

Transdisciplinary Leadership in Modelling Curriculum Innovation and Reform

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Abstract

This study was conducted to identify the Transdisciplinary Leadership in Modelling Curriculum Innovation and Reform exemplified among Junior High School Master Teachers of Secondary Mega Schools in Camarines Norte. Specifically, it has given answers to the following questions: 1. What transdisciplinary leadership attributes are being practiced by the respondents along with a. Communication; b. Planning; c. Problem-Solving; d. Decision-Making; and e. Ethics and Values. 2.) What transdisciplinary leadership actions of the respondents could be associated in curriculum innovation and reform along with a. Educational Goals; b. Alignment with Standards; and c. Sustainability. 3. Is there a significant relationship between transdisciplinary leadership and curriculum innovation and reform? 4. What transdisciplinary leadership model may be proposed for effective curriculum innovation and reform?

This study was delimited in the twelve Public Mega Secondary Schools in Camarines Norte among the Junior High School Master Teachers designated in different curriculum learning areas of these targeted schools due to the fact that they have the roles of educational leaders in terms of curriculum development and improvement in their own schools. Furthermore, the researcher utilized a descriptive-correlational research method and used the total enumeration sampling technique with 107 respondents that gave further examination of the entire population of the targeted Junior High School Master Teachers of the Mega Public Secondary Schools in Camarines Norte.

Based on the data gathered, the findings of the study are as follows: 1) The transdisciplinary leadership attributes of the Junior High School Master Teachers of the Mega Secondary Schools along with Communication, Planning, Problem- Solving, Decision Making and Ethics and Values were rated as Extensively Practiced with an average weighted mean of 4.33, 4.27, 4.34, 4.18 and 4.52. 2.The transdisciplinary leadership actions of the Junior High School Master Teachers of the Mega Secondary Schools along with Educational Goals, Alignment with Standards and Sustainability were rated as Highly Associated with an average weighted mean of 4.37, 4.37 and 4.22. 3. The test for significant relationship that may exist between transdisciplinary leadership along communication, planning, problem solving, decision-making and ethics and values and the curriculum innovation and reform in terms of educational goals, alignment of standards and sustainability were tested using the Pearson Product Moment Correlation. The results have shown that significant relationship exists between transdisciplinary leadership and curriculum innovation and reform except for the variable's ethics and values as against educational goals, alignment with standards and sustainability. 4. The proposed model of the researchers was designed to prevail the continuity

and improve the transdisciplinary leadership of the Junior High School Master Teachers of the Secondary Schools in Camarines Norte for a more effective curriculum innovation and reform.

After a thorough analysis of the data gathered in the study, the following were the recommendations:

1. The application of attributes on communication, planning, problem solving, decision making and ethics and values is recommended to continuously be applied by the Master Teachers as these are essential transdisciplinary attributes for curriculum innovation and reform.
2. The transdisciplinary leadership practices along with Educational Goals, Alignment with Standards and Sustainability are recommended to continuously be applied by the Master Teachers as these are essential for an effective curriculum innovation and reform.
3. Despite the result that there is insignificant relationship between Ethics and Values as a Transdisciplinary Leadership Attribute, it is recommended that significance of ethics and values in transdisciplinary leadership be well-maintained for the purpose of ensuring that leaders partake a strong ethical foundation and sustain morals promoting sustainability and ethical decisions leading to the researchers' second recommendation that ethics and values education be integrated into Master Teachers' curriculum leadership workshops and training programs. The all-inclusive and effective method towards curriculum innovation and reform promoting sustainability and ethical practices within the organization can be established by the Master Teachers along with the subordinate teachers by integrating ethics and values alongside effective communication and alignment with standards.
4. As the curriculum leaders, the Master Teachers may apply and use the proposed model as a guide to sustain, continue, strengthen and improve their transdisciplinary leadership attributes and transdisciplinary leadership practices in curriculum innovation and reform specifically that the Department of Education is now gradually transitioning to a new curriculum again.
5. The future researchers may need further study since the scope of the research done is only limited to transdisciplinary leadership and practices of Master Teachers in the Division of Camarines Norte. They may conduct an in-depth study of level of effectiveness and also its advantages and not only the attributes and association of transdisciplinary leadership practices to curriculum innovation and reform.

Keywords: *Transdisciplinary Leadership Attributes, Transdisciplinary Leadership Practices, Transdisciplinary Leaders, Transdisciplinary Leadership, Curriculum Innovation, Curriculum Reform, Philippine Educational Curriculum.*

Introduction

In the field of education, transdisciplinary leadership goes beyond the traditional boundaries of discipline-specific approaches. In order to tackle the difficult educational challenges, it is a comprehensive and integrated way of thinking that aims at unifying all sorts of areas, methodologies, or points of view. This type of management aims to create a wider understanding of learning issues by promoting collaboration, innovation, and the use of various fields. The transdisciplinary leader of education does not confine itself to a single area or approach; rather, it actively engages with interested parties from different disciplines to foster openness, cooperation, and shared learning. They are applying the insights of different fields such as psychology, sociology, technology, and education as a whole to come up with innovative solutions that respond to the various needs of students, teachers, and the entire educational community.

Meanwhile, in June 2016, the Philippines experienced a major curriculum innovation and change to raise educational standards and bring the nation's educational system into line with worldwide norms in a jam-packed implementation of the Philippines' Kinder to Grade 12 Curriculum Program. There is a supplementary two years for senior high school, which brings the cycle of education from ten to twelve years and make education learner-centered, inclusive, competence-based, and responsive to the community's needs (Abragan, F., Abarcas, V., Aquino, I. M., & Bagongon, R. E. 2022). To support this significant curriculum innovation, the Department of Education adopted the Professional Standards for the teachers in the Philippines. with the approval and dissemination of the 42nd order released by the Department of Education.

With this, the Master Teachers I-IV in Philippine Education categorized as Highly Proficient Educators were continuously trained to become skilled and competent curriculum writers and innovators. Even the Division of Camarines Norte set the bar high when they had the first initiative to release the first MELC Curriculum aligned modules in Region V during the first year of the Pandemic. The Master Teachers from different Mega Schools were tapped as the curriculum leaders, consultants, and pacesetters in their designated schools and worked together to realize the desired curriculum reform. Up to this date, the Department of Education V provides various seminars/trainings for them to dwell with in-depth studies, strategies, or action research on curriculum innovations and enrichment as they lead the Beginning Teachers (Teachers I-III) in their respective stations.

