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# Organization Development Intervention: Applying Lewin's Action Research Model to Enhance Skill Competency and Collaboration for Improved Job Performance of Online Teachers at AAA Online School

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## Abstract

This study examines the organizational development potential of the Teaching Service Center (TSC) at AAA Online School by strengthening online teachers' skill competencies and collaborative capacity to improve online teacher job performance. Guided by Goal-setting theory and Weisbord's six-box model and structured around Lewin's action-research cycle (Pre-ODI, ODI, Post-ODI), a mixed-methods design was implemented with 130 teachers sampled from a population of 360. The ODI comprised a seven-activity portfolio (leadership workshop, World Café on communication, cloud-based e-learning, one-to-one lesson observation/feedback, virtual team-building, Appreciative Coaching, and teaching rating scale updates). Pre/post comparisons showed significant gains across all six variables (all $p < .001$). Online Teacher Job Performance rose from $M = 3.32$ to $M = 3.93$, mean difference = 0.62, $t = 6.893$, $p < .001$. Multiple regression on post-ODI scales yielded $R = .662$, $R^2 = .438$, adj. $R^2 = .415$, $F(5,124) = 19.338$, $p < .001$; all five predictors contributed uniquely and positively: trust in virtual workplace ($\beta = .248$, $p = .002$), collaboration with co-workers ($\beta = .217$, $p = .012$), individual leadership skills ($\beta = .193$, $p = .011$), virtual classroom-tech skills ($\beta = .171$, $p = .023$), and communication skills ($\beta = .153$, $p = .043$). Qualitative evidence converged, indicating clearer lesson leadership, more adaptive communication, routine use of interactive tools, stronger peer routines, and improved perceptions of organizational reliability. Taken together, the evidence supports all eleven hypotheses—post-intervention gains across all six constructs and positive, unique effects of each predictor on Online Teacher Job Performance. Findings show that a strategically designed ODI—linking capability building with social/structural supports—can strengthen perceived performance and the collaborative infrastructure of virtual teaching.

Keywords: Online teachers; Job performance; Skill competency; Collaboration; Goal-Setting Theory; Virtual Classroom Technology Skills; Communication Skills

## Introduction

Online education has grown rapidly in the past two decades, accelerated by global digi tal transformation and the COVID-19 pandemic. While it has increased access to learning, it h as also exposed issues in instructional quality, teacher collaboration, and technology integrati on (Bogdandy et al., 2020). In China, the online education sector has progressed through five stages, from early experiments with web-based platforms like Koolearn and Hujiang to AI-en abled, SaaS-based models under stricter regulation (Agora & Blue Elephant Capital, 2024). W ithin this environment, AAA Online School has emerged as a private institution serving intern ational learners, with its Teaching Service Center (TSC) managing over 360 remote Chinese l anguage teachers across multiple time zones.

Despite its strong infrastructure and content offerings, AAA online school's leadership identified challenges in teacher job performance. Initial organizational diagnosis, guided by Weisbord's (1976) Six-Box Model and the SOAR framework (Stavros, 2013), revealed weak alignment between the organizational mission and daily teaching practices. The diagnosis highlighted gaps in communication, insufficient professional development, low collaboration among teachers, and a reliance on punitive rather than developmental performance appraisal systems. These issues contributed to lower-than-expected student attendance, lesson completion, and teacher motivation.

The research focuses on improving online teachers' job performance at the TSC through a structured OD Intervention. Although broader factors such as policy constraints and platform fatigue also influence teaching outcomes, the TSC plays a central role in shaping teaching quality. Issues such as virtual isolation, miscommunication between departments, and lack of trust were especially evident in interactions among teachers, student service staff, and parents− an issue also noted by König et al. (2020) in their work on online education environments.

To address these issues, this study employed Lewin's (1946) three-step Action Research Model and was informed by Goal-Setting Theory (Locke & Latham, 2002). The ODI focused on enhancing five key variables: individual leadership skills, communication skills, virtual classroom technology skills, collaboration with co-workers, and trust in virtual workplaces. Intervention activities included class observation and feedback, World Café sessions for open communication, virtual team-building events, leadership skills workshops, cloud-based e-learning, Appreciative Coaching skills workshop, and updates to the teaching rating system.

The objectives of this study were fivefold: (1) to assess and diagnose the existing job performance of online teachers in terms of individual leadership skills, communication skills, virtual classroom technology skills, collaboration with co-workers, and trust in virtual workplaces; (2) to design and implement a targeted ODI based on the initial assessment; (3) to evaluate the extent of post-ODI improvements in teachers' skill competencies; (4) to assess changes in their capacity for effective online collaboration; and (5) to determine the overall impact of the ODI on online teacher job performance. This research contributes practical insights into managing virtual teaching teams in a private-sector education setting and expands the theoretical application of OD in online teaching contexts.

