Effects of a Production-Oriented English for Cabin Crew Course on Oral Communication and Professional Skills

Sai Wang[1*], and Prannapha Modehiran[2]

Received August 5, 2026; Retrieved October 22, 2026; Accepted November 2, 2026

Abstract

This mixed-methods intervention study evaluated a needs-based English-for-Cabin-Crew course implemented using the Production-Oriented Approach (POA) at a Chinese vocational college. Forty-nine second-year cabin crew students completed a 16-week, 64-hour course organized around the flight-service sequence and a motivating–enabling–assessing cycle. Parallel pre- and post-tests assessed six dimensions of oral communication and five components of professional competence. Paired-samples t-tests and Cohen's d quantified change; a 23-item perception questionnaire and interviews with 10 students examined acceptability and learning experience. Overall oral communication increased from M = 1.52 (SD = 0.40) to M = 2.21 (SD = 0.61), t (48) = 17.45, $p < .01$, d = 2.49. Every oral dimension improved significantly, with the largest effect for fluency (d = 2.73). Overall professional scores increased from M = 83.27 (SD = 11.60) to M = 86.57 (SD = 10.47), t(48) = 5.05, $p < .001$, d = 0.72; however, only professional vocabulary was individually significant. Students evaluated the course highly (overall M = 4.30), and 95.9% described it as very or mostly successful and effective. Interview themes emphasized authenticity, confidence, collaboration, and the usefulness of production tasks. Triangulation showed that perceived professional improvement was stronger than several objective component gains, underlining the importance of multiple outcome measures. The findings support differentiated evaluation in vocational ESP, with separate indicators for language performance, professional knowledge, and situated procedural competence. POA-based ESP can rapidly improve oral performance, while professional procedural competence may require longer, simulator-intensive practice and direct observation in authentic training environments. The findings also identify priorities for refining the course.

Keywords: Cabin Crew, English for Specific Purposes, Production-Oriented Approach, Oral Communication, Vocational Education

[1*], [2]Graduate School of Human Sciences. Assumption University, Thailand

[*]*Corresponding author.* E-mail: hopeedu2023oda@163.com[1*], prannapha@gmail.com[2]

Introduction

Vocational English instruction is expected to develop learners' communicative competence while preparing them to perform effectively in the workplace. This dual responsibility is particularly important in cabin crew education, where learners must communicate in English while following operational procedures, ensuring passenger safety, and maintaining professional service standards (International Civil Aviation Organization [ICAO], 2020). From an English for Specific Purposes (ESP) perspective, teaching occupational terminology alone is insufficient. Instruction should instead be designed around the communicative purposes, tasks, and conditions that learners are likely to encounter in their target workplace (Anthony, L., 2018; Basturkmen, H., 2010). A course that focuses primarily on aviation terminology may strengthen learners' declarative knowledge but may not adequately prepare them to respond appropriately in real-time situations. Similarly, role-play activities may provide limited benefits when they are not supported by sufficient language input, systematic teacher guidance, and clearly defined assessment criteria.

The Production-Oriented Approach (POA) provides a systematic framework for connecting language learning with purposeful communicative performance. POA consists of three interconnected phases: motivating, enabling, and assessing. During the motivating phase, learners are presented with a communicative task that helps them recognize the gap between their current abilities and the level of performance required. In the enabling phase, the teacher provides carefully selected linguistic, content-based, and procedural support. Learners subsequently complete the production task, receive feedback, and revise their performance during the assessing phase (Wen, Q., 2018). This instructional process is compatible with ESP because both approaches emphasize purposeful language use and the alignment of learners' needs, learning objectives, instructional materials, classroom tasks, and assessment practices (Anthony, L., 2018; Basturkmen, H., 2010).

Although research on POA has expanded within Chinese tertiary-level foreign-language education (Ellis, R., 2017; Wen, Q., 2018), its application in aviation-specific ESP contexts and its potentially different effects on language proficiency and professional competence remains underexplored. Distinguishing between these outcomes is important because oral fluency may improve through repeated communicative interaction, whereas procedural judgment and emergency-response performance may require sustained practice in realistic or simulator-based environments (ICAO, 2020). Accordingly, the present study evaluated a needs-based English for Cabin Crew course by employing oral communication tests, professional skills tests, effect-size estimates, learner questionnaires, and semi-structured interviews.

