

Literature Review: Explorers of the Forest of Reading and Writing:  
A Blended Learning Model to Strengthen Motivation, Reading, and Spanish Writing in  
Bilingual Classrooms

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September 21, 2025

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**Writing in Bilingual Classrooms**

**Abstract**

Teaching reading and writing in elementary school requires sustaining student motivation and engagement, particularly in bilingual classrooms where children advance in two languages simultaneously. Traditional approaches often restrict meaningful literacy development. Blended learning emerges as an alternative by combining digital tools with face-to-face instruction, encouraging students to take an active role in learning. Within this framework, the Explorers of the Forest of Reading and Writing project was designed as a blended model for second-grade bilingual students. The study explores how this approach can foster motivation, improve reading comprehension, and strengthen Spanish writing while building foundations for English learning. Although theoretical models such as Universal Design for Learning (UDL) and the COVA approach provide valuable guidance, empirical research in bilingual elementary settings remains scarce. This review offers practical guidance for creating inclusive and sustainable classrooms.

**Keywords:** blended learning, bilingual literacy, elementary education, digital assessment, motivation.

## **Introduction**

In elementary education, literacy plays a central role as the foundation for lifelong learning. Yet, schools increasingly face the challenge of teaching reading and writing in diverse, bilingual classrooms. Students are expected to progress in two languages simultaneously, and many lose motivation when instruction relies on traditional methods that fail to address their needs and interests. In this setting, motivation and engagement become decisive factors for achieving sustained literacy growth.

Research highlights that technology integration should not be seen as an add-on but as a transformative element that reshapes the learning experience (Christensen, Horn, & Johnson, 2017). Blended learning models provide opportunities to personalize instruction, combine digital and face-to-face strategies, and position students as active participants. When combined with storytelling, playful activities, and formative assessment, these approaches can strengthen literacy in more inclusive and sustainable ways.

Within this framework, the Explorers of the Forest of Reading and Writing project was created for second-grade bilingual students. Its purpose is to demonstrate how learning centers, adaptive platforms, and digital assessment can enhance motivation, improve reading comprehension, and strengthen Spanish writing while laying the foundation for future English learning.

## **Literature Review**

This review focuses on the contributions of research on blended models applied to bilingual literacy in elementary education. It is organized around five themes: blended learning and digital tools, bilingual literacy, motivation and learning culture, instructional design and the teacher's role, and assessment for continuous improvement. Taken together, these perspectives show that technology, when applied with pedagogical purpose, can enhance student motivation, participation, and achievement while supporting teachers in building inclusive and sustainable practices.

### **Blended Learning and Digital Tools**

Blended learning is the intentional integration of face-to-face instruction with digital tools to create flexible and engaging environments. Christensen, Horn, and Johnson (2017) describe it as a disruptive innovation that transforms learning and positions students as active participants. Graham (2019) adds that its impact is greatest when aligned with clear instructional goals, particularly in literacy.

A key contribution of blended learning lies in adaptive platforms that tailor instruction to students' individual needs while generating performance data to guide teacher feedback. Means et al. (2010) found that blended environments supported by such platforms consistently outperformed traditional approaches in reading comprehension. Building on this, Hughes and Roblyer (2022) illustrate how Amplify Reading develops vocabulary and comprehension through narrative-based modules, while Taylor & Francis Author Services (2023) show how iReady provides personalized instruction and analytics that strengthen teaching decisions.

Gamification further amplifies engagement by embedding play into literacy tasks. Wang and Tahir (2020) demonstrated that Kahoot! promotes collaboration, while Sánchez-Caballé, Gisbert-Cervera, and Esteve-Mon (2020) highlight how Genially fosters agency by enabling students to design interactive storyboards and digital texts. Roblyer and Hughes (2019) add that Adobe Express supports multimodal creations that link comprehension with creative writing, reinforcing ownership of learning.

