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When specialists enter: classification, framing, and the pedagogic device in Italy's primary physical education reform

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ABSTRACT

Italy's Law 234/2021 introduced specialist physical education (PE) teachers into grades 4–5 of primary school (ages 9–11), replacing exclusively generalist provision for the subject. This qualitative document analysis examines how the reform reorganises the classification and framing of primary PE. The corpus comprises two binding Official Recontextualising Field (ORF) texts – Law 234/2021 and the *Indicazioni Nazionali 2025* – and the advisory SISMeS consensus document in the Pedagogic Recontextualising Field (PRF). The analysis identifies an intra-ORF tension: the legislation strengthens subject and teacher boundaries, whereas the curriculum advances a more integrated, holistic orientation. The SISMeS document converges with the curriculum's holistic orientation while explicitly defining Physical Literacy and rejecting narrow biomedical reductionism. From these patterns the paper develops two interpretive constructs: a 'hybrid code structure' produced when a collection-code specialist is inserted into an otherwise integrated-code primary school, and a 'Bernsteinian paradox' in which stronger classification alone does not secure curricular coherence. Implications are drawn for specialist teacher preparation and primary PE policy.

KEYWORDS

Physical education; primary school curriculum; specialist teacher; Bernstein; classification and framing; Italy

Introduction

In December 2021, the Italian parliament enacted a major reform of primary physical education (PE). Legge 30 dicembre 2021, n. 234 (Law 234/2021; Parlamento Italiano, 2021), embedded within the annual budget act, introduced a specialist teacher for the statutory subject *educazione motoria* in grades 4 and 5 of *scuola primaria* (primary school). Eligibility is based on an LM-67, LM-68, or LM-47 master's degree (or an equivalent qualification),¹ together with 24 CFU/CFA in anthropo-psycho-pedagogical disciplines and teaching methodologies.² The reform therefore interrupted the previously generalist, class-teacher-led organisation of PE for children aged approximately 9–11. Throughout this paper, PE is used as the umbrella analytical term; 'motor education' is retained only when translating or referring directly to the statutory term *educazione*

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motoria. Implementation began in 2022–23 for grade 5 and was extended to grade 4 the following year. By 2025–26, the reform encompassed approximately 47,000 classes – an estimated 870,000 children, or roughly two-fifths of the entire state primary school population (Ministero dell’Istruzione e del Merito [MIM], 2024).

The sheer scale of this change alone would justify scholarly attention. Yet what makes the reform consequential for curriculum scholarship is what it does to the organisation of knowledge in primary education. It reconfigures a previously weakly classified arrangement, in which PE was woven into the generalist teacher’s holistic practice, into a more strongly classified one in which a subject specialist assumes responsibility for formally timetabled PE. This is a curriculum question before it is an outcomes question.

The reform was broadly welcomed. For decades, Italian PE scholars and professional associations had noted that generalist teachers often lack adequate preparation and confidence to deliver PE effectively (Casolo & Tosi, 2023; D’Elia, 2023). International evidence offered grounds for optimism: Telford et al.’s (2016) Australian cluster randomised trial reported that specialist-taught PE increased moderate-to-vigorous physical activity during lessons, whilst Truelove et al. (2021) found specialist self-efficacy significantly exceeded that of generalists. The logic seemed straightforward: replace generalists with specialists, and PE quality improves.

That logic, however, rests on assumptions about knowledge, curriculum, and institutional structure that deserve closer scrutiny than they have so far received. What the specialist teaches depends on what the specialist was trained to know. How the specialist operates depends on how the school’s curriculum is organised. And what counts as ‘improved’ PE depends on which conception of the subject – biomedical, pedagogical, holistic, or some combination – one brings to bear. None of these matters can be resolved by pointing to student fitness outcomes alone, because they are fundamentally questions about how knowledge is classified, selected, and transmitted within educational institutions.