## Literature Review

### OD and Online Teacher Job Performance

Organizational Development (OD) is a structured process aimed at enhancing organizational effectiveness through strategic goal alignment, capacity development, and supportive systems (Cummings & Worley, 2015). Meanwhile, Campbell's Determinants of Job Performance Model highlights that job performance is shaped by motivation, declarative knowledge, and procedural skills (Campbell et al. ,1993), offering a useful framework to interpret improvements in teacher competencies following OD interventions. Recent studies highlight that transformational leadership, digital literacy, job satisfaction, and effective communication are key determinants of job performance in virtual education settings (Lyu & Luo, 2024). Effective job performance in online teaching extends beyond classroom practices, encompassing technological proficiency, teacher autonomy, and emotional intelligence (Côté & Miners, 2006; Johari & Zulkarnain, 2018). Performance appraisal methods such as Teaching Rating Scales play vital roles in evaluating and guiding online teachers' performance by enabling detailed assessments to guide continuous professional improvement (Wind et al., 2018).

### Factors in Online Teacher Job Performance

Online teacher job performance is shaped by a range of interrelated factors in the virtual education environment (Johari & Zulkarnain, 2018). This study identified six variables based on pre-intervention organization diagnoses: individual leadership skills (ILS), communication skills (CS), virtual classroom technology skills(VCTS), collaboration with co-workers(CWC) and trust in virtual workplaces(TVW) as the independent variables. Online teacher job performance (OTJP) was included as the dependent variable. Definitions of these constructs are presented in Table 1.

**Table 1**

*Definitions of Key Factors in Online Teacher Job Performance*

| Variable | Definition |
|---|---|
| ILS | The tools, behaviors, and personal capabilities such as communication, motivation, creativity, trustworthiness, and conflict resolution that promote teacher growth, well-being, and online teaching success (Shal et al., 2024) |
| CS | The ability to convey ideas effectively in virtual classrooms, including digital literacy, clarity, responsiveness, and active listening, which enhance feedback quality and classroom presence (Alshumaimeri & Alhumud, 2021; Siddiq et al., 2016). |
| VCTS | Teachers' capacity to operate virtual platforms, use interactive tools, troubleshoot issues, and personalize digital instruction to improve student learning and confidence (Hoang & Le, 2021; Torres, 2023). |
| CWC | Cooperative interaction among online educators that facilitates knowledge exchange, teaching innovation, and collective problem-solving (Ross & Ressia, 2015). |

| Variable | Definition |
|---|---|
| TVW | The degree to which online teachers feel psychologically safe, respected, and supported in their digital work environment, fostering openness and teamwork (Breuer et al., 2020). |
| OTJP | The effectiveness of teachers in delivering instruction, engaging students, managing technology, and achieving learning outcomes in a virtual setting (Johari & Zulkarnain, 2018). |

*Online Teachers' Skill Competency.* Core competencies such as individual leadership, communication skills, and technology proficiency are critical to effective online teaching. Individual leadership skills—encompassing communication, motivation, creativity, trustworthiness, and conflict resolution—are foundational capabilities that promote professional growth, employee well-being, and organizational success, and can be developed through deliberate practice and supported through individual teacher leadership in virtual communities of practice (Bell et al., 2019; Shal et al., 2024). Strong communication skills—including digital literacy, clarity, and responsiveness—enhance teacher-student interaction, feedback quality, and overall presence in virtual classrooms, reflecting a deeper emphasis on developing students' digital communication competencies (Alshumaimeri & Alhumud, 2021; Siddiq et al., 2016). Technological competency is foundational in managing virtual platforms and delivering content effectively. Teachers' ability to leverage interactive tools, troubleshoot challenges, and personalize instruction has been shown to significantly influence teaching confidence and student engagement (Hoang & Le, 2021; Torres, 2023).

*Online Teacher Collaboration.* Collaboration among online educators plays a pivotal role in sustaining high-quality instruction. Professional peer interaction fosters knowledge sharing, classroom innovation, and collective problem-solving (Ross & Ressia, 2015). Trust within virtual teams enhances cohesion and psychological safety, enabling candid feedback and cooperative engagement despite physical distance (Breuer et al., 2020).

The literature review concluded with the conceptual framework (Figure 1) and the statement of hypotheses (Table 2). Grounded in prior studies, the framework focuses on two dimensions: online teachers' skill competency (ILS, CS, VCTS)—and collaboration (CWC, TVW). These five independent variables were examined for their effect on online teacher job performance, both in terms of change after OD intervention and predictive influence. Accordingly, eleven hypotheses were developed. Hypotheses H1 to H6 tested whether there were significant differences between pre-ODI and post-ODI levels of each variable, including job performance. Hypotheses H7 to H11 evaluated whether each competency or collaboration factor had a significant influence on online teacher job performance.

