approach in teaching is limited. The overall average weighted mean is 3.86 (SD=0.347) or Agree on scholarly inquiry approach of teaching student learning improvement in inquiry problem-based approach in teaching as observed among the respondents.

Table 4: Inquiry Guided Approach in Teaching

Indicators	WM	I	R
1. It leads to guide inquiry approach-based learning to assist students find solution to issues in the societal problems.	3.91	A	4
2. It utilizes various kinds of inquiry and guided approach in learning and benefits utilization of knowledge.	4.12	A	2.5
3. It explores teaching guides for students to develop critical thinking on issues and problems to support student skills and development.	3.38	MA	6
4. It initiates guided learning processes in advance and experience source distinct instructional learning.	4.23	SA	1
5. It directs guided learning capacity, intentions for interpersonal interaction and indirect observation of inquiry guided approach processes.	3.87	A	5
6. It provides necessary skills on global and competitive society as an inquiry guided approach and instruction.	4.12	A	2.5
Average Weighted Mean	3.938	A	
Standard Deviation	0.306		

Table 4 presents the weighted mean and the corresponding interpretation on the scholarly inquiry approach of teaching student learning improvement of the respondents in terms of inquiry guided approach in teaching.

It shows in the table that "It initiates guided learning process in advanced and experiences source distinct instructional learning", with a weighted mean of 4.23 or Strongly Agree which means inquiry guided approach in teaching is highly observed. On the other hand, it also shows that "It explores teaching guides for students to develop critical thinking on issues and problems to support student skills and development", with a weighted mean of 3.38 or Moderately

Agree which means inquiry guided approach in teaching is limited. The overall average weighted mean is 3.938 (SD=0.306) or Agree on scholarly inquiry approach of teaching student learning improvement in terms of inquiry guided approach in teaching as observed among the respondents.

2. What is the extent of scholarly inquiry springboard learning improvement of students among the respondents in the aspect of planning inquiry, retrieving information inquiry, project process inquiry, and creativity skills inquiry?

Table 5: Springboard Learning Improvement as to Planning Inquiry

Indicators	WM	I	R
1. It develops and projects a planning inquiry process to understand the purpose of learning acquisition, optimism, curiosity, and skills.	3.93	A	3
2. It offers direction, standard planning inquiry-based activity learning integration.	4.21	SA	1
3. It ensures students to improve learning process and knowledge for planning standards in advanced technology of learning.	3.37	MA	5.5
4. It identifies resources and areas for curriculum-based background of student experiences in learning scholarly inquiry.	3.84	A	4
5. It emphasizes planning inquiry, learning engagement and process for scholarly inquiry topic and idea.	4.00	A	2
6. It is an experiential learning planning inquiry approach to explore resources for student concepts and contexts.	3.37	MA	5.5
Average Weighted Mean	**3.786**		
Standard Deviation	**0.345**		

Table 5 presents the weighted mean and the corresponding interpretation on the extent of scholarly inquiry springboard learning improvement of students among the respondents in the aspect of planning inquiry.

It shows in the table that "It offers direction, standard planning inquiry-based activity learning integration", with a weighted mean of 4.21 or Strongly Agree which means springboard learning improvement as to planning inquiry is highly observed. On the other hand, it also shows that "It ensures student to improve learning process and knowledge for planning standard in advanced technology of learning", and "It is an experiential learning planning inquiry approach to explore resources for student concept and contexts", with a weighted mean of 3.37 or Moderately Agree which means springboard learning improvement as to planning inquiry is limited. The overall average weighted mean is 3.786 (SD=0.345) or Agree on the extent of scholarly inquiry springboard learning improvement of students among the respondents in the aspect of planning inquiry.

Table 6: Springboard Learning Improvement as to Retrieving Information Inquiry

Indicators	WM	I	R
1. It provides information related to the ideal topic for scholarly inquiry needed for solution to societal issues.	4.03	A	2.5
2. It assists students to retrieve and organize information through skills and strategies in demonstrating relevant information and search selection process.	4.21	SA	1
3. It integrates information for literacy strategy and skills in scholarly inquiry projects.	3.87	A	4
4. It retrieves information about learning activities to demonstrate evidence and setting for natural utilization of the scholarly inquiry process.	4.03	A	2.5
5. It retrieves information for effectiveness of scholarly inquiry-based learning implementation design for curriculum genuine content.	3.35	MA	6
6. It fosters retrieval of information activities to enhance learning exercises and devices for teachers' professional responsibility.	3.69	A	5
Average Weighted Mean	**3.863**	**A**	
Standard Deviation	**0.306**		

Table 6 presents the weighted mean and the corresponding interpretation on the extent of scholarly inquiry springboard learning improvement of students among the respondents in the aspect of retrieving information inquiry.