Basil Bernstein’s sociology of knowledge offers a systematic conceptual vocabulary for asking these questions. His distinction between collection and integrated codes – between curricula where ‘contents stand in a closed relation to each other’ and curricula where ‘contents stand in an open relation to each other’ (Bernstein, 1971, p. 49) – maps directly onto the structural shift the Italian reform enacts. Before Law 234/2021, Italian primary PE was embedded within an integrated generalist arrangement. After the reform, the statutory subject *educazione motoria* (motor education) in grades 4–5 was assigned to a subject specialist, creating a collection-code arrangement for one subject within an otherwise predominantly integrated school.

A substantial body of scholarship has applied Bernstein to PE curriculum, from Evans and Penney’s (1995) foundational analysis of the English National Curriculum for Physical Education (NCPE) through Penney and Chandler (2000), Penney (2013), Ekberg (2016, 2021), Herold (2020), and the recent wave of Bernsteinian PE research by Penney and colleagues (E. Jones et al., 2025; O’Connor et al., 2024). A gap persists, however. Few studies in this lineage have combined these concepts to examine a live reform in which generalist teachers are being replaced by specialists – that is, a reform that structurally enacts the shift from integrated to collection code. The Italian case provides exactly that opportunity. A second gap compounds the first. Despite Italy’s being the third-largest EU member state, its PE curriculum reform has received limited attention in Anglophone

journals. Piccioli et al. (2025) observed that the reform ‘has not catalysed much attention in the scientific literature’ (p. 100). Italian PE research has historically been published in Italian-language venues and oriented toward biomedical methodologies (D’Elia et al., 2025; D’Isanto et al., 2024), leaving a significant national context invisible to the international curriculum studies community. This paper addresses that invisibility through a curriculum-focused analysis.

Against this background, the aim of the study is to examine how Italy’s specialist PE reform reorganises the classification and framing of primary PE and to identify patterns of alignment and contradiction within and between the recontextualising fields. Two research questions guide the analysis. First, how do the three policy documents that institutionalise the reform classify and frame primary PE and the specialist teacher? Second, what patterns of alignment and contradiction emerge within and between the Official Recontextualising Field (ORF) and Pedagogic Recontextualising Field (PRF), and what theory-derived expectations do these patterns support for the field of reproduction? Three policy documents are analysed: (a) Law 234/2021; (b) the *Indicazioni Nazionali per il Curricolo della Scuola dell’Infanzia e del Primo Ciclo d’Istruzione* [National guidelines for the curriculum of pre-primary school and the first cycle of education] (Ministero dell’Istruzione e del Merito [MIM], 2026), hereafter the *Indicazioni Nazionali 2025*; and (c) the consensus document of the Italian Society of Movement and Sport Sciences (Società Italiana delle Scienze Motorie e Sportive [SISMeS], 2024). Together, these documents occupy different institutional positions within the education system: the law and curriculum framework are state-authored ORF texts, whereas the SISMeS document is an advisory PRF text. The study is a qualitative document analysis conducted from a critical policy perspective. Its conceptual contribution, developed in the Discussion, is the proposal of the ‘hybrid code structure’ and the ‘Bernsteinian paradox’ for comparative analysis of specialist PE reforms.

Theoretical framework: Bernstein’s pedagogic device and PE curriculum

Bernstein’s work spanned several decades and underwent considerable refinement between *Class, Codes and Control* (1971, 1975/2003) and *Pedagogy, Symbolic Control and Identity* (2000). Four conceptual resources are used in this study: classification and framing, the collection/integrated code distinction, the pedagogic device, and the distinction between singulars and regions.

Classification and framing

Classification refers to the strength of boundaries between categories – between subjects, between school knowledge and everyday knowledge, between the identities of different kinds of teachers (Penney, 2013). Strong classification (C+) means sharp, well-insulated boundaries; weak classification (C–) means permeable ones. Framing refers to who controls the communicative relationship within pedagogic practice: what is selected, sequenced, paced, and evaluated – what Bernstein termed the three message systems of curriculum, pedagogy, and assessment (Penney et al., 2009). Strong framing (F+) indi-

cates transmitter control; weak framing (F–) indicates that the acquirer has more apparent control (Bernstein, 2000, pp. 12–17). The analytical power of these concepts lies in their capacity to describe structural features of educational arrangements independently of the intentions of the actors involved.