Total enumeration will be used to create a further examination of the entire population of the targeted Junior High School Master Teachers of the Mega Public Secondary Schools in the Division of Camarines Norte. These public Mega Secondary schools intended to be the target respondents of the study are Alawihao National High School, Basud National High School, Batobalani National High School, Camarines Norte National, DQ Liwag National High School, Jose Panganiban National High School, Moreno Integrated School, Paracale National High School, Rizal National High School, San Roque National High School, Tulay Na Lupa National High School, and Vinzons Pilot High School. In the education system, Master Teachers can perform the exemplary role of transdisciplinary leaders. These teachers have a large amount of experience, expertise, and very deep pedagogical knowledge which enables them to bridge disciplinary boundaries and lead with transdisciplinary. Master Teachers are increasingly engaged in diverse groups of stakeholders, ranging from their peers as teachers, managers, students, parents, and the wider community because of their roles. The transdisciplinary leadership demonstrated by Master Teacher sets a remarkable example for fostering collaboration, innovation, and holistic education. Their capacity to combine different perspectives and methodologies will be instrumental in developing an efficient, flexible education system able to respond to the changing needs of students and society. the transdisciplinary leadership demonstrated by Master Teacher sets a remarkable example for fostering collaboration, innovation, and holistic education. Their capacity to combine different perspectives and methodologies will be instrumental in developing an efficient, flexible education system able to respond to the changing needs of students and society. Thus, Transdisciplinary leadership encourages collaboration, a holistic approach, and the synthesis of numerous viewpoints from the educational field.

Through this study, transdisciplinary leadership employed by the Junior High School Master Teachers from the twelve Public Mega Secondary Schools in the Division of Camarines Norte in the context of curriculum innovation will be assessed. With this, the researcher will also be able to determine the transdisciplinary attributes in Modelling Curriculum Innovation and Reform.

Methods

This study utilized a quantitative method using descriptive-correlation research method to identify the transdisciplinary leadership attributes being practiced by the respondents and the transdisciplinary leadership actions that may have a relationship or association in curriculum innovation and reform. The study utilized an adapted and modified survey questionnaire as the primary method of gathering data. It served as an instrument to identify the transdisciplinary leadership attributes of the Junior High School Master Teachers of the twelve Public Mega Secondary Schools in the Division of Camarines. Furthermore, this research will use the total enumeration with 107 respondents to create a further examination of the entire population of the targeted respondents of the study. The instrument used is an adapted and modified survey questionnaire to gather the needed data along with the Position and Competency Profile of Master Teachers I and II from the official website of the Department of Education.

In terms of the statistical tools, weighted mean was utilized by the researcher to quantify the data and proceed with the interpretation more objectively. Pearson Product-Moment Correlation was used to correlate the two variables, Transdisciplinary Leadership and the Curriculum Innovation and Reform.

Results and Discussion

1. Transdisciplinary Leadership Attributes Practiced by the Junior High School Master Teachers in the Mega Secondary Schools of Camarines Norte as to Communication, Planning, Problem-Solving, Decision Making and Ethics and Values.

Table 1 shows the different transdisciplinary attributes of the Junior High School Master Teachers in the Mega Secondary Schools of Camarines Norte in terms of Communication. The result has shown that the average weighted mean for the aspect of Communication is 4.33 denoting that Communication as a Transdisciplinary leadership attribute of the respondents is Extensively Practiced. Provides constructive feedback to the teachers and other members of the organization to support and improve individual performance indicator got the highest weighted mean of 4.66 and was interpreted as Extensively Practiced. On the contrary, Skilled in managing conflicts and diffusing tensions between teachers through any form of oral or written deliberation got the lowest weighted mean of 4.02 and was interpreted as Well-Practiced.

Table 1. Communication

Statement	Mean	Interpretation
1.Communicates and explains the tasks or activities to the teachers with clarity and precision.	4.50	Extensively Practiced
2.Provides a source of data or information to the teachers or colleagues for their utilization.	4.23	Extensively Practiced
3.Arranges meetings, circulars, and various forms of oral and written communication.	4.12	Well- Practiced
4.Communicates the curriculum policies, guidelines, and memos to the teachers for them to carry out their tasks efficiently.	4.35	Extensively Practiced
5.Skilled in managing conflicts and diffusing tensions between teachers through any forms of oral or written deliberation.	4.02	Well- Practiced
6.Provides constructive feedback to the teachers and other members of the organization to support and improve individual performance.	4.66	Extensively Practiced
7.Promotes communication at the same levels or between any horizontally equivalent organizational member or teacher.	4.43	Extensively Practiced
8.Listens attentively, asks questions for clarifications, and shares feedback on the interpretation of the message of others.	4.52	Extensively Practiced
9.Communicates to key stakeholders on whatever changes may occur in any implemented programs or actions in the organization.	4.09	Well-Practiced
10.Responsible for conveying the DepEd mission, vision, and values to the subordinate teachers and how to achieve them.	4.33	Extensively Practiced
Average Weighted Mean	4.33	Extensively Practiced

Legend: 1:00-1.79 = Not Practiced; 1.80-2.59 =Slightly Practiced; 2.60-3.39=Moderately Practiced; 3.40-4.19=Well -Practiced; 4.20-5.00 = Extensively Practiced

It can be inferred that the Junior High School Master Teachers of the Mega Secondary Schools in Camarines Norte extensively practiced the different communication attributes as curriculum leaders because the results showed a positive evaluation of indicators whereas they provide constructive feedback to the teachers and other members of the organization to support and improve individual performance indicator received the highest rating. This result implies that most of the Junior High School Master Teachers in the Secondary Mega Schools give emphasis to the crucial role of supporting the effective implementation of curriculum within the organization through the extensive practice of giving constructive feedback and clarity of tasks to teachers to ensure that curriculum objectives are well understood and executed effectively to achieve the desired curricular outcomes. These results were braced by the study of Maxbuba Qobilovna

(2022). The study claimed that the improved and enhanced curriculum embraces and roots to a holistic approach to the communication skills development of teachers.

