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A National Survey on Supporting K–12 Teachers in Cambodia through Professional Development and Teaching Guides

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ABSTRACT

A three-week cross-sectional online survey of 2,199 Cambodian K–12 teachers used descriptive statistics and cross-tabulations, complemented by chi-square tests, to pinpoint (a) pressing classroom challenges, (b) preferred professional-development formats, and (c) needs for instructional guides. Results showed that 59.8% of teachers wanted support for slow learners, 55.8% for classroom management, and 39.2% for low-tech digital integration; an overwhelming 93.3% favoured short workshops (1–2 days) or medium-length hybrid courses (1–3 months) with follow-up coaching via Telegram; and 60.6 % requested step-by-step lesson guides aligned with national textbooks, ideally as portable booklets and mobile-friendly PDFs. Chi-square tests confirmed that the pattern of classroom challenges varied significantly by grade level ($\chi^2(36, n = 2{,}199) = 108.34$, $p < 0.001$), whereas demand for ready-made guides was statistically uniform across school types ($\chi^2(16, n = 2{,}199) = 18.01$, $p = 0.323$). The findings support a compact yet sustained professional development model that begins with practice-focused workshops, embeds ongoing online mentoring, and equips teachers with bilingual visual guides—offering a realistic pathway for translating Cambodia's ambitious education reforms into daily classroom gains.

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1. INTRODUCTION

Cambodia's school system has evolved from monastic instruction to French colonial reforms and post-conflict reconstruction, achieving near-universal primary enrollment (97.7% in 2016) [1], [2], [3], and piloting higher-performing New Generation Schools (NGS) [4]. However, teaching quality still lags: most educators begin with modest preservice preparation and receive fragmented, short-lived in-service support, especially in rural areas where resources, internet connectivity, and school backing remain scarce [5], [6], [7], [8], [9], [10]. Current professional development (PD) provision is a patchwork—regional training centers supply coursework, NGOs run ad-hoc workshops, and the NGS network tests incentive-linked schemes. Meanwhile, teachers themselves repeatedly call for practice-

oriented, Khmer-language guides that translate the national curriculum into strategies for large, mixed-ability classes [11], [12]. International and local evidence shows that PD is most effective when it is sustained, collaborative, and tied to daily practice, but purely digital or purely theoretical models falter in Cambodia's bandwidth- and budget-constrained schools [13], [14], [15], [16], [17]. Consequently, instructional quality and student achievement remain uneven, and existing studies, often limited to single provinces or single interventions, have yet to clarify what front-line teachers nationwide actually need from PD and teaching materials [18], [19], [20], [21], [22].

This study is a large-scale, multi-province survey (n = 2,199) that integrates teachers' perspectives on classroom challenges, preferred professional development formats, and desired features of future Khmer-language teaching guides. By linking these three strands, the research provides a comprehensive, data-driven foundation for designing professional development (PD) models and instructional resources that are both context-responsive and scalable within Cambodia's public school system.

Guided by this purpose, the study addressed three research questions:

1. What key challenges do Cambodia's K–12 public school teachers face in their classrooms, and how do these challenges vary across different grade levels?
2. What types of professional development do teachers prefer in terms of duration, delivery format, and content focus, and what features make these formats appealing or practical for them?
3. What do teachers want from instructional materials such as teaching guides? In particular, what content and format do they prefer in future Khmer-language teacher guides, and what core pedagogical goals do they prioritize when selecting or designing teaching materials?

2. METHOD

2.1. Research Design

A quantitative survey method was used to obtain a comprehensive profile of teachers' needs and preferences. To gather data on the research focal points, a structured questionnaire was developed and administered to a large and diverse sample of K–12 public school teachers throughout Cambodia. This approach enabled the systematic accumulation of teachers‘ responses and the exploration of pattern variation between subgroups.

2.2. Survey Instrument

The purpose of this study is primarily a needs assessment rather than theory testing, and the key validity threat is that respondents might misinterpret the items or find them culturally irrelevant. For this reason, the researcher chose to establish face validity, the extent to which an instrument appears to measure what it is intended to measure, before deploying it on a large scale [23].