In the *Explorers of the Forest of Reading and Writing* project, these insights are applied through the integration of adaptive platforms, gamified activities, and creative digital tools. Together, they not only enhance motivation, comprehension, and writing but also provide evidence for continuous assessment, ensuring inclusive and sustainable practices in bilingual elementary classrooms

### **Bilingual Literacy**

Research on bilingual literacy highlights that a strong foundation in the native language serves as a bridge for acquiring literacy in a second language. Cummins (2000), through the interdependence hypothesis, emphasized that reinforcing the home language provides cognitive and linguistic support for additional language learning. Building on this, August and Shanahan (2006) found that Spanish-speaking students with strong Spanish literacy achieve higher levels of reading comprehension in English. García and Kleifgen (2018) further stressed that maintaining Spanish literacy prevents English from being perceived as disconnected or overly difficult, reinforcing the importance of valuing both languages in instruction.

A central concept is cross-linguistic transfer, the ability to apply skills from one language to another. Genesee et al. (2006) and Koda (2007) demonstrated that phonological awareness,

vocabulary, and comprehension strategies can transfer across languages, while Bialystok (2001) showed that bilingual learners often develop stronger metalinguistic awareness, which supports reading and writing development in both languages.

However, challenges persist when instruction does not intentionally integrate both languages. August and Shanahan (2017) identified persistent gaps in vocabulary and syntax, particularly when bilingual learners are taught in fragmented ways. To address this, García (2009) proposed translanguaging as a strategy to leverage both languages flexibly, and Snow (1990) warned that neglecting the home language risks widening literacy gaps.

In the *Explorers of the Forest of Reading and Writing* project, these principles guide the intentional design of learning centers where Spanish serves as the foundation for biliteracy. Activities prioritize Spanish reading and writing while gradually connecting to English tasks, allowing students to transfer skills naturally. Evidence of this process is documented through digital portfolios and authentic assessments, ensuring that literacy growth is monitored in both languages.

### **Motivation and Learning Culture**

Motivation is a central factor in literacy development, especially in bilingual classrooms where students face the challenge of learning to read and write in two languages. Research shows that beliefs about ability strongly influence persistence and performance. Dweck (2006) demonstrated that students who adopt a growth mindset are more willing to persist in challenging tasks, while Schunk (1991) highlighted that self-efficacy directly impacts students' willingness to engage in reading and writing.

Curiosity and play also emerge as powerful motivators. Thomas and Brown (2011) argued that these elements form the foundation of a new culture of learning, where reading and writing are experienced as exploratory and enjoyable activities. Similarly, Guthrie (2004) showed that literacy instruction that connects autonomy and relevance increases both motivation and comprehension. Motivation is further reinforced when it connects to students' cultural identities. Ladson-Billings (1995) introduced culturally relevant pedagogy, emphasizing that texts and practices must reflect students lived experiences to make learning meaningful.

Emotions and belonging add another dimension. Pekrun (2006), through control-value theory, explained that when students perceive value in a task and feel control over it, they experience positive emotions that increase engagement. Wenger (1998) expanded on the concept of communities of practice, demonstrating that belonging and identity within a learning group strengthen motivation and participation.

In blended learning contexts, these dimensions can be intentionally strengthened. Fisher and Frey (2016) demonstrated that structured literacy centers accelerate progress and sustain engagement, while Fink (2013) highlighted that meaningful learning emerges when active strategies and reflection are present. Harapnuik (2016), through the COVA+CSLE model, emphasized that choice, voice, and authenticity in digital portfolios and creative tasks promote agency and sustained literacy achievement.

Ultimately, motivation and learning culture are not complementary conditions but the driving force behind bilingual literacy. When students believe in their abilities, feel a sense of belonging, and connect meaningfully with texts, learning shifts from being an obligation to becoming a transformative experience. For this reason, blended environments that incorporate

growth mindset, self-efficacy, curiosity, play, and belonging strengthen literacy in both Spanish and English while ensuring inclusive and sustainable practices for the future.

### **Assessment and Continuous Improvement (final English version)**

Assessment in blended bilingual literacy environments must address both learning outcomes and processes. Mertler (2019) emphasized that action research requires data triangulation to strengthen validity and ensure that assessment supports learning rather than simply measuring it. Similarly, Creswell and Creswell (2018) noted that combining quantitative and qualitative data increase's reliability.

