

Alternative Delivery Mode Effectiveness and Perceived Student Outcomes in the Open High School Program: Teachers' Perspectives from a Quantitative Correlational Study

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ABSTRACT

This study examined the relationship between teachers' perceived effectiveness of Alternative Delivery Mode (ADM) and perceived student outcomes in the Open High School Program (OHSP) at Benigno V. Aldana National High School, Pozorrubio, Pangasinan. Using a quantitative descriptive-correlational design, the study included all 52 Junior High School and Senior High School teachers implementing the OHSP through census sampling. A validated and pilot-tested researcher-made questionnaire measured five ADM domains and four student-outcome domains. Teachers rated ADM positively across all five dimensions. Instructional delivery obtained the highest mean ($M = 4.54$), followed by learning resources and learner support (both $M = 4.49$), institutional support ($M = 4.44$), and

assessment ($M = 4.35$). Student outcomes were rated high, led by completion ($M = 4.20$), engagement ($M = 4.13$), academic performance ($M = 3.93$), and attendance ($M = 3.88$). All correlations were positive and significant. The strongest association was between assessment and academic performance ($r = .821$, $p < .001$), followed by learning resources and completion ($r = .724$, $p < .001$), instructional delivery and attendance ($r = .673$, $p < .001$), learner support and academic performance ($r = .668$, $p < .001$), and institutional support and attendance ($r = .665$, $p < .001$). Stronger perceptions of ADM effectiveness were associated with more favorable perceived student outcomes. The findings support improvements in communication, supplementary resources, assessment practices, and sustained teacher training. Results are correlational rather than causal.

Keywords: *Alternative Delivery Mode, Open High School Program, perceived student outcomes, teachers' perspectives, quantitative correlational study, flexible learning*

INTRODUCTION

Flexible and alternative delivery approaches have become important mechanisms for widening educational access and sustaining learning when regular attendance is limited by poverty, geography, work, health, family responsibilities, or other circumstances. International guidance emphasizes that distance and flexible learning are most effective when programs are designed around learner needs, local constraints, accessible resources, and teacher capacity rather than around technology alone (UNESCO, 2023, 2025).

Evidence from pandemic-related disruptions also demonstrated that access without adequate instructional support may produce uneven learning. Meta-analytic and national evidence documented learning losses when learners had less direct instructional time, weaker feedback, and limited home support,

with disadvantaged learners often experiencing the greatest effects (Betthäuser et al., 2023; Engzell et al., 2021). These conditions reinforced the principle that alternative delivery must protect both access and the quality and equity of learning (UNICEF, UNESCO, & World Bank, 2022).

In the Philippines, the Department of Education strengthened flexible learning through the Basic Education Learning Continuity Plan and related policies on the production and distribution of learning resources (Department of Education, 2020a, 2020b). Long before the pandemic, the Open High School Program had already provided a formal alternative pathway for secondary learners who could not regularly attend conventional classes (Department of Education, 2006). Republic Act No. 10665 later institutionalized the Open High School System as a means of extending secondary education to learners facing personal, geographic, socioeconomic, or physical barriers (Republic of the Philippines, 2015).

Program evaluations and Philippine studies have shown that the effectiveness of open and modular learning depends on policy awareness, operational readiness, teacher coordination, learning resources, monitoring, and sustained learner support (SEAMEO INNOTECH, 2015; Taguba, 2023; Tanucan et al., 2023). Teachers are central to these conditions because they organize materials, clarify lessons, monitor progress, provide feedback, assess performance, and maintain communication despite reduced face-to-face contact (RTI International, 2022).

The study was anchored in three complementary perspectives. Moore's Theory of Transactional Distance explains that the psychological and communication gap in distance education is shaped by the balance among dialogue, instructional structure, and learner autonomy (Moore, 1993). Lower transactional distance is associated with more favorable learning experiences, particularly when structure and dialogue are responsive to learners (Tria, 2024; Weidlich & Bastiaens, 2018). The Community of Inquiry framework further identifies teaching presence, social presence, and cognitive presence as interacting conditions for meaningful learning in nontraditional settings (Garrison et al., 2000; Garrison & Arbaugh, 2007).

