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BLENDED LEARNING IN LEARNING ACTION CELL

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ABSTRACT

This study explored how a blended learning approach in Learning Action Cell (LAC) sessions influences teachers' professional development. Recognizing the crucial role of the Individual Development Plan (IDP) in guiding professional growth, the research aimed to pinpoint teachers' specific developmental needs and evaluate how tailored blended learning materials could support them. Using descriptive research design, the study first analyzed IDPs and gathered teachers' responses to identify common areas for development. Teachers, who update their IDPs annually, confirmed that these documents were valuable tools in recognizing their personal development goals. The findings highlighted key priority areas for professional growth: creating safe learning environments, improving assessment practices, fostering higher-order thinking, and strengthening home-school partnerships. Instructional materials designed around these themes in a blended format received very high ratings for relevance, clarity, and engagement. Teachers reported that the blended model brought greater flexibility, more opportunities for reflection, and stronger collaboration within their LAC sessions. Overall, the study concludes that blended learning in LACs is a powerful and effective strategy for addressing teachers' professional needs.

KEYWORDS: Blended learning, Learning Action Cell, professional development, Teacher Performance, Individual Development Plan (IDP)

INTRODUCTION

The evolving landscape of education has placed a significant responsibility on teachers to continually update their skills and adapt to new teaching methods that meet the diverse needs of their students. This study examines the integration of blended learning within Learning Action Cell (LAC) sessions, which are professional development strategies designed to enhance teachers' instructional practices. Mandated by the Department of Education (DepEd Order No. 35, s.2016), LAC sessions aim to provide collaborative

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learning opportunities for teachers, focusing on addressing instructional challenges and improving teaching outcomes. However, traditional LAC sessions often face challenges such as scheduling conflicts, limited participation, and an inability to address the varying professional development needs of teachers (Javier, 2021; Culajara, 2022).

This research seeks to explore how incorporating blended learning, a combination of face-to-face interactions and online learning can overcome these challenges. Specifically, the study investigates how blended learning enhances teacher engagement, fosters collaboration among educators, and strengthens teaching practices. Blended learning has been recognized for its potential to transform professional development by providing flexibility and accessibility. Juridico et al. (2023) and Manalo & De Villa (2022) emphasize that blended learning supports teachers in balancing their professional growth with instructional responsibilities by offering resources that are accessible any time. Basco et al. (2022) and Ancho & Arrieta (2021) highlight that digital tools within blended learning environments foster collaboration and engagement, enabling teachers to personalize their learning and apply new knowledge effectively. The constructivist and self-determination theories provide a strong theoretical foundation for this approach, as they underscore the importance of active participation, autonomy, and social interactions in fostering meaningful professional development experiences.

Despite its advantages, the practical application of blended learning within LAC sessions remains underexplored, particularly in the Philippine context. While studies have discussed the general benefits of blended learning, few have focused on its implementation in addressing logistical challenges and resource limitations specific to LAC sessions (Verbo, 2020). Teachers often struggle with time constraints and the heavy demands of their workload. Teachers frequently report feeling overwhelmed by the limited time allotted for professional development activities, as LAC sessions are often scheduled during already busy school days (Gonzales & Rivera, 2022). Many also express frustrations with the traditional LAC formats, which they perceive as failing to fully engage them or address their diverse professional needs (Torres & Abad, 2021). Local schools have similarly reported concerns about the passive nature of conventional LAC sessions, where the one-size-fits-all approach does not adequately consider the varying levels of experience and expertise among teachers (Santos & Manalo, 2020). This study aims to bridge this gap by investigating how blended learning can overcome these barriers, optimize professional development, and support teachers in adapting to the demands of 21st-century education.

This research makes a significant contribution by presenting practical strategies for integrating blended learning into LAC sessions, aligning with the Philippine Professional Standards for Teachers (PPST). The findings provide valuable insights for educators, school leaders, and policymakers, enabling them to design professional development programs that are responsive and impactful. By addressing the identified

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gaps, this study aspires to enhance the quality of teaching and learning, fostering a culture of continuous improvement among teachers and creating inclusive, dynamic learning environments for students.