An important contribution comes from the *4 Disciplines of Execution (4DX)* by Covey, McChesney, and Huling (2012), which distinguishes between lead measures—predictive indicators such as engagement or time on task—and lag measures, such as test scores. This distinction allows teachers to monitor both motivation and performance. Marzano (2009) confirmed that combining formative (lead) and summative (lag) assessments improves reading comprehension and writing. Brookhart (2013) added that analytic rubrics provide transparency and enable teachers to assess progress in complex skills such as writing, which is highly relevant in bilingual contexts.

Data triangulation remains a key principle. Creswell and Creswell (2018) highlighted that combining tests and platform analytics with observations, surveys, and portfolios increases the reliability of classroom research. Mertler (2019) stressed that action research depends on multiple sources of evidence to adjust instruction in real time. Mills (2014) further confirmed that integrating teacher notes, student work samples, and test results offers a more accurate picture of literacy development.

The literature also underscores the importance of authentic assessment in hybrid environments. Brookhart (2013) argued that rubrics help students internalize quality criteria and self-regulate their writing. Barrett (2007) showed that digital portfolios promote reflection and ownership of learning, particularly effective in blended contexts where both physical and online evidence are collected. Andrade and Brookhart (2020) demonstrated that self-assessment, when combined with rubrics and portfolios, strengthens metacognition and supports continuous improvement.

### **Limitations of These Studies**

#### **Technological limitations**

Unequal access to technology is one of the greatest challenges in blended learning implementation. Graham (2019) noted that models lose effectiveness when students lack reliable platforms or stable connectivity. In under-resourced schools, devices are often scarce or outdated and internet connections are unstable. In many cases, students also face complicated systems to access online educational portals, further limiting participation.

Another challenge relates to institutional decisions. Some schools, rather than viewing technology as a long-term investment, see it only as an expense. This perspective restricts opportunities to modernize infrastructure and to provide students with digital literacy experiences integrated into the curriculum. Warschauer and Matuchniak (2010) argued that technological inequalities affect not only access but also the quality of digital literacy opportunities.

It is also important to acknowledge that physical resources, such as school libraries, remain essential. The challenge lies in connecting these spaces with digital tools that complement them, enabling students to access both printed materials and interactive platforms that strengthen reading and writing. Selwyn (2016) warned that without pedagogical support, technology risks reproducing inequities, but when intentionally integrated, it can enrich and extend the value of physical resources.

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### **Demographic limitations**

Most studies on disruptive innovation in blended learning have been conducted in secondary or higher education, limiting their applicability to younger learners (Christensen, Horn, & Johnson, 2017). This gap is significant because elementary students have distinct cognitive and linguistic needs that require tailored strategies. Cummins (2000) emphasized that bilingual literacy development at these ages depends on supports that remain underexplored in current research.

Another important limitation relates to the populations studied. August and Shanahan (2006) noted that much research has focused on urban contexts, leaving rural and migrant communities underrepresented, despite their urgent bilingual education needs. García and Kleifgen (2018) warned that disregarding cultural and linguistic diversity risks reinforcing homogeneous approaches that fail to reflect students' realities, thus widening rather than closing

literacy gaps. These limitations highlight that without attention to age, sociocultural context, and linguistic diversity, blended models may be less relevant for bilingual elementary classrooms, underscoring the need for more situated and inclusive research.

### **Modality limitations**

Limitations also arise from how blended learning is implemented. Christensen, Horn, and Johnson (2017) warned that in many cases, models are reduced to a superficial mix of digital tools and face-to-face instruction without intentional design. This lack of coherence weakens their transformative potential and may generate resistance among both teachers and students. A critical issue is that without clear educational intentionality, the opportunity to build meaningful learning environments is lost. The integration of virtual and face-to-face components should not be seen as a simple addition, but as a complement that enhances motivation and engagement. When this intentional connection is missing, valuable opportunities to enrich literacy and sustain student commitment are wasted.