Self-Determination Theory adds a motivational explanation by proposing that engagement and persistence improve when learners experience autonomy, competence, and relatedness (Ryan & Deci, 2000, 2020). In the OHSP, flexible pacing may support autonomy, clear guidance and feedback may strengthen competence, and regular communication may promote relatedness. Together, these perspectives suggest that effective instructional delivery, adequate learning resources, learner support, sound assessment, and institutional support may be associated with stronger student outcomes.

This study therefore examined teachers' perceptions of ADM effectiveness and perceived student outcomes in the OHSP at Benigno V. Aldana National High School. Specifically, it described the teacher-implementers' profile, assessed ADM effectiveness in instructional delivery, learning resources, learner support, assessment, and institutional support, determined perceived student outcomes in academic performance, engagement, attendance, and completion, and tested the relationship between the ADM dimensions and the student-outcome dimensions.

METHODS

Research Design

The study used a quantitative descriptive-correlational design. The descriptive component summarized the teacher profile and the perceived levels of ADM effectiveness and student outcomes. The correlational component determined the strength and direction of the associations between the ADM dimensions and the student-outcome dimensions without manipulating the variables or making causal claims (Cohen et al., 2018; Creswell & Creswell, 2018).

Research Locale, Participants, and Sampling

The research was conducted at Benigno V. Aldana National High School in Pozorrubio, Pangasinan, Philippines, a public secondary school implementing the OHSP. The respondents were all 52 Junior High School and Senior High School teachers assigned to the program during the study. Census or total-

population sampling was used because the target group was small, clearly defined, and directly involved in instructional delivery, learner monitoring, assessment, and program implementation (Fraenkel et al., 2019).

Research Instrument

Data were gathered through a researcher-made survey questionnaire with three parts. Part I covered age, sex, highest educational attainment, length of teaching experience, and years of OHSP involvement. Part II measured perceived ADM effectiveness in instructional delivery, learning resources, learner support, assessment, and institutional support. Part III measured perceived student outcomes in academic performance, engagement, attendance, and completion. Parts II and III used a five-point Likert scale.

The instrument underwent expert content validation, revision, pilot testing, and reliability analysis using Cronbach’s alpha before full administration. These procedures were undertaken to improve item clarity, relevance, alignment, and internal consistency (DeVellis, 2017).

Data-Gathering Procedure and Ethical Considerations

Permission was secured from the appropriate education authorities and the school head before data collection. The final questionnaire was administered to the identified teacher-respondents with clear instructions. Participation was voluntary, informed consent was obtained, and respondents were assured of anonymity and confidentiality. Data were reported only in aggregate form and were handled in accordance with the Data Privacy Act of 2012 and accepted ethical standards for educational research (National Privacy Commission, 2016; Republic of the Philippines, 2012).

Statistical Treatment

Frequencies and percentages described the respondents’ profile. Weighted means and standard deviations summarized perceived ADM effectiveness and perceived student outcomes. Pearson’s product-moment correlation coefficient tested the relationships between the five ADM dimensions and the four student-outcome dimensions at $\alpha = .05$. The analysis focused on associations and did not establish causation (Hair et al., 2019).

RESULTS AND DISCUSSION

Profile of Teacher-Implementers

Table 1. *Profile of the OHSP teacher-implementers (N = 52)*

Variable	Category	n	%
Age	Below 25	5	9.6
	25–34	28	53.8
	35–44	10	19.2
	45–54	2	3.8
	55 and above	7	13.5
Sex	Male	23	44.2
	Female	29	55.8
Highest educational attainment	Bachelor’s degree	9	17.3
	Master’s degree, with units	8	15.4
	Master’s degree, completed	19	36.5
	Doctoral degree, with units	11	21.2
	Doctoral degree, completed	5	9.6