METHODOLOGY

A descriptive research methodology was utilized to assess the effectiveness of blended learning in LAC to teachers' professional development. It aimed to identify the professional development needs of teachers and how effective the materials that were developed are based on the identified needs. The research was conducted in one of the schools of the Division of Surigao del Sur, namely Cantilan Pilot School. Cantilan Pilot School (CPS) is recognized as high-performing institution in the implementation of Learning Action Cell (LAC) sessions. With longstanding and well-established infrastructure, CPS provide an ideal environment for conducting this study, which aims to assess the outcomes of using a blended learning approach in LAC sessions. This school is widely known for its strong commitment to the professional development of its teachers. Through continuous training and comprehensive support, they foster a highly engaging and effective teaching community.

According to DepEd Order No. 35, s. 2016, a Learning Action Cell (LAC) is a small group of teachers composed of five (5) to fifteen (15) members. At Cantilan Pilot School, each grade level from Grades 1 to 3 has four sections. To support collaboration and shared learning, the twelve teacher-advisers from these grade levels were brought together to form one Learning Action Cell (LAC) group. This setup helps teachers work more closely, share ideas, and grow together professionally as they support their young learners.

This study employed an adapted survey questionnaire to gather comprehensive data on the implementation of blended learning in Learning Action Cell (LAC) sessions. Two questionnaires were utilized: the Pre-Implementation Survey Questionnaire and the Post-Implementation Survey Questionnaire.

To inform the development of relevant blended learning materials for LAC sessions, a Pre-Implementation Survey Questionnaire was administered to assess teachers' professional development needs in relation to their Individual Development Plans (IDPs). The first part of the survey (Part I-A) focused on understanding the current status of teachers' IDPs, how frequently they are updated, how well they reflect actual professional needs, and the level of support teachers receive in implementing them. This helped establish a baseline of how actively teachers engage with their IDPs and how useful they find them. The second part (Part I-B) used a quantitative approach to identify priority areas for professional development.

The Post-Implementation Survey Questionnaire was designed to assess the impact of the blended learning materials on teacher professional development. Part I-A: Blended Learning Materials Evaluation focused



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on how well the materials used during the LAC sessions met teachers' needs. Part I-B: Online Component Evaluation assessed the effectiveness and user experience of the online elements of the blended learning approach, online platform supported ongoing professional development and where it could be improved.

Data collection for this study followed standard ethical research protocols. Prior to implementation, formal authorization was obtained from the Schools Division Superintendent, the district supervisor, and the school head to ensure institutional support. Informed consent was obtained from all participants, with clear communication regarding the confidentiality of their responses and the voluntary nature of their participation. To accommodate varying preferences and ensure accessibility, the survey was administered in both printed and digital formats. Follow-up reminders were conducted to maximize response rates. Data were analyzed using descriptive statistical methods, including mean, frequency, standard deviation, and percentage, to summarize the results and identify patterns related to the accessibility of training and teachers' competency levels.

RESULTS AND DISCUSSION:

Identified Needs of Teachers for Professional Development in Learning Action Cell (LAC) Sessions as Reflected in their Individual Development Plan (IDP)

Table 1 presents the existence of the Individual Development Plan (IDP) of the teacher respondents.

Table 1. Existence of Individual Development Plan (IDP)

Statement	Frequency (Yes)	Frequency (No)
Do you have a current Individual Development Plan (IDP)?	24	0

Table 1 shows that all the 12 teacher-respondents (100%) cite that there is access to an updated Individual Development Plan (IDP). The unified response guarantees documentation of compliance with DepEd Order No. 35, s.2016, mandating use of the IDP as a sustaining tool for professional development in the Learning Action Cell (DepEd, 2016). The presence of the IDP among educators is also a type of organizational commitment towards goal setting and reflective practice. Drawing on a background of blended learning and ongoing improvement, a revised IDP envisions educators continuously monitoring development needs and correlating with teaching goals. This is the foundation for effective participation in LAC meetings, particularly if the same is made adaptive and data-informed (Gecobe et al., 2022).

