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RESEARCH ARTICLE

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INTEGRATING PRACTICE AND PLAY-SEQUENCE APPROACHES TO FOSTER MOTIVATION AND MOTOR SKILL MASTERY IN ELEMENTARY PHYSICAL EDUCATION

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ABSTRACT
The development of fundamental motor skills is a cornerstone of physical education in primary schooling and contributes directly to students' long-term physical, cognitive, and emotional development. However, traditional instruction in motor learning often prioritizes repetitive technical exercises, which may hinder student motivation and engagement. This study explores how integrating the *practice method* and the *play-sequence method* can enhance both skill acquisition and learning motivation in elementary physical education classes, particularly in small-ball games. Using a qualitative descriptive design, this study synthesizes theoretical perspectives and empirical findings from prior pedagogical research to analyze how these methods shape motor learning outcomes and affective engagement. The findings indicate that the practice method supports precise technical mastery through structured repetition, while the play-sequence method fosters intrinsic motivation, creativity, and social interaction. When combined, these methods produce synergistic effects that strengthen psychomotor competence and student enthusiasm. The study argues that an integrated pedagogical approach grounded in experiential and motivational learning principles contributes to achieving Sustainable Development Goal 4 (Quality Education) by promoting inclusive, equitable, and effective learning practices.

Introduction
Physical education (PE) serves as an essential component of holistic education, fostering the physical, cognitive, emotional, and social dimensions of student development (Bailey et al., 2009; Kirk, 2010). At the elementary level, it provides children with the foundational motor skills and movement literacy necessary for lifelong participation in physical activity (Gallahue & Donnelly, 2007). According to UNESCO (2021), quality physical education contributes directly to Sustainable Development Goal 4 by equipping learners with the knowledge, skills, and attitudes to maintain healthy lifestyles and promote inclusion through cooperative play and teamwork.

Small-ball games, such as softball, rounders, and kasti, are a central part of Indonesia's elementary PE curriculum, designed to develop agility, coordination, and psychomotor control. Mastering the basic manipulative skills of throwing, catching, and striking is fundamental to children's motor competence (Lutan, 2001). Yet, despite their curricular importance, many students struggle to perform these skills effectively due to inappropriate instructional methods that emphasize technical repetition without sufficient motivation or contextual relevance (Mahendra, 2017).

Traditional practice-based instruction tends to improve mechanical precision but can limit engagement, particularly for younger learners whose cognitive and affective development thrives on enjoyment and variety (Sukintaka, 2004). In contrast, play-based pedagogies promote holistic growth by embedding skill learning within meaningful, game-like contexts (Light, 2008). Nevertheless, few studies have examined how these two pedagogical models, practice and play, can be effectively integrated to optimize both technical learning and intrinsic motivation.

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In Indonesia, where PE aims to cultivate both physical proficiency and character education, integrating methods that balance discipline and enjoyment aligns with the broader educational reforms toward student-centered learning (Kemendikbud, 2020). This integration also supports SDG 17 by encouraging sustainable partnerships between educators, policymakers, and communities to innovate teaching practices. Therefore, this article investigates the pedagogical integration of practice and play-sequence methods to improve basic small-ball game skills among elementary school students. The discussion draws on a qualitative synthesis of theoretical literature and empirical evidence, providing a framework for teachers to design PE instruction that promotes mastery of motor skills, motivation, and meaningful learning.

Motor skill development forms the foundation of children's physical literacy, the ability to move with competence and confidence across diverse environments (Whitehead, 2010). Fundamental movement skills, including locomotor, manipulative, and stability skills, underpin later participation in sports and lifelong physical activity (Barnett et al., 2016). Studies indicate that structured PE instruction significantly enhances students' coordination, balance, and confidence (Gallahue & Ozmun, 2012).

In elementary education, small-ball games provide an accessible platform for cultivating manipulative skills such as throwing, catching, and striking. These skills develop through the interplay of practice, feedback, and motivation. According to Schmidt and Lee (2011), repeated practice is crucial for strengthening neural pathways and achieving motor automation. However, repetition alone does not guarantee effective learning. Without meaningful engagement, students may perform movements mechanically without understanding their functional purpose (Rink, 2014). Hence, PE instruction must integrate cognitive, affective, and social learning dimensions to transform mechanical repetition into purposeful action. Play-based approaches fulfill this function by embedding skills in enjoyable, context-rich scenarios that promote intrinsic motivation (Deci & Ryan, 2000).