Meanwhile, Table 2 shows the different transdisciplinary attributes of the Junior High School Master Teachers in the Mega Secondary Schools of Camarines Norte in terms of Planning. The result has shown that the average weighted mean for the aspect of Planning is 4.27 which denotes that Planning as a Transdisciplinary Leadership attribute of the respondents is extensively practiced. Establishes goals that go with the general acceptance of everybody so individual efforts will not go misguided and misdirected indicator got the highest weighted mean of 4.46 and was interpreted as extensively practiced. On the contrary, preparing sound plans fair to all the subordinate teachers and members of the organization. got the lowest weighted mean of 3.98 and was interpreted as well-practiced.

Table 2. Planning

Statement	Mean	Interpretation
1.Sets clear expectations and settles to the appropriate timeline.	4.34	Extensively Practiced
2.Prepare a project proposal plan and defines its project goals, milestones, and objectives by outlining key tasks and due dates.	4.29	Extensively Practiced
3.Develops an alternative set of options in case the other plans do not work effectively due to emergent problems.	4.33	Extensively Practiced
4.Ensures plan project proposal timeline as well as other resources needed followed by strategic planning among the involved teachers.	4.19	Well- Practiced
5.Adds more resources or people to the project timeline in order to help accommodate the unforeseen or dragging tasks.	4.11	Well- Practiced
6.Establishes goals that go with a general acceptance of everybody so individual efforts will not go misguided and misdirected.	4.46	Extensively Practiced
7.Leads the planning and identifies the action that would lead to desired goals quickly and cautiously works on it.	4.35	Extensively Practiced
8.Requires peeping into the future, analyzing it, and predicting the possible outcomes of the present actions and activities.	4.26	Extensively Practiced
9.Prepare sound plans fair to all the subordinate teachers and members of the organization.	3.98	Well- Practiced
10.Prepare for plan evaluation and review in the light of adapting to new requirements and changing circumstances in school.	4.41	Extensively Practiced
Average Weighted Mean	4.27	Extensively Practiced

Legend: 1.00-1.79 = Not Practiced; 1.80-2.59 =Slightly Practiced; 2.60-3.39=Moderately Practiced; 3.40-4.19=Well Practiced; 4.20-5.00 = Extensively Practiced

It can be inferred that the Junior High School Master Teachers of the Mega Secondary Schools in Camarines Norte extensively practiced the different planning attributes as curriculum leaders because the results showed a positive evaluation of indicators whereas the respondents' practices being a Goal Setter or establishes goals that go with general acceptance of everybody so individual efforts will not go misguided and misdirected indicator received the highest rating.

These results are highlighted and supported as well by the study of Muzafarova MA (2019). His study claimed that there should be efficient and institutional priorities in planning the curriculum improvement activities of all the members within the organization. The study also suggests that Master Teachers are perceived as an authority in organizing and planning professional development activities. It was claimed that the distribution of roles and responsibilities shall also be planned to provide competent teachers' professional development in adapting to the curriculum changes.

Meanwhile, Table 3 shows the different transdisciplinary attributes of the Junior High School Master Teachers in the Mega Secondary Schools of Camarines Norte in terms of Problem-solving. The result has shown that the average weighted mean for the aspect of Planning is 4.34 which denotes that Problem-Solving as a Transdisciplinary Leadership attribute of the respondents is extensively practiced. Creating and suggesting solutions after logical analysis of the emerging problems indicator got the highest weighted mean of 4.45 and was interpreted as extensively practiced. On the contrary, Influences the quality and direction of decisions among teachers in solving small and huge glitches or difficulties indicator got the lowest rating with 4.16 but was still interpreted as well practiced.

Table 3. Problem-Solving

Statement	Mean	Interpretation
1. Identifies problems that arise and always makes complete diagnosis of the roots of these problems.	4.29	Extensively Practiced
2. Conducts careful analysis and extensive understanding of the emerging problems concerning the teachers and the organization.	4.38	Extensively Practiced
3. Influences the quality and direction of decisions among teachers in solving small and huge glitches or difficulties.	4.16	Well-Practiced
4. Creates and suggests solutions after logical analysis of the emerging problems.	4.45	Extensively Practiced
5. Finds solutions to emerging problems through negotiation and cooperation with the subordinate teachers.	4.36	Extensively Practiced
6. Avoids the Blame Game when there are unresolved conflicts or problems within the organization.	4.32	Extensively Practiced
7. Adopts a step-by-step approach to help in the implementation of innovations directed towards improving the curriculum's competitiveness.	4.42	Extensively Practiced
8. Identifies the needs and the existing potential challenges for the development of identification of gaps/root causes of the issues.	4.33	Extensively Practiced
9. Analyzes the data for setting the priorities and the plan of action, deciding on the appropriate interventions, and developing a plan.	4.28	Extensively Practiced
10. Provides best alternatives or strategic solutions for handling a problem at hand or various organizational issues.	4.39	Extensively Practiced
Average Weighted Mean	4.34	Extensively Practiced

Legend: 1:00-1.79 = Not Practiced; 1.80-2.59 = Slightly Practiced; 2.60-3.39 = Moderately Practiced; 3.40-4.19 = Well Practiced; 4.20-5.00 = Extensively Practiced

It can be inferred that the Junior High School Master Teachers of the Mega Secondary Schools in Camarines Norte extensively practiced the different problem-solving attributes as curriculum leaders because the results have shown that being systematic or creates and suggests solutions after logical analysis of the emerging problems indicator got the highest weighted mean followed by being adaptive or prepares for plan evaluation and review in the light of adapting to new requirements and changing circumstances in school. It implies that most of them apply problem-solving as a transdisciplinary attribute in curriculum innovation and reform specifically in creating solutions for emerging problems and in being procedural or adopts a step-by-step approach in the educational and curricular context.

Moreover, these results are reinforced in the study of Visone, J. D. (2018). In his study, he mentioned that a fundamental aspect of an educational leader's role is to solve problems. Indeed, situations that are complicated, unique, and open-ended often present challenges to building leaders such as Head or Master Teachers. There are solutions to problems and an intelligent education leader must take into consideration a number of factors and stakeholders before setting out an action plan.

Meanwhile, Table 4 shows the different transdisciplinary attributes of the Junior High School Master

Teachers in the Mega Secondary Schools of Camarines Norte in terms of decision-making. The result has shown that the average weighted mean for the aspect of Decision Making is 4.20 denoting that Decision Making as a Transdisciplinary Leadership attribute is Extensively Practiced. Weighs the pros and cons of the suggested actions before making the final decision received the highest rating of 4.38 and was interpreted as extensively practiced. On the contrary, finds standardized procedures or solutions that already exist and are tested as a basis for designing new decisions got the lowest rating of 3.98 but was still interpreted as Well-Practiced.