It shows in the table that "It assists students to retrieve and organize information through skills and strategies in demonstrating relevant information and search selection process", with a weighted mean of 4.21 or Strongly Agree which means springboard learning improvement as to retrieving information inquiry is highly observed. On the other hand, it also shows that "It retrieves information for effectiveness of scholarly inquiry-based learning implementation design for curriculum genuine content", with a weighted mean of 3.35 of Moderately Agree which means springboard learning improvement as to retrieving information inquiry is limited. The overall average weighted mean is 3.863 (SD=0.306) or Agree on the extent of scholarly inquiry springboard learning improvement in the aspect of retrieving information inquiry as observed among the respondents.

Table 7: Springboard Learning Improvement as to Project Process Inquiry

Indicators	WM	I	R
1. Project process inquiry decides activity to be performed in teaching and learning inquiry delivery of the module.	3.39	MA	5.5
2. It provides format acceptable project requirements for student involvement and personal perspective.	4.13	A	2
3. It focuses on the quality of teaching influences for student knowledge to determine competency opportunity and development.	3.39	MA	5.5
4. It establishes a teaching system in forming student critical thinking, culture, and ability.	4.27	SA	1
5. It analyzes self-education and utilization idea methods and work through the process method of scholarly inquiry.	3.74	A	4
6. It corresponds to actual societal problems in the educational system setting sphere and development understanding.	4.00	A	3
Average Weighted Mean	**3.82**	**A**	
Standard Deviation	**0.376**		

Table 7 presents the weighted mean and the corresponding interpretation on the extent of scholarly inquiry springboard learning improvement of students among the respondents in the aspect of project process inquiry.

It shows in the table that "It establishes a teaching system in forming student critical thinking, culture, and ability", with a weighted mean of 4.27 or Strongly Agree which means springboard learning improvement as to project process inquiry is highly observed. On the other hand, it also shows

that "Project process inquiry decides activity to be performed in teaching and learning inquiry delivery of the module", and "It focuses on system quality teaching influences for student knowledge to determine competency opportunity and development", with a weighted mean of 3.39 or Moderately Agree which means springboard

learning improvement as to project process inquiry is limited. The overall average weighted mean is 3.82 (SD=0.376) or Agree on the extent of scholarly inquiry springboard learning improvement in the aspect of project process inquiry as observed among the respondents.

Table 8: Springboard Learning Improvement as to Creativity Skills Inquiry

Indicators	WM	I	R
1. It organizes information on student empowerment and creativity skills in suitable concepts of scholarly inquiry.	4.00	A	3
2. It advances resource learning confidence and activity to focus on scholarly inquiry modules.	3.85	A	4
3. It determines timeliness for student creativity skills inquiry to be taught for learning knowledge and background.	3.38	MA	6
4. It provides scientific investigation and analysis of data involvement process in scholarly inquiry modules as springboard learning of students.	4.26	SA	1
5. It involves the process of creativity skills and success in advance outcome and observation design in scholarly inquiry modules.	3.79	A	5
6. It analyzes the process of creativity skills in scholarly inquiry to explore ideas in solving issues in the society and elaboration.	4.17	A	2
Average Weighted Mean	3.90	A	
Standard Deviation	0.315		

Table 8 presents the weighted mean and the corresponding interpretation on the extent of scholarly inquiry springboard learning improvement of students among the respondents in the aspect of creativity skills inquiry.

It shows in the table that "It provides scientific investigation and analysis of data involvement process in scholarly inquiry modules as springboard learning of students", with a weighted mean of 4.26 or Strongly Agree which means springboard learning improvement as to creativity skills inquiry is highly observed. On the other hand, it also shows that "It determines timeliness for student creativity skills inquiry to be taught for learning knowledge and background", with a weighted mean of 3.38 or Moderately

Agree which means springboard learning improvement as to creativity skills inquiry is limited. The overall average weighted mean is 3.90 (SD=0.315) or Agree on the extent of scholarly inquiry springboard learning improvement in the aspect of creativity skills inquiry as observed among the respondents.