Table 2 presents how frequently the teacher respondents update their Individual Development Plan (IDP)

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Table 2. Frequency of IDP Update

Frequency of Updating IDP	Frequency
Every Term	0
Every School Year	24
Rarely	0
Not Applicable	0

Table 2 indicates that all the respondents update their Individual Development Plan every year. This annual resubmission of the IDP is its application and ongoing existence as a working document, not on paper. Annual update enables teachers to maintain their goals in equilibrium with changing curriculum requirements, student requirements, and policy drives on a continuous basis. It is also a sign of a results-driven professional culture where continuous reflection and development are common events, not something that happens occasionally. Applied to blended learning in LAC sessions, this yearly reauthoring of goals is perfectly matched to the responsiveness and flexibility provided by blended model delivery (Ahmadi et al., 2023). Through annual reflection on their goals, teachers are infusing LAC interventions into practice and current.

Table 3 presents the teachers' perceptions on their individual development plan as analyzed using mean.

Table 3. Teachers' Perceptions on their Individual Development Plan

Statement	Mean	Verbal	Rank
		Interpretation	
I feel that my IDP aligns with my professional development	4.79	Strongly Agree	2
needs.			
My IDP helps me identify areas for improvement in my	4.83	Strongly Agree	1
teaching practice.			
I receive adequate support in implementing my IDP.	4.04	Agree	3
Average Weighted Mean	4.55	Strongly Agree	-

Range:

$$1.00 - 1.80$$
 - Strongly Disagree $1.81 - 2.60$ - Disagree $2.61 - 3.40$ - Undecided

3.41 - 4.20 - Agree 4.21 - 5.00 - Strongly Agree

It can be seen from Table 3 that the teacher-respondents had the following perception about their Individual Development Plans (IDPs) in the sense that the mean is 4.55 rated Strongly Agree. The IDP is perceived by teachers as very important as an indispensable tool of their professional work. The highest

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rate was "My IDP helps me identify areas for improvement in my teaching practice." at a mean of 4.83, and very closely followed by "I feel that my IDP aligns with my professional development needs" (M = 4.79). These findings actually do validate that the IDP can actually help personal goal-setting and self-assessment. It suggests that not just the policy needs are being served by the teachers but also, they themselves identify the IDP as a development of their own development agenda. The non-selective favorability was noted except for the lowest-scored item being "I receive adequate support in implementing my IDP" (M = 4.04), which is interpreted as agree.

It shows moderate lack of facilitating mechanisms among the teachers. Although teachers accept that they should prepare for their own development, in practice they can be overwhelmed by time, a lack of mentoring, or a lack of appropriate resources. This is also supported by McKnight et al. (2016), who assumed that professional development of teachers is likely to be ineffective but not because they lack motivation but because of structural and logistical issues in the school system. These results have profound implications for planning and conducting LAC sessions in LAC.

The perceived usefulness of the IDP is exceptionally high, thereby raising the odds of having IDP-related goals incorporated into LAC planning and consequently making LAC sessions more effective and purposeful. Secondly, LAC's utilization of blended learning is potentially bridging the action-plan gap (Medina & Del Rosario, 2022; Ahmadi et al., 2023). Carefully planning deploying blended learning approaches would remind not just instructors about the requirement of developing skills, but it could assist in informing instructors, Table 4 presents the teachers' professional development needs based on IDP as analyzed using mean

Table 4. Teachers' Professional Development Needs Based on IDP

Statement	Mean	Verbal	Rank
		Interpretation	
I need more training in applying content knowledge across	3.71	Agree	15
curriculum areas.			
I require professional development on using diverse teaching	4.26	Strongly Agree	10
strategies to improve literacy and numeracy outcomes.			
I would benefit from additional support in applying teaching	4.63	Strongly Agree	4
strategies that foster critical, creative, and higher-order			
thinking skills.			
I need guidance on effectively using Filipino, and English to	3.92	Agree	13
enhance teaching and learning.			