The *practice method* emphasizes structured, repetitive activity designed to refine technical precision and build muscle memory (Schmidt & Wrisberg, 2008). In motor learning theory, repetition under variable conditions enhances skill adaptability, a process known as *schema formation* (Schmidt, 1975). For young learners, however, monotonous drills can undermine motivation if not supported by engaging feedback and clear learning goals (Silverman, 2011). In the Indonesian context, practice methods are widely used in PE classes to ensure standardized skill instruction (Depdiknas, 2006). Yet, overemphasis on technical accuracy can restrict creativity and diminish students' enjoyment, especially when success is narrowly defined by performance outcomes rather than effort or participation (Mahendra, 2017). Therefore, effective use of the practice method in elementary PE requires adaptation: exercises should be concise, goal-oriented, and interspersed with playful or cooperative elements to maintain attention and motivation.

The *play-sequence method* integrates structured skill instruction within a series of progressive games that mirror authentic sport contexts (Light, 2008). It aligns with the principles of *Teaching Games for Understanding (TGfU)*, emphasizing tactical awareness, problem-solving, and enjoyment over rote repetition (Bunker & Thorpe, 1982). Play-sequence pedagogy encourages children to experiment with movement solutions, fostering autonomy and cognitive engagement (Harvey & Jarrett, 2014). Empirical studies highlight that play-based instruction enhances student motivation and social cooperation while improving skill performance (Pill & SueSee, 2017). Through guided discovery and feedback, learners develop a deeper understanding of game principles and apply technical skills with contextual awareness. The affective benefits of play, enjoyment, belonging, and self-expression further support sustainable participation in physical activity, resonating with SDG 4's emphasis on inclusive and equitable education. Recent educational research advocates for integrating traditional and contemporary pedagogies to balance technical proficiency and learner engagement (Casey & Goodyear, 2015). Combining practice and play-sequence methods aligns with constructivist theories that view learning as an active, social process of meaning-making (Vygotsky, 1978). The practice method ensures the precision necessary for skill acquisition, while the play-sequence method situates learning within meaningful contexts that sustain motivation.

This integration embodies the principle of *pedagogical balance*—providing both structure and flexibility to accommodate diverse learning needs (Ennis, 2017). By combining repetition with creativity, teachers can cultivate students' motor competence alongside cognitive and socio-emotional growth. Such integration

also fulfills the call for *Quality Education* under SDG 4 by promoting effective, inclusive, and context-sensitive pedagogy

Materials and Methods

Research Design

This study employs a qualitative descriptive research design to synthesize and interpret prior scholarly findings rather than test hypotheses. Qualitative description allows for rich exploration of how instructional methods influence motor learning and student motivation within real educational contexts (Creswell & Poth, 2018). The approach emphasizes accuracy in representing existing knowledge and provides practical insights for educators seeking to enhance classroom implementation.

Data Sources and Selection Criteria

Data were derived from an extensive review of peer-reviewed journal articles, scholarly books, and national educational guidelines published between 2000 and 2024. Key inclusion criteria included: (1) studies on physical education pedagogy in primary schools, (2) research on practice-based or play-based methods, (3) literature on motivation and motor skill acquisition, and (4) studies relevant to Indonesian or comparable educational systems. Core references included works from Routledge, Cambridge University Press, Elsevier, and Sage Publications, complemented by Indonesian educational literature (e.g., Lutan, 2001; Mahendra, 2017). This combination ensures both global theoretical grounding and local contextual relevance.

Data Analysis

Following Miles, Huberman, and Saldaña (2014), data were analyzed using an iterative process of data reduction, display, and conclusion drawing. Thematic coding was applied to identify recurrent pedagogical themes such as structured repetition, experiential learning, motivation, and skill mastery. Conceptual categories were compared across sources to highlight how the practice and play-sequence methods intersect in promoting effective motor learning. Reliability was ensured through inter-source triangulation, while validity was maintained by cross-referencing findings with established motor learning theories (Schmidt & Lee, 2011; Deci & Ryan, 2000). Ethical considerations adhered to responsible scholarship and accurate representation of sources.