Table 4. Decision Making

Statement	Mean	Interpretation
1.Recognizes problems or opportunities that arise to better address the outcomes of decisions.	4.12	Extensively Practiced
2.Finds standardized procedures or solutions that already exist and are tested as a basis for designing new decisions.	3.98	Extensively Practiced
3.Gathers input from various sources and decides for the collective interest of the subordinate teachers as well as the organization.	4.20	Well-Practiced
4.Obtains and uses data by asking questions, and shifting answers to find relevant information for a desirable decision.	4.17	Extensively Practiced
5.Creates a check and balance in the attainment of objectives to ensure that everyone keeps moving and growing.	4.10	Extensively Practiced
6.Does not take any decision abruptly and always be careful before taking another follow-up action.	4.20	Extensively Practiced
7.Finds the right kind of information, synthesizes, and does fact-checks before heading to a decision.	4.21	Extensively Practiced
8.Arrives at sound judgments, with no impartiality and with the purpose of achieving the fairness of all.	4.30	Extensively Practiced
9.Weighs the pros and cons of the suggested actions before making the final decision.	4.43	Extensively Practiced
10.Seeks for the opinions and viewpoints of every subordinate teacher and colleague without snubbing or cold-shouldering anyone.	4.30	Extensively Practiced
Average Weighted Mean	4.20	Extensively- Practiced

Legend: 1.00-1.79 = Not Practiced; 1.80-2.59 =Slightly Practiced; 2.60-3.39=Moderately Practiced; 3.40-4.19=Well Practiced; 4.20-5.00 = Extensively Practiced

It can be inferred that the Junior High School Master Teachers of the Mega Secondary Schools in Camarines Norte extensively practiced the different Decision-Making attributes as curriculum leaders and innovators because the result has shown a positive evaluation of indicators whereas the respondents' practices being an evaluator or weighs the pros and cons of the suggested actions before making the final decision indicator. It implies that most of the Junior High School Master Teachers in the Secondary Mega Schools gives emphasis to the critical role of Decision-Making in the curriculum innovation and reform specifically in the consideration and deliberation of the decisions being made where the teachers and other members of the organization are encouraged to weigh the pros and cons of various options before setting onto any conclusions.

Also, in the study of Ingersoll et al. (2018), it was highlighted that teachers and educational leaders play a significant role in key areas of decision-making within their schools. They found that there is a significant difference in the leadership of the teacher's role in a variety of decision areas within the school context. Some are in the instructions and some are in teaching techniques and some are involved in the decision-making of the schoolwide academic and curricular concerns and engaging in the school improvement plans. With this support, it all boils down to the idea that the decision-making process is a key attribute for educational leaders or curriculum leaders.

Meanwhile, Table 5 shows the different transdisciplinary attributes of the Junior High School Master Teachers in the Mega Secondary Schools of Camarines Norte in terms of Ethics and Values. The result has shown that the average weighted mean for the aspect of Ethics and Values is 4.52 which denotes that Ethics and Values as Transdisciplinary Leadership attribute of the respondents are extensively practiced. Meanwhile, being morally upright or creates a sense of right and wrong in every concern and matter existing within the organization indicator received the highest rating of 4.64 and was interpreted as extensively practiced. On the other hand, the indicator that received the lowest rating is being a Servant Leader or placing a colleague's interests ahead of his interests, being humane, and acts in a manner that is always fruitful for his teachers and colleagues yet still interpreted as Extensively Practiced.

Table 5. Ethics and Values

Statement	Mean	Interpretation
1.Respects other's feelings and decisions as well as being liberal in hearing opposing viewpoints and authenticate their values.	4.49	Extensively Practiced
2.Places colleague's interests ahead of his interests, humane and acts in a manner that is always fruitful for his teachers and colleagues.	4.40	Extensively Practiced
3.No personal bias and always shows a treatment that is fair, clear, and built on morality. decision.	4.46	Extensively Practiced
4.Considers his or her own purpose as well as other's purpose while making efforts to achieve the goals suitable to everyone.	4.45	Extensively Practiced
5.Presents the facts and circumstances truthfully and completely, no matter how critical and harmful the fact may be.	4.52	Extensively Practiced
6.Values the friendship and camaraderie among the teachers in the workplace or organization.	4.53	Extensively Practiced
7.Treat subordinates with huge respect and admiration regardless of their rank or position.	4.63	Extensively Practiced
8.Creates a sense of right and wrong in every concern and matter existing within the organization	4.64	Extensively Practiced
9.Builds a proper, ethical, and decent environment for subordinate teachers and colleagues.	4.57	Extensively Practiced
10.Driven by moral values, ideals, and principles to support subjective well-being and a sense of efficacy in the accomplishment of tasks.	4.51	Extensively Practiced
Average Weighted Mean	4.52	Extensively Practiced

Legend: 1:00-1.79 = Not Practiced; 1.80-2.59 =Slightly Practiced; 2.60-3.39=Moderately Practiced; 3.40-4.19=Well Practiced; 4.20-5.00 = Extensively Practiced

It can be inferred that the Junior High School Master Teachers of the Mega Secondary Schools in Camarines Norte extensively practiced the different Ethics and Values attributes as curriculum leaders because the results have shown a positive evaluation of indicators whereas the respondents' practices being creating a sense of right and wrong in every concern and matter existing within the organization. It implies that most of the Junior High School Master Teachers in the Secondary Mega Schools imply or suggest that within the organization, there is a solid emphasis on moral uprightness and respectfulness in every concern and relevant matter to the Master Teachers for their subordinate teachers as well.

These findings are supported by the study of Conroy and Ehrensall (2021). The findings of their study revealed that educational leaders are aware of the influence of their values on their entire organization's actions. Educational leaders think that the voices of others are important especially if they have an impact on individuals as a result. Also, he mentioned that in order to value relationships, teachers and curriculum leaders who work from an ethic of care need to consider how decisions will affect the different relations within the school context. Ethics in educational leadership and educational leaders have become progressively significant. This was already by the call to integrate ethics into the curriculum of and preparation programs for leaders (Greer et al., 2015; Mullen, 2017; Shapiro & Gross, 2017; Young & Perrone, 2016).