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I need professional development in creating safe and secure	4.92	Strongly Agree	1
learning environments through consistent implementation of			
classroom policies and procedures.			
I would like more support in maintaining learning	4.08	Agree	12
environments that promote fairness, respect, and care,			
fostering student learning.			
I need more training in establishing a learner-centered culture	3.96	Agree	14
that responds to my students' linguistic, cultural,			
socioeconomic, and religious backgrounds.			
I would benefit from additional support in adapting teaching	4.04	Agree	11
strategies for indigenous learners.			
I need professional development on setting achievable,	3.92	Agree	13
appropriate learning outcomes aligned with learning			
competencies.			
I would like more training on providing timely, accurate, and	4.75	Strongly Agree	3
constructive feedback to improve student performance.			
I require support in using assessment data to adjust my	4.84	Strongly Agree	2
teaching practices and programs effectively.			
I would like to improve my ability to build relationships with	4.79	Strongly Agree	5
parents/guardians and the wider school community to enhance			
their involvement in education.			
I need more opportunities to engage in professional networks	4.00	Agree	11
to share knowledge and improve my teaching practice.			
I would benefit from professional development focused on	4.08	Agree	12
creating a personal improvement plan through reflection and			
continuous professional learning.			
I need additional support in handling related tasks and	4.08	Agree	12
activities that contribute to the teaching-learning process.			
Average Weighted Mean	4.22	Agree	-

Range:

$$1.00 - 1.80$$
 - Strongly Disagree $1.81 - 2.60$ - Disagree $2.61 - 3.40$ - Undecided $3.41 - 4.20$ - Agree $4.21 - 5.00$ - Strongly Agree

Table 4 presents the teachers' professional development needs as identified in their Individual Development Plans (IDPs). Ranking first is, "I need professional development in creating safe and secure learning environments through consistent implementation of classroom policies and procedures" (M =



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4.92), highlighting teachers' growing concern for classroom order and student welfare. This heightened awareness may stem from the rise in emotional and behavioral challenges among students in the post-pandemic learning environment.

The second most highly rated need is, "I would like to improve my ability to build relationships with parents/guardians and the wider school community to enhance their involvement in education" (M = 4.79). This underscores the recognition that strong school-community partnerships are essential for student success. Third, "I require support in using assessment data to adjust my teaching practices and programs effectively" (M = 4.84), reveals a strong demand for increased data literacy. The fourth, "I would benefit from additional support in applying teaching strategies that foster critical, creative, and higher-order thinking skills" (M = 4.63), suggests a push toward 21st-century learning goals. Fifth, "I would like more training on providing timely, accurate, and constructive feedback to improve student performance" (M = 4.75), emphasizes the ongoing need to strengthen formative assessment practices.

Interestingly, some areas were rated lower, such as completing content knowledge within and between curriculum areas (M = 3.71), restructuring learning to address indigenous students' needs (M = 4.04), and valuing caring and equitable learning environments (M = 4.08). These lower ratings may indicate that teachers perceive these as lower priority needs, believe they have already achieved competency, or lack access to context-specific training. Nevertheless, in light of the increasingly diverse student population including indigenous learners these areas still warrant attention through inclusive and equity-oriented professional development sessions (Mabuan, 2022).

To address these varying needs, blended learning emerges as a promising approach. It enables schools to offer personalized professional development modules aligned with teachers' IDPs while allowing flexibility for self-paced learning (Gecobe et al., 2022). For example, topics like data use or feedback strategies can be addressed through online modules, while collaborative in-person sessions such as debates or case studies can be used to strengthen classroom management and inclusive practices. In this context, Learning Action Cells (LACs) evolve into responsive and practical platforms where teachers not only reflect on their learning but also apply new strategies in real school settings. Thus, the integration of blended learning with LACs supports DepEd's goal of delivering context-sensitive, sustainable, and differentiated professional development (DepEd, 2016).

Effectiveness of the Developed Blended Learning Materials Based on the Identified Needs of Teachers in LAC Sessions



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Table 5 presents the evaluation of blended learning materials.

