

Evaluating Curriculum Effectiveness through the Kirkpatrick Model: A Framework for Training and Learning Programs

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ABSTRACT

This study primarily focused on the curriculum evaluation of the practicum program of St. Michael's College of Iligan, Inc. in the Higher Education Department in Iligan City as a basis for the enrichment program. This study contributes to the body of knowledge by proposing a more systematic curriculum evaluation based on the Kirkpatrick Model, which examines both formal and informal training procedures and rates them against four levels of criteria: reaction, learning, behavior, and results. This study used a descriptive-correlational research approach and a self-created questionnaire used by the institution for curriculum evaluation. There were 40 industrial sectors represented. The researcher treated the data using a quantitative manner that included frequency and percentage, mean and standard deviation, and Kruskal-Wallis. The findings revealed that the majority of practicum providers belong to a tertiary industrial sector. Moreover, researcher concludes that industries observed that conduct was the most valued appraisal factor of on-the-job training students, which was viewed as outstanding. Further, this study proves that there is no significant difference in the appraisal factors of the curriculum evaluation in the perception of industries that provide the on-the-job-training experience for the students, which proves that the school curriculum program was consistent in delivery methodology that tailors students' skills to the needs of the industry.

Keywords: Curriculum Evaluation, On-The-Job-Training, Industrial Sectors

INTRODUCTION

In today's rapidly evolving educational and professional landscape, the effectiveness of training and learning programs is a critical concern for institutions aiming to produce competent, industry-ready graduates. Curriculum evaluation serves as a vital process in determining whether educational objectives are being met and whether learning experiences are translating into real-world competencies. Among various evaluation frameworks, the Kirkpatrick Model remains one of the most widely recognized tools for assessing training effectiveness, encompassing four key levels: reaction, learning, behavior, and results. Despite its widespread use in corporate training and professional development, the application of the Kirkpatrick Model in formal academic curriculum evaluation, particularly in higher education and on-the-job training (OJT) settings, remains limited and underexplored. Existing studies often focus on individual components of the model or emphasize learner satisfaction (Level 1) without sufficiently addressing deeper behavioral changes and measurable outcomes (Level 3 and 4).

This fragmented approach creates a significant research gap in the holistic and systematic evaluation of curriculum effectiveness through all four levels of the Kirkpatrick framework. This study addresses that gap by applying the complete Kirkpatrick Model to evaluate the effectiveness of training and learning programs, with a specific focus on OJT curricula. By doing so, it aims to provide a more comprehensive understanding of how training programs influence learners' knowledge acquisition, workplace behavior, and actual performance outcomes. The findings are intended to guide curriculum developers, educators, and institutional leaders in designing and refining learning experiences that are

both impactful and aligned with real-world demands.

On-the-job training is one approach in which students are given the opportunity to apply the theories they have studied in school. It also assists students in acquiring important knowledge and abilities through performance in a real job situation. As part of their curriculum, colleges and universities need their students to complete such training within a certain number of hours. An OJT allows students to experience the actual procedures of a certain work while using genuine tools, equipment, and papers. In consequence, the workplace becomes a training ground for a student trainee to learn more about his chosen subject and put what he has learned in the academy into reality. This is also why trainees should take their internship seriously, since it can help them advance in their careers (Hebron, 2020).

Curriculum evaluation is a critical component of educational review to ensure compliance and effectiveness. The analysis of how well the curriculum satisfies the standards, as well as the outcome of the evaluation, will be a critical component for future research and revisions to the current curriculum. This study adds to the body of knowledge by attempting a more systematic curriculum review based on the Kirkpatrick Model, which evaluates both formal and informal training techniques and assesses them against four levels of criteria: reaction, learning, behavior, and results.

THEORETICAL BACKGROUND

The evaluation of training and learning programs is essential in determining their effectiveness, relevance, and contribution to organizational goals. One of the most widely recognized frameworks for such evaluation is the Kirkpatrick Model, developed by Donald Kirkpatrick in 1959. Rooted in educational psychology and organizational behavior theories, the model provides a comprehensive approach to assessing training outcomes across four distinct levels: Reaction, Learning, Behavior, and Results. The theoretical foundation of the Kirkpatrick Model draws on behaviorist and constructivist learning theories, emphasizing not only knowledge acquisition but also the application of skills in the workplace and the resulting organizational impact. The model operates under the premise that effective training leads to measurable changes in knowledge, behavior, and performance.