2. Transdisciplinary Leadership Actions of the Junior High School Master Teachers in the Mega Secondary Schools of Camarines Norte as to Educational Goals, Alignment with Standards and Sustainability

Table 6 shows Table 6 shows the different transdisciplinary leadership of the Junior High School Master Teachers in the Mega Secondary Schools of Camarines Norte as to Educational Goals. The result shows that the average weighted mean is 4.37 denoting that these transdisciplinary leadership along with educational goals are Highly Associated. Attends professional meetings, in-service trainings, and related activities for self-growth and advancement is the indicator that received the highest rating of 4.68 and was interpreted as Highly Implemented. Meanwhile, the indicator that received the lowest rating is Conducts action studies, interventions, and research to address the instructional or curricular problems with a 3.93 rating and interpreted as Well Associated.

Table 6. Educational Goals

Statement	Mean	Interpretation
1. Attends professional meetings, in-service trainings, and related activities for self-growth and advancement.	4.68	Highly Associated
2. Recognizes the importance of integrating 21st-century skills within the curriculum for better educational outcomes.	4.53	Highly Associated
3. Initiates projects and programs that will augment the curriculum.	4.40	Highly Associated
4. Leads in the preparation of curricular materials to enrich the curriculum to achieve the goals of education.	4.32	Highly Associated
5. Conducts action studies, interventions and research to address the instructional or curricular problems.	3.93	Well Associated
6. Initiates improvement in instructional programs of the different curricular subjects.	4.40	Highly Associated
7. Introduces customized and unique innovative teaching approaches and strategies for curriculum improvement.	4.53	Highly Associated
8. Finds ways on enriching and elevating the curriculum of his or her own field of specialization.	4.35	Highly Associated
9. Designs and validates curricular training activities and programs for subordinate teachers and colleagues.	4.24	Highly Associated
10. Leads in the discussion of professional ideas, problems, issues, and concerns related to curriculum changes.	4.30	Highly Associated
Average Weighted Mean	4.37	Highly Associated

Legend: 1.00-1.79 = Not Associated; 1.80-2.59 = Slightly Associated; 2.60-3.39 = Moderately Associated; 3.40-4.19 = Well Associated; 4.20-5.00 = Highly Associated

It can be inferred that the Junior High School Master Teachers of the Mega Secondary Schools in Camarines Norte highly associate transdisciplinary leadership along with Educational Goals in Curriculum Innovation and Reform because the results have shown a positive evaluation of indicators whereas the respondents highly associate professional meetings, in-service trainings, and related activities for self-growth and advancement and Recognizes the importance of integrating the 21st-century skills within the curriculum for better educational outcomes and introduce customized and unique innovative teaching approaches and strategies for curriculum improvement. It implies that the high association of the first indicator suggests that Junior High School Master Teachers give importance to the opportunities for continuous knowledge and growth to augment their skills and knowledge as curriculum leaders.

These findings are supported by the study of Nooruddin, S., & Bhamani, S. (2019). In their study, they pointed out that in order to meet the needs of 21st-century learners and students, educational leaders, and teachers need to constantly improve their knowledge, skills, and attitudes in the recent fast-changing technological era. They were able to conclude that school leaders were very systematic and process-oriented

in their pursuit of Continuous Professional Development. The process starts with understanding the needs of the educational leaders and teachers and providing them with opportunities to improve the curriculum.

Meanwhile, Table 7 shows the different transdisciplinary leadership actions of the Junior High School Master Teachers in the Mega Secondary Schools of Camarines Norte along with Alignment with Standards. The result shows that the average weighted mean on this is 4.37 which denotes that the transdisciplinary leadership practices as to Alignment with Standards in Curriculum Innovation and Reform are Highly Associated. Conducts classroom observation or demonstration teaching, sharing effective techniques or strategies for aligning curriculum with standards and implementing best practices got the highest rating among the indicators with 4.56 and interpreted as Highly Associated.

Table 7. Alignment with Standards

Statement	Mean	Interpretation
1. Develops and implements daily lesson plans that are consistent with the program curriculum guidelines and standards.	4.35	Highly Associated
2. Oversees the implementation of the curriculum among the teachers through regular checking of instructional materials and lesson plans.	4.20	Highly Associated
3. Employs hands-on instructional techniques design to contextualize subjects in real-world scenarios.	4.44	Highly Associated
4. Leads in the implementation of the school level age-appropriate curriculum ensuring that appropriate opportunities are provided in order to maximize learning potential.	4.28	Highly Associated
5. Conducts classroom observation or demonstration teaching, sharing effective techniques or strategies for aligning curriculum with standards and implementing best practices.	4.56	Highly Associated
6. Guides teachers in the introduction of innovative teaching approaches and strategies that align with the standards.	4.47	Highly Associated
7. Represents the school in conferences or events concerning the thorough understanding of the educational standards related to their areas of specialization as delegated by the school head.	4.21	Highly Associated
8. Participates actively in the school strategic planning process involving internal and external stakeholders.	4.25	Highly Associated
9. Consolidates and interprets data from assessments and evaluation to allow instructional adjustments and interventions.	4.44	Highly Associated
10. Designs and corroborates activities or programs for teachers' curriculum improvement.	4.51	Highly Associated
Average Weighted Mean	4.37	Highly Associated

Legend: 1.00-1.79 = Not Associated; 1.80-2.59 = Slightly Associated; 2.60-3.39 = Moderately Associated; 3.40-4.19 = Well Associated; 4.20-5.00 = Highly Associated

It can be inferred that the Junior High School Master Teachers of the Mega Secondary Schools in Camarines Norte highly associates the transdisciplinary leadership along with Alignment with Standards in the Curriculum Innovation and Reform because the results have shown a positive evaluation of indicators whereas the respondents highly associates Conducts classroom observation or demonstration teaching, sharing effective techniques or strategies for aligning curriculum with standards and implementing best practices and Designs and corroborates activities or programs for teachers' curriculum improvement. These results imply that the Master Teachers are vigorously involved and dedicated in supporting their colleagues and subordinate teachers within the organization by working on different techniques, strategies, and best practices for aligning curriculum with standards.

These findings are supported by the study of Meng (2023). He was able to find out that the importance of different approaches and integration in education, and the role they play in the professional development of the educational leaders and teachers and the need to continuously assess and give feedback on the effective techniques and practices used. The findings emphasize the potential of linking the practices to

quality education aligning with standards in order to achieve a beneficial outcome learning environment.