**Figure 1**

*Conceptual Framework*

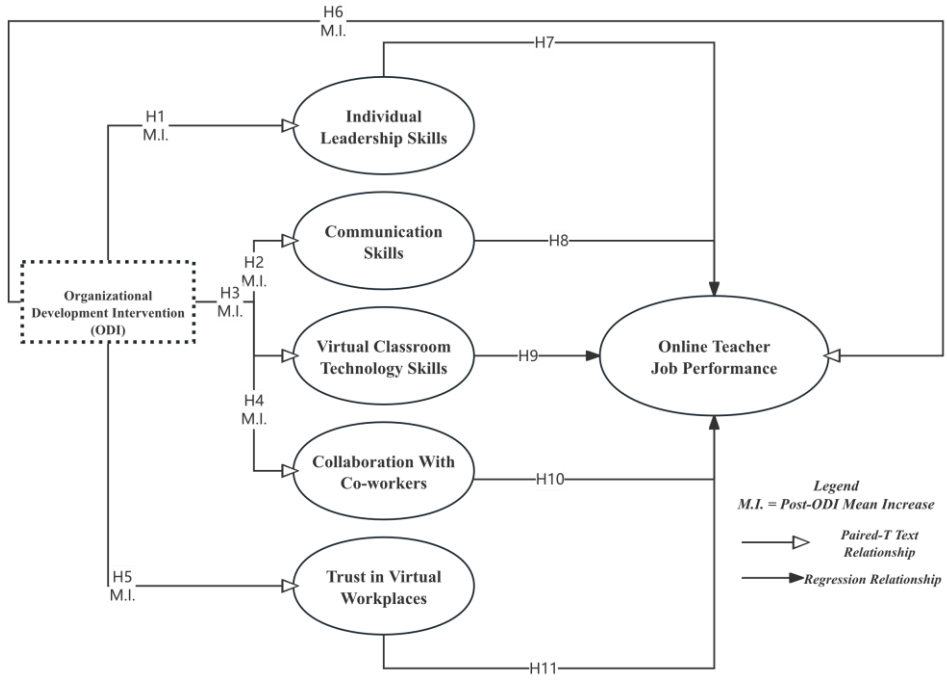



**Table 2**

*Hypotheses of the Study*

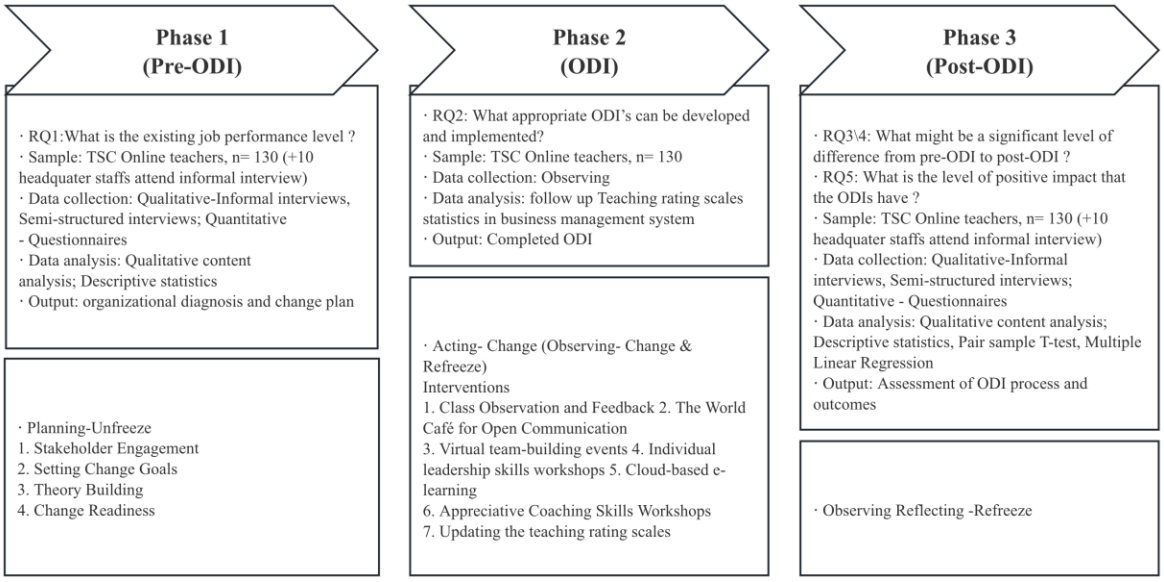
| Hypothesis | Statement |
|---|---|
| H1 | There is a significant difference between Pre-ODI and Post-ODI of individual leadership skills. |
| H2 | There is a significant difference between Pre-ODI and Post-ODI of communication skills. |
| H3 | There is a significant difference between Pre-ODI and Post-ODI of virtual classroom technology skills. |
| H4 | There is a significant difference between Pre-ODI and Post-ODI of collaboration with co-workers. |
| H5 | There is a significant difference between Pre-ODI and Post-ODI of trust in virtual workplace. |
| H6 | There is a significant difference between Pre-ODI and Post-ODI of online teacher job performance. |
| H7 | There is a significant influence of individual leadership skills on online teacher job performance. |
| H8 | There is a significant influence of communication skills on online teacher job performance. |
| H9 | There is a significant influence of virtual classroom technology skills on online teacher job performance. |
| H10 | There is a significant influence of collaboration with co-workers on online teacher job performance. |
| H11 | There is a significant influence of trust in virtual workplace on online teacher job performance. |