3. On the significant correlation between the scholarly inquiry approach of teaching student learning improvement and the extent of scholarly inquiry springboard learning improvement of students among the respondents.

Table 9: Test of Significant Correlation between the Scholarly Inquiry Approach of Teaching Student Learning Improvement and the Extent of Scholarly Inquiry Springboard Learning Improvement of Student among the Respondents

Test of Variables on Scholarly Inquiry Approach and Improvement of Learning Among the Respondents	Computed r value	Relationships *significant *not significant	Hypothesis *accepted *rejected

A.   Inquiry structure approach
  • planning inquiry
  • retrieving information inquiry
  • project process inquiry
  • creativity skills inquiry
	0.003887
	0.008484
	0.003870
	0.003862
		not significant
		not significant
		not significant
		not significant
			accepted
			accepted
			accepted
			accepted

B.   Inquiry open-ended approach
  • planning inquiry
  • retrieving information inquiry
  • project process inquiry
  • creativity skills inquiry
	0.003937
	0.003898
	0.003920
	0.003876
		not significant
		not significant
		not significant
		not significant
			accepted
			accepted
			accepted
			accepted

C.   Inquiry problem-based approach
  • planning inquiry
  • retrieving information inquiry
  • project process inquiry
  • creativity skills inquiry
	0.003914
	0.003875
	0.003897
	0.003853
		not significant
		not significant
		not significant
		not significant
			accepted
			accepted
			accepted
			accepted

D.   Inquiry guided approach
  • planning inquiry
  • retrieving information inquiry
  • project process inquiry
  • creativity skills inquiry
	0.003875
	0.003837
	0.003858
	0.003815
		not significant
		not significant
		not significant
		not significant
			accepted
			accepted
			accepted
			accepted

One tailed test, df of 125, with 0.05 level of significant at critical r value of 0.174308			

Table 9 presents the test of significant correlation between the scholarly inquiry approach of teaching student learning improvement and the extent of scholarly inquiry springboard learning improvement of students among the respondents.

It shows that when the two variables are tested, it reveals that all the computed r values are lower than the critical value of 0.174308 which means that the relationship is not significant, one tailed test, with df of 125 at 0.05 level of significant which resulted to acceptance of the hypothesis. Therefore, it is now safe to say that there is no significant correlation between the scholarly inquiry approach of teaching student learning improvement and the extent of scholarly inquiry springboard learning improvement of students among the respondents.

Discussion
The scholarly inquiry approach of teaching student learning improvement of the respondents in terms of inquiry structure approach shows how to utilize a course module for students to find solutions on the societal issues and process. It also shows to map necessary opportunities of the lesson through activity inquiry classroom lessons explicitly. It involves inquiry-based teaching support to acquire proper scientific knowledge among the learners through either direct or indirect learning from the faculties. The instructional approach utilized widely among various educators. It is inquiry-based approach and policy making effectiveness. It is linked with positive instruction associated with evidence of inquiry-based instruction and approach in teaching and learning. It utilizes various measures in inquiry-based learning and attainment in the disciplinary level standard scholarly inquiry model (Jerrim, *et al*., 2022) [11]. On the other hand, inquiry-based learning approaches provide goals and clear assessment on objectives and motives of the course as to performance, product, and presentation. It is an educational notion and setting in the optimal best achievement school subject matter in scholarly inquiry for teaching and learning. It considers the best approach in educational setting, optimal function, optimal best, reflect positivity, and proactivity motivation of the learners. It provides a rationale and logical basis for education consideration and implication for inquiry-based learning approach and development (Phan, *et al*., 2022) [25].
On the other hand, the scholarly inquiry approach of teaching student learning improvement of the respondents in terms of inquiry open-ended approach in teaching shows to motivate and to increase learning approach for open-ended inquiry and creative thinking of students. It examines students' creative thinking assessment and discussion in scholarly inquiry to include creative process and knowledge. The creative thinking approach provides the needs of students as the centers for learning in scholarly inquiry as to practicality, originality, synthesis, transfer of learning, and adaptation. It utilizes student knowledge and domains of learning in creative process and adaptation. It synthesizes the other domains and transfers of knowledge during the exploratory phase in a scholarly inquiry-based learning model. It provides students to develop and explore the context of a scholarly inquiry model to nurture the learning and insight process of teaching (Skjelstad 2022, pp. 1583-1600) [26]. Notably, it shows a free from open-ended inquiry based-learning approach teaching and learning to challenge critical thinking of students. It engages student effect of learning and achievement in various classroom settings of learning based on the needs of students as centers of learning. It captures activity management systems and learning. The approach of student learning and engagement is assessed on various examinations in scholarly inquiry subjects such as group or individual assessment which is structured based on expected learning outcome (Tan, *et al*., 2022, pp. 1347-1359).