Meanwhile, Table 8 shows the different transdisciplinary leadership practices of the Junior High School Master Teachers in the Mega Secondary Schools of Camarines Norte along with Sustainability. The result has shown that the average weighted mean is 4.22 which denotes that the transdisciplinary leadership actions of the Junior High School Master Teachers as to Sustainability in Curriculum Innovation and Reform is Highly Associated. The indicator Rates teachers' performance during quarterly classroom observation and give remarkable comments for their long-term practice received the highest rating with 4.43 interpreted as Highly Associated. On the other hand, the indicator with the lowest rating Collaborates with the barangays or community organizations to support sustainable educational initiatives has a rating of 3.57 which is interpreted as Well Associated.

Table 8. Sustainability

Statement	Mean	Interpretation
1. Serves as a Trainer or Resource Speaker in School-Based INSET to deliver training programs that equip teachers with the knowledge and skills and incorporate sustainability principles into their teaching.	4.13	Well Associated
2. Takes active participation in the planning and implementation of curricular programs in school, district, and division levels for curriculum sustainability.	4.21	Highly Associated
3. Collaborates with the barangays or community organizations to support sustainable educational initiatives.	3.57	Well Associated
4. Conducts post conferences with teachers for feedback on teaching-learning process and integrate components that foster a culture of lifelong learning and adaptability.	4.39	Highly Associated
5. Checks, improves, and prepares model and sample lesson plans for the assigned curricular area to assess the effectiveness and sustainability of curriculum initiatives.	4.26	Highly Associated
6. Interprets assessment results and utilizes them for the improvement of instruction and curriculum using effective feedbacking to make informed adjustments for continuous improvement.	4.34	Highly Associated
7. Rates teachers' performance during quarterly classroom observation and give remarkable comments for their long-term practice.	4.43	Highly Associated
8. Identifies and initiates projects that contribute to the enduring enrichment of the curriculum.	4.22	Highly Associated
9. Introduces sustainable practices and approaches in curriculum development.	4.25	Highly Associated
10. Ensures efficient use of resources in curriculum implementation.	4.22	Highly Associated
Average Weighted Mean	4.22	Highly Associated

Legend: 1.00-1.79 = Not Associated; 1.80-2.59 = Slightly Associated; 2.60-3.39 = Moderately Associated; 3.40-4.19 = Well Associated; 4.20-5.00 = Highly Associated

It can be inferred that the Junior High School Master Teachers of the Mega Secondary Schools in Camarines Norte highly associates the transdisciplinary leadership along with Sustainability in Curriculum Innovation and Reform because the results have shown a positive evaluation of indicators whereas the three highest indicators are Rates teachers' performance during quarterly classroom observation and give remarkable comments for their long-term practice and Conducts post conferences with teachers for feedback on teaching-learning process and integrate components that foster a culture of lifelong learning and adaptability and Interprets assessment results and utilizes them for the improvement of instruction and curriculum. These results imply that the Master Teachers' practice of rating their subordinate teachers' performance in the conduct of the quarterly classroom observation and eventually providing valuable response and criticism indicates assurance and commitment to recognizing and supporting effective teaching methods and approaches over the long term.

These findings are supported by the study of Barrogo (2020). She found out from the results that there is an overall consensus was reached on eight out of ten statements concerning a standardized classroom observation device. She also mentioned that observations in the classroom are essential in the educational context. Whether they are part of supervision or routine monitoring by administrators, observations continue throughout the career of a teacher. The advantages of classroom observation may be regarded as the establishment of a positive critical framework for assessment of one's practice, improvement of skills, and development of strengths.

3. Significant Relationship between Transdisciplinary Leadership and Curriculum Innovation and Reform

The test for significant relationship that may exist between transdisciplinary leadership along communication, planning, problem solving, decision-making and ethics and values and the curriculum innovation and reform in terms of educational goals, alignment of standards and sustainability were tested using the Pearson Product Moment Correlation (r). Table 9 shows that significant relationship exists between transdisciplinary leadership and curriculum innovation and reform except for the following variables such as ethics and values as against educational goals, alignment with standards and sustainability.

Table 9. Significant Relationship between Transdisciplinary Leadership and Curriculum Innovation and Reform

	r	p-value	r	p-value	r	p-value
Communication	.539**	0.000	.385**	0.000	.473**	0.000
Planning	.636**	0.000	.439**	0.000	.529**	0.000
Problem-Solving	.709**	0.000	.669**	0.000	.612**	0.000
Decision-Making	.643**	0.000	.569**	0.000	.587**	0.000
Ethics and Values	-0.167	0.199	-0.192	0.139	-0.14	0.282

**Correlation is Significant @ 0.01 level

It can be observed that communication as one of the attributes of transdisciplinary leadership obtained significant relationship along educational goals ($r=.539$, $p\text{-value}=.000$), alignment with standards ($r=.385$, $p\text{-value}=.000$) and sustainability ($r=.473$, $p\text{-value}=.000$) at 0.01 significant level. The results suggest moderate positive correlations, which means that as communication skills in transdisciplinary increase, the same happens on the curriculum innovation and reform along educational goals, alignment with standards and sustainability. Moreover, the p-values for all the variables are below .001, indicating a very high level of statistical significance. It implies that the role of communication in effective transdisciplinary leadership is crucial to clearly articulate the educational goals, to ensure alignment with the established standards and to maintain the commitment for sustainability.

These results are supported by the study of Priadi (2020) where he emphasized that in view of the fact that the educational process is currently being carried out in an educational context and community, communication is very essential. In these circumstances, it is necessary to establish two ways of communication in order to achieve optimal interactions among teachers on all the faces facing each other with a view to achieving education goals.

4. Proposed Transdisciplinary Leadership Model for Effective Curriculum Innovation and Reform

The proposed leadership model content was created by the researcher to address the leadership attributes and practices that received the lowest ratings among the given indicators. In the model presented by the researcher, transdisciplinary leadership attributes practiced by the Junior High School Master Teachers along with Communication, Planning, Decision Making, Problem- Solving and Ethics and Values are visible. The researcher included the practices implemented and associated in the Curriculum Innovation and Reform along with Educational Goals, Alignment with Standards and Sustainability. In the proposed model, the

researcher included the Key Objective, Strategic Implementation, Target Outcomes, Key Persons and Resources as the primary components to address the needs according to the result of the study. Moreover, for these outcomes to materialize, there are several Key Persons needed to work together. These Key Persons or officers are Department of Education, SDO Camarines Norte, School Heads, Master Teachers and Proficient Teachers (Teachers I-III). All these components are connected and signifies a strong relationship with each other forming the framework of this model. Through the model formulated by the researcher, the effective curriculum innovations and reform will be followed through specially that the Department of Education is now again transitioning to MATATAG Curriculum for the forthcoming School Year.

