Trifocalizing Instruction, Research, and Extension Functions in Outcome-Based Graduate Education Programs at Romblon State University in the "New Normal"

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This paper aims to map the curriculum of the graduate courses in Education offered by Romblon State University, in the Philippines, in the "new normal" ushered in by the Covid-19 pandemic. To do so, it combines an assessment of student feedback and performance with an in-depth documentary analysis of existing policies, past projects, and activities of the university's Graduate School.

Having made this analysis, the paper presents a number of recommendations, namely that 1) the curriculum is re-visited to ensure alignment between the university's mission and vision, on the one hand, and the learning outcomes, structure, and proposed learning outcomes of the graduate programs in Education on the other, and 2) the curriculum mapping presented in this paper is applied and implemented with a view to achieving consonance between the university's vision and mission – which sets the outcomes and practice – and which is operationalized in this paper as the class practices and activities to be adopted in Romblon State University's Master's and Doctoral programs in Education.

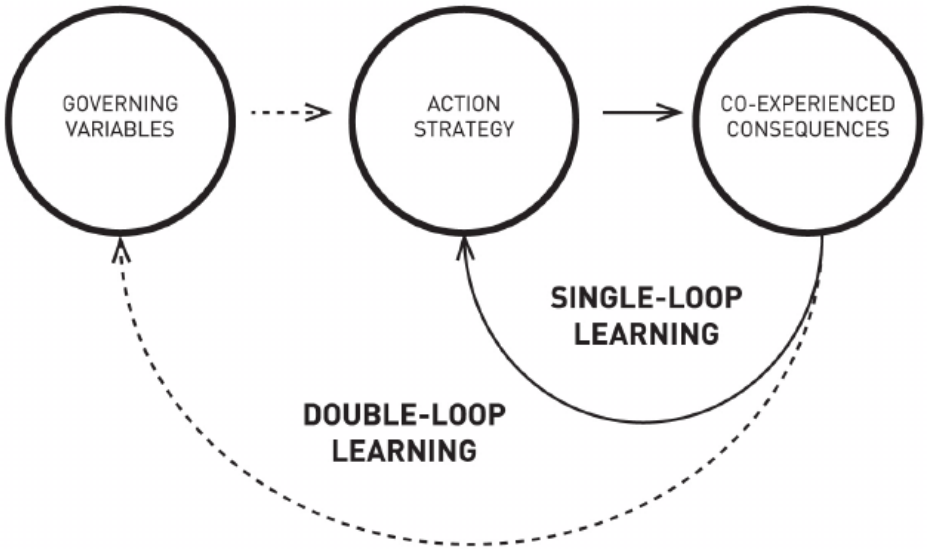
Keywords: trifocalizing, assessment, analysis, curriculum mapping, outcome-based

INTRODUCTION

Inspired by Hatch and Schultz's Organizational Identity Dynamics Model[1] and Mead's Identity Theory[2], the researchers attempted to test for consonance between theory and practice during the middle cycle of the second semester of the 2021-2022 academic year. The focus on theory related to the nature of Romblon State University's stated vision and mission, while the focus on practice referred to the research skills that graduate students developed – via instruction – through their undertaking of the College of Education's "Methods of Research" module. The intention was to establish the extent to which consonance existed between instruction and research, which was facilitated by a concurrent assessment of proposed learning outcomes and graduate outcomes. Davis[3] defines "outcome" as the final demonstration of learning, while Spady[4] defines it as "what the student is capable of doing after the course." Thus, outcome-based education must always be about "results-oriented" thinking and action[5].

In this attempt to contextualize the confluence between theory and practice via outcome-based education, a dissonance was observed. Figure 1, below, shows, Argyris' concept of feedback loops and theory of action[6]:

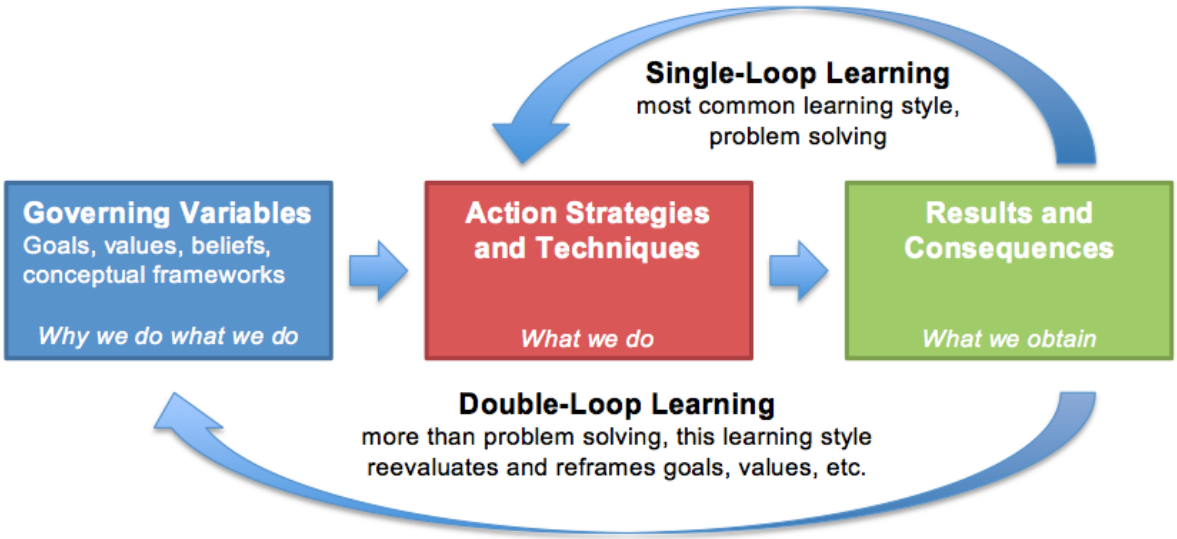
FIGURE 1
ARGYRIS' FEEDBACK LOOP MODEL



"Double-Loop" Learning, Adopted from Argyris and Schön[7]

On the other hand, Figure 2, below, shows the operational dimensions of the confluence of theory and practice in this study. Further, it demonstrates that the established learning outcomes for the program are evidently not articulated by the graduate class. As a result, this triggers a requirement to go back and "question" the interpretation of the governing variables (theory) before crafting mechanisms for practice. This process of "going back" to question the interpretation of governing variables led to this second cycle of documenting feedback from graduate students.

FIGURE 2
ARGYRIS' "DOUBLE-LOOP" LEARNING MODEL AS A THEORETICAL FRAMEWORK FOR DEVELOPING AN OUTCOME-BASED CURRICULUM MAP FOR GRADUATE EDUCATION PROGRAMS AT ROMBLON STATE UNIVERSITY[8]



METHODOLOGY

To realize the researchers' main aim of operationalizing the dimensions to reveal the confluence between theory (vision-mission) and practice (graduate students' learning outcomes on the "Methods of Research" module), the investigation made of use of the mixed methods of research. Specifically, it employed sequential explanatory design, in five stages: triangulation, complementarity, development, initiation, and expansion[9].

Triangulation determines the consistency of findings obtained from different instruments, which was achieved via student self-surveys, peer evaluation, and assessment of the practitioner-researcher of selected student portfolios. *Complementarity* involves elaborating, enhancing, illustrating, and clarifying results from one method with the results from another – in this case, by seeking to assess the quantitative data derived from peer evaluation with the qualitative data generated from student self-surveys and student portfolios. *Development* involves using the results from one method to help develop or inform the other method. *Initiation* is the discovery of paradox and contradiction that can lead to the formulation of new perspectives and frameworks, and the recasting of questions or results from one method with those from the other method. *Expansion* involves extending the breadth and range of inquiry by employing different methods for different components of inquiry. This paper is the consequence of the magnification of these elements to come up with the final components of the mixed method of research: development, initiation, and expansion.

RESULTS AND DISCUSSION

During the middle cycle of the second semester of the 2021-2022 academic year, students undertaking the College of Education's "Methods of Research" module and "Advanced Statistics" module offered by the School of Arts, Sciences, and Technology were utilized as subjects in this study. Thus, expected and desired learning outcomes based on the instructional processes stipulated in the syllabi for both courses were ascertained for alignment and complementarity, before a second cycle of feedback was conducted to test for consonance between theory and practice.

How Does Theory Translate Into Practice on the College of Education's "Methods of Research" Module, via Evaluation of Outcome-Based Activities?

It was ascertained that the learning outcomes set for the module by the module's convenor were largely achieved, with observations findings that 96% of students enrolled on the module could demonstrate the research skills taught on the course. This finding was corroborated through assessment of their GPA results and performance in rubric-based peer assessments. Moreover, the students collectively confirmed that they possessed increased confidence in conducting and writing up research as – thanks to the changes brought about in the "new normal" – the course allowed them to explore various opportunities within and beyond classes. In particular, many felt that the incorporation of e-learning activities – facilitated through the use of platforms such as Google Classroom and Google Meet – played a significant role in helping to reinforce and enhance communication between students and teaching staff. In other words, many found benefit in the fact that the use of technology meant that, at any given time, they had access to a virtual classroom in which they could engage with their professors and peers regarding the assigned research activities.

Is There Clear Evidence of Confluence Between Theory and Practice in the "Methods of Research" Module, via Evaluation of Outcome-Based Activities?