Results and Discussion

The analysis of the reviewed literature shows that the practice method remains one of the most effective strategies for improving *technical accuracy* and *movement consistency* in small-ball games at the elementary level. As noted by Schmidt and Lee (2011), structured repetition under controlled conditions allows learners to form stable motor schemas that enhance movement precision. This is particularly significant in small-ball games, where skills such as throwing, catching, and striking demand coordination between visual perception and kinesthetic control. In the Indonesian context, where physical education curricula often emphasize measurable skill outcomes (Depdiknas, 2006), teachers tend to prioritize drills and repetition to ensure uniform performance. Studies such as those by Rink (2014) and Silverman (2011) affirm that consistent practice enables students to refine specific movement patterns. However, these studies also reveal that repetitive training, when isolated from meaningful contexts, can lead to motivation fatigue, particularly among younger learners.

Thus, the key pedagogical implication is that *practice alone is insufficient*. The repetitive nature of drills must be balanced with motivational strategies, verbal encouragement, progress tracking, and gamification elements to sustain attention and enjoyment. When structured meaningfully, the practice method supports not only technical mastery but also the development of perseverance and self-discipline, key dimensions of educational character building promoted under SDG 4. In contrast, the play-sequence method prioritizes enjoyment, creativity, and social collaboration as vehicles for learning. The reviewed studies consistently indicate that students participating in play-based sequences demonstrate greater enthusiasm, sustained attention, and willingness to engage with challenging tasks (Light, 2008; Harvey & Jarrett, 2014). This finding

resonates with *Self-Determination Theory*, which posits that intrinsic motivation flourishes when learning activities satisfy the needs for autonomy, competence, and relatedness (Deci & Ryan, 2000).

In small-ball games, play-sequence methods introduce *situational games* that simulate real play environments while progressively targeting specific skills. For example, instead of isolated throwing drills, teachers can design mini-games in which students throw to score or work together to keep a ball in motion. These structured play sequences create *task relevance*, transforming technical learning into problem-solving and teamwork experiences (Bunker & Thorpe, 1982; Pill & SueSee, 2017).

The literature also shows that this approach enhances social and emotional learning (SEL). When learners collaborate and compete in moderated game scenarios, they develop empathy, communication, and sportsmanship, values central to sustainable education (Bailey et al., 2009). Moreover, play-sequence instruction aligns with inclusive education principles, enabling diverse learners to participate at varying levels of ability without the stigma of failure (UNESCO, 2021).

Synthesizing both pedagogical approaches reveals a complementary relationship rather than opposition. The practice method provides *structure, discipline, and technical grounding*, whereas the play-sequence method provides *context, motivation, and emotional engagement*. Their integration forms a holistic pedagogical model that bridges technical and affective dimensions of learning (Casey & Goodyear, 2015; Ennis, 2017).

For example, after practicing the technique of catching through structured drills, teachers may transition students into a mini-game where they apply this skill dynamically. This sequencing transforms procedural knowledge into applied competence (Gallahue & Ozmun, 2012). Moreover, alternating between practice and play reduces cognitive fatigue by varying intensity and focus, sustaining long-term engagement (Renshaw et al., 2019). In line with Vygotsky's (1978) constructivist perspective, learning in PE should occur within the *zone of proximal development*, where guided support transitions into independent performance. Integrating practice and play-sequence methods provides scaffolding: structured guidance through repetition, followed by autonomy during gameplay. This pedagogical cycle nurtures metacognitive awareness as students learn to evaluate and refine their own performance.

Furthermore, the integration supports the development of motor competence as a socio-cognitive process rather than a purely physical one. As noted by Barnett et al. (2016), children's physical self-efficacy, their belief in their motor ability, correlates strongly with motivation to participate in lifelong physical activity. By embedding practice within play, teachers cultivate confidence, cooperation, and reflective thinking, ensuring sustainable behavioral outcomes aligned with SDG 4 and SDG 10 (reducing inequalities in learning opportunities).