Objectives

1. To what extent did the course improve learners' English oral communication skills?
2. To what extent did the course improve learners' professional cabin crew skills?
3. How did learners perceive the course in terms of its relevance, implementation, learning tasks, assessment methods, and learning outcomes?

Review of Literature and Ideas

Needs-based ESP course development

Anthony, L. (2018) four-pillar frame views ESP development as alignment among needs, objectives, materials and methods, and evaluation, consistent with Basturkmen, H. (2010).

A preceding needs analysis identified interactive speaking, listening, safety communication, emergency handling, authentic cabin tasks, professional vocabulary, and simulation as priorities for the intervention.

Production-Oriented Approach

POA seeks to reduce the separation between learning and use through the motivating–enabling–assessing cycle (Wen, Q., 2018, 2024). During motivating, a realistic production scenario gives learners a reason to communicate and reveals what they cannot yet do. During enabling, the teacher supplies targeted input, strategies, vocabulary, models, and rehearsal. During assessing, learners produce an observable performance and use teacher, peer, and self-feedback to improve it. The teacher remains an active mediator, especially where learners need differentiated support. Ellis, R. (2017) notes that the approach's development depends on clarifying the relationship between input, output, and teacher mediation. For cabin crew ESP, a production may be an announcement, service exchange, complaint response, safety demonstration, or coordinated emergency interaction.

Research Scope

The content scope covered English oral communication and cabin crew professional skills embedded in boarding, pre-takeoff, in-flight service, special and premium service, and emergency communication. The population scope was limited to second-year cabin crew students at one Chinese vocational college. The sample comprised 49 students who completed the 16-week course; all responded to the perception questionnaire, and 10 joined post-course interviews. The intervention and evaluation occurred during one academic semester. This article excludes the preceding stakeholder needs-analysis results, which are reported in a separate manuscript.

Research Hypotheses

H1: Students' English oral communication scores after attending the developed course are significantly higher than their scores before attending the course.

H2: Students' cabin crew professional skills scores after attending the developed course are significantly higher than their scores before attending the course.

Research Methodology

Design and participants

A one-group pretest–posttest mixed-methods design was employed to examine changes in learners' English oral communication and cabin crew professional skills after completing the course. This design enables researchers to compare participants' performance before and after an intervention, while qualitative data provide additional insight into participants' experiences and the processes that may explain the observed changes (Creswell, J. W. & Creswell, J. D., 2018; Creswell, J. W. & Plano Clark, V. L., 2018). The participants were 49 second-year students enrolled in a cabin crew program at a vocational college in China. All participants completed the course and responded to the post-course perception questionnaire. After the course, 10 students also participated in semi-structured interviews designed to explore their perceptions of the course's relevance, implementation, learning tasks, assessment practices, and outcomes.

The quantitative component assessed changes within the same cohort, whereas the questionnaire and interview data were used to interpret the course's acceptability and the perceived mechanisms underlying learners' development. Integrating quantitative and qualitative evidence provided a more comprehensive evaluation than either form of evidence could have provided independently (Creswell, J. W. & Plano Clark, V. L., 2018). Nevertheless, because the study did not include a control or comparison group, improvements cannot be attributed exclusively to the Production-Oriented Approach. One-group pretest–posttest designs may be affected by threats to internal validity, including maturation, testing effects, history, and other experiences occurring during the intervention period (Shadish, W. R. et al., 2002). Therefore, the findings are interpreted as improvements associated with participation in the course rather than definitive evidence that POA alone caused the observed changes.

Intervention

The course comprised 64 instructional hours over 16 weeks and followed the chronological flight-service sequence. Four modules addressed boarding and pre-takeoff communication, routine in-flight service, special and premium service, and emergency and safety communication. Two integrated production projects required learners to combine language and professional procedures. Each unit used the POA motivating–enabling–assessing cycle. Materials included cabin-service textbooks, announcements, service dialogues, safety

scripts, audio-visual examples, cases, and teacher-developed tasks. Assessment combined classroom production, feedback, and pre/post outcome measures.