Collection and integrated codes

Where classification is strong and contents stand in closed relation, Bernstein (1971) identified a collection code; where classification is weak and contents are in open relation, an integrated code. The primary school generalist – a ‘teacher-based’ arrangement integrating multiple knowledge areas – prototypically facilitates integrated code. A ‘teachers-based’ arrangement, with specialists teaching distinct subjects, instantiates collection code. Bernstein observed that code change threatens existing identities: ‘subject loyalty creates an educational identity which is clear-cut and bounded’ (Bernstein, 1975/2003, p. 88).

The pedagogic device

In his later work, Bernstein (2000) developed the pedagogic device as a model for how knowledge is produced, recontextualised, and reproduced. The model distinguishes three fields. The field of production is where disciplinary knowledge is generated; the field of recontextualisation is where knowledge is selected, relocated, and transformed for pedagogic purposes; and the field of reproduction is where pedagogic discourse is enacted in educational practice. Within recontextualisation, Bernstein distinguished the Official Recontextualising Field (ORF), comprising state agencies that establish official curricular and regulatory frameworks, from the Pedagogic Recontextualising Field (PRF), comprising agents such as universities, teacher education programmes, and professional or scholarly associations. The present study uses the device to locate the documents and the relations between them, with empirical analysis centred on the recontextualising field. The field of production provides the upstream disciplinary context, while the field of reproduction is addressed through theory-derived expectations because the corpus contains no classroom-level data.

The fourth conceptual distinction concerns Bernstein’s (2000) ‘singulars’ and ‘regions’. Singulars are strongly classified, discipline-based knowledge forms – physiology or biomechanics, for example – with their own intellectual fields and procedures of legitimation. Regions are recontextualised constellations of singulars that face outward toward a field of practice; medicine, engineering, and education are paradigmatic examples (Bernstein, 2000). The distinction matters for teacher education because it captures the difference between knowing a discipline and possessing professionally organised knowledge for teaching a school subject (M. Young & Muller, 2016). In this paper, Physical Literacy – the motivation, confidence, physical competence, knowledge and understanding required to value and engage in physical activity throughout life (Whitehead, 2010) – provides an interpretive candidate for a pedagogical region in primary PE, an interpretation developed further in the Discussion.

The Bernstein–PE tradition has made productive use of these conceptual resources. Evans and Penney (1995; see also Penney & Evans, 1999) demonstrated how the ORF

overrode the PRF in the English case. Penney and Chandler (2000) mapped PE futures onto the code continuum. Ekberg (2016) tracked recontextualisation across three levels in Swedish PE; Herold (2020) found English PE teachers relying on informal communities of practice in the absence of strong recontextualising agents. Stirrup et al. (2025) used Bernstein's boundary concepts to examine Northern Irish PE. None of these studies, however, has applied this combination of concepts to a reform that structurally enacts a code shift – the replacement of an integrated-code arrangement with a collection-code arrangement for PE within the primary school.

The Italian context: PE in primary schools before and after Law 234/2021

The Italian primary school (*scuola primaria*) spans five grades and serves children aged 6–11; it has historically operated as an integrated-code institution. A class is usually staffed by a small team of generalist teachers who divide a broad range of learning areas among themselves. English language and Catholic religion have long been specialist exceptions, but cross-curricular integration remains the prevailing pedagogical orientation. Until the recent reform, PE was also taught within this generalist structure. No subject other than English and Catholic religion had been entrusted to a dedicated specialist teacher. The specialist introduced by Law 234/2021 therefore enters a system in which all other curricular teaching in grades 4 and 5 (ages 9–11) remains predominantly the responsibility of generalists.