Moreover, the scholarly inquiry approach of teaching student learning improvement of the respondents in terms of inquiry problem-based approach in teaching shows that there is an active learning technique suitable for teaching scholarly inquiry-based approach for students as centers of learning. It is an inquiry-based approach that is geared toward the learning process and integration of advanced technology. It reviews and provides integrated technology context for specific learning approaches to inquiry-based processes. It aims to investigate scope of inquiry-based approaches to include technological intervention and characteristic usage. It examines integrated approach and effect in the learning process. It navigates and focuses on inquiry-based learning development assimilation in scientific tools of knowledge. It demonstrated a learning management system, science integration, and technology integration approach inquiry-based learning for scholarly inquiry modules (Kamarudin, *et al*., 2022, pp. 1-20) [12]. Hence, it requires disciplinary knowledge and a teaching-based approach on problem solving skills, and critical thinking in a real-world safe context. It fosters practical problems and student ability to deal with the importance of professional training for scholarly inquiry modules to equip student technicalities of writing research preparation projects prior for graduation. This can help students to practice proper writing technique which is adopted during the class discussion. It is being recognized for effective teaching modalities in scholarly inquiry implementation and challenges for both teachers and students (Chang, 2022, pp. 1-20) [5].

Furthermore, the scholarly inquiry approach of teaching student learning improvement of the respondents in terms of inquiry guided approach in teaching initiates guided learning process in advanced and experience source distinct instructional learning. It is necessary in understanding instructional design and practice in scholarly inquiry. It challenges instructional design based on the needs of students as centers of learning and complex nature and concept. It is a sense process of learners in deeper understanding theory in a scholarly approach of teaching and learning. It is a fundamental instructional design process for effective learning promotion (Agbi, & Yuangsoi, 2022, pp. 9-20) [2]. On the other hand, it explores teaching guides for students to develop critical thinking on issues and problems to support skills and development. It explores issues on educational policy in oriented learning toward thinking skills and order. The expected learning development student competency and achievement in scholarly inquiry model develops policy and program to strengthen integrated learning orientation of students. It analyzes faculty skills and the training process. It describes development skills of faculties in the activity tasks to be performed by students (Fiock, *et al*., 2022, pp. 31-57) [8].
Consequently, the extent of scholarly inquiry springboard learning improvement of students among the respondents in the aspect of planning inquiry offers direction, standard planning inquiry-based activities of learning integration. It

explores characteristics of scholarly inquiry learning and the desirable behavior achievement process of teaching. It integrates the effectiveness of scholarly inquiry-based learning management and characteristics of the learners. It focuses on the approach of learning as to evaluation, planning and reflection. It acquires observation and learning management. It allows systematic thinking and solving problems in the improved aspect of planning in the scholarly inquiry model. It illustrates scientific knowledge of student progress, (Thangjai, & Worapun, 2022, pp. 137-150) [28]. Also, it ensures students to improve process and knowledge for planning standard in advanced technology of learning and explores experiential learning planning inquiry approach and resources for student concept and contexts. It determines the improved instruction performance of scholarly inquiry among students. It improves the performance of creative writing. It provides a concept on inquiry-based learning promotion and platform collaboratively. It uses instructional materials to improve teaching and learning scholarly inquiry-based learning. It integrates scholarly inquiry motivation learning process (Adhami, & Taghizadeh, 2022, pp. 1-37) [1].

Notably, the extent of scholarly inquiry springboard learning improvement of students among the respondents in the aspect of retrieving information inquiry assists students to retrieve and organize information through skills and strategies in demonstrating relevant information and search selection process. It requires success in problem-based learning literary and information to evaluate scholarly inquiry, and argumentation skills. It scaffolds information and support of problem-based learning skills and quality of learning. It develops a strategy of learning in addressing the concept and challenges of scholarly springboard learning improvement (Kim, *et al.*, 2022, pp. 1-22) [15]. Hence, it retrieves information for effectiveness of scholarly inquiry-based learning implementation design for curriculum genuine content. It assesses the indicated inquiry-based learning and literacy effect of the module as instructional quality type in teaching and learning process. It explores open guided instruction quality teacher support, adaptive teaching, classroom management, and teacher-student centered relationship. It overrules the effect of predicting open inquiry teaching and learning. It stimulates inquiry-based learning reflection of authentic work of students (Kang, 2022, pp. 339-355) [13].