The integration of practice and play-sequence methods presents significant implications for both teacher education and curriculum design. At the instructional level, teachers should be trained to design sequential lessons that transition fluidly between *technical repetition* and *contextual gameplay*. This requires competence in both traditional pedagogy and contemporary learner-centered methodologies (Casey, 2017). At the policy level, ministries and local education authorities can support teachers through continuous professional development programs focused on *instructional design for motivation and inclusion*. Embedding play-based pedagogy into national PE standards will enhance the subject's relevance, moving beyond physical training toward holistic education.

This integrated approach also reflects the vision of education for sustainable development by cultivating collaboration, empathy, and health literacy. By connecting motor learning to psychological well-being and social inclusion, physical education can fulfill a broader societal role as envisioned in SDGs 4 and 17, equipping learners not only with skills but with the values necessary for lifelong learning and community engagement.

Discussion

The findings of the reviewed literature indicate that integrating the practice method and the play-sequence method creates a pedagogical synergy that enhances both technical skill acquisition and intrinsic motivation in elementary physical education. Each method addresses different yet complementary dimensions of the learning process. The practice method strengthens *technical precision, discipline, and consistency*, whereas the play-sequence method nurtures *motivation, creativity, and social collaboration*. The combination of

these pedagogical strategies supports a more balanced and sustainable approach to teaching small-ball games, enabling learners to acquire motor competence within a context that values enjoyment and inclusivity.

From a psychomotor learning standpoint, the practice method remains indispensable for developing stable motor schemas and reinforcing kinesthetic awareness. As Schmidt and Lee (2011) assert, repetitive practice under structured conditions enhances learners' neural encoding of motor patterns, leading to greater movement accuracy and retention. This process is particularly critical in small-ball games, such as throwing, catching, and striking, that require precise coordination between visual and proprioceptive systems. Within Indonesia's educational context, where curricular frameworks (Depdiknas, 2006) traditionally emphasize measurable performance outcomes, the practice method systematically reinforces foundational skills through repetition and feedback. Such practice-oriented learning builds not only technical ability but also perseverance and resilience, key components of character education promoted under the Sustainable Development Goals (SDG 4: Quality Education)**.**

Nevertheless, as highlighted by Rink (2014) and Silverman (2011), repetitive drills alone can lead to *cognitive monotony and motivational fatigue*, especially for younger students who thrive on novelty and engagement. Overreliance on rigid practice may limit learners' creative exploration and diminish their intrinsic motivation. Therefore, the practice method, though effective in fostering precision, must be complemented by instructional strategies that provide enjoyment, autonomy, and relevance. Integrating verbal encouragement, performance feedback, and gamified progression systems has been shown to sustain engagement and transform routine repetition into meaningful mastery experiences (Schmidt & Wrisberg, 2008; Ennis, 2017).

In contrast, the play-sequence method introduces a motivational dimension that transforms the learning environment into a space of exploration and social interaction. The reviewed studies (Light, 2008; Harvey & Jarrett, 2014) demonstrate that when students learn through progressive game sequences, they exhibit greater enthusiasm, persistence, and self-directed participation. This aligns with *Self-Determination Theory* (Deci & Ryan, 2000), which posits that intrinsic motivation is optimized when learners experience autonomy, competence, and social connectedness. In small-ball game contexts, structured mini-games, such as cooperative throwing challenges or target-based scoring activities, enable learners to apply technical skills within meaningful and interactive frameworks. This not only contextualizes technical performance but also reinforces tactical understanding and teamwork (Bunker & Thorpe, 1982; Pill & SueSee, 2017).

Moreover, the play-sequence method serves as a catalyst for social and emotional learning (SEL), an educational dimension often overlooked in traditional physical education models. Participation in structured games cultivates empathy, cooperation, and sportsmanship, fostering a sense of belonging that transcends mere competition (Bailey et al., 2009). By allowing students of varying abilities to participate meaningfully, play-based instruction promotes inclusivity and reduces stigmatization, key elements of equitable education aligned with SDG 10 (Reduced Inequalities**)**. As UNESCO (2021) emphasizes, quality physical education must ensure participation opportunities for all learners, irrespective of skill level or background, thereby promoting holistic well-being and social cohesion.