PE under this arrangement was, according to the available evidence, uneven. Italian studies raised concerns about generalist teachers' preparation for PE, particularly their initial teacher education and perceived readiness to teach the subject (D'Elia, 2023). Morgan and Bourke (2008), in an Australian context that closely echoes the Italian one, reported that negative personal school experiences in PE predicted lower generalist confidence. The qualitative picture in Italy was similar, though the empirical evidence base remained thin and largely confined to Italian-language publications (Casolo & Lipoma, 2018; Moliterni et al., 2020).

Law 234/2021 (Art. 1, paragraphs 329–338) restructured this arrangement by introducing the statutory specialist motor education teacher (*docente specialista di educazione motoria*) for grades 4 and 5. Candidates are recruited through specific competitive procedures from among holders of an LM-67, LM-68, or LM-47 degree (or equivalent qualifications), together with 24 CFU/CFA in anthropo-psycho-pedagogical disciplines and teaching methodologies. In juridical and economic terms, these specialists are aligned with other teachers at the same school level and may not be assigned to other primary-school subjects. In non-full-time classes, the reform allows up to two additional weekly hours; in full-time classes, motor education may be delivered in co-teaching (*compre-senza*). Implementation was phased: grade 5 in 2022/23 and grade 4 in 2023/24. According to staffing data published by FLC CGIL (Federazione Lavoratori della Conoscenza CGIL), an Italian education trade union, only 13 full-time specialist positions were created nationally in the first year; the remainder was distributed as fractional *spezzoni* – hour fragments scattered across 2234 allocations (FLC CGIL, 2022). By the second year, total posts rose to 4405, yet fewer than 40% were full-time positions (FLC CGIL, 2023). Early scholarly commentary – based on official documents rather than classroom obser-

vation – warned against a hyper-disciplinary approach isolating the specialist from the generalist team (Piccioli et al., 2025) and identified prospective ‘methodological criticalities’ in specialist–generalist coexistence (D’Isanto, 2023).

A further complication arises from the national curriculum. The *Indicazioni Nazionali* 2025, formally superseding the 2012 framework but introduced through phased implementation, articulate a vision of PE grounded in a *paradigma della complessità* (paradigm of complexity). They describe a continuous process of *alfabetizzazione fisico-motoria*, translated here literally as ‘physical-motor literacy’, across interconnected active-lifestyle, motor, cognitive, social, and emotional-relational dimensions. The curricular expression is conceptually distinct from the international Physical Literacy construct explicitly adopted by SISMeS and discussed later. The curricular orientation aligns with broader European trends toward holistic and student-centred PE (Carl et al., 2026) and leans toward integrated code, whereas the specialist teacher structure pulls toward collection code. The tension between these orientations is central to the analysis.

Methodological approach

The study is an empirical, qualitative document analysis (Bowen, 2009), conducted from a critical policy analysis perspective (Diem et al., 2014) and structured through Bernstein’s (2000) pedagogic device. The three labels are nested rather than competing: critical policy analysis names the overall orientation – an interest in how policy organises power and knowledge rather than simply in stated intentions; document analysis names the method through which data were collected and examined; and Bernstein’s concepts, operationalised through the external language of description developed by Morais and Neves (2018), supply the analytical framework that guided coding. The genre is established in Bernsteinian PE scholarship: Evans and Penney (1995) analysed the English NCPE without primary interview data; Ekberg (2021) applied knowledge structures to the Swedish syllabus as a conceptual exercise; and Pluim et al. (2020) revisited Bernstein’s classification and framing of educational knowledge through an analysis of curriculum integration. The empirical focus is the recontextualising field represented by the three corpus documents; the Discussion extends the analysis to theory-derived expectations concerning the field of reproduction.