Instruments

Parallel oral pre- and post-tests were rated by two examiners for pronunciation, structure, vocabulary, fluency, comprehension, and interaction. Parallel written tests assessed professional vocabulary (40 points) and professional knowledge and skills (60 points): regulations, customer service, regular cabin work, and emergency or special work. A 23-item five-point questionnaire measured course design, implementation, production tasks, and outcomes; semi-structured interviews examined relevance and learning experience. Instruments underwent expert review, pilot testing, internal-consistency checks, and inter-rater procedures.

Analysis

Paired-samples t-tests compared pre- and post-test means, with $p < .05$ used as the significance criterion. Cohen's d described practical magnitude. Questionnaire items were summarized with means, standard deviations, and response percentages. Interview data were coded thematically and integrated with questionnaire findings by evaluation domain. Because multiple oral subscales and professional components were tested, the pattern of effect sizes and consistency across measures was considered alongside p values.

Results

English oral communication

All six oral dimensions improved significantly. The overall mean increased by 0.69 points, from 1.52 (SD = 0.40) to 2.21 (SD = 0.61), $t(48) = 17.45$, $p < .01$, $d = 2.49$. Fluency produced the largest effect ($d = 2.73$), followed by pronunciation ($d = 1.83$). Vocabulary, comprehension, and interaction each showed large effects. Structure improved least, although its effect remained medium-to-large.

Table 1 Pre–post results for oral communication (N = 49)

Dimension	Pre M (SD)	Post M (SD)	Gain	t(48)	p	Cohen's d
Pronunciation	1.71 (0.50)	2.73 (0.93)	1.02	12.790	< .01	1.827
Structure	1.45 (0.54)	1.76 (0.56)	0.31	4.603	< .01	0.657
Vocabulary	1.10 (0.31)	1.76 (0.56)	0.65	8.748	< .01	1.250
Fluency	1.59 (0.54)	2.55 (0.61)	0.96	19.117	< .01	2.731
Comprehension	1.69 (0.51)	2.33 (0.77)	0.63	9.094	< .01	1.299
Interaction	1.59 (0.50)	2.14 (0.71)	0.55	7.681	< .01	1.097
Overall	1.52 (0.40)	2.21 (0.61)	0.69	17.450	< .01	2.493

Professional skills

The overall professional score increased by 3.31 points and showed a medium effect. Professional vocabulary improved significantly, whereas the four professional knowledge and skills components increased only slightly and did not reach significance. (Xiong, J. et al., 2022) The pattern indicates that language-linked professional knowledge was more responsive during one semester than procedural domains with high pretest scores or limited opportunity for embodied practice.

Table 2 Pre–post results for professional skills (N = 49)

Component	Pre M (SD)	Post M (SD)	t(48)	p	d
Professional vocabulary (40)	32.29 (7.14)	34.33 (6.11)	3.98	< .001	0.57
Basic knowledge/regulations (12)	10.84 (2.99)	11.51 (1.12)	1.75	.086	0.25
Customer service/communication (18)	16.22 (2.75)	16.41 (2.46)	0.43	.666	0.06
Regular cabin work (12)	8.76 (3.61)	9.18 (3.15)	1.00	.322	0.14
Emergency/special cabin work (18)	15.12 (4.50)	15.24 (4.28)	0.29	.771	0.04
Overall professional score (100)	83.27 (11.60)	86.57 (10.47)	5.05	< .001	0.72

Learner perceptions

Learners evaluated the course favourably. The overall questionnaire mean was 4.30; item means ranged from 4.18 to 4.39. In the global item, 69.4% described the course as very successful and effective, 26.5% as mostly successful and effective, and 4.1% as partly successful and effective. The highest-rated item was the sense of achievement after completing production tasks (M = 4.39, SD = 0.98). Assessment appropriateness, career relevance of production tasks, allocated task time, collaboration, and confidence were also rated highly.

Integrated qualitative findings

Interviews supported the quantitative findings: students valued career-relevant materials, authentic scenarios, repeated production, feedback, confidence building, and collaboration. They requested more scenarios, authentic listening, and simulator practice, identifying the limits of classroom-only professional training (Li, L. & Kookiattikoon, S., 2024).

Conclusion, Discussion and Suggestions

Conclusion

Both research hypotheses were supported at the overall-score level. Oral communication improved significantly across all six dimensions, with the largest gains in fluency and pronunciation. Overall professional skills also improved significantly, although only professional vocabulary reached significance as an individual component. Learner perceptions were very positive, and interview findings attributed engagement and confidence to authentic scenarios, collaboration, and production tasks.