Brookhart (2013) stressed that authentic assessment tools such as rubrics and portfolios lose their pedagogical value when teachers are not adequately trained to apply them effectively. Mertler (2019) added that most studies report only short-term outcomes, underscoring the need for longitudinal research to examine how hybrid environments influence motivation and literacy growth over time. Darling-Hammond et al. (2020) further emphasized that without sustainable planning, educational innovations often lose momentum and fail to produce lasting change.

## **Discussion**

The reviewed literature provides a solid framework for understanding how blended environments influence motivation, reading comprehension, and Spanish writing among bilingual elementary students. Christensen, Horn, and Johnson (2017) argue that technology in blended models should not be viewed as a mere add-on, but as a disruptive innovation that transforms teaching. This principle is reflected in the Explorers of the Forest of Reading and Writing project, where adaptive platforms and interactive tools are integrated as central elements of the pedagogical design. Beyond enriching activities, they generate real-time data that makes continuous monitoring and improvement of strategies possible.

Graham (2019) reinforces that blended learning achieves its greatest impact when aligned with clear pedagogical goals. In this project, the primary goal is to strengthen motivation and Spanish literacy as the foundation for biliteracy, ensuring that students not only develop linguistic skills but also acquire autonomy, collaboration, and strategic use of technology—competencies essential for the 21st century.

Cummins (2000) contributes the linguistic interdependence hypothesis, emphasizing that a strong foundation in the first language supports the acquisition of a second. This principle guides the decision to prioritize Spanish reading and writing activities in the project, with progress measured through rubrics that assess writing, comprehension, and vocabulary transfer. August and Shanahan (2006) provide empirical confirmation by demonstrating that students who consolidate literacy in their home language achieve higher levels of comprehension in English. In Explorers, this principle is applied through the design of learning centers that connect Spanish literacy activities with bilingual tasks, documented in digital portfolios that serve both as evidence of progress and as tools for authentic assessment.

Motivation is also a central theme in the literature. Dweck (2006) shows that a growth mindset increases persistence in challenging tasks, a concept reflected in the project's forest narratives that frame mistakes as learning opportunities. Thomas and Brown (2011) emphasize that curiosity and play create meaningful learning cultures; in *Explorers*, forest characters and scenarios transform reading and writing into exploratory experiences. These motivational elements are evaluated through surveys, reflective journals, and systematic observations that complement academic achievement measures.

On the pedagogical level, Universal Design for Learning (CAST, 2018) highlights the importance of offering multiple means of representation, action, and engagement. The project reflects this by designing hybrid centers that integrate oral reading, digital materials, and written or creative productions, with differentiated rubrics to acknowledge diverse learning styles and paces. Harapnuik (2016), through the COVA+CSLE framework, stresses the value of choice, voice, and authenticity; in *Explorers*, students build digital portfolios with authentic creations, promoting agency and self-assessment. Wiggins and McTighe (2005) emphasize planning with enduring understandings in mind, which is evident in the project's focus on reading comprehension and writing as transferable skills that extend beyond isolated tasks and prepare learners for 21st-century challenges.

Assessment emerges as an essential axis of this process. Brookhart (2013) explains that rubrics clarify quality criteria and foster student self-regulation; in the project, each learning center includes simple rubrics for self-assessment. Mertler (2019) highlights that action research requires triangulation of data; *Explorers* incorporates observations, surveys, portfolios, and results from adaptive platforms to ensure comprehensive and valid analysis. Creswell and Creswell (2018) add that validity increases when quantitative and qualitative data are combined,

inspiring a dual measurement in the project that tracks both academic outcomes and motivational processes.

Taken together, the literature shows that theory is not an isolated reference but a foundation that supports and strengthens the design and implementation of the innovation plan. The reviewed frameworks demonstrate how a blended model can create inclusive and motivating environments, and the Explorers project translates these insights into concrete practices that enhance bilingual literacy. At the same time, continuous assessment is positioned as a fundamental element: it not only measures outcomes but also drives the improvement of strategies, ensures pedagogical relevance, and promotes the development of critical, communicative, and technological skills required for success in the 21st century.