Three documents constitute the corpus, and their differing legal status matters for the analysis. The first is Law 234/2021 (Art. 1, paragraphs 329–338; Parlamento Italiano, 2021): the annual budget statute through which parliament introduced the specialist teacher, a binding legislative text that defines the qualification route, the juridical status of the specialist, and the organisation of teaching time. The second is the section on motor and physical education of the *Indicazioni Nazionali* 2025 (MIM, 2026): the national curriculum framework for the first cycle of education, enacted as a ministerial regulation and likewise binding, which prescribes the rationale, expected competences, learning objectives, and assessment orientation of the subject. Both documents belong to the ORF. The third is the consensus document of SISMeS (2024), *L’educazione fisica in Italia: Scenari, sfide, prospettive* [Physical education in Italy: Scenarios, challenges, perspectives]: a position statement produced by a study group of the national scholarly society of the movement and sport sciences. Unlike the two state documents, it has no

regulatory force; it is advisory, and it is analysed here as the most authoritative public articulation of the disciplinary community's position within the PRF. All three documents were read in full in the original Italian; the excerpts quoted in the findings were translated by the author.

Based on Morais and Neves's (2018) external language of description – the set of indicators through which Bernstein's internal concepts are brought into relation with empirical texts – a study-specific instrument was developed. Five indicators were defined. Three concern classification: inter-subject classification (the strength of the boundary between PE and the other learning areas of the primary curriculum, indicated, for instance, by dedicated teaching time and exclusive teaching personnel); knowledge-everyday classification (the strength of the boundary between school PE and children's everyday movement experiences); and teacher identity classification (the strength of the boundary between the specialist and the generalist class teacher, indicated by qualification routes, recruitment procedures, and restrictions of role). Two concern framing: selection (the degree of control that the document assigns to central prescription, as against local and professional discretion, over what is taught) and evaluation (the corresponding degree of control over how learning is assessed). Each document was coded on each indicator using a four-degree scale from very strong (C++/F++) to weak (C-/F-), adapted from Morais and Neves (2018). Coding was conducted by the author as a theory-led interpretive analysis: each document was read in full, passages relevant to each indicator were identified and assigned a degree, and codings were revised across repeated readings of the corpus. The analysis was not designed as an inter-rater content analysis generating reliability coefficients – a choice consistent with the interpretive tradition of Bernsteinian policy scholarship and acknowledged as a limitation below. The procedure moved from within-document coding to between-document comparison in order to identify patterns of alignment and contradiction within the ORF and between the ORF and PRF. Because no classroom-level material was analysed, statements about the field of reproduction are theory-derived expectations rather than findings.

In addition to the corpus, secondary sources are used for contextualisation and discussion. These comprise published studies of the reform and Italian PE teacher education (Casolo & Tosi, 2023; D'Isanto, 2023; Piccioli et al., 2025), comparative analyses of Italian kinesiology curricula (Cereda, 2026a), empirical work on the professional identity formation of exercise science students (Cereda, 2025), bibliometric data on the Italian exercise science community (D'Elia et al., 2025; D'Isanto et al., 2024), and international studies of specialist provision in primary PE. They were identified through searches of Scopus and Google Scholar combining terms for the reform (Law 234/2021, *educazione motoria*, specialist teacher) with terms for Italian PE and PE teacher education, complemented by backward citation tracking from recent Italian studies. Secondary sources inform the background, contextualisation, and Discussion; Table 1 reports codings of the three corpus documents only.

Findings

Table 1 summarises the coding of the three corpus documents on the five indicators. The subsections that follow present the findings for the two recontextualising fields. In each

Table 1. Classification and framing analysis across three analysed documents.