Level 1–Reaction: This level assesses participants' immediate responses to the training program. Theoretically, it aligns with the affective domain of Bloom's Taxonomy, focusing on attitudes, motivation, and satisfaction. A positive reaction is considered a precursor to meaningful learning.

Level 2–Learning: This level measures the extent to which participants acquire the intended knowledge, skills, and attitudes. It is rooted in cognitive learning theories, particularly those emphasizing knowledge retention and skill development through structured instruction and active participation.

Level 3–Behavior: This level examines whether the learning is transferred and applied in the workplace. It draws on social learning theory, especially Albert Bandura's concept of observational learning and reinforcement, highlighting the importance of environmental support and reinforcement mechanisms in facilitating behavioral change.

Level 4–Results: The final level evaluates the overall impact of the training on organizational performance. It aligns with systems theory and human capital theory, suggesting that investment in human development leads to improved productivity, efficiency, and goal achievement.

The Kirkpatrick Model remains influential due to its practicality, flexibility, and scalability across various industries and organizational contexts. It provides a structured methodology to bridge the gap between training inputs and organizational outcomes. Moreover, modern adaptations of the model have emphasized the need for continuous evaluation and the inclusion of return on expectations (ROE) to align learning initiatives with strategic objectives.

In sum, the Kirkpatrick Model offers a robust theoretical and practical framework that supports evidence-based decision-making in training and development. It promotes accountability, enhances program design, and ultimately contributes to sustainable organizational growth.

MATERIALS AND METHODS

This study used the descriptive-correlational research design. This study utilized a self-made questionnaire used by the institution for curricular evaluation. Content validity was conducted by a panel of experts to review the instrument. The researcher used purposive sampling in selecting the participants, specifically the practicum providers/host training establishment. There were 40 industrial sectors that participated. The researcher employed a quantitative method using frequency and percentage, mean and standard deviation, and Kruskal-Wallis in treating the data analysis. This study employs the Kirkpatrick Model, which evaluates both formal and informal training techniques and assesses them against four levels of criteria: reaction, learning, behavior, and results.

Research Objectives

The researcher aims to investigate the curriculum evaluation, which is grounded on the Kirkpatrick Model for training and learning programs. The findings and analyses of data were used as the basis for the enrichment program.

Specifically, the main objective of this study was to answer the following questions:

1. What is the respondent's type of industrial sectors in terms of secondary industry, tertiary industry, and quaternary industry?
2. What is the respondent's curricular assessment in terms of ability, conduct, quality of work, quantity of work, and health and attendance?
3. Is there a significant difference in the curricular assessment when compared in terms of types of industrial sectors?
4. What enrichment program can be designed based on the findings of the study?

Ethical Considerations

This study involves the collection and analysis of data related to the curriculum evaluation of on-the-job training (OJT) of students from various host training establishments. The respondents were immediate supervisors of OJT students from the host training establishment, all of whom were of legal age. Ethical standards were strictly observed throughout the research process. Informed Consent was obtained from all participants prior to data collection, ensuring that they were fully aware of the purpose, procedure, and scope of the study—additionally, confidentiality and Data Privacy. Compliance with the Data Privacy Act of 2012 (Republic Act No. 10173) was strictly upheld to protect the confidentiality and anonymity of all personal and institutional data. All information gathered was used solely for academic purposes and stored securely to prevent unauthorized access. For the minimization of risk and harm, this study ensured that all potential risks to the respondents were minimized. Participation involved no physical, psychological, or emotional harm, and all procedures were designed to respect the dignity, rights, and well-being of the participants involved. The research activities posed minimal risk, and participants were not exposed to any form of coercion or undue influence. Anonymity and confidentiality were strictly maintained to protect respondents from potential negative consequences resulting from their participation.

RESULTS AND DISCUSSION

This part presents a comprehensive analysis and interpretation of the data gathered during the course of this study, where the researchers conduct an in-depth discussion of the findings obtained from a thorough investigation of the curriculum evaluation. The results and findings of the study are presented chronologically, based on the objectives as presented therein.

Problem No. 1. What is the respondent's type of industrial sectors in terms of secondary industry, tertiary industry, and quaternary industry?