Conclusions

In the light of the findings of the study, the following conclusions of the study were drawn:

1. Most of the Junior High School Master Teachers within the Mega Secondary Schools reveals an extensive practice of transdisciplinary leadership attributes along with communication, planning, decision making, problem solving and ethics and values. It is very remarkable that their extensive practice in communication, planning, problem solving, decision-making and ethics and values reflects a considerable level of competency. These results underline the importance of cultivating transdisciplinary leadership skills by the Master Teachers as curriculum leaders of their schools and in the entire division of Camarines Norte.
2. There is a commendable level of transdisciplinary leadership practices among Junior High School Master Teachers within Mega Secondary Schools. This emphasizes a high association of their transdisciplinary leadership practices along with educational goals, alignment with standards, and sustainability.
3. There is a significant relationship between communication along with educational goals alignment with standards and sustainability 0.01 significant level. Though ethics and values do not have a significant relationship within educational goals, alignment with standards and sustainability at 0.01 significant level, it does not diminish the importance of ethics and values in transdisciplinary leadership.
4. The researcher's proposed model was designed to prevail the continuity and improve the transdisciplinary leadership attributes and practices of the Junior High School Master Teachers of the Secondary Schools in Camarines Norte for a more effective curriculum innovation and reform.

Recommendations

After a thorough analysis of the data gathered in the study, the following are highly recommended:

1. The application of attributes on communication, planning, problem-solving, decision making and ethics, and values is recommended to continuously be applied by the Master Teachers as these are essential transdisciplinary attributes for curriculum innovation and reform.

Meanwhile, in terms of Communication, it is recommended that Master Teachers be provided with training programs or seminar workshops intended on conflict resolution techniques through different communication strategies. It shall also be implemented to help the Master Teachers be equipped with the necessary skills to efficiently handle and be able to manage conflicts and uphold better collaboration for educational excellence. The Master Teachers may invest in training or workshops on conflict resolution methods and procedures. The Department of Education specifically the Division of Camarines Norte can support a more harmonious and productive working environment by providing the Master Teachers with effective strategies for managing conflict and diffusing tensions, ensuring that constructive feedback is taken into account and implemented effectively.

Also, in terms of Planning, it is recommended to initiate opportunities for the augmentation about proactive leadership in planning and execution. Consideration should be given to implementing targeted training or workshops to enhance communication and persuasion skills. Involving Master teachers in an open dialogue and providing them with the opportunity to actively participate in decision-making can also be a way of enhancing their contribution towards solving small problems and important challenges within the organization.

In addition, it is also recommended that the Department of Education specifically the Division of Camarines Norte provide the Master Teachers, as curriculum leaders of their own schools to have or attend professional development opportunities focused on leadership skills, most especially in the extent of strategic planning and effective execution of the curriculum.

Additionally, in terms of Decision Making, the Master Teachers as the curriculum experts and leaders of the schools are recommended to sustain the culture of collaboration and empowerment among themselves. It is recommended for them to have active participation in decision-making forums on how to exert influence on the course and quality of decisions. With this, the Department of Education and even their schools can leverage the shared know-how and insights of their Master Teachers in small problems and difficulties efficiently leading to desired outcomes.

Moreover, in terms of Problem- Solving, it is recommended to provide specialized training or workshops focused on enhancing innovative thinking and creative problem-solving skills, to address issues in solution designing. Equipping them with more efficient solution designs can help them look for a broader range of solutions, adapt their current practice to meet specific contexts, and develop ideas beyond the box when they face challenges.

Lastly, in terms of Ethics and Values, it is recommended that targeted training programs and workshops essential to highlight the importance of Servant Leader principles be provided as well for them to develop a culture where colleagues feel valued and supported can be fostered by providing opportunities for reflection and discussion on the core values of servant leadership, such as empathy, cooperation, and selflessness. While being equipped with these principles through training programs, Master Teachers can be further reinforced within the organization by making it easier for them as curriculum leaders to demonstrate their leadership practices in interactions with colleagues through example and active demonstration.

2. The transdisciplinary leadership practices along with Educational Goals, Alignment with Standards, and Sustainability are recommended to continuously be applied by the Master Teachers as these are essential for effective curriculum innovation and reform.

In terms of Educational Goals, it is recommended that Master Teachers be considered to be given or be implemented with specific training programs or seminars on research methodology, data analysis techniques, and intervention strategies. The Department of Education may give them trainings to constantly improve and innovate which may also be fostered by encouraging Master Teachers to cooperate with action research projects and provide support for their implementation.

In terms of Alignment with Standards, it is highly suggested that Master Teachers consider developing monitoring procedures and plans for regular checking, classroom observations schedules, and even the evaluation of instructional materials and lesson plans. This would also help them in the provision of training and resources to the subordinate teachers to align their teaching methods with the objectives of the curriculum. Moreover, it can also contribute to better steadiness and competence by creating a supportive environment in which teachers can exchange best practices and obtain feedback on their implementation efforts. The organization or the school will be able to ensure that teaching practices are aligned with objectives, resulting in better learning outcomes for students by strengthening the supervision of curriculum implementation. The Master Teachers should be given or offered with professional development opportunities

that will enhance the understanding of educational standards and their relevance for specific areas of specialization by teachers.

In terms of Sustainability, it is recommended that the Master Teachers adopts a sense of common accountability for educational initiatives and create robust links with local barangays and community organizations. Furthermore, it also suggested to fortify Master Teachers' relationships and commitment to sustainable education through the organization of shared collaborative efforts such as barangay workshops or even projects and providing them with essential resources and training programs for them to work effectively way towards sustainable educational goals.

3. Despite the result that there is an insignificant relationship between Ethics and Values as a Transdisciplinary Leadership Attribute, it is recommended that the significance of ethics and values in transdisciplinary leadership be well-maintained for the purpose of ensuring that leaders partake in a strong ethical foundation and sustain morals promoting sustainability and ethical decisions leading to the researchers' second recommendation that ethics and values education be integrated into Master Teachers' curriculum leadership workshops and training programs. The all-inclusive and effective method towards curriculum innovation and reform promoting sustainability and ethical practices within the organization can be established by the Master Teachers along with the subordinate teachers by integrating ethics and values alongside effective communication and alignment with standards.