Five senior teacher-trainers from the New Generation Pedagogical Research Center (NGPRC) were recruited to participate in the face validity because they: (a) have trained K–12 teachers for years and have observed many classrooms during the supervision of

mentoring practicum annually at different public schools, (b) have designed teacher training courses for new teachers, and (c) are fluent in both English and Khmer.

All reviewers met in a closed conference room at NGPRC, where the researcher projected the draft questionnaire, item by item, onto an LCD screen. During this focus-group walk-through, NGPRC trainers evaluated each question for clarity, relevance, and cultural appropriateness, immediately flagging ambiguous and double-barrelled wording and proposing alternatives. The researcher took structured notes on every suggested change until a consensus was reached. Therefore, all agreed-upon edits were incorporated into the final version to produce an instrument that knowledgeable practitioners judged to be clear, context-specific, and linguistically accurate for Cambodian public teachers.

2.3. Data Collection Procedure

Data were collected over approximately three weeks using an online survey via Telegram, a platform widely used among Cambodian teachers. The researcher employed a snowball sampling approach, utilizing both formal and informal networks to recruit participants. The survey link was shared across various Telegram group networks, including NIE, NGS, Model Schools, Secondary Resource Schools, the Department of Early Childhood Education, the Department of Primary Education, Battambang Teacher Education College (BTEC), Phnom Penh Teacher Education College (PTEC), and several other Teacher Telegram groups. Teachers, mentors, technical team leaders, vice school principals, school principals, NGS program coordinators, department heads, and directors of teacher training institutions, with the assistance of the director of NGPRC, were invited to share the link with others, as it could increase the number of participants. Involvement was voluntary and anonymous. Participants voluntarily completed the survey via Google Forms, and they were informed that no personally identifiable details would be retained or published to the public.

2.4. Sample and Participants

Table 1 indicates that 2,199 public school teachers from various schools participated in the survey, comprising teachers from regular public schools, NGS, Model Schools, Secondary Resource Schools, STEM-based schools, and vocational schools. The sample included all grades from kindergarten to upper secondary and all Cambodian geographic areas. Although the non-random nature of the sample reduces our ability to generalize the findings to the population, the size of the sample and the diversity of its membership offer a fairly detailed snapshot of the Cambodian teacher pool interested in professional development.

Table 1. Demographic Information of the Respondents

Variables	Frequency	Percentage
1. Gender		
Male	887	40.3
Female	1312	59.7
2. Marital Status		
Single	591	26.9
Married	1573	71.5
Prefer Not to Say	35	1.6
3. Type of Public School		
New Generation School	214	9.7
Secondary Resource School	114	5.2
Model School	212	9.6
STEM-Based School	32	1.5
Normal Public School	1627	74
4. School Level		
Kindergarten	69	3.1
Primary	1399	63.6
Lower Secondary (7-9 grades)	143	6.5
Upper Secondary (10-12 grades)	506	23
Technical and Vocational (10-12 grades)	82	3.7
5. Academic Qualification		
High School's Degree	671	30.5
Bachelor's Degree	890	40.5
Master's Degree	233	10.6
Doctorate	3	.1
12 + 2 Degree	126	5.7
Bachelor's + 1 Degree	139	6.3
Bachelor's + 2 Degree	10	.5
Other	127	5.8

Note. The sample (*n*) = 2199.

The teachers surveyed, as shown in Table 2, were middle-aged, with an average age of approximately 36 years, and had an average of around 14 years of teaching experience. The sample consisted of 59.7% females, and most participants were married. Slightly more than half had at least a bachelor's degree (most of the rest had a high school degree or two-year teaching certificate). Almost two-thirds (64 percent) of respondents taught at the primary level; fewer taught kindergarten, secondary, or vocational classes. About three-quarters of them were from typical public schools, while those from special school models, such as NGS and Model Schools, made up the rest. This multicultural background offers valuable insight into their professional development expectations.

Table 2. Age and Teaching Experience of the Respondents

Variable	*n*	*M*	*SD*	Min	Max
Age	2196	35.89	9.97	0	65
Teaching Experience	2196	13.75	10.11	0	49

Note. The sample (*n*) = 2199, but there were three invalid responses.