Indicator	Law 234/2021	Indicazioni Nazionali 2025	SISMeS consensus (2024)
Inter-subject classification	C++ (specialist teacher; formally delimited teaching time; insulated subject)	C+/- (complexity paradigm; cross-curricular orientation; PE still identified as a subject area)	C+/- (PE as distinct subject; five-dimensional model blurs boundaries)
Knowledge-everyday classification	C+ (school PE is formalised through statutory provision and designated teaching time, with no explicit emphasis on children's everyday movement experiences)	C- (children's movement experiences, active lifestyles, and out-of-class activity are explicitly valued; <i>alfabetizzazione fisico-motoria</i> is framed longitudinally)	C- (Physical Literacy explicitly bridges school PE with out-of-school active lifestyles, lifelong habits, and everyday movement)
Teacher identity classification	C++ (LM-67/LM-68/LM-47 or equivalent + 24 CFU/CFA; distinct recruitment boundary; specialist-only role)	C+/- (explicitly acknowledges the specialist teacher in grades 4–5, but offers only limited operational guidance on role enactment)	C+ (specialist endorsed; pedagogical training demanded)
Framing: selection	F+ (motor education formally specified; up to 2 additional hours in non-full-time classes; different organisational rule in full-time settings)	F+/- (five interconnected dimensions at the general level; three broad areas specified for Grades 4–5; local adaptation encouraged)	F+ (five dimensions prescribed)
Framing: evaluation	F+/- (strong legal specification of role and teaching space, but assessment responsibility is not explicitly elaborated in the law itself)	F+/- (objectives prescribed; flexible assessment approach)	F- (formative assessment recommended)

Note: C++ = very strong classification; C+ = strong; C+/- = moderate; C- = weak. Same scale for framing (F). Coding adapted from the four-degree scales developed by Morais and Neves (2018).

subsection, the documentary evidence – including illustrative excerpts translated from the Italian – is presented first, and an analytical summary closes the account.

The official recontextualising field: divergent legislative and curricular orientations

The ORF comprises two documents of markedly different character: a legislative text (Law 234/2021) and a national curriculum framework (the Indicazioni Nazionali 2025). Both carry state authority; they embed, however, fundamentally different visions of how PE knowledge ought to be organised.

The legislation regulates the specialist teacher, not the generalist: the generalist class teacher continues to be governed by the ordinary rules of primary school, so the comparison is between a tightly specified specialist category and the existing generalist category. Article 1, paragraph 331 (Italian: *comma* 331) defines a bounded qualification route: access to the teaching of statutory motor education follows ‘the passing of specific qualifying competitive procedures’, restricted to holders of the LM-67, LM-68 or LM-47 master’s degrees (or equivalent qualifications) who have also obtained 24 university credits ‘in the anthropo-psycho-pedagogical disciplines and in teaching methodologies and technologies’ (Parlamento Italiano, 2021, Art. 1, para. 331). Paragraph 332 further insulates the specialist role: the teacher ‘is equated, as regards juridical and economic status, with the teachers of the same level of education and may not be employed in the other teachings of the primary school’ (Art. 1, para. 332). Teaching time is likewise delimited: no more than two additional weekly hours in classes that do not adopt the full-time model, whilst full-time classes retain their existing timetable and may deliver motor education in co-teaching (*compresenza*), ‘the responsibility of the teachers involved remaining unaffected’ (Art. 1, para. 333). Taken together, these provisions yield strong

codings. The subject is insulated by dedicated personnel and formally delimited time, so inter-subject classification is very strong (C++). Teacher identity classification is likewise very strong (C++): qualification, recruitment, and an explicit prohibition on teaching other subjects separate the specialist from the generalist. The statute's silences are equally informative. Its provisions concern qualification, juridical status and the organisation of teaching time; at no point does the text refer to children's out-of-school movement, to active mobility, or to lifestyle. School PE is thereby constituted as a formally bounded, timetabled provision, and knowledge-everyday classification is accordingly strong (C+). Framing of selection is likewise strong at the level on which the statute operates (F+): the law names the statutory subject, fixes its weekly time, and prescribes who may teach it, leaving no local discretion over these parameters, whilst devolving the specification of content to the curriculum. Framing of evaluation is mixed (F+/-). By equating the specialist in juridical terms with the teachers of the same school level (Art. 1, para. 332), the law determines who assesses; it elaborates no criteria, instruments or procedures of its own, leaving what and how to be determined elsewhere. The legislation therefore institutionalises a collection-code arrangement for one subject.