Synthesizing both methods, the findings advocate for an integrated pedagogical framework that unites the structure of practice with the engagement of play. Rather than viewing them as opposing approaches, this integration creates a continuum of learning experiences in which technical repetition evolves into applied problem-solving and reflective performance. As Casey and Goodyear (2015) and Ennis (2017) argue, effective pedagogy in physical education requires balancing control and autonomy, guiding learners through structured instruction while granting freedom for creative expression. This integrated model aligns closely with *constructivist learning theory*, which views knowledge acquisition as an active, social, and context-dependent process (Vygotsky, 1978).

For example, teachers may begin a lesson with structured throwing drills to establish correct technique, followed by a mini-game where students apply those techniques dynamically in a simulated play situation. This transition from practice to play bridges procedural and conceptual learning, helping students internalize motor patterns and tactical awareness simultaneously (Gallahue & Ozmun, 2012). Alternating between structured practice and playful engagement also mitigates cognitive fatigue and maintains learner focus,

leading to sustained motivation over longer instructional periods (Renshaw et al., 2019). The cyclical nature of this method—*practice* → *play* → *reflection*, fosters metacognitive growth, encouraging students to evaluate their performance and adapt their strategies for improvement.

Additionally, the integration of practice and play-sequence methods supports the development of motor competence as a socio-cognitive phenomenon. Barnett et al. (2016) emphasize that children's physical self-efficacy, their confidence in performing movement tasks, is a critical predictor of lifelong physical activity engagement. By embedding practice within play, teachers not only cultivate motor proficiency but also nurture confidence, collaboration, and reflective awareness. This holistic development underpins the broader goals of physical education as a foundation for sustainable health, social inclusion, and lifelong learning.

From an educational policy perspective, this integrated pedagogical model carries implications for teacher training and curriculum reform. Teachers must be equipped to design sequential learning experiences that blend repetition with meaningful play. This requires professional development programs that emphasize instructional design, motivational psychology, and adaptive pedagogy (Casey, 2017). Furthermore, institutional support should prioritize *learner-centered teaching frameworks* that empower teachers to innovate beyond conventional drill-based instruction. Embedding play-based and reflective components into the national curriculum will not only modernize physical education but also align it with Indonesia's broader educational vision of "Merdeka Belajar" (Freedom to Learn).

At a systemic level, integrating these pedagogical methods contributes to Education for Sustainable Development (ESD) by cultivating cognitive, emotional, and social competencies essential for lifelong learning. Physical education, when delivered through such integrative approaches, becomes more than a vehicle for physical training, it evolves into a transformative practice that connects *motor learning*, *psychological well-being*, and *community values*. As UNESCO (2021) underscores, sustainability in education involves fostering individuals who are not only skilled but also empathetic, cooperative, and resilient. By combining practice and play-sequence methods, physical education can serve as a microcosm of sustainable pedagogy, empowering students to learn, move, and live with purpose.

Conclusions

This study concludes that integrating practice and play-sequence methods offers a balanced and sustainable pedagogical framework for enhancing both *motor skill mastery* and *learning motivation* in elementary physical education. The practice method effectively improves technical precision through structured repetition, while the play-sequence method stimulates enjoyment, creativity, and cooperative learning. When used together, they foster comprehensive development encompassing psychomotor, cognitive, and affective domains. The integration advances the aims of *Quality Education* (SDG 4) by ensuring inclusive, equitable, and engaging instruction that addresses learners' diverse needs. Moreover, it supports the formation of social and emotional competencies vital for lifelong participation in physical activity. For educators, this model serves as a guide for designing dynamic, student-centered PE programs. For policymakers, it underscores the need to institutionalize pedagogical flexibility and innovation within physical education curricula. Future research may extend this framework through experimental or longitudinal designs to measure the long-term effects of combined practice and play-sequence instruction on students' physical literacy, motivation, and well-being. As educational systems worldwide seek to integrate sustainability and inclusion into pedagogy, this study highlights how even traditional subjects such as physical education can serve as powerful vehicles for social transformation.