Discussion

The strongest finding concerns the magnitude and consistency of the gains in oral communication. Large effect sizes were observed for fluency, pronunciation, comprehension, vocabulary, and interaction. This pattern is consistent with the proposed mechanism of the Production-Oriented Approach (POA), in which a meaningful production goal directs learners' attention to gaps in their current performance, the enabling phase provides targeted linguistic and content support, and repeated production followed by assessment creates opportunities for improvement (Wen, Q., 2018). Repeated, purposeful practice can also contribute to the gradual proceduralization and automatization of language knowledge (Zou, R. et al., 2024), allowing learners to communicate with greater speed and fluency (DeKeyser, R. M., 2007). However, improvement in grammatical structure was comparatively modest. This result may reflect the course's emphasis on successful communication, as learners performing meaning-focused tasks often allocate more attention to fluency and meaning than to grammatical accuracy (Skehan, P., 1998). It may also indicate that grammatical control develops more slowly and requires sustained, form-focused practice. Future iterations of the course should therefore retain authentic production tasks while incorporating systematic feedback and targeted practice addressing recurrent structural errors.

The pattern of improvement in professional skills was more differentiated. Professional vocabulary and the overall professional-skills score increased, whereas basic knowledge, service communication knowledge, routine work, and emergency or special-situation work did not demonstrate statistically significant changes at the component level. Several explanations are possible. First, the relatively high pretest means for some bounded subscales may have reduced the measurable scope for improvement, potentially producing a ceiling effect (Terwee, C. B. et al., 2007). Second, written tests may not fully capture situated professional competence because cabin crew performance involves the integrated application of communication, procedural knowledge, situational awareness, coordination, and decision-making in realistic operational conditions (ICAO, 2020). Simulator-based observation and performance assessment may consequently be more sensitive to changes in procedural competence than conventional written tests. Finally, professional judgment and emergency coordination are complex competencies that may require extended training and repeated embodied practice beyond the duration and scope of a language course (ICAO, 2020). These findings should therefore be interpreted as evidence that the professional-skill components responded differently to the intervention, rather than as proof that no professional learning occurred.

Students' positive perceptions indicate that the course was acceptable, relevant, and engaging. Their responses particularly emphasized perceived achievement, confidence, and collaboration, all of which may support continued participation and willingness to

communicate. Nevertheless, positive perceptions should not be treated as direct evidence of learning. Self-assessments frequently reflect learners' motivation, confidence, and satisfaction in addition to their actual knowledge or performance (Sitzmann, T. et al., 2010; Somthawinpongsai, C. et al., 2025). In the present study, learners reported substantial professional improvement, while several professional test components demonstrated comparatively limited gains. This difference reinforces the importance of combining learner perceptions with objective assessments of knowledge and observable performance. Drawing on multiple sources of evidence provides a more credible and comprehensive evaluation of course effectiveness than relying exclusively on either satisfaction ratings or test results (Creswell, J. W. & Plano Clark, V. L., 2018).

Suggestions

Future course delivery should adapt enabling support to proficiency, add focused grammatical feedback, recycle emergency scenarios with increasing complexity, include diverse accents and unplanned passenger turns, and assess procedural competence in simulators. Evaluation should report effect sizes and combine learner perceptions with observed performance and delayed follow-up.

Limitations and Suggestions for Future Research

The one-group design cannot rule out maturation, testing, teacher, or historical effects. Participants came from one institution, the cohort was modest, and no delayed test established retention. Oral ratings may be influenced by examiner expectations despite the use of two raters (Li, G. et al., 2024), while written professional tests may underrepresent situated performance. Multiple paired tests also increase familywise error risk. Future studies should use comparison groups or staggered implementation, preregister primary outcomes, report confidence intervals and reliability coefficients, include delayed testing, and assess professional performance in cabin simulators with blinded raters.

Knowledge from Research

The findings lead to a Differentiated Outcome Model for Production-Oriented Vocational ESP. In the model, authentic production, targeted support, and performance assessment mainly strengthen oral communication, while professional competence depends on longer exposure to simulator practice and repeated procedural feedback. The important point is that language performance and professional procedures do not necessarily develop at the same pace. Course evaluation should therefore report language, knowledge, and situated performance separately rather than combine them into a single indicator.