The *Indicazioni Nazionali 2025* articulate a substantially different orientation. The document grounds PE in a *paradigma della complessità* (paradigm of complexity) and defines it as concerned with 'the study of the body and of human movement in the context of the complex interactions – physical, cognitive, emotional and social – of the body in action in relation with different environments' (MIM, 2026, p. 105). It presents motor and physical education as 'a continuous learning pathway articulated in five interconnected dimensions that accompany the curriculum longitudinally: the dimension of active and healthy lifestyles, the motor dimension, the cognitive, the social and the emotional-relational' (p. 105). The curriculum also uses the expression *alfabetizzazione fisico-motoria* ('physical-motor literacy') and explicitly values movement beyond lesson time through active breaks, active outdoor intervals, active mobility to and from school, and outdoor education (p. 106). For grades 4–5, it organises PE around three broad areas – motor abilities and game tactics and strategies, components of fitness, and promotion of an active lifestyle – within an interdisciplinary vision (p. 106). Assessment emphasises observation supported by grids, rubrics, tests, questionnaires, checklists, and diaries, with attention to individual learning processes (p. 107). On the five indicators, these passages support moderate inter-subject classification (C+/-), weak knowledge-everyday classification (C-), and mixed framing of selection and evaluation (F+/-).

The two ORF documents therefore encode different orientations to PE. Law 234/2021 establishes strong subject and teacher boundaries through a specialist role and delimited teaching time. The *Indicazioni Nazionali 2025*, by contrast, articulate a more integrated, multidimensional, and cross-contextual curricular orientation. The principal corpus-grounded contradiction is consequently intra-ORF: two state-authored instruments recontextualise primary PE according to different principles of knowledge organisation.

The *Indicazioni* explicitly acknowledge that 'the specialist teacher of motor education has recently been instituted, whose presence will entail a broadening and a deepening of children's motor experience' (MIM, 2026, p. 106). They also envisage collaboration with generalists, who 'in collaboration with their colleagues' are expected to promote a more active school (p. 106). However, the document does not specify an operational model for how the specialist should work with generalist teachers in the primary school setting.

Teacher identity classification in the curriculum is therefore moderate (C+/-): the specialist is named and legitimised as a distinct teaching role, yet the boundary with the generalist team is left permeable, and the terms of its enactment are not specified. In analytical summary, the legislation displays a collection-code orientation, whereas the curriculum displays a more integrated-code orientation; the coexistence of these orientations is documented within the ORF itself.

The pedagogic recontextualising field: the SISMeS consensus document

The SISMeS consensus document is the sole PRF text in the coded corpus. It is an advisory position statement produced by the national scholarly society of movement and sport sciences and has no regulatory force. It is analysed as an articulation of how an influential disciplinary community recontextualises PE knowledge and the specialist teacher role within the PRF.

The SISMeS document is explicit both about the knowledge it proposes and about the knowledge it opposes. It defines Physical Literacy as ‘the motivation, confidence, physical-motor competence, knowledge, understanding and awareness necessary to value physical activity and to engage in an active lifestyle throughout life, according to a holistic approach to the individual’, articulated in ‘five principal dimensions ... : physical-motor, cognitive, social, affective-relational and behavioural (or related to personal lifestyle)’ (SISMeS, 2024, p. 16). Within the document, Physical Literacy is explicitly defined but not designated as ‘the overarching concept’ for PE; it nevertheless structures teacher-education recommendations around the adoption of the concepts of Physical Literacy, planning for motor competences, assessment of teaching–learning processes, and analysis of teaching (p. 97). It also warns that ‘a narrow “biomedical” vision of the movement and sport sciences in Italy risks erasing years of progress in the educational field’ and risks ‘weakening the function of the physical education teacher in the complex architecture of the school’s educational planning’ (p. 28). On the indicators, the document endorses a distinct specialist role (teacher identity classification C+) whilst weakening the boundary between school PE and everyday movement (knowledge–everyday classification C–), a pattern closer to the curricular orientation of the *Indicazioni* than to the legislative structure.