Using Telegram snowball sampling enables the researcher to reach a large number of teachers quickly, but it also introduces bias into the sample. Invitations tend to move through the same professional circles, so urban and tech-savvy teachers are more likely to attend, while teachers from remote schools appear less frequently. People in one chat group often share similar views, which can make patterns look stronger than they are. Only teachers who were comfortable with online professional development (PD) clicked the link, and the researcher has no way to determine how many teachers viewed it, so a valid response rate or margin of error cannot be calculated. These results, therefore, reflect the voices of connected teachers rather than every teacher in Cambodia.

2.5. Data Analysis

Data from the Google Forms survey were first exported to Microsoft Excel for preliminary screening. This involved checking for missing or implausible values, especially in age and experience fields. Three responses indicating ages over 90 were deemed invalid and removed, resulting in a sample of n = 2,196 valid cases for analysis.

Cleaned data were imported into IBM SPSS Statistics v27, which served as the primary tool for both descriptive and inferential statistical analyses. The analysis was structured around the study's three research questions, focusing on (1) classroom challenges, (2) professional development preferences, and (3) instructional material needs.

Descriptive statistics, including frequencies, percentages, and means, were computed to summarise teacher demographics, training preferences, instructional strategies, and desired features in teaching guides. For continuous variables, such as age and teaching experience, measures of central tendency and dispersion (mean, standard deviation, minimum, maximum) were reported.

To test relationships between categorical variables—such as grade level and reported teaching challenges, or school type and guide content preferences—Pearson's Chi-square tests of independence were employed.

2.6. Ethical Considerations

The research adhered to ethical standards in education research. Participation was not compulsory. No respondent identifying information was provided (e.g., names or contact numbers), so individuals remained anonymous. The study protocol was approved by the ethics committee of the National Graduate Program in Research and Clinical Practice (NGPRC). Information was kept confidential and only presented in aggregate. The researcher described the research as designed to ultimately benefit teachers by informing improvements in professional development opportunities and resources to NGPRC and other relevant stakeholders.

3. RESULTS

3.1. Teacher Challenges in the Classroom

Across all grades, the most frequently cited challenge was classroom discipline and behavior management. Over a third of primary teachers (433 respondents) flagged this issue, as did many secondary and even kindergarten teachers (in smaller numbers), indicating a

widespread struggle to maintain order in large, diverse classes. The second most common challenge was integrating new technology into teaching: for example, 202 primary teachers and 77 high school teachers reported difficulty using digital tools in lessons, reflecting limited infrastructure and training. These two concerns — managing student behavior and incorporating technology — emerge as general needs for Cambodian educators.

Table 3. Most Teaching Challenging Factors among Teachers at Different Grade Levels

Variables	Kindergarten	Primary School	Secondary School	High School	Vocational School	Total
1. Classroom discipline and behavior management	26	433	35	87	9	590
2. Low student engagement or motivation	6	95	9	49	5	164
3. Managing time	0	18	5	8	1	32
4. Assessing students	8	158	22	50	10	248
5. Dealing with student's absenteeism	1	112	9	52	5	179
6. Producing teaching materials	10	76	9	39	5	139
7. Adapting to new innovative teaching techniques	2	151	8	63	13	237
8. Understanding diverse student needs	0	48	9	31	2	90
9. Enhancing subject matter expertise	6	106	20	50	11	193
10. Adapting to new technologies	10	202	17	77	21	327
Total	69	1399	143	506	82	2199

Note. The sample (n) = 2199.

Some challenges were more specific to certain levels. Secondary teachers were more likely to mention student assessment problems and gaps in subject-matter knowledge, highlighting the need for better training in advanced content delivery and evaluation methods at the middle and high school levels. Kindergarten teachers, by contrast, struggled with creating teaching materials and finding age-appropriate ways to utilize technology, as early childhood classrooms demand many hands-on, low-cost learning resources. Meanwhile, vocational teachers emphasized the challenges of adopting new teaching techniques and aligning instruction with industry standards, highlighting the need for pedagogical updates in technical and vocational subjects. These patterns suggest that while core training in behavior management and basic ICT integration would benefit all teachers, more targeted support by grade level is also important – for instance, subject-specific pedagogy for secondary instructors, early childhood methods for kindergarten, and practice-oriented strategies for vocational educators.