Variable	Category	n	%
Teaching experience	Less than 5 years	8	15.4
	5–9 years	23	44.2
	10–14 years	7	13.5
	15–19 years	2	3.8
	20 years and above	12	23.1
OHSP involvement	Less than 1 year	9	17.3
	1–3 years	43	82.7

Most respondents were 25–34 years old (53.8%), female (55.8%), master’s-degree holders (36.5%), and teachers with 5–9 years of teaching experience (44.2%). Most had been involved in the OHSP for 1–3 years (82.7%). The profile indicates that the program was implemented by a comparatively young but academically qualified and professionally experienced group with emerging familiarity with OHSP requirements. The demographic data are descriptive and were not treated as evidence that any profile characteristic caused better program performance.

Perceived Effectiveness of Alternative Delivery Mode

Table 2. *Teachers’ perceived effectiveness of ADM by domain*

Domain	Mean	SD	Interpretation
Instructional delivery	4.54	0.576	Very Great Extent
Learning resources	4.49	0.740	Great Extent
Learner support	4.49	0.745	Great Extent
Assessment	4.35	0.819	Great Extent
Institutional support	4.44	0.788	Great Extent

Scale: 4.50–5.00 = Very Great Extent; 3.50–4.49 = Great Extent; 2.50–3.49 = Moderate Extent; 1.50–2.49 = Slight Extent; 1.00–1.49 = No Extent.

Teachers rated all five ADM domains positively. Instructional delivery obtained the highest overall mean ($M = 4.54$), indicating a very great extent of effectiveness. Learning resources and learner support both obtained $M = 4.49$, followed by institutional support ($M = 4.44$) and assessment ($M = 4.35$). At the item level, the strongest ratings involved the suitability of materials for independent learning, appropriate instructional strategies, available consultation and remediation, the use of assessment results to guide instruction, and adequate school support. The relatively weaker areas involved explaining lessons with limited face-to-face interaction, material sufficiency, teacher-learner communication, modality-appropriate assessment methods, and sustained teacher training.

The strong rating for instructional delivery is consistent with Transactional Distance Theory because clear structure, flexible pacing, and appropriate strategies can reduce the instructional gap created by physical separation (Tria, 2024; Weidlich & Bastiaens, 2018). It also reflects teaching presence in the Community of Inquiry framework. Research has linked stronger teaching presence, organization, facilitation, and feedback with higher perceived learning and satisfaction in online and blended settings (Caskurlu et al., 2020; Martin et al., 2022; Morrison & Jacobsen, 2023).

The ratings also support Philippine findings that effective flexible learning requires well-designed materials, communication, intervention, and quality assurance (Tanucan et al., 2023). At the same time, the weaker ratings in communication, assessment methods, and training resemble implementation concerns reported in OHSP and modular-learning studies (Balbin & Sumail, 2025; Taguba, 2023). These results

suggest that the program is functioning well overall, but its quality may be strengthened through better interaction systems, enriched resources, refined assessment practices, and continuous capability-building.

Perceived Student Outcomes

Table 3. *Teachers' perceived student outcomes by domain*

Domain	Mean	SD	Interpretation
Academic performance	3.93	0.915	High
Engagement	4.13	0.835	High
Attendance	3.88	0.898	High
Completion	4.20	0.870	High

Scale: 4.50–5.00 = Very High; 3.50–4.49 = High; 2.50–3.49 = Moderate; 1.50–2.49 = Low; 1.00–1.49 = Very Low.

Teachers rated all four student-outcome domains as high. Completion was highest ($M = 4.20$), followed by engagement ($M = 4.13$), academic performance ($M = 3.93$), and attendance ($M = 3.88$). Teachers observed strengths in students' application of learned concepts, self-directed learning, persistence, participation, commitment to finishing the program, and progression to the next grade level. Lower ratings were recorded for sustained academic improvement, interest and motivation, consultation attendance, regular submission of requirements, and persistence in completing all requirements until program completion.