Table 1
Respondent's Type of Industry

Type of Industry	<i>f</i>	Percentage
Secondary	11	27.5
tertiary	27	67.5
Quaternary	2	5.0
Total	40	100.0

Table 1 presents the distribution of the respondents based on their respective industrial sectors. As indicated in the data, the majority of the respondents – 27 out of 40, or 67.5% belong to the tertiary industry sector. This suggests that a significant portion of the study's participants are engaged in occupations within the services sector of the economy. The tertiary industry, also referred to as the service sector, encompasses a broad and diverse range of activities that do not involve the direct production of goods but instead focus on providing services to consumers and businesses. According to Hayes, Khartit, and Beer (2022), the tertiary sector is generally divided into two major categories. The first category includes for-profit service-oriented firms, such as those in finance, retail, hospitality, real estate, education, and telecommunications.

The second category consists of non-profit organizations or non-business entities such as charitable institutions, foundations, healthcare organizations, government agencies, and non-governmental organizations. The predominance of respondents from the tertiary sector in this study may reflect the growing importance and expansion of the service economy, especially in urbanized and economically diverse regions. It also underscores the relevance of understanding service-related industries in evaluating business practices, workforce dynamics, and economic contributions within the context of this research.

The tertiary sector plays a pivotal role in the structure and sustainability of modern economies. As highlighted, it serves as the primary source of employment, accommodating a substantial portion of the labor force across various service industries. The tertiary sector's interdependence with the primary (agriculture) and secondary (Manufacturing) sectors positions it as a foundational pillar for economic condition, continuity, and development. Given its significance, the growth and stability of the tertiary sector have profound implications for economic policy, labor market strategies, and development planning. The sector's dominance also implies a shift toward a knowledge-based economy (Pettinger, 2021).

Problem No. 2. What is the respondent's curricular assessment in terms of ability, conduct, quality of work, quantity of work, and health and attendance?

Table 2
Level of Respondents' Curricular Assessment

Dimensions	Mean	SD	<i>Qualitative Interpretation</i>
Ability	4.60	.535	<i>Outstanding</i>
Conduct	4.75	.368	<i>Outstanding</i>
Quality of Work	4.65	.580	<i>Outstanding</i>

Quantity of Work	4.55	.639	<i>Outstanding</i>
Health and Attendance	4.73	.784	<i>Outstanding</i>
Overall Mean	4.62	.451	<i>Outstanding</i>

Table 2 shows the curriculum evaluations of the respondents. Overall, respondents revealed that “conduct” affects the performance of on-the-job training students, which was statistically discovered with a highest mean of 4.75 and regarded as outstanding. These conduct are highly valued factors. These incorporated the trainee's personality, initiative, and cooperation. According to the curriculum assessment tool, personality relates to trainees' ability to interact with others, trainees' initiative means OJT self-initiated attempts to develop ways to achieve goals, and cooperation implies the ability to work peacefully with others toward the overall efficiency of the company, as well as the observance of proper office and obedience to rules and regulations and office policies (Curriculum Assessment Tool, 2022).

The high regard for conduct implies that technical skills alone are not sufficient for a successful OJT experience. Instead, behavioral competencies and professional demeanor play a pivotal role in determining the trainee's overall performance and integration into the workplace culture. This finding underscores the importance of embedding character development, soft skills training, and workplace etiquette into the academic curriculum to ensure that students are not only skilled but also work-ready and professionally mature.

Problem No. 3. Is there a significant difference in the curricular assessment when compared in terms of types of industrial sectors?

Table 3
Level of Respondents' Curricular Assessment

Dimension	Secondary		Tertiary		Quaternary		Kruskal-Wallis H-Value	p-value
	Mean	DE	Mean	DE	Mean	DE		
Ability	4.67	<i>O</i>	4.56	<i>O</i>	4.83	<i>O</i>	.309	.857
Conduct	4.79	<i>O</i>	4.73	<i>O</i>	4.83	<i>O</i>	.081	.960
Quality of Work	4.64	<i>O</i>	4.67	<i>O</i>	4.5	<i>O</i>	.505	.777
Quantity of Work	4.73	<i>O</i>	4.48	<i>O</i>	4.5	<i>O</i>	.932	.627
Health and Attendance	5.00	<i>O</i>	4.59	<i>O</i>	5	<i>O</i>	2.351	.309