Table 4. Association Between Grade Level and Reported Teaching Challenges

Test	***χ²***	***df***	***p***	***Cramér's V***
Pearson Chi-Square	108.34	36	< .001	.11
Likelihood Ratio	113.91	36	< .001	—
Linear-by-Linear Association	32.42	1	< .001	—

To determine whether classroom challenges varied by grade level, a Pearson chi-square test of independence was conducted. Results indicated a significant association, $\chi^2(36, n = 2{,}199) = 108.34$, $p < .001$, with a small effect size according to Cohen [24], Cramér's V = .11. The likelihood-ratio statistic ($\chi^2 = 113.91$, $df = 36$, $p < .001$) and the linear-by-linear trend ($\chi^2 = 32.42$, $df = 1$, $p < .001$) confirmed the same pattern across ordinal grade levels. Although grade accounts for only a modest share of the variability, the effect is practically relevant: primary teachers most often report behavior-management difficulties, whereas secondary and vocational teachers emphasize subject-specific assessment and the integration of technology. These distinctions justify grade-tailored professional development modules alongside system-wide support for common challenges, such as managing mixed-ability classrooms.

3.2. Teachers' Current Practices and Alignment with Needs

Teachers reported using a mix of interactive techniques to engage students. The most common was group work or class discussions (used by ~36% of respondents), reflecting a move toward more collaborative learning. Gamified activities (quizzes, educational games) were the next most popular (~24.5%), followed by hands-on experiments or demonstrations (~16%) and peer teaching (10%). In contrast, more resource-intensive methods, such as debates, role-plays, field trips, or independent projects, were rarely used (each by less than 3% of teachers), likely due to time, resource, or curriculum constraints.

Table 5. Common In-Class Practices among Teachers

Variables	Frequency	Percentage
1. Brainstorming	162	7.4
2. Group work or discussions	792	36.0
3. Debates or role-playing	37	1.7
4. Hands-on experiments or demonstrations	353	16.1
5. Field trips or outdoor activities	40	1.8
6. Asking students to do independent study or research projects	45	2.0
7. Peer teaching activities	232	10.6
8. Gamified learning (quizzes, competitions, or games)	538	24.5

Note. The sample (n) = 2199.

Table 6. Digital Tools and Techniques Teachers Use to Capture Students' Interest

Rank	Activity/technique	Frequency	Percentage
1	Telegram / Messenger / WhatsApp	962	43.7
2	Smartphone (as a teaching aid)	844	38.4
3	Presentation slides	665	30.2
4	Laptop	716	32.6
5	Zoom / Google Meet	464	21.1
6	None of the above	404	18.4
7	Google Classroom	356	16.2
8	Tablet	204	9.3
9	Desktop computer	166	7.5
10	Smartboard	164	7.5
11	Electronic books/e-learning programmes	163	7.4
12	Learning-management systems	135	6.1
13	Others	129	5.9

In terms of digital tools, teachers primarily rely on easily accessible technology. About 44% use messaging apps (e.g., Telegram or WhatsApp) to communicate or share materials, and 38% use smartphones as teaching aids in class. Many also incorporate presentation slides (around 30% use PowerPoint or similar) to deliver content. However, more advanced e-learning platforms and hardware are uncommon in classrooms—only a small minority of teachers reported using tools like Google Classroom, interactive whiteboards, or tablets (generally under 10% for each). This limited uptake reflects the uneven availability of equipment and training for high-tech teaching solutions.

Table 7. Top Teacher-Training Topics Requested (Multiple Responses)

Rank	Topic/Skill	Frequency	Percentage
1	Methods to support slow learners	1316	59.8
2	Classroom management	1228	55.8
3	Modern teaching methods	1171	53.3
4	Teaching methods – specific subject	989	45.0
5	Teaching methods – diverse abilities	966	43.9
6	Using technology in the classroom	863	39.2
7	Writing lesson plans and materials	668	30.4
8	Assessing students and feedback	539	24.5
9	Writing curricula and detailed lesson plans	508	23.1
10	Methods for students with special needs	487	22.1
11	Creating an inclusive environment	468	21.3
12	Evidence-based teaching and learning	363	16.5
13	Others	163	7.4

Note. Percentages are rounded to one decimal place; counts exceeding 2,199 teachers are due to this being a multiple-response item.