The favorable engagement and completion results align with Self-Determination Theory because flexible pacing can support autonomy, while guidance, feedback, and consultation can strengthen competence and relatedness (Ryan & Deci, 2020). Recent studies also show that autonomy support and self-regulated learning contribute to online engagement and persistence (Miao & Ma, 2023; Wang et al., 2024). Philippine evidence similarly indicates that modular and open-learning environments can support independence and flexibility, although motivation and interest may vary among learners (Capinding, 2022; Mallari & Tayag, 2022; Mirasol et al., 2023).

Attendance obtained the lowest domain mean, although it remained high. This pattern suggests that learners may complete the program despite irregular consultation attendance or delayed submissions. Because dropout in flexible learning is influenced by course design, motivation, technology, and support, structured monitoring and early intervention remain important (Rahmani et al., 2024).

Relationship Between ADM Effectiveness and Student Outcomes

Table 4. *Correlations between perceived ADM effectiveness and student outcomes*

Student outcome	Instructional delivery	Learning resources	Learner support	Assessment	Institutional support
Academic performance	.600***	.678***	.668***	.821***	.626***
Engagement	.491***	.534***	.534***	.428**	.636***
Attendance	.673***	.627***	.628***	.510***	.665***
Completion	.580***	.724***	.613***	.469***	.560***

*Note. Values are Pearson r coefficients. ** $p < .01$. *** $p < .001$.*

All correlations were positive and statistically significant. The strongest relationship was between assessment and academic performance ($r = .821$, $p < .001$), suggesting that clearer alignment of tasks, feedback, and use of results for instructional decisions is closely associated with more favorable perceptions of achievement. Learning resources had the strongest relationship with completion ($r = .724$, $p < .001$), while instructional delivery had the strongest relationship with attendance ($r = .673$, $p < .001$). Learner

support was strongly related to academic performance ($r = .668, p < .001$), and institutional support was strongly related to attendance ($r = .665, p < .001$).

The pattern is consistent with the study's theoretical framework. Structured instruction and accessible resources may reduce transactional distance; teaching presence and feedback may promote cognitive engagement; and learner and institutional support may strengthen autonomy, competence, and relatedness. The results also agree with research showing that program implementation, teaching presence, and support conditions are related to learner engagement, retention, and performance in flexible environments (Cena & Corpuz, 2024; Martin et al., 2022; Miao & Ma, 2023). Because the design was correlational and based on teacher perceptions, the coefficients indicate association rather than causal effect.

CONCLUSION

The OHSP at Benigno V. Aldana National High School was implemented by a generally young, academically qualified, and experienced group of teachers. Teachers perceived ADM as effective across instructional delivery, learning resources, learner support, assessment, and institutional support. Instructional delivery emerged as the strongest domain, while assessment received the lowest overall mean, although it remained positively rated.

Perceived student outcomes were high across academic performance, engagement, attendance, and completion. Completion and engagement were the strongest outcomes, while attendance was the comparatively weakest area. The findings indicate that the program supports persistence and flexible participation but still faces challenges in regular consultation attendance, timely submission, sustained motivation, and consistent academic progress.

Perceived ADM effectiveness was positively and significantly associated with every measured student-outcome domain. The strongest association involved assessment and academic performance. The null hypothesis of no significant relationship was therefore rejected. These relationships should be interpreted as correlational and perception-based, not as evidence that ADM alone caused the reported outcomes.

Recommendations

School leaders should sustain continuous professional development, mentoring, and role-specific orientation for OHSP teachers, particularly in teacher-learner communication, flexible-learning pedagogy, assessment design, feedback, and learner monitoring.

The school should strengthen learning-resource systems by ensuring the adequacy, accessibility, alignment, and enrichment of printed and supplementary materials for independent learning.

A structured learner-support and monitoring system should include scheduled academic check-ins, early follow-up for missed submissions, remediation, motivational support, and coordination with parents or guardians for learners at risk of disengagement or noncompletion.

Program improvement should remain data-driven. Administrators may regularly review assessment quality, resource adequacy, attendance patterns, learner-support records, and completion data to identify priority interventions. Future studies may include learner and parent perspectives, objective achievement records, and multi-school samples to improve triangulation and generalizability.

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