### **Conclusions and Future Study**

The reviewed literature provides a strong foundation across blended learning, bilingual literacy, motivation, instructional design, and assessment. Taken together, these studies confirm that purposeful integration of technology can transform literacy instruction by enhancing personalization, motivation, and student engagement. They also reinforce that Spanish, as the first language, plays a central role in supporting the transfer of strategies into English, ensuring sustainable biliteracy development.

Nevertheless, important gaps remain that justify the focus of this action research. Christensen, Horn, and Johnson (2017) highlight the transformative potential of blended learning, yet most studies concentrate on secondary or higher education, offering little evidence for younger learners. Cummins (2000) and August and Shanahan (2006) emphasize the value of

strengthening the first language, but little is known about how digital tools mediate cross-linguistic transfer. Likewise, frameworks such as UDL (CAST, 2018), COVA (Harapnuik, 2016), and Understanding by Design (Wiggins & McTighe, 2005) provide strong guidance, but few empirical studies document their application in elementary bilingual hybrid classrooms. Finally, while rubrics (Brookhart, 2013) and data triangulation (Mertler, 2019) are widely supported, there is limited evidence on how these tools can be integrated with digital portfolios to capture both motivation and literacy growth in real time.

The Explorers of the Forest of Reading and Writing project responds to these gaps by implementing a bilingual blended learning environment designed for second-grade students. Its purpose is to examine how this model strengthens motivation, reading comprehension, and Spanish writing, while equipping teachers with authentic assessment tools for continuous monitoring and improvement. In doing so, the study contributes empirical evidence in an underexplored area and proposes actionable practices for inclusive and transformative literacy instruction.

- At the same time, the reviewed literature raises questions that extend beyond the scope of this study and suggest directions for future research:
- In what ways can digital portfolios provide longitudinal evidence of biliteracy development across multiple grade levels?
- How might frameworks such as UDL, COVA, and Understanding by Design be integrated into a unified model for hybrid bilingual literacy instruction?
- What teacher training strategies are most effective in preparing educators to implement technology and authentic assessment tools in elementary classrooms?

In conclusion, this action research views theory not only as a conceptual reference but also as a practical guide that informs innovation, monitoring, and evaluation. The findings aim to bridge research and practice, showing how blended bilingual models, grounded in continuous assessment, can respond to current gaps while preparing students with the literacy, motivation, and 21st-century skills essential for their academic and personal growth.

### References

- Andrade, H., & Brookhart, S. M. (2020). *Student self-assessment: Assessment to empower students and transform teaching*. Routledge. <https://doi.org/10.4324/9780429295628>
- August, D., & Shanahan, T. (2006). *Developing literacy in second-language learners: Report of the National Literacy Panel on Language-Minority Children and Youth*. Lawrence Erlbaum.
- August, D., & Shanahan, T. (2017). *Developing literacy in second-language learners*. Routledge.
- Barrett, H. C. (2007). Researching electronic portfolios and learner engagement: The REFLECT initiative. *Journal of Adolescent & Adult Literacy*, 50(6), 436–449.  
<https://doi.org/10.1598/JAAL.50.6.2>
- Bialystok, E. (2001). *Bilingualism in development: Language, literacy, and cognition*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511605963>
- Brookhart, S. M. (2013). *How to create and use rubrics for formative assessment and grading*. ASCD.

CAST. (2018). *Universal Design for Learning guidelines version 2.2*. CAST.

<http://udlguidelines.cast.org>

Christensen, C. M., Horn, M. B., & Johnson, C. W. (2017). *Disrupting class: How disruptive innovation will change the way the world learns*. McGraw-Hill.

Covey, C., McChesney, C., & Huling, J. (2012). *The 4 disciplines of execution: Achieving your wildly important goals*. Free Press.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Cummins, J. (2000). *Language, power and pedagogy: Bilingual children in the crossfire*.

Multilingual Matters. <https://doi.org/10.21832/9781853596773>

Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97–140. <https://doi.org/10.1080/10888691.2018.1537791>

Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random House.

Fink, L. D. (2013). *Creating significant learning experiences: An integrated approach to designing college courses* (2nd ed.). Jossey-Bass.