Acknowledgment

This article was developed from the implementation and evaluation phase of the doctoral dissertation entitled "Course Development of English for Cabin Crew to Improve

English Oral Communication and Professional Skills among Chinese EFL Learners at a Vocational College in China." A companion manuscript reports the preceding stakeholder needs-analysis phase. The two articles address different objectives, analyses, tables, and conclusions.

References

Anthony, L. (2018). *Introducing English for specific purposes*. London, England: Routledge.

Basturkmen, H. (2010). *Developing courses in English for specific purposes*. Basingstoke, England: Palgrave Macmillan.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches.* (5th ed.). Thousand Oaks, CA: Sage.

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods Research.* (3rd ed.). Thousand Oaks, CA: Sage.

DeKeyser, R. M. (Ed.). (2007). *Practice in a second language: Perspectives from applied linguistics and cognitive psychology*. Cambridge, England: Cambridge University Press.

Ellis, R. (2017). The production-oriented approach: Moving forward. *Chinese Journal of Applied Linguistics, 40*(4), 454–458. DOI: 10.1515/cjal-2017-0027

International Civil Aviation Organization. (2020). *Cabin crew safety training manual*. (2nd ed., Doc 10002). Montreal, Canada: International Civil Aviation Organization.

Li, G., Kluensuwan, P., & Wang, Y. (2024). Edusemiotics and confucius: a cultural semiotic analysis of the triadic model, the included middle, and the process-ontology. *International Journal of Society, Culture & Language*, *12*(1), 283–292. https://doi.org/10.22034/ijscl.2023.2013765.3216

Li, L., & Kookiattikoon, S. (2024). A study on the external communication path of Chinese traditional culture from a semiotic perspective: A case study of Li Ziqi's short videos on YouTube. *Pakistan Journal of Life and Social Sciences, 22*(2), 2497-2508. Retrieved from https://www.pjlss.edu.pk/pdf_files/2024_2/2497-2508.pdf

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghton Mifflin.

Sitzmann, T., Ely, K., Brown, K. G., & Bauer, K. N. (2010). Self-assessment of knowledge: A cognitive learning or affective measure?. *Academy of Management Learning & Education, 9*(2), 169–191. https://doi.org/10.5465/AMLE.2010.51428542

Skehan, P. (1998). *A cognitive approach to language learning*. Oxford, England: Oxford University Press.

Somthawinpongsai, C., Vorayotha, C., Yang, C., Lu, L., & Tee, M. (2025). Narrative design for SDG-oriented social innovation: The Koh Kret model. *TPM—Testing, Psychometrics, Methodology in Applied Psychology, 32*(S3), 885–895. Retrieved from https://tpmap.org/submission/index.php/tpm/article/view/550

Terwee, C. B., Bot, S. D., de Boer, M. R., van der Windt, D. A., Knol, D. L., Dekker, J., Bouter, L. M., & de Vet, H. C. (2007). Quality criteria were proposed for measurement properties of health status questionnaires. *Journal of clinical epidemiology*, *60*(1), 34–42. https://doi.org/10.1016/j.jclinepi.2006.03.012

Wen, Q. (2016). The production-oriented approach to teaching university students English in China. *Language Teaching, 51*(4), 526–540. DOI: 10.1017/S026144481600001X

Wen, Q. (2024). *Production-oriented approach: A pedagogical innovation in university English teaching in China*. Beijing, China: Foreign Language Teaching and Research Press.

Xiong, J., Pinyonatthagarn, D., & Kluensuwan, P. (2022). Semiotic interpretation of female images in the novel Shuihu Zhuan. *Res Militaris, 12*(2), 7927-7939. Retrieved from https://resmilitaris.net/issue-content/semiotic-interpretation-of-female-images-in-the-novel-shuihu-zhuan-688

Zou, R., Dechsubha, T., & Wang, Y. (2024). Mapping the semiotic landscape in education: Language, multimodality, and educational transformation. *Language Related Research, 15*(5), 283-311. Retrieved from https://www.researchgate.net/publication/382358745_Mapping_the_Semiotic_Landscape_in_Education_Language_Multimodality_and_Educational_Transformation