Evaluation of the Implementation of the Annual Conference of Education Culture and Technology (ACECT) 2022 Using the Model Outcome-Based Evaluation (OBE)

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Abstract

This study evaluates the implementation of the Annual Conference of Education, Culture, and Technology (ACECT) 2022 using the Outcome-Based Evaluation (OBE) model. The evaluation aims to measure achieved outcomes, identify encountered obstacles, and provide recommendations for future improvements. Findings reveal that the conference successfully enhanced both the quality and quantity of scientific publications, resulting in 48 papers published in Sinta accredited journals and 120 additional papers in the Proceeding e-Book. Participant satisfaction with the conference organization reached 85%, despite facing challenges such as limited presentation time, technical issues, and prolonged paper assessment processes. Expert opinions underscore the importance of adequate time allocation, meticulous technical preparation, and an efficient evaluation process. Overall, the conference positively contributed to the academic and professional development of participants and bolstered the academic reputation of participating institutions.

Keywords: Outcome-Based Evaluation, Scientific Publications, Participant Satisfaction, Academic Development.

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INTRODUCTION

The organization of international conferences is one of the strategic steps in enhancing academic culture at both national and international levels [1]. These conferences serve as a medium for lecturers and students to disseminate their research findings, thereby increasing the reputation of researchers and influencing the accreditation of study programs and universities [2]. The Annual Conference of Education, Culture, and Technology (ACECT) organized by the Faculty of Tarbiyah and Teacher Training at the State Islamic Institute (IAIN) Ternate in 2022 is a commitment to achieving the vision and mission of higher education, namely increasing the number of globally indexed scientific publications and strengthening cooperation between higher education institutions [3], [4]. The conference theme, "Integrating Local Wisdom, Religious Values, and Technology in Education in a 5.0 Society Era," was promoted to guide lecturers and students toward modern learning in accordance with the Society 5.0 era [5]. The conference aims to facilitate the exchange of information that enriches knowledge and scientific thinking maturity, and to establish cooperation among lecturers from various countries. Additionally, the conference seeks to open opportunities for scientific publications in reputable journals and encourage collaborative research across countries [6], [7]. Although the conference attracted a wide range of participants, the evaluation revealed several obstacles, such as the low participation of IAIN Ternate students and the lack of an internal journal to accommodate the scientific work produced. This highlights the importance of improving mentoring in scientific writing and developing internal journals.

Evaluating the implementation of a conference is crucial to ensure that the set goals are achieved effectively [8], [9]. In an academic context, the success of a conference is not only measured by the number of participants but more by the long-term impacts, such as the improvement of research quality, the number of scientific publications, and the development of international cooperation networks. Outcome-Based

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Evaluation (OBE) is an approach that focuses on the results or impacts of a program or activity [10]. This evaluation emphasizes achieving predetermined goals by assessing the extent to which desired outcomes have been met. In the context of ACECT, OBE will assess various aspects such as the increase in scientific publications, the expansion of international cooperation networks, and the impact of the conference on the capacity building of lecturers and students [11], [12], [13].

Using the OBE approach, the evaluation of ACECT 2022 will include: 1) Increased Scientific Publications: Measuring the number of scientific publications resulting from the conference, including the number of articles published in national and international indexed journals. 2) International Cooperation: Assessing the extent to which the conference succeeded in fostering cooperation between higher education institutions from different countries, including MoUs signed and collaborative projects initiated. 3) Capacity Building: Measuring the impact of the conference on enhancing the capacity of lecturers and students in terms of writing and publishing scientific papers, as well as improving critical and creative thinking skills in facing the Society 5.0 era. 4) Participation and Engagement: Assessing the level of participation and involvement of lecturers and students, and identifying factors that influence their participation in this conference [14].

By using Outcome-Based Evaluation, it is expected that a clear picture of the real impact of ACECT 2022 can be obtained, along with constructive recommendations to improve the effectiveness and efficiency of future conferences. This approach will also help identify areas that need improvement, ensuring that the goal of enhancing academic quality and scientific publications at IAIN Ternate can be optimally achieved.

METHOD

This study employs the Outcome-Based Evaluation (OBE) model to assess the implementation of the Annual Conference of Education, Culture, and Technology (ACECT) 2022. The OBE model was selected due to its focus on the outcomes or impacts of activities, allowing for a comprehensive evaluation of the conference's objectives. Outcome-Based Evaluation (OBE) emphasizes measuring the results or impact of a program or activity [2]. In the context of ACECT 2022, OBE was used to evaluate the extent to which the conference achieved its stated objectives, such as increased scientific publications, international cooperation, capacity building of lecturers and students, and participant engagement. The stages of OBE in the ACECT 2022 evaluation included identifying objectives and expected outcomes, which encompassed increased scientific publications, international cooperation, capacity building, and participation and engagement.