References

Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I., & Sandford, R. (2009). *The educational benefits claimed for physical education and school sport: An academic review*. *Research Papers in Education, 24*(1), 1–27. https://doi.org/10.1080/02671520701809817

Barnett, L. M., Stodden, D., Cohen, K. E., Smith, J. J., Lubans, D. R., Lenoir, M., & Morgan, P. J. (2016). Fundamental movement skills: Determinants and associations with physical activity. *Sports Medicine, 46*(9), 1357–1374. https://doi.org/10.1007/s40279-016-0496-0

Bunker, D., & Thorpe, R. (1982). A model for the teaching of games in secondary schools. *Bulletin of Physical Education, 18*(1), 5–8.

Casey, A. (2017). Cooperative learning and teaching games for understanding. In R. Light, D. Harvey, & S. Mooney (Eds.), *Contemporary developments in games teaching* (pp. 33–48). Routledge.

Casey, A., & Goodyear, V. A. (2015). Can cooperative learning achieve the four learning outcomes of physical education? *Physical Education and Sport Pedagogy, 20*(4), 387–408. https://doi.org/10.1080/17408989.2013.862001

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01

Depdiknas. (2006). *Kurikulum tingkat satuan pendidikan*. Jakarta: Depdiknas.

Ennis, C. D. (2017). Educating students for a lifetime of physical activity: Enhancing mindfulness, motivation, and meaning. *Research Quarterly for Exercise and Sport, 88*(3), 241–250. https://doi.org/10.1080/02701367.2017.1342490

Gallahue, D. L., & Donnelly, F. C. (2007). *Developmental physical education for all children* (4th ed.). Human Kinetics.

Gallahue, D. L., & Ozmun, J. C. (2012). *Understanding motor development: Infants, children, adolescents, adults* (7th ed.). McGraw-Hill.

Harvey, S., & Jarrett, K. (2014). A review of teaching games for understanding research: 2004–2014. *Physical Education and Sport Pedagogy, 19*(2), 131–166. https://doi.org/10.1080/17408989.2012.713283

Kirk, D. (2010). *Physical education futures*. Routledge. https://doi.org/10.4324/9780203874622

Light, R. (2008). Complex learning theory—Its epistemology and its assumptions about learning: Implications for physical education. *Physical Education and Sport Pedagogy, 13*(1), 5–17. https://doi.org/10.1080/17408980701345733

Lutan, R. (2001). *Belajar keterampilan motorik*. Jakarta: Depdikbud.

Mahendra, A. (2017). *Pembelajaran pendidikan jasmani di sekolah dasar*. Bandung: FPOK UPI.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE Publications.

Pill, S., & SueSee, B. (2017). Foundations of game-based pedagogy in physical education. *Journal of Physical Education, Recreation & Dance, 88*(3), 28–33. https://doi.org/10.1080/07303084.2017.1260953

Renshaw, I., Chow, J. Y., Davids, K., & Hammond, J. (2019). A constraints-led perspective to understanding skill acquisition and game play: A basis for integration of motor learning theory and physical education practice. *Physical Education and Sport Pedagogy, 24*(2), 113–127. https://doi.org/10.1080/17408989.2018.1552674

Rink, J. E. (2014). *Teaching physical education for learning* (7th ed.). McGraw-Hill.

Schmidt, R. A. (1975). A schema theory of discrete motor skill learning. *Psychological Review, 82*(4), 225–260. https://doi.org/10.1037/h0076770

Schmidt, R. A., & Lee, T. D. (2011). *Motor control and learning: A behavioral emphasis* (5th ed.). Human Kinetics.

Schmidt, R. A., & Wrisberg, C. A. (2008). *Motor learning and performance* (4th ed.). Human Kinetics.

Silverman, S. (2011). Teaching for physical literacy: Implications to instruction and research. *Quest, 63*(1), 46–54. https://doi.org/10.1080/00336297.2011.10483659

Sukintaka. (2004). *Teori pendidikan jasmani*. Yogyakarta: FIK UNY.

UNESCO. (2021). *Quality physical education: Guidelines for policy-makers*. Paris: UNESCO.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Whitehead, M. (2010). *Physical literacy: Throughout the lifecourse*. Routledge. https://doi.org/10.4324/9780203881903