Importantly, the areas in which teachers desire further training closely align with the challenges they face and the practices they are implementing. The top three requested training topics were methods to support slow learners (59.8% of teachers), classroom management techniques (55.8%), and modern teaching methods (53.3%). These directly correspond to managing mixed-ability classes, maintaining discipline, and adopting more student-centered approaches. In other words, teachers are asking for help with the very skills they are already trying to implement. This alignment highlights that professional development will likely be most effective if it is practical and classroom-focused—providing concrete strategies to improve class management and differentiate instruction in ways that build on teachers' current efforts.

3.3. Preferred Formats and Topics for Professional Development

Teachers showed clear preferences for short and practical training formats. Nearly half (47.7%) favored brief workshops of 1–2 days, and another 45.6% were open to medium-length courses spanning 1–3 months (likely attended part-time or in modules). In contrast, virtually no one wanted a very long training commitment (only 4.4% chose a year-long program, and 2.3% indicated no interest in any PD). Consistent with these views, the most popular delivery mode was an in-person workshop (selected by 35.2%), followed by hybrid courses blending face-to-face and online learning (25.4%). About a quarter (25.9%) also

appreciated the idea of a multi-month training course (overlapping with the 1–3 month duration group). Fully online courses were the least favored format (only 4.8%), likely due to limitations in internet connectivity and a preference for some face-to-face engagement. Overall, these responses suggest that teachers seek professional development (PD) that is concise, hands-on, and easily integrated into their schedules.

Table 8. Preferences of Training Duration and Model among Teachers

Variables	Frequency	Percentage
1. Training Duration of the Course		
Short-term training (1-2 days)	1049	47.7
Medium-term Training (1-3 months)	1002	45.6
Long-term training (1 year)	96	4.4
No Training Preference	52	2.3
2. Training Model		
Workshops (1-2 days)	775	35.2
Training Courses (1-3 months)	570	25.9
Training Courses (6 months or more)	191	8.7
Online Courses	105	4.8
Hybrid Courses (Online + Face-to-Face)	558	25.4

Note. The sample (n) = 2199.

Beyond the question of format, teachers stressed the importance of practical content in professional development. Two-thirds (66.4%) said training should focus on real classroom challenges they encounter rather than abstract theory. Many also valued professional development that includes active learning (e.g., practicing teaching techniques during the session) and provides follow-up support—38.2% mentioned the need for ongoing assistance after the initial training. In other words, teachers envision an ideal professional development (PD) as a short but intensive learning experience that directly addresses their classroom needs, followed by opportunities to receive advice or coaching as they implement new strategies. This underscores the value of models like a workshop "boot camp" combined with subsequent peer discussion or mentoring (for example, via a Telegram group), which align well with the expressed preferences.

Table 9. Teacher-Preferred Training Methods for Addressing Classroom Needs

Teacher-training method	Frequency	Percentage
1. Focus on real classroom challenges	1,461	66.4
2. Provide necessary materials for limited-tech contexts	978	44.5
3. Include practical application through learning activities	863	39.2
4. Link to professional learning and peer sharing	869	39.5
5. Ensure ongoing support after the course ends	840	38.2
6. Offer culturally adaptive teaching strategies	826	37.6

3.4. Needs and Preferences for Instructional Materials

Teachers shared clear opinions on the content and design of teaching guides that would help them. The vast majority want ready-to-use lesson plans with step-by-step instructions and examples—this was the single most frequently requested feature (cited by 1,332 teachers). Other common requests included guidance on blending traditional and modern teaching methods, tips for managing multi-grade classrooms, ideas for integrating local community resources into lessons, and suggestions for creating low-cost teaching aids.

In terms of format, an overwhelming number of favored guides with a detailed, procedural layout (mirroring the desire for step-by-step content). Many also emphasized the value of visual aids (diagrams, charts, infographics) within guides to clarify key points. Teachers expressed interest in accessing guides in dual formats – for example, as compact printed booklets that they can carry into class and as digital resources (PDFs or short videos) accessible via their phones. In short, teachers are seeking guides that are practical, visual, and accessible both offline and online for maximum convenience.