4. As the curriculum leaders, the Master Teachers may apply and use the proposed model as a guide to sustain, continue, strengthen, and improve their transdisciplinary leadership attributes and transdisciplinary leadership practices in curriculum innovation and reform specifically that the Department of Education is now gradually transitioning to a new curriculum again.

5. The future researchers may need further study since the scope of the research done is only limited to transdisciplinary leadership and practices of Master Teachers in the Division of Camarines Norte. They may conduct an in-depth study of the level of effectiveness and also its advantages and not only the attributes and association of transdisciplinary leadership practices to curriculum innovation and reform. They may also create an action plan or other intervention plans as an output of their study.

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References

- Aquino, C. J. C., Afalla, B. T., & Fabelico, F. L. (2021). Managing educational institutions: School heads' leadership practices and teachers' performance. *International Journal of Evaluation and Research in Education (IJERE)*.
- Conroy, T. J., & Ehrensall, P. A. L. (2021). VALUES AND ETHICS IN EDUCATIONAL ADMINISTRATION. CONSORTIUM FOR THE STUDY OF LEADERSHIP AND ETHICS IN EDUCATION, 16(1). <https://journals.sagepub.com/doi/abs/10.1177/1741143217745880>
- Creech, J. (2023, January 15). The importance of professional development for educators. Queens University of Charlotte. <https://online.queens.edu/resources/article/professional-development-for-educators/>
- Barrogo, S. D. (2020). Teachers' Perception of Standardized Classroom Observation Tool. *International Journal of Academic Pedagogical Research (IJAPR)*, 4(7), 2643–9123.
- Dadmehr, M., Karami, M., Mahram, B., & Izadi, S. (2023). Teachers' lived experiences of communication in curriculum planning and implementation in a centralized educational system. *International Journal of Educational Reform*. <https://doi.org/10.1177/10567879231211269>
- Enerio, A. T., Jr. (2020). Master Teachers' Challenges in Doing Action Research: A Case Study. *Universal Journal of Educational Research*, 8(7), 2990–2995. <https://doi.org/10.13189/ujer.2020.080727>
- Hands, C.M. (2023). School-Community Collaboration: Insights from Two Decades of Partnership Development. In: Cleveland, B., Backhouse, S., Chandler, P., McShane, I., Clinton, J.M., Newton, C. (eds) *Schools as Community Hubs*. Springer, Singapore. https://doi.org/10.1007/978-981-19-9972-7_3
- Ingersoll, R., Sirinides, & Dougherty, P. (2018). *Leadership Matters Teachers' Roles in School Decision Making and School Performance*. American Educator Spring 2018
- Intra, F. S., Nasti, C., Massaro, R., Perretta, A. J., Di Girolamo, A., Brighi, A., & Biroli, P. (2023). Flexible Learning Environments for a Sustainable Lifelong Learning Process for Teachers in the School Context. *Sustainability (Basel)*, 15(14), 11237. <https://doi.org/10.3390/su151411237>
- Laude, T. M., Ralar, T. J., & Arcenal, J. T. (2018). Master Teachers as Instructional Leaders: An Exploration of School Leadership Capacity in the Division of Biliran. *International Journal of Sciences Basic and Applied Research (IJSBAR)*, 40(1), 2307–4531. <https://core.ac.uk/download/pdf/249336371.uk/pdf/249336371.pdf>
- Lavigne, A. L., Allen, S., Shao, S., & Acosta Feliz, J. A. (2023). Learning from post-observation Conferences: Emerging Measures of and Mechanisms to Improve Principals' Feedback to Teachers. *Journal of Educational Supervision*, 6 (3). <https://doi.org/10.31045/jes.6.3.2>

- Meij, L. W., & Merx, S. (2018). Improving curriculum alignment and achieving learning goals by making the curriculum visible. *the International Journal for Academic Development* (Print), 23(3), 219–231. <https://doi.org/10.1080/1360144x.2018.1462187>
- Mendoza, J. J., & Bautista, S. C. (2022, May). Master Teachers' Leadership Practices, Instructional Competence and Performance of Senior High Teachers in the City Divisions of Laguna. *International Journal of Social Science and Education Researchers Studies*. <https://ijssers.org/single-view/?id=6770&pid=6754>
- Meng, S. (2023). Enhancing Teaching and Learning: Aligning Instructional Practices with Education Quality Standards. *Paradigm Academic Press Research and Advances in Education*, 2(7), 2788–7057. <https://doi.org/10.56397/RAE.2023.07.04>
- Meyer, H. (2018). Teachers' thoughts on student decision making during engineering design lessons. *Education Sciences* (Basel), 8(1), 9. <https://doi.org/10.3390/educsci8010009>
- Nooruddin, S., & Bhamani, S. (2019). Engagement of School Leadership in Teachers' Continuous Professional Development: A Case Study. *Journal of Education and Educational Development*, 6(1), 95-110.
- Priadi, R. (2020). Teacher communication effectiveness in the learning process. *Budapest International Research and Critics Institute Journal (BIRCI-Journal)*, 3(4), 3433–3444. <https://doi.org/10.33258/birci.v3i4.1378>
- Smith, C., & Babich, C. (n.d.-b). 6.1 Educational ethics. Pressbooks. <https://ecampusontario.pressbooks.pub/ticl/chapter/6-1-educational-ethics/>
- Talmage-Rostron, M. (2024, February 12). 10 Leadership Conflict Management & Resolution Skills 2024. Nexford University. <https://www.nexford.edu/insights/leadership-conflict-managementresolution>
- Ulla, M. B. (2018). Benefits and challenges of doing research: Experiences from Philippine public-school teachers. *Issues in Educational Research*, 797.
- Visone, J. D. (2018). The Development of Problem-Solving Skills for Aspiring Educational Leaders. *Journal of Leadership Education*, 17(4). https://journalofleadershiped.org/wp-content/uploads/2019/02/17_4_visone.pdf
- Yunita, I., Syam, H., Ulmadevi, U., Zahratul Jannah, N., & Witri Asri, R. (2023). The Role of Leadership in Decision Making and Team Building. *GICT Proceeding*, 1(1), 256–263. <https://doi.org/10.30983/gic.v1i1.128>