It is clear, from this study's findings, that the students enrolled on the "Methods of Research" and "Advanced Statistics" courses were able to significantly improve their research skills thanks, in part, to the alignment and complementarity that existed in the learning outcomes set for both modules. Analysis of the student portfolios and final research outputs and evaluations demonstrated that there was clear consonance in the cycle of feedback between theory and practice.

Principally, the investigation found that expected and desired learning outcomes were achieved by the students at the end of the course, as shown by the evident presence of consonance between theory and practice by the triangulated evaluation of outcome-based educational activities in the "Methods of Research" module.

In his "Wave Pattern of Space-Change-Time" model, Pelayo (9) suggested that it is necessary to initiate change (termed a "ripple") towards achievement of organizational goals ("forward motion"). However, one must first identify the breaking point (the point at which change should be initiated) before attempting to introduce the change. If this breaking point is not specifically determined, only a repeated backward motion will be produced – one in which no change or organizational goal(s) will be achieved.

In this study, the breaking point is a curriculum map that merges the trifocalized functions of any higher education institution in the Philippines: instruction, research, and extension. Learning outcomes for instruction and research were designed to be congruent and complementary in the first and second cycle of feedbacks, and so it is expected that these two be made consistent with academic extension.

These assumptions and interpretations of Pelayo's Wave Pattern model led to the conceptualization of this curriculum map for research and extension to both the Master of Arts in Education (MAEd) and Ph.D. in Education programs offered by the College of Education at Romblon State University. This curriculum mapping is outlined in Table 1, below:

TABLE 1
CURRICULUM MAPPING FOR TRIFOCALIZED INSTRUCTION, RESEARCH, AND EXTENSION WITH OUTCOME-BASED GRADUATE EDUCATION

A. Master of Arts in Education Programs

Areas of Specialization	Trifocalized Program Objectives	Research Options	Proposed Parallel Extension Activities
1. Educational Leadership and Management	**INSTRUCTION** Show expertise in the field of educational leadership and management, particularly as an outstanding research-oriented school with principals, supervisors, and department heads who are highly competent in all aspects of management. **RESEARCH** Actively engage in research-oriented educational projects and activities exploring innovations and reforms in educational leadership and management. **EXTENSION** Exemplify RSU's vision of academic excellence, global competitiveness, and service by undertaking socio-civic service in the community.	**Group Outputs** Conduct true or quasi-experimental research on innovations in educational leadership and management. Conduct exploratory research projects on potential innovations in the educational leadership and management curriculum.	**Class Undertakings** Launch a Student Research Colloquium for Educational Leadership and Management Majors and students on the PhD program, with Basic Education (BED) teachers and partner-school communities also invited. Design, develop, and deliver teacher-training programs for MAEd and BED teachers from partner-school communities based on the results of student research. Implement training programs for specific target audiences, including community partners and schoolteachers. Bring together the PhD and ELM Majors to spearhead the design, development, and

			evaluation of training programs for specific audiences and recipients.
2. English	**INSTRUCTION** Gain clear conceptual and practical understanding of relevant approaches, principles, and methodologies in English language and teaching. **RESEARCH** Actively engage in research projects and other scholarly endeavors that seek to identify and address issues, gaps, and gray areas in English language and teaching. **EXTENSION** Exemplify RSU's vision of academic excellence, global competitiveness, and service by undertaking socio-civic service in the community.	**Group Outputs** Conduct true or quasi-experimental research on innovations in English language pedagogy and teaching. Conduct exploratory research projects on potential innovations in English language and teaching. Conduct exploratory research projects on developing instructional materials for better English language teaching.	**Class Undertakings** Launch a Student Research Colloquium for undergraduate and graduate students enrolled on English Majors, with BED teachers and partner-school communities as audience members. Design, develop, and deliver teacher-training programs for MAEd and BED teachers from partner schools based on the results of student research. Implement ELT focusing on literacy for specific audiences, including from community and school partners.
3. Mathematics	**INSTRUCTION** Function as competitive educational leaders in the field of mathematics. **RESEARCH** Lead in the production of quality scientific research on potential innovations and improvements in mathematics teaching and learning. **EXTENSION** Exemplify RSU's vision of academic excellence, global competitiveness, and service by undertaking socio-civic service in the community.	**Group Outputs** Conduct true or quasi-experimental research on innovations in mathematics pedagogy. Conduct exploratory research projects on potential innovations in mathematics teaching and learning. Conduct exploratory research projects on developing instructional materials for better mathematics teaching.	**Class Undertakings** Design and develop innovative instructional materials for the teaching of mathematics. Deliver teacher training programs for BED Math teachers and school partners with the purpose of driving innovation in mathematics teaching and learning. Spearhead a Student Research Colloquium featuring educational researchers in the field of mathematics.