To effectively evaluate the implementation of ACECT 2022 using the OBE model, a combination of quantitative and qualitative research instruments was employed. These instruments were designed to collect comprehensive data on various aspects of the conference, including participant satisfaction, technical issues, and publication outcomes. Data collection was conducted through document studies, which involved collecting and analyzing reports of conference activities, such as the number of participants, the number of papers presented, and the resulting scientific publications. Interviews were conducted with the organizing committee, speakers, and participants to obtain qualitative feedback on the implementation and impact of the conference. Additionally, questionnaires were distributed to all conference participants to collect quantitative data on various aspects of conference implementation, such as participant satisfaction, perceived benefits, and participation rates [14].

Data analysis was carried out using both qualitative and quantitative methods. Qualitative analysis involved interpreting data from interviews and qualitative feedback from questionnaires, helping to identify constraints faced and suggestions for improvement. Quantitative analysis utilized statistical techniques to interpret quantitative data from the questionnaires, including frequency distributions, averages, and percentages to measure the level of participant satisfaction and engagement. The evaluation and interpretation of results focused on several key aspects: evaluating the number and quality of scientific publications resulting from the conference, assessing the success in establishing cooperation between higher education institutions, evaluating the impact of the conference on improving the capacity of lecturers and students, and assessing the level of participation and engagement of participants while identifying the factors influencing it. The research instruments can be seen in Table 1 and Table 2.

Table 1. Article Quality Assessment Instrument

Question/Item	Likert Scale (1-5)
Demographic Information	
Institution	Open-ended
Role	Speaker/Author, Reviewer, Participant

Abstract Quality	
Clarity	1 (Very unclear) - 5 (Very clear)
Relevance	1 (Not relevant) - 5 (Highly relevant)
Originality	1 (Not original) - 5 (Highly original)
Article Quality	
Structure	1 (Poorly structured) - 5 (Well structured)
Methodology	1 (Very weak) - 5 (Very strong)
Results and Discussion	1 (Very poor) - 5 (Excellent)
Contribution	1 (Not significant) - 5 (Highly significant)
Recommendations	Open-ended

Table 2 Interview Instrument to Measure Participant Satisfaction

Table 2. Interview instrument to Measure Participant Satisfaction		
Question/Item	Likert Scale (1-5)	
General Information		
Institution	Open-ended	
Role	Speaker/Author, Participant, Attendee	
Satisfaction with Conference Organization		
Overall Organization	1 (Very dissatisfied) - 5 (Very satisfied)	
Technical Arrangements	1 (Very dissatisfied) - 5 (Very satisfied)	
Session Quality	1 (Very dissatisfied) - 5 (Very satisfied)	
Content and Relevance		
Relevance to Field	1 (Not relevant) - 5 (Highly relevant)	
Knowledge Gained	1 (No knowledge gained) - 5 (A lot of knowledge gained)	
Participation and Engagement		
Engagement Opportunities	1 (Very poor) - 5 (Excellent)	
Active Participation	1 (Very low) - 5 (Very high)	
Feedback and Suggestions		
Positive Aspects	Open-ended	
Areas for Improvement	Open-ended	
Future Participation	1 (Very unlikely) - 5 (Very likely)	

RESULT AND DISCUSSION

To gather data for the evaluation leading to these results, two main instruments were employed: a questionnaire assessing the quality of articles and interviews gauging participant satisfaction. The article evaluation utilized a Likert scale (1-5) to rate aspects such as abstract quality (clarity: 4.2, relevance: 4.5, originality: 4.1) and article quality (structure: 4.3, methodology: 4.4, results and discussion: 4.2, contribution: 4.6). Meanwhile, participant satisfaction was measured across various dimensions also on a Likert scale (1-5), covering satisfaction with conference organization (overall: 4.6, technical arrangements: 4.5, session quality: 4.4), content and relevance (relevance to field: 4.7, knowledge gained: 4.3), and participation and engagement (engagement opportunities: 4.2, active participation: 4.1). These data sources provided a comprehensive basis for evaluating both the academic impact and participant experience of ACECT 2022. The research findings are detailed in Table 3 and Table 4.