## Research Methodology

This study employed a three-phase action research design based on Lewin's (1946) model. Figure 2 summarizes the process stages and research tools applied. Action research was chosen for its alignment with reflective practice and practical change in educational contexts (McNiff & Whitehead, 2002). Across the pre-ODI, ODI, and post-ODI stages, qualitative tools (interviews, organizational diagnoses) and quantitative instruments (questionnaires, teaching rating scales) were used to identify needs, implement interventions, and assess outcomes.

**Figure 2**

*The Research Design*




**Note:** Designed by author

### Sampling

The study involved 130 online teachers who participated in the pre-ODI, ODI, and post-ODI stages, and 10 headquarters staff who joined informal interviews during pre- and post-ODI. Although Cochran's formula (1963) recommended a sample size of 186, only actively teaching B-level above teachers were included due to operational constraints, and low-performing C/D-level teachers were excluded due to high turnover. For qualitative data, 30 semi-structured interviews were conducted via video calls across S-, A-, and B-level groups, with transcripts generated by AI and reviewed by bilingual coders and an OD expert (Patton, 2014).

### Instruments

In Phase 1, informal interviews were used to collect qualitative data from top management, headquarter staffs, and online teachers. These interviews followed Appreciative Inquiry's 4-D framework and were guided by the Six-box model and SOAR analysis to explore

initial perceptions of online teacher job performance and organizational support mechanisms (Stavros, 2013; Swain & King, 2022; Weisbord, 1976). Semi-structured interviews were then conducted to examine the relationships between individual leadership skills, communication skills, virtual classroom technology skills, collaboration with co-workers, trust in virtual workplace, and online teacher job performance. Additionally, a pre-test/post-test questionnaire was administered to collect quantitative data. The instrument contained 31 Likert-scale items measuring online teacher job performance, individual leadership skills, communication skills, virtual classroom technology skills, collaboration with co-workers, and trust in virtual workplace. Pre-test surveys and interviews established baseline data, while post-test instruments assessed changes following the intervention in Phase 3. As summarized in Table 3, some questionnaire items were adapted from literature sources such as Sabanci et al.'s (2016) ERIC submission and Tamarack Institute (n.d.), as they offered original, practice-based frameworks and item sets not found in peer-reviewed publications. To strengthen content validity, the item-objective congruence (IOC) method was subsequently applied. Specifically, a panel of five experts evaluated each item for relevance and clarity. Items failing to reach a score of 0.80 were revised or discarded, and all retained items met the IOC threshold (Lynn, 1986; Polit & Beck, 2006). During the pre-ODI pilot (N = 30), all scales showed acceptable-to-good internal consistency. Cronbach's alpha ranged from .827 for VCTS to .891 for CWC; the remaining sub-scales were OTJP $\alpha = .839$, ILS $\alpha = .870$, CS $\alpha = .844$, and TVW $\alpha = .853$. All coefficients exceeded the conventional .80 criterion for group-level research, indicating that the pilot instruments were sufficiently reliable for subsequent data collection (DeVellis & Thorpe, 2021; Tabachnick & Fidell, 2019).

**Table 3**

*Research Questionnaire*

| Scale | Items | Sources | Cronbach Alpha |
|---|---|---|---|
| OTJP | 5 | Larkin et al. (2015) | 0.839 |
| ILS | 6 | (Tamarack Institute, n.d.) | 0.870 |
| CS | 5 | Sabanci et al. (2016) | 0.844 |
| VCTS | 5 | Turner et al. (2010) | 0.827 |
| CWC | 5 | Orchard et al. (2012) | 0.891 |
| TVW | 5 | Breuer et al. (2020) | 0.853 |

## Data Collection

Across all phases, data were collected using semi-structured interviews, observations, and online questionnaires. Phase 1 gathered baseline qualitative and quantitative data; Phases 2 and 3 collected post-ODI data for comparison. Interviews were conducted via video/voice calls, transcribed using AI tools, and supplemented by researcher notes and informal observations. Questionnaires were distributed via Wenjuanxing, with anonymize identifiers to ensure confidentiality. Reminders were sent to maximize completion rates.