Table 10. Content Elements That Teachers Prefer to Future Guides

Variables	New Generation School	Resource School	Model School	STEM-Based School	Normal School	Total
1. Ready-to-use materials with step-by-step explanation and example	121	68	125	25	993	1332
2. Tips for integrating local community resources into lessons	32	13	24	3	154	226
3. Guidelines for incorporating traditional teaching methods with modern approaches	31	9	22	2	183	247
4. Suggestions for creating low-cost teaching aids	10	10	15	1	112	148
5. Tips for managing multi-grade classrooms	20	14	26	1	185	246
Total	214	114	212	32	1627	2199

Note. The sample (n) = 2199.

Table 11. Chi-Square Test of Independence and Correlation between School Type and Preferred Content in Teaching Guides (n = 2,199)

Test	χ^2	***df***	***p***	***Cramér's V***
Pearson Chi-Square	18.01	16	.323	.05
Likelihood Ratio	18.47	16	.297	—
Linear-by-Linear Association	0.00	1	.994	—

A Pearson chi-square test was used to assess whether the preferred content for teaching guides varied by school type (New Generation, Resource, Model, STEM-based, and Normal). The association was not significant, $\chi^2(16, n = 2\ 199) = 18.01$, $p = .323$, and the effect size was negligible, Cramér's V = .05. With V well below Cohen's "small" threshold (.10), even a sample of this size detects no practically meaningful difference: teachers across all five school types converge on the same top priority—ready-to-use, step-by-step lesson materials. This statistical uniformity reinforces the feasibility of developing a

single national template for Khmer-language teaching guides rather than producing multiple, school-specific versions.

Table 12. Descriptive Statistics for Teachers' Perceived Goals of Using Teaching Materials

The goal of Using Teaching Materials (labels used in analyses)	*M*	*SD*	Min	Max
1. Help students understand lesson content	4.1	.82	1	5
2. Draw students' attention and engagement	4.1	.82	1	5
3. Help students perform well in exams	3.6	1.01	1	5
4. Help students use different learning methods	3.7	.85	1	5
5. Help students become well-rounded, conscientious people	3.9	.95	1	5

Note. n = 2,199, and ratings were given on a 5-point Likert scale (1 = *Not important at all*, 5 = *Very important*).

As shown in Table 13, the five-item Goal of Using Teaching Guides scale demonstrated excellent internal consistency—Cronbach's α = .91, 95 % CI [.90, .92]—well above the .80 benchmark typically recommended for established instruments (Nunnally & Bernstein, 1994). This result indicates that the items form a coherent, unidimensional set and can be summed or averaged to yield a reliable composite score for subsequent analyses. Although alphas exceeding .90 sometimes signal modest item redundancy, the coefficient is appropriate for the present study's program-evaluation purposes; future scale refinement could explore whether any items are semantically overlapping without compromising content coverage.

Table 13. Internal Consistency of the "Goal of Using Teaching Materials" Item Set (n = 2,199)

Construct	*k*	Cronbach's α	95 % CI for α
The goal of Using Teaching Materials	5	.91	[.90, .92]

Note. k = number of items. Cronbach's α was computed after verifying identical 5-point Likert coding and reverse-scoring none of the items. An α above .90 indicates excellent internal consistency for research and applied use.

4. DISCUSSION

The findings provide a snapshot of Cambodian K–12 teachers' day-to-day challenges, professional development preferences, and instructional material needs. They point to a three-part support package, including brief workshops, peer-mentoring channels, and ready-to-use lesson guides, which can be deployed nationwide at low cost. Major findings, practical significance, and implications for policy and practice are discussed in this section.

4.1 Classroom Challenges: Common Pain Points, Modest Grade-Level Effects

Behavior management problems, low student engagement, and limited low-tech ICT integration appeared as the top concerns across school levels. Although a large sample made grade-level and teaching challenge relationships statistically significant, the effect size was small (Cramér's V = 0.11), indicating only modest variation. Primary teachers require the most urgent help with behavior management, while secondary and vocational teachers need additional support in subject-specific assessment and digital integration. This pattern aligns with earlier provincial case studies that highlighted fragmented preservice preparation and uneven ICT resources [5], [18], [19]. The small but consistent grade-level differences,

therefore, justify a dual professional development approach: core modules on behavior management and low-cost technology for all teachers, plus elective, grade-tailored strands.