Fisher, D., Frey, N., & Hattie, J. (2016). *Visible learning for literacy, grades K-12: Implementing the practices that work best to accelerate student learning*. Corwin Literacy.

García, O. (2009). *Bilingual education in the 21st century: A global perspective*.

Wiley-Blackwell.

- García, O., & Kleifgen, J. A. (2018). *Educating emergent bilinguals: Policies, programs, and practices for English learners* (2nd ed.). Teachers College Press.
- Genesee, F., Geva, E., Dressler, C., & Kamil, M. (2006). Synthesis: Cross-linguistic relationships. In D. August & T. Shanahan (Eds.), *Developing literacy in second-language learners* (pp. 153–174). Lawrence Erlbaum.
- Graham, C. R. (2019). Current research in blended learning: Integration, disruption, and acceleration. *Computers & Education, 144*, 103701.  
<https://doi.org/10.1016/j.compedu.2019.103701>
- Guthrie, J. T., & Wigfield, A. (2000). Engagement and motivation in reading. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (Vol. 3, pp. 403–422). Lawrence Erlbaum.
- Harapnuik, D. (2016). COVA+CSLE: Choice, ownership, voice, and authentic learning in creating significant learning environments. <https://www.harapnuik.org>
- Hughes, J. E., & Roblyer, M. D. (2022). *Integrating educational technology into teaching* (9th ed.). Pearson.
- Koda, K. (2007). Reading and language learning: Crosslinguistic constraints on second language reading development. *Language Learning, 57*(1), 1–44.  
<https://doi.org/10.1111/0023-8333.101997010-i1>
- Ladson-Billings, G. (1995). But that's just good teaching! The case for culturally relevant pedagogy. *Theory into Practice, 34*(3), 159–165.  
<https://doi.org/10.1080/00405849509543675>

- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.
- Marzano, R. J. (2009). *Formative assessment & standards-based grading*. Marzano Research Laboratory.
- Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. U.S. Department of Education.
- Mertler, C. A. (2019). *Action research: Improving schools and empowering educators* (6th ed.). SAGE Publications.
- Mills, G. E. (2014). *Action research: A guide for the teacher researcher* (5th ed.). Pearson.
- Pekrun, R. (2006). The control-value theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice. *Educational Psychology Review*, 18(4), 315–341. <https://doi.org/10.1007/s10648-006-9029-9>
- Roblyer, M. D., & Hughes, J. E. (2019). *Integrating educational technology into teaching* (8th ed.). Pearson.
- Sánchez-Caballé, A., Gisbert-Cervera, M., & Esteve-Mon, F. (2020). The digital competence of university students: A systematic literature review. *Revista de Educación a Distancia*, 20(64). <https://doi.org/10.6018/red.407371>
- Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educational Psychologist*, 26(3–4), 117–137. <https://doi.org/10.1080/00461520.1991.9653133>

- Schunk, D. H., & Pajares, F. (2009). Self-efficacy theory. In K. R. Wentzel & A. Wigfield (Eds.), *Handbook of motivation at school* (pp. 35–53). Routledge.
- Selwyn, N. (2016). *Education and technology: Key issues and debates* (2nd ed.). Bloomsbury Academic.
- Snow, C. (1990). *Language and literacy development in bilingual settings*. Harvard University Press.
- Taylor & Francis Author Services. (2023). i-Ready case study: Personalized learning in literacy. *Taylor & Francis*. <https://authorservices.taylorandfrancis.com>
- Thomas, D., & Brown, J. S. (2011). *A new culture of learning: Cultivating the imagination for a world of constant change*. CreateSpace.
- Wang, A. I., & Tahir, R. (2020). The effect of using Kahoot! for learning: A literature review. *Computers & Education*, 149, 103818. <https://doi.org/10.1016/j.compedu.2020.103818>
- Warschauer, M., & Matuchniak, T. (2010). New technology and digital worlds: Analyzing evidence of equity in access, use, and outcomes. *Review of Research in Education*, 34(1), 179–225. <https://doi.org/10.3102/0091732X09349791>
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge University Press.
- Wiggins, G., & McTighe, J. (2005). *Understanding by design* (2nd ed.). ASCD.