Table 5. Evaluation of Blended Learning Materials

Statement	Mean	Verbal	Rank
		Interpretation	
The blended learning materials are relevant to my professional	4.58	Strongly Agree	5
development needs.			
The content in the blended learning materials aligns with the	4.20	Agree	9
professional development needs identified in my IDP.			
The content presented in the blended learning materials is clear and	4.75	Strongly Agree	2
easy to understand.			
The learning strategies presented in the blended learning materials	4.75	Strongly Agree	2
are practical and can be applied directly to my teaching.			
The blended learning materials encourage engagement and	4.67	Strongly Agree	4
interactivity, helping me stay involved in the learning process.			
The blended learning materials effectively integrate technology into	4.50	Strongly Agree	7
the learning activities.			
The blended learning approach has been effective in improving my	4.67	Strongly Agree	4
teaching practices.			
The materials are easy to use and accessible, allowing me to	4.50	Strongly Agree	7
navigate and apply them easily.			
The blended learning materials provide strategies and support for	4.67	Strongly Agree	4
differentiated instruction.			
Overall, the blended learning materials have been effective in	4.58	Strongly Agree	5
supporting my professional development.			
Average Weighted Mean	4.63	Strongly	-
		Agree	

Table 5 presents the rating of blended learning materials used in Learning Action Cell (LAC) sessions based on the perception of teacher-respondents. The finding revealed a mean of 4.60, which was Strongly Agree, and with a highly positive rating of the materials. This finding testifies that the blended learning materials were perceived to be effective, usable, and useful in teachers' professional development. Highest rated, strongest answers at 4.75 were "The content presented in the blended learning materials is clear and easy to understand." and "The learning strategies presented in the blended learning materials are



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practical and can be applied directly to my teaching." These both indicate that teachers not only adore the clarity of the content, but it's practical as well, and both are colossal pieces of successful professional development.

The favorable scores on several of the items: particularly those having an interactivity (M = 4.67), a technology integration (M = 4.50), and accessibility (M = 4.50) focus are reflective of the well-rounded nature of the materials. Even the lowest rated comment, "The content in the blended learning materials aligns with the professional development needs identified in my IDP." (M = 4.20), was rated Agree, which means that while maybe it might have been improved, it was generally fine. These results are positive evidence of the creation and execution of the blended materials, particularly in overcoming teachers' time constraint and irregular schedules, which are normally cited obstacles to successful professional development (McKnight et al., 2016; Lim et al., 2020).

The implications of these results are considerable. The aggregate high ratings present proof that blended learning, if well executed, enhances teachers' professional development and teaching effectiveness. This is in agreement with DepEd Order No. 35, s.2016, and drives LAC as a just and nature-oriented development model and also ensures technology adoption in the sessions improves attendance and reproductivity (DepEd, 2016; Pangilinan, 2021). Furthermore, results corroborate the assertion by Junpel (2023) and Ormilla et al. (2024) that blended sessions in LAC improve motivation, aside from rendering teachers technologically capable. For the sake of maintaining such outcomes, technical assistance for lengthy periods, adaptive learning schedules, and IDP-computed resources need to be granted so that teachers from every walk of life can leverage policy for digital change and become adaptive professionals in the ever-digitizing education industry (Alvarez & Aclan, 2022; Solomon & Alforja, 2021).

Table 6. Evaluation of the Online Component of the Blended Learning Materials

Statement	Mea	Verbal	Rank
	n	Interpretation	
Overall, the courseware explained the lessons/topics	4.50	Strongly Agree	7
clearly.			
I learned a lot from the courseware lessons.	4.50	Strongly Agree	7
The courseware was easy to navigate (I could find my	4.42	Strongly Agree	10
way through the screens and sections easily).			
The courseware had an attractive 'look and feel'.	4.50	Strongly Agree	7
I was able to work through the courseware at my own	4.58	Strongly Agree	6
pace.			