4.2 Preferred Professional Development Formats

Nearly 93% of respondents prefer workshops of 1–2 days or modular courses of 1–3 months, with integrated follow-up coaching via Telegram. This short-plus-support preference coheres with meta-analytic evidence that brief, practice-rich sessions reinforced by mentoring yield stronger transfer to classroom practice than longer, theory-heavy courses [10], [13]–[16]. It also reflects limited resources at Cambodian public schools, which make fully online courses unpopular [17]. For policy implications, professional development funds currently scattered across one-off training sessions could be consolidated into cyclical, mentor-supported programs that respect teachers' time constraints while sustaining behavioral change.

4.3 Instructional Materials: Near-Universal Demand for Turnkey Lesson Guides

More than 60% of teachers, regardless of school type, rank step-by-step lesson guides as their top need, and the association between school types and preferred content is both non-significant and negligible in magnitude (Cramér's V = 0.05). This uniformity means that one template, with a visually rich and phone-friendly format, can satisfy demand across different types of schools. Teachers' emphasis on student understanding and engagement further suggests that guides should privilege clear explanations, low-cost visuals, and differentiated activities over exam-driven drills.

5. RECOMMENDATIONS

To translate the study's findings into actionable steps, the following table outlines targeted recommendations for key stakeholders involved in teacher professional development and instructional resource creation in Cambodia. Each recommendation outlines specific actions aligned with the expressed needs of teachers and highlights the anticipated impact on classroom practices and educational outcomes.

Table 14. Recommendations

Stakeholder	Action	Expected Impact
Ministry of Education, Youth and Sport (MoEYS) & POEs	Shift from one-off workshops to ongoing training cycles; promote peer reflection; include follow-up sessions via Telegram or in-person.	Enhanced teacher capacity through sustained, reflective professional development.
Teacher-Training Institutions	Train experienced teachers as peer mentors, develop Khmer-language guides addressing classroom issues, and pilot the use of these guides by redesigning in-service training into modular formats.	Increased instructional support, improved guide quality, and better in-service training effectiveness.
Education NGOs and Donors	Transition from isolated training to integrated PD packages; provide printed and digital support (e.g., Telegram groups) for post-training implementation.	Improved application of training, stronger communities of practice, and better long-term outcomes.

Stakeholder	Action	Expected Impact
School Management Teams	Use survey findings to plan professional development, organize peer learning on topics such as behavior management and student engagement, and conduct school-based needs assessments.	Targeted, relevant PD; increased teacher satisfaction and effectiveness.
Educational Researchers	Conduct mixed-methods evaluations of training effectiveness and guide implementation; focus on longitudinal impact.	Data-informed professional development reforms; a stronger evidence base for policy and practice.

6. CONCLUSION

This study collected data from 2,199 public school teachers, spanning primary to high school levels and various types of schools, to determine which classroom problems trouble teachers the most and which supports they value. Three main needs have been revealed. First, teachers experience oversized classes, mixed-ability classes, waning pupil attention, and limited low-cost technology. Second, they favor workshops or short blended courses that are immediately followed by ongoing peer or mentor support or preferably delivered through Telegram. Third, a strong majority want concise Khmer-language lesson guides that offer step-by-step plans, clear visuals, and tips for differentiation so that new practices transfer smoothly from training to the classroom.

Several limitations frame these findings, as the survey relied on volunteers responding online. Consequently, teachers in remote or low-connectivity areas may be underrepresented, and perceptions were self-reported rather than observed. Future mixed-method studies that combine classroom observations, achievement data, and longitudinal tracking will be essential to test the real-world impact of the recommended support package.

Looking ahead, the evidence suggests a pragmatic, system-wide strategy for Cambodia's next phase of educational reform: embedding short, practice-focused workshops within the national professional development calendar, sustaining learning through digital peer-mentoring networks, and distributing lesson guides in mobile-friendly PDFs. Aligning curriculum budgets, professional development funds, and donor projects around this three-part model can accelerate progress toward the country's vision of equitable, child-centered, and technology-enabled schooling.

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