Indeed, the extent of scholarly inquiry springboard learning improvement of students among the respondents in the aspect of project process inquiry establishes a teaching system in forming student critical thinking, culture and ability. It focuses on facilitating pathways for teaching and learning. It draws analysis and institutional perspective for new teachers' legitimacy. It focuses analysis of observation and experiences of professional competency skills for scholarly inquiry as springboard learning improvement. It identifies challenges of scholarly inquiry learning improvement associated with managing and understanding the teacher role, facilitation, and communication skills. It influences challenges and recognizes professional faculties (Bengtsson, & Mickwitz, 2022, pp. 214-229) [4]. Nonetheless, project process inquiry decides activity to be performed in the teaching and learning inquiry delivery module. It also focuses on system quality of teaching influences for student knowledge to determine competency opportunity and development. It delivers a radical change in

the improvement of learning as a springboard for academic performance of students. It immerses the success of student performance in scholarly inquiry underpins the design for positive outcome and performance diverse cohort. It engages on the indicated behavioral learning academic success and positive effect of student deeper learning (Goode, *et al.*, 2022, pp. 76-94) [9].

Lastly, the extent of scholarly inquiry springboard learning improvement of students among the respondents in the aspect of creativity skills inquiry provides scientific investigation and analysis of data involvement in scholarly inquiry modules as springboard learning of students. It incorporates teaching and learning springboard improvement in a scholarly inquiry module. It is a prerequisite for the General Education subjects. It is a crucial component of the school curriculum needed in the accomplishment of teaching. It makes the process of learning more pleasure and simple but rewarding on the part of students. It develops a curriculum based on the needs of students as centers of learning springboard for teaching improvement (Andarza, 2022, pp. 12-25) [3]. Thus, it determines timeliness for student creativity skills inquiry to be taught for learning knowledge and background. It develops effectiveness in the modern teaching of scholarly inquiry tool models. It assists in cognitive learning improvement, critical thinking, creativity, process skills, and prospective teaching. It develops learning and development of scholarly inquiry tools as to dissemination, and design development of teaching and learning. Scholarly inquiry-based learning provides learning springboard improvement through process skills and cognitive skills. It improves skills in learning outcome and student springboard learning and creativity (Susilawati, *et al.*, 2022, pp. 291-295) [27].

Conclusions
It shows that the scholarly inquiry approach of teaching student learning improvement of the respondents in terms of inquiry structure utilizes the course module for students' solution to societal issues and process to include the maps necessary opportunity of the lesson through activity inquiry classroom lessons explicitly. It shows that inquiry open-ended approach in teaching motivates to increase learning and creative thinking of students where it is free from challenges among the respondents. It shows that inquiry problem-based approach in teaching as an active learning technique suitable for teaching scholarly inquiry-based approach to students as centers of learning where it requires disciplinary knowledge and teaching-based approach on problem solving skills, and critical thinking in real world safe context. It shows that inquiry guided approach in teaching initiates learning process in advanced and experience source distinct instructional learning where it explores teaching guide for students to develop critical thinking on issues and problems to support student skills and development.

On the other hand, the extent of scholarly inquiry springboard learning improvement of students among the respondents in the aspect of planning inquiry shows to offer direction, standard planning inquiry-based activities of learning integration where it ensures students to improve learning process and knowledge for planning standard in advanced technology of learning. It shows that retrieving information inquiry assists students to retrieve and organize information through skills and strategies in demonstrating

relevant information and search selection process. It shows that project process inquiry establishes the teaching system in forming student critical thinking, culture and ability where it decides for the activity to be performed in teaching and learning inquiry delivery of the module and focuses on system quality of teaching influences for student knowledge to determine competency opportunity and development. It shows that creativity skills inquiry provides scientific investigation and analysis of data involvement process in scholarly inquiry modules as springboard learning of students and to determine timeliness for student creativity skills inquiry to be taught for learning knowledge and background.

It shows that there is no significant correlation between the scholarly inquiry approach of teaching student learning improvement and the extent of scholarly inquiry springboard learning improvement of students among the respondents.

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