4. Science	**INSTRUCTION** Demonstrate knowledge of science education and the innovative pedagogical practices associated with it. **RESEARCH** Produce research on potential innovations and improvements in science teaching and learning. **EXTENSION** Exemplify RSU's vision of academic excellence, global competitiveness, and service by undertaking socio-civic service in the community.	**Group Outputs** Conduct true or quasi- experimental research on innovations in science education. Conduct exploratory research projects on potential innovations in the science education curriculum.	**Class Undertakings** Design and develop innovative instructional materials for teaching science. Deliver teacher training programs for BED Science teachers and school partners with the purpose of driving innovation in science teaching and learning. Spearhead a Student Research Colloquium featuring educational researchers in the field of science.
5. Home Economics	**INSTRUCTION** Design an appropriate curriculum incorporating recent innovations in home economics teaching and learning. **RESEARCH** Produce research on potential innovations and improvements in home economics teaching and learning. **EXTENSION** Exemplify RSU's vision of academic excellence, global competitiveness, and service by undertaking socio-civic service in the community.	**Group Outputs** Conduct true or quasi- experimental research on innovations in home economics education. Conduct exploratory research projects on potential innovations in the home economics education curriculum. Create a community livelihood plan from special topics in home economics.	**Class Undertakings** Design and develop innovative instructional materials for teaching home economics. Deliver teacher training programs for BED Home Economics teachers and school partners with the purpose of driving innovation in home economics teaching and learning. Spearhead a Student Research Colloquium featuring education researchers in the field of home economics. Organize a micro-training workshop for a partner community with focus on a livelihood plan.

B. PhD in Education

Areas of Specialization	Trifocalized Program Objectives	Research Options	Proposed Parallel Extension Activities
1. Educational Leadership and Management	**INSTRUCTION** Demonstrate competitiveness, innovation, efficiency, and an in-depth knowledge of educational leadership and management. **RESEARCH** Produce quality scientific research that is published and widely acknowledged/disseminated (ideally, internationally). **EXTENSION** Exemplify RSU's vision of academic excellence, global competitiveness, and service by undertaking socio-civic service in the community.	**Group Outputs** Conduct true or quasi-experimental research on innovations in educational leadership and management. Conduct exploratory research projects on potential innovations in the educational leadership and management curriculum. Create a training program or plan for principal training workshops, with the assistance of MAEd-Educational Leadership Majors.	**Class Undertakings** Develop administrator and teacher training programs for EdD, MAEd, and BED teachers and students from partner schools, based on the results of student research. Spearhead a Student Research Colloquium for EdD, MAEd, and BED teachers and students, with the assistance of MAEd Educational Leadership Majors. Initiate a series of principal training workshops based on the results of student research.

In the implementation of the curriculum mapping for instruction, research, and extension, Argyris' double-loop learning model could be used as a framework from planning to evaluation.

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ENDNOTES

1. Hatch, M.J., & Schultz M. (2002). The Dynamics of Organizational Identity. *Human Relations, 55*(8), 989–1018. Retrieved https://journals.sagepub.com/doi/10.1177/0018726702055008181
2. Mead, G.H. (1934). *Mind, Self and Society*. University of Chicago Press.
3. Pelayo, R. (2016). *The Wave Leadership Model*. An Unpublished Dissertation. The National Teachers College.
4. Asim, H.M., Vaz, A., Ahmed, A., & Sadiq, S. (2021). A Review on Outcome Based Education and Factors That Impact Student Learning Outcomes in Tertiary Education System. *International Education Studies, 14*(2), 1. ISSN 1913-9020 E-ISSN 1913-9039
5. Spady, W.G. (1994). Outcome-Based Education: Critical Issues and Answers. *ERIC Collection*. Retrieved https://eric.ed.gov/?id=ED380910

6. Harden R.M., Crosby, J.R., & Davis, M.H. (1999). AMEE Guide No. 14: Outcome-based education: Part 1 – An introduction to outcome-based education. *Medical Teacher*, *21*(1), 7–14. Retrieved https://paeaonline.org/wp-content/uploads/imported-files/19e-Intro-to-Outcome-Based-Education.pdf
7. Argyris, C., & Schon, D. (1996). Organizational learning II: Theory, Method and Practice. Addison Wesley.
8. InVista Performance Solutions. (n.d.). *Double-loop Learning and Leadership Development*. Retrieved https://www.invistaperforms.org/double-loop-learning-leadership-development/
9. Creswell, J. (2014). *Research Design, Quantitative, Qualitative and Mixed Methods Approaches* (4th Edition). SAGE Publishing Inc.