## The Intervention

During the ODI stage, from July 2024 to February 2025, seven targeted interventions were implemented to improve online teacher job performance at AAA school TSC. The details of each intervention are summarized in Table 4. These activities were guided by Lewin's (1946) planned change theory and informed by relevant frameworks such as Appreciative Inquiry (Cooperrider et al., 2008), Appreciative Coaching (Orem et al., 2007) and Transformational Leadership (Bass & Riggio, 2006), the World Café (Brown & Isaacs, 2005). Outcomes demonstrated significant improvements in instructional quality, teacher self-reflection, collaboration, and communication, while also strengthening trust in organizational processes. Challenges such as evaluator burnout and teacher adjustment to new appraisal criteria were noted.

**Table 4**

*Summary of the ODI Activities and Outcomes*

| ODI Activities | Outcomes |
|---|---|
| Intervention | 1.Class observation feedback/ 2.World Café for open communication/ 3.Virtual team-building events/ 4.Individual leadership skills workshop/ 5.Cloud-based e-learning/ 6.Appreciative Coaching skills workshop/ 7.Updating teaching rating scales |
| Objective | ● Identify strengths, set improvement plans, and foster reflection.<br>● Improve teacher-HQ communication, parent engagement, classroom strategies.<br>● Enhance trust, cohesion, satisfaction, and cross-team collaboration.<br>● Enhance leadership, self-management, responsibility, and team collaboration.<br>● Improving VCTS, interactive tools, personalization, and core teaching skills.<br>● Enhance communication, emphasizing positive feedback, and proactive language.<br>● Improve evaluation accuracy and fairness; promote self-reflection, 360° feedback, and trust in the appraisal system. |
| Participant | Intervention 1: 100 teachers with ≥2 years experience<br>Intervention 2: 120 participants joined live or asynchronously across 3 daily time slots.<br>Intervention 3: 100-120 teachers participated, supported by HQ media and TSC staff.<br>Intervention 4: 100 informed; 80 attended; 30 gave feedback; 10 joined role-play;<br>Intervention 5: All rating levels involved; 90 teachers completed certification in ODI.<br>Intervention 6: 130 teachers participated, with full TSC HQ involvement.<br>Intervention 7: 30 online teachers participated updating, fully supported by HQ staff.<br>(Note: Owing to an organization-wide financial crisis during the ODI period, ~30 rostered teachers remained active in class service and responded to text-based/asynchronous communications but did not attend the full sequence of ODI activities, so the per-activity Ns for Interventions 1-5 are < 130.) |
| Key Activity | In1: Checked 6 months record online class video observations by evaluation team, then gave the teacher 1:1 feedback by teaching director.<br>In2: Applied the World Café approach to host online communication meetings, (1) focused on teacher-HQ collaboration strategies; (2) pointed on positive parent communication solutions;(3)worked on teacher-student interaction methodology.<br>In3: Shared company information through Cambridge education forums, overseas school visits, team building through teacher competitions, salons, WeChat community sharing, |

| ODI Activities | Outcomes |
|---|---|
| | social media tasks, and platform launch by live streams.<br>In4: Conducted workshops to explore leadership theories, encouraged discussions, practiced ILS via role-play and case studies.<br>In5: Assigned Cloud-based e-learning tasks for teachers, topics included VCT interaction, EDB activities, class management, teaching philosophy, ed psych, subject pedagogy.<br>In6: Conducted seminars, case analyses, group discussions, and role-plays on appreciative coaching, positive feedback, and practical applications.<br>In7: Went through three stages to update the rating scales, (1) teacher self-assessment via school platform/DingTalk; (2) organized the evaluation team into 6 senior teachers and 4 TSC staff; (3) Emphasis on innovation & personalization. |
| Researcher Observation | In1: The participants shared examples of individual performance progress to promote further improvement and peer learning.<br>In2: The intervention provided opportunities for teachers who had felt isolated during pre-ODI stage to speak more freely in large groups, it strengthened peer learning and communication, as well as collaboration between teacher and HQ .<br>In3: It showed the company was taking actions to build brand reputation, expand market, and connect with online teachers, which enhanced trust, communication, collaboration between teachers and HQ staff.<br>In4: The workshops improved online teachers' self-leadership which was evident in observing their interactions with students, parents, and colleagues.<br>In5: The intervention boosted teachers' VCTS, and they gained confidence in using interactive tools to deliver engaging and innovative lessons.<br>In6: The workshops improved the teachers' use of positive feedback practices and enhanced the tone of classroom interaction. Continuing reinforcement through additional training follow-ups and peer modeling was acknowledged.<br>In7: Updating the teaching rating scale boosted teacher trust and self-reflection, and minor issues related evaluator fatigue were effectively managed. |