Table 3 shows the level of curricular assessment of respondents. According to the findings, there is no substantial variation in curricular evaluation based on the types of industrial sectors. This suggests that the curricular appraisal element is consistently observed in students' on-the-job training across all industrial sectors. This implies that whatever types of industrial sectors, such as secondary, tertiary, and quaternary, on-job-training students' ability, conduct, quality of work, quantity of work, and health and attendance were consistently observed by the practicum providers. This study proves that there is no significant difference in the appraisal factors of the curriculum evaluation in the perception of industries that provide the on-the-job-training experience for the students, which proves that the school curriculum program was consistent in delivery methodology that tailors students' skills to the needs of the industry.

Problem No. 4. What enrichment program can be designed based on the findings of the study?

The researcher presented an enrichment program based on the results of a survey.

Rationale:

St. Michael's College is a tertiary institution that aims to provide curriculum programs to meet the needs of the industrial sectors. The enrichment program is a supplementary educational program designed to enhance students' academic and practical learning experiences. It is not a replacement for the core curriculum, but rather an addition to it. The conclusions reached based on the facts presented here could serve as a good foundation for developing and defining enrichment program initiatives.

Objectives:

Specifically, the proposed enrichment program focuses on the objectives:

1. To improve the soft skills and hard skills of students.

Expected Outcome:

The findings of this study will assist school administrators, college deans, and OJT coordinators in developing enrichment programs to enhance students' ability to tailor their skills to the needs of the industry.

Areas of Concern	Specific Objective	Activities	Person Involved	Time Frame	Outcome
Soft Skills	Improve student ability to work with others and to have a positive influence on furthering their career.	▪ Communication Training ▪ Social Skills Training ▪ Conflict Management Training ▪ Interactive Training	College Dean OJT Coordinator Student	Twice a semester of the school year	▪ Developing communication skills and improve active listening skills. ▪ Demonstrate interpersonal skills and competencies to boost confidence. ▪ To improve employees' social and problem-solving skills in order to better position
Hard Skills	Enhance technical skills required for a job through education and experience.	▪ Professional Development Training	College Dean OJT Coordinator Student	Twice a semester of the school year	▪ Improvement of specific competencies, skills, knowledge, and abilities needed to perform a specific task or role. ▪ To strengthen student's technical skills, they have learned through education and experience.

CONCLUSION

The goal of the school curriculum should be to provide students with knowledge and skills that will enable them to become better citizens. Thus, effective curriculum monitoring and evaluation ultimately determine the educational quality. From the foregoing summary of findings, the following conclusions are drawn: all industrial sectors classified in this study consistently observed that students' on-the-job training steadily demonstrates factors such as ability, conduct, quality of work, quantity of work, health, and attendance as they perform their work experience with the various practicum providers. It demonstrates that the school's curriculum program meets the needs of the industrial sectors. It also demonstrates that OJT trainees were prepared to tailor their skills to the needs of the industry. As concluding highlights, the results clearly answered our research question, met our research purpose, and supported our hypothesis.

Recommendations

From the foregoing conclusions, the following recommendations are suggested and offered:

Educational Institutions and Host Training Institutions. It is recommended that educational institutions and training providers adopt the Kirkpatrick Model as a comprehensive framework for evaluating the effectiveness of their curriculum and learning programs. By systematically assessing all four levels-reaction, learning, behavior, and results- stakeholders can gain a clear understanding of program impact and areas for improvement. Additionally, it is advised to integrate continuous feedback mechanisms and align training objectives with organizational or institutional goals to ensure relevance and practical application of required skills. Future curriculum development efforts should be guided by evidence-based evaluations to promote more effective, outcome-driven learning experiences.

Future Researcher. Encouraged to expand the scope of curriculum evaluation by applying the Kirkpatrick Model across diverse educational and training contexts, including different academic disciplines, institutions, and industry-based training programs. It is also recommended to employ mixed-method approaches to capture both quantitative outcomes and qualitative insights, especially at the behavioral and results levels, which are often underexplored. Moreover, longitudinal studies may provide a deeper understanding of the sustained impact of curriculum interventions over time. Researchers may also explore the integration of emerging technologies and digital platforms in enhancing curriculum delivery and evaluation under the Kirkpatrick framework.

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