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The videos in the courseware were useful.	4.67	Strongly Agree	3
I was generally able to complete the courseware in less	4.75	Strongly Agree	1
than two hours.			
I did some of the courseware at home on my own laptop	4.50	Strongly Agree	7
or cellphone.			
If I wanted to go back and review courseware content,	4.75	Strongly Agree	1
I was able to do so.			
The courseware provided sufficient support/resources	4.83	Strongly Agree	1
for me to apply what I learned to my teaching.			
Average Weighted Mean	4.60	Strongly Agree	-

Range:

$$1.00 - 1.80$$
 - Strongly Disagree $1.81 - 2.60$ - Disagree $2.61 - 3.40$ - Undecided

$$3.41 - 4.20$$
 - Agree $4.21 - 5.00$ - Strongly Agree

Table 6 presents the evaluation of the online component of the blended learning materials used during the Learning Action Cell (LAC) activities. The average rating is 4.60, equivalent to Strongly Agree, indicating that the teachers rated very high the online courseware as being very effective, easy to access, and beneficial to their professional development. Notably, the first three ranked options are tied at one: "The courseware provided sufficient support/resources for me to apply what I learned to my teaching." (M = 4.83), " If I wanted to go back and review courseware content, I was able to do so." (M = 4.75), and " I was generally able to complete the courseware in less than two hours." (M = 4.75). These results suggest that teachers favored the functional usability, ease of handling, and time-saving user interface design of web-based instructional materials.

The uniformly high ratings for navigation (M = 4.42)-focused items, visual attractiveness (M = 4.50), independent study (M = 4.58), and use of video (M = 4.67) suggest the strengths of courseware in providing autonomous and enjoyable learning experiences. These findings align with three general specifications of quality blended learning (clarity, accessibility, and flexibility) stipulated in DepEd Order No. 35, s.2016 in favor of collective and situational professional growth (DepEd, 2016). Additionally, the convenience of viewing and reviewing the content at their own pace enabled the teachers to use their time more effectively, an element to consider given their several responsibilities that they are currently dealing with (Lim et al., 2020). The positive uptake of the digital interface and content also supports Junpel's (2023) study that participation in blended LAC sessions improves the motivation and performance of teachers to use ICT tools in the classroom. The implications of the findings are key to the sustainability and development of blended learning in teacher training programs.



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The positive response to the courseware assures that the Department of Education's digitalization endeavors are on track (Pangilinan, 2021). Not only does the courseware align with the ICT Integration Framework (Ormilla et al., 2024) but also tackles teacher capacity and classroom innovation directly. As teachers become more digitally empowered, they are in a better position to provide 21st-century learning spaces for students, which results in instructional quality and student preparedness for the digital age (Alvarez & Aclan, 2022; Solomon & Alforja, 2021). These findings affirm the need to invest in accessible, well-designed, and teacher-friendly digital learning materials that facilitate teachers in traditional and innovative learning settings.

Based on the findings, teachers regularly update their IDPs, which they view as essential tools for identifying their professional development needs. Key areas of focus include classroom safety, assessment-driven instruction, constructive feedback, critical thinking, and stronger family and community engagement.

The blended learning materials were perceived as highly effective by teachers. They found the content to be relevant, clear, engaging, and generally aligned with their identified needs.

Teachers described blended learning as flexible, reflective, and empowering. They appreciated the integration of digital tools which made sessions more interactive and meaningful.

CONCLUSION

On the basis of the findings of the study, the following conclusions were drawn regarding the implementation of blended learning during Learning Action Cell (LAC) sessions and its relevance in terms of teacher professional development. These conclusions reflect the necessity of data-driven, responsive, and innovative professional learning systems in the education system.

Educators use and refer to their Individual Development Plans (IDPs) quite often as an instrument of growth and reflection, with yearly revised updates confirmed by participants. The IDP was rated as highly valuable in identifying areas for development and aligning professional learning with actual classroom priorities.

Key areas of professional development were clearly identified, including the creation of safe learning environments, effective use of assessment data, provision of timely feedback, enhancement of higher-order thinking skills, and strengthened collaboration with families and communities. These areas reflect the evolving and multifaceted role of teachers in 21st-century classrooms.



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The LAC session combined learning materials that were designed were considered to be very effective, in particular relevance, clarity, interest, and utilization. Combining online and offline features produced an adaptive learning platform that was conducive to intensive learning and extended participation.

Positive dispositions and rich experiences of blended learning were provided by teachers, which they attributed to heightened engagement, reflective practice, autonomy, and digital confidence. Use of digital tools and flipped classroom pedagogy enabled more active and collaborative LAC sessions.

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