**Data Analysis**

This study employed separate qualitative and quantitative analyses, followed by triangulation to enhance validity. Qualitative data from interviews were analyzed using content analysis with NVivo 15, guided by a coding framework derived from research objectives and literature. Quantitative data were processed using SPSS 30.0. Descriptive statistics and paired sample t-tests were used to compare pre- and post-ODI results, while multiple linear regression examined the influence of ILS, CS, VCTS, CWC, and TVW on OTJP (Marill, 2004). Triangulation integrated findings across all phases to provide a comprehensive understanding of the intervention's impact, enhancing both methodological rigor and validity (Foss & Ellefsen, 2002; Östlund et al., 2011).

## Results and Discussion

### The pre-ODI Situation

*Qualitative findings.* Pre-ODI qualitative data were collected through both informal and semi-structured interviews with top management, headquarter staff, and online teachers. Informal interviews revealed several organizational constraints affecting OTJP, including limited real-time interaction across departments, miscommunication between online teachers and headquarters, and a lack of structured systems to support consistent teacher development. Semi-structured interviews indicated that teachers viewed ILS, CS, and VCTS as vital to managing virtual classrooms, maintaining student engagement, and ensuring smooth instruction. Teachers also recognized that CWC and TVW played a critical role in fostering a supportive teaching environment and enhancing their overall job performance. However, challenges were evident. Teachers reported insufficient training support, limited peer collaboration opportunities, and under-utilization of digital tools. These issues contributed to inconsistent teaching quality and underscored the need for targeted organizational interventions to support teacher growth and performance.

*Quantitative findings.* The pre-ODI survey, conducted in June 2024, yielded 130 usable responses. Demographic analysis showed most participants were female (90.77%), aged 31-40 (47.69%), and held a master's degree (53.08%). Over 70% had more than two years of online teaching experience.

OTJP scores were mostly neutral (M = 3.19-3.42, SD = 0.95-1.07), indicating moderate and uneven confidence in engagement, communication, and innovation (lowest A5 = 3.19; highest A3 = 3.42). ILS (M = 3.18-3.62, SD = 0.93-1.17) showed strength in empowering others but weaker openness to feedback and vision alignment (B5 = 3.18; B6 = 3.62). CS (M = 2.98-3.29, SD = 1.01-1.06) remained neutral across items, highlighting needs in empathy, responsiveness, and clarity. VCTS leaned positive (M = 3.28-3.49, SD = 0.95-1.02), revealing a value-use gap between perceived usefulness and consistent classroom application (D5 = 3.28; D4 = 3.49). CWC was relatively strong (M = 3.42-3.55, SD = 0.93-1.01) yet would benefit from tighter shared goal-setting and joint planning. TVW indicated moderate trust (M = 3.00-3.38, SD = 1.04-1.15), calling for more consistent managerial support and clearer conflict-resolution routines.

### ODI Outcomes

*Qualitative findings.* Post-ODI interviews with 30 online teachers revealed marked improvements across all six variables. In terms of ILS, respondents described greater confidence in setting clear learning objectives, structuring lessons strategically, and actively managing class activities. CS also improved, with many reporting enhanced adaptability in responding to student needs, refining questioning techniques, and engaging more effectively with parents. Teachers demonstrated noticeable growth in VCTS, integrating tools like polls and drills more smoothly into their lessons. These changes improved lesson coherence and student engagement. CWC was strengthened through peer support and joint planning, though a few participants still noted structural limitations to deeper collaboration. Improvements

in TVW were reflected in increased reliance on technical and administrative support, which reduced anxiety and improved classroom stability, despite some lingering challenges in building interpersonal trust due to limited face-to-face contact.

Overall, OTJP improved significantly in areas such as pacing, differentiated instruction, and student motivation. Respondents described better classroom flow and increased confidence. However, a few participants continued to express feelings of emotional disconnection, highlighting the ongoing need to address relational dynamics in virtual environments.