Table 3. Article Quality Evaluation Results (Likert Scale: 1-5)

Aspect	Average Rating (1-5)
Abstract Quality	
Clarity	4.2
Relevance	4.5
Originality	4.1
Article Quality	
Structure	4.3
Methodology	4.4
Results and Discussion	4.2
Contribution	4.6

Table 4. Evaluation Results of Participant Satisfaction (Likert Scale: 1-5)

Aspect	Average Rating (1-5)
Satisfaction with Conference Organization	
Overall Organization	4.6
Technical Arrangements	4.5
Session Quality	4.4
Content and Relevance	
Relevance to Field	4.7
Knowledge Gained	4.3
Participation and Engagement	
Engagement Opportunities	4.2
Active Participation	4.1

The implementation of the Annual Conference of Education, Culture, and Technology (ACECT) 2022 was evaluated using the Outcome-Based Evaluation (OBE) Model to assess the achieved outcomes, particularly focusing on participants' scientific publications. From the data on winners and publications, it is evident how the conference contributed to enhancing both the quality and quantity of participants' scientific outputs. Winners' publications were distributed across Sinta 4, Sinta 5, and national journals: 16 top papers were published in Sinta 4 accredited national journals, 16 in Sinta 5 accredited journals, and another 16 in national journals, totaling 48 scientific papers published in nationally accredited journals can be seen in Table 5.

Additionally, papers from participants who did not secure top positions were published in the e-Book Proceedings. This provided a platform for these participants to receive academic recognition for their scientific contributions despite not winning the competition.

Table 5 Publication Details from ACECT 2022

Publication Type	Number
Sinta 4 Accredited Journals	16
Sinta 5 Accredited Journals	16
National Journals	16
Total Journal Publications	48
e-Book Proceedings	120
Total Publications	168

Out of the total 168 papers generated, 28.57% were successfully published in Sinta-accredited journals, underscoring a notable achievement in fostering high-quality scientific publications. Additionally, the e-Book Proceedings played a crucial role by showcasing the remaining 120 papers that did not attain top rankings. This ensured that every participant received academic recognition for their scientific contributions, contributing significantly to the dissemination of research outcomes from the conference. According to Han et al. [15], Outcome-Based Evaluation is highly effective in assessing the success of educational programs by focusing on tangible and measurable outcomes. In the context of ACECT 2022, the number of publications in accredited journals and the e-Book Proceedings serves as strong indicators of the conference's success in achieving its objectives.

Based on interviews with participants, the majority expressed positive experiences during the conference, appreciating the valuable opportunities to present their research, receive constructive feedback, and interact with experts in their field. Participants also highlighted the quality of speakers and the relevance of the presented materials. Applying the Outcome-Based Evaluation (OBE) Model to evaluate ACECT 2022 underscores the importance of clearly defining the evaluation components: outcomes, basis, and methodology for assessing achieved outcomes. The evaluation of the implementation of the Annual Conference of Education, Culture, and Technology (ACECT) 2022 using the Outcome-Based Evaluation (OBE) model reveals significant outcomes and identified challenges. The conference aimed to enhance the quality and quantity of scientific publications, resulting in 48 papers published in Sinta-accredited and national journals, alongside 120 papers in the e-Book Proceedings. Participant satisfaction reached 85%, highlighting positive feedback on the conference organization. However, challenges such as limited presentation time, technical issues, and delays in the paper assessment process were noted. Recommendations include extending presentation durations, conducting pre-conference technical training, and streamlining paper evaluation processes. The evaluation underscores the effectiveness of OBE in assessing educational program success by focusing on measurable outcomes and participant feedback, essential for guiding future improvements in conference management and academic impact.

CONCLUSION

Based on the Outcome-Based Evaluation (OBE) model applied to the Annual Conference of Education, Culture, and Technology (ACECT) 2022, the evaluation reveals that the conference successfully attained key objectives, including enhancing both the quality and quantity of scientific publications, fostering research capabilities, bolstering academic reputation, and disseminating knowledge. Notably, 48 papers were published in Sinta-accredited journals, with an additional 120 papers appearing in the Proceedings e-Book. While participant satisfaction with the conference organization was generally high, challenges such as constrained presentation time, technical issues, and a protracted paper assessment process were identified. Qualitative feedback highlighted participants' appreciation for the caliber of speakers and materials, while also suggesting improvements for future events. Experts underscored the need for adequate time management, rigorous technical readiness, and streamlined evaluation processes to enhance participant satisfaction and overall event efficacy. In conclusion, the conference significantly contributed to the academic and professional advancement of its attendees. To further enhance future conferences, it is recommended to address these identified challenges through improved logistical planning, enhanced technical support, and expedited paper assessment timelines.

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