*Quantitative findings.* Post-ODI scores increased consistently across all six variables: OTJP ($\Delta M = 0.62$, $t = 6.893$, $p < .001$), ILS ($\Delta M = 0.67$, $t = 7.310$, $p < .001$), CS ($\Delta M = 0.71$, $t = 7.361$, $p < .001$), VCTS ($\Delta M = 0.58$, $t = 7.020$, $p < .001$), CWC ($\Delta M = 0.57$, $t = 6.604$, $p < .001$), and TVW ($\Delta M = 0.74$, $t = 7.561$, $p < .001$). Item-level highlights included the largest gain on TVW F1 ($\Delta M = 0.91$), plus notable improvements on OTJP A2 ($\Delta M = 0.75$), CS C5 ($\Delta M = 0.79$), and VCTS D5 ($\Delta M = 0.71$). These shifts reflect movement from Neutral to Agree on most indicators, pointing to more coherent lesson leadership, more responsive/empathetic communication, and more routine technology use.

*Intervention effectiveness (H1-H6)*. Paired-samples tests confirmed all pre/post improvements (all $p < .001$; t range = 6.604-7.561). Effect magnitudes clustered at $\Delta M \approx .57$-$.74$, with TVW largest, indicating strengthened interpersonal reliability and clearer performance routines (e.g., deadlines and follow-through). Collectively, results affirm the ODI's effectiveness in lifting capability and collaboration simultaneously.

*Predictors of Online Teacher Job Performance (H7-H11).* The post-ODI multiple regression was significant, $F(5,124) = 19.338$, $p < .001$; $R = .662$, $R^2 = .438$, adj. $R^2 = .415$. Each predictor made a unique, positive contribution to Online Teacher Job Performance: Trust in the Virtual Workplace ($\beta = .248$, $p = .002$) and Collaboration with Co-workers($\beta = .217$, $p = .012$) were strongest, followed by Individual Leadership Skills ($\beta = .193$, $p = .011$), Virtual Classroom Technology Skills ($\beta = .171$, $p = .023$), and Communication Skills ($\beta = .153$, $p = .043$). Interpreting magnitude, $R^2 = .438$ corresponds to an overall effect size of $f^2 = R^2/(1-R^2) = .78$, indicating a large model effect in field settings; at the same time, 56.2% of variance remains outside the model. As summarized earlier, additional determinants—teacher self-efficacy, work engagement, perceived organizational support, role/goal clarity, teaching and social presence, and technology acceptance—operate alongside the five capabilities and plausibly account for further variance. Accordingly, the present model captures the core capability and social-climate levers targeted by the ODI (with trust and collaboration most influential) while leaving theoretically expected room for factors beyond the intervention's scope. Table 5 summarizes the hypothesis outcomes.

**Table 5**

*Hypothesis results*

| Hypothesis | Statement | t | p | Outcome |
|---|---|---|---|---|
| H1 | There is a significant difference between Pre-ODI and Post-ODI of individual leadership skills. | 7.310 | <.001 | Supported |
| H2 | There is a significant difference between Pre-ODI and Post-ODI of communication skills. | 7.361 | <.001 | Supported |
| H3 | There is a significant difference between Pre-ODI and Post-ODI of virtual classroom technology skills. | 7.020 | <.001 | Supported |
| H4 | There is a significant difference between Pre-ODI and Post-ODI of collaboration with co-workers. | 6.604 | <.001 | Supported |
| H5 | There is a significant difference between Pre-ODI and Post-ODI of trust in virtual workplace. | 7.561 | <.001 | Supported |
| H6 | There is a significant difference between Pre-ODI and Post-ODI of online teacher job performance. | 6.893 | <.001 | Supported |
| H7 | There is a significant influence of individual leadership skills on online teacher job performance. | 2.567 | .011 | Supported |
| H8 | There is a significant influence of communication skills on online teacher job performance. | 2.046 | .043 | Supported |
| H9 | There is a significant influence of virtual classroom technology skills on online teacher job performance. | 2.305 | .023 | Supported |
| H10 | There is a significant influence of collaboration with co-workers on online teacher job performance. | 3.547 | .012 | Supported |
| H11 | There is a significant influence of trust in virtual workplace on online teacher job performance. | 3.239 | .002 | Supported |

*Organizational outcomes.* Post-ODI informal interviews with 10 headquarter staff revealed clear organizational improvements. Teachers showed stronger commitment to focal organization's mission, increased participation in institutional activities, and greater responsiveness to lesson supervision and promotion criteria. Respondents noted enhanced real-time communication, a shift from passive to proactive collaboration, and stronger engagement in curriculum feedback, student reporting, and incentive-based projects. Teachers also applied new teaching techniques more actively and demonstrated improved coordination with headquarters. While financial concerns occasionally resurfaced, overall findings indicated greater teacher initiative, strengthened cross-functional collaboration, and closer alignment with AAA school's strategic direction.

## Conclusions and Recommendations

### Conclusions

Organized by the five research questions, findings show: RQ1 (baseline)—OTJP and TVW were generally neutral; CS was weakest; ILS and VCTS were uneven; CWC was comparatively stronger, with qualitative evidence of fragmented peer routines and inconsistent enactment of instructional skills. RQ2 (intervention design)—the ODI portfolio (leadership,

communication, virtual classroom-tech micro learning, observation/feedback, team-building, appreciative coaching, teaching rating-scale updates) directly targeted these gaps. RQ3-RQ4 (competency & collaboration)—post-ODI, competencies and collaboration moved from neutral/uneven to consistently higher endorsement, reflecting clearer lesson leadership, more empathetic and responsive communication, steadier classroom use of tools, tighter goal-setting, and more reliable managerial follow-through. RQ5 (overall performance)—OTJP improved in parallel; explanatory analysis indicated that trust and collaboration are the strongest correlates, with leadership, technology, and communication adding incremental gains.

**Recommendations**

*Organizational level.* The Pre-ODI diagnostic phase proved highly valuable, especially the informal interviews that fostered early trust and stakeholder alignment. Future ODIs should retain this component while enhancing workshop structure; interventions will benefit from clearer timelines, explicit learning checkpoints, and tighter integration of theory with practice. Establishing measurable success indicators at the outset will also strengthen evaluation; for example, announcing the staged rollout for updating the teaching rating scale and engaging high-performing teachers as co-designers earlier in the cycle. To sustain gains, the organization should embed ongoing development cycles, reinforce successful practices through coaching, and invest in leadership pipelines, while continuing to address emotional and interpersonal gaps in virtual work by strengthening trust-building mechanisms and peer-engagement platforms. Within AAA, the finalized dissertation points to a deepening strategy that keeps trust in the virtual workplace and collaboration with co-workers as the operational spine: set explicit targets for both constructs, institutionalize transparent response-time standards and issue-tracking visibility, and formalize paired lesson planning/observation with fixed feedback cadences; in parallel, run role-differentiated practice on communication Skills, virtual classroom technology skills, and individual leadership skills so that capability gains translate reliably into performance. For other online teaching organizations, the same architecture can be transferred by beginning with a brief diagnostic to surface local constraints, then installing trust and collaboration routines as non-negotiates, and finally layering role-differentiated communication and technology practice with clearly specified metrics and quarterly calibration; this preserves feasibility across contexts while aligning daily routines with the mechanisms shown to elevate Online Teacher Job Performance.

*Future Research.* First, longitudinal multi-cycle ODIs could explore how improvements in OTJP are maintained over time. For instance, follow-up intervention plans can be designed after one cycle of ODI by using the previous post-ODI diagnoses as the next round of pre-ODI diagnostic results, or by applying alternative assessment tools to identify additional factors that may influence OTJP. One such tool is the Burke-Litwin Model of Organizational Performance and Change (Burke & Litwin, 1992), which offers a more detailed and multi-dimensional diagnostic framework comprising twelve interrelated dimensions. Compared to broader models, the Burke-Litwin Model enables a more granular analysis of internal organizational dynamics. It could be particularly valuable for designing second-round or follow-up OD interventions, where the focus shifts from general organizational alignment to targeted refinement of specific

areas. Second, conducting comparative studies across institutions or cultural settings could reveal which OD strategies are transferable and which require adaptation to specific contexts—for example, by comparing the experiences of online English teachers and online Chinese teachers. Third, examining the impact of specific technological tools—such as AI-assisted feedback or gamification—could help refine digital integration strategies (Zawacki-Richter et al., 2019). With the rapid advancement of virtual teaching technologies, tools like feedback-detecting sensors that monitor eye movements and body gestures now enable real-time tracking of both teacher and student engagement. These technologies are particularly valuable in large-scale online classrooms, where teachers often struggle to gauge student attentiveness, and they can also provide institutions with actionable data for monitoring and evaluating classroom dynamics. Finally, future OD research could account for external organizational factors such as financial stability and institutional transparency, which can affect teacher motivation and engagement. Theories such as the Job Demands-Resources model (Bakker & Demerouti, 2018) and Expectancy Theory (Vroom, 1964) offer useful frameworks for these expanded inquiries.

In conclusion, this study provides strong empirical evidence that well-designed ODIs can substantially improve both individual and collaborative factors contributing to online teaching success. Continued commitment to development and adaptation will be essential for sustaining these improvements. Anchoring capability development in trust- and collaboration-centred routines yields a replicable, theory-grounded architecture for institutionalizing performance in virtual schooling. Future research should assess this architecture's transferability and durability across providers and intervention cycles, refining guidance on governance, measurement, and cost-effective scaling.

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