The remaining indicators complete the pattern. Inter-subject classification is moderate (C+/-): the document affirms PE as a distinct school subject with its own teacher, warning against ‘weakening the function of the physical education teacher in the complex architecture of the school’s educational planning’ (p. 28), whilst its five-dimensional model – cognitive, social and affective-relational as well as physical-motor – describes learning that runs across the boundaries between PE and the other learning areas. Framing of selection is strong (F+): five dimensions are prescribed, and teacher preparation is organised around a defined set of contents (p. 97). Framing of evaluation is weak (F–): the document addresses the assessment of teaching–learning processes without prescribing instruments or criteria, leaving determination to the teacher. Because the document is advisory, these framing values describe the pedagogic relation that SISMeS proposes rather than one it is in a position to impose.

Across the three analysed documents, the strongest contradiction is therefore within the

ORF: the law strengthens boundaries that the curriculum seeks to keep comparatively permeable. By contrast, the *Indicazioni* and SISMeS document converge on a holistic multidimensional, and lifelong orientation to movement and PE, even though they occupy different recontextualising fields.

Discussion

This study aimed to examine how Italy's specialist PE reform reorganises the classification and framing of primary PE and to identify patterns of alignment and contradiction within and between the recontextualising fields. The document analysis identifies two central patterns. First, there is a clear intra-ORF tension between the strongly classified specialist structure established by Law 234/2021 and the more integrated curricular orientation of the *Indicazioni Nazionali* 2025. This structural tension compounds the textual contradictions already identified within the curriculum itself, where holistic aspirations clash with the rigid grammar of learning objectives and assessment – a phenomenon described as the 'Translator's Dilemma' (Cereda, 2026b). Second, the *Indicazioni* and SISMeS document converge on a holistic and multidimensional conception of PE, including close links between school learning, everyday movement, and lifelong activity. This convergence raises a further question concerning the alignment of specialist preparation with those educational aspirations. Secondary evidence on specialist preparation provides the context for examining this question. The Discussion then develops the 'Bernsteinian paradox' and 'hybrid code structure' as interpretive constructs arising from the documentary patterns and contextual evidence.

The Bernsteinian paradox: classification without curricular alignment

The findings support a policy paradox that Bernsteinian concepts help to articulate, although Bernstein did not formulate it in this specific form. The term 'Bernsteinian paradox' is proposed in this paper and is not, to the author's knowledge, an established construct in Bernsteinian scholarship. Importantly, Bernstein's theory does not imply that stronger classification automatically produces epistemically or educationally superior knowledge. The paradox concerns a policy logic: introducing a subject specialist may be expected to strengthen PE by increasing disciplinary depth, yet the educational value of that specialisation depends on how specialist knowledge is recontextualised for the purposes of primary schooling. Stronger classification, by itself, cannot guarantee curricular alignment.

Secondary evidence on specialist preparation makes this question empirically plausible. Published analyses report that Italian LM-67 and LM-68 programmes allocate roughly two-thirds of their credits to biomedical, technical, and sport-science disciplines, while socio-psycho-pedagogical content occupies a substantially smaller share (Piccioli et al., 2025); this balance has also been criticised in the Italian literature (Casolo & Lipoma, 2018; Moliterni et al., 2020; Morandi, 2023). D'Isanto et al. (2024) identified a parallel pattern in research output: 58.5% of publications by Italian full professors in the M-EDF/01 sector were biomedical, whereas 6.9% were classified as pedagogical. Taken together, these studies indicate a training and disciplinary environment in which

biomedical and technical singulars carry substantial weight, without characterising every graduate or specialist. Exercise physiology is a paradigmatic singular in Bernstein's sense: it has clear disciplinary boundaries, a cumulative knowledge base, and well-defined criteria of legitimation.

Read alongside the corpus, this contextual evidence suggests a potential mismatch between specialist preparation and the pedagogical orientations identified in the recontextualising texts. The 24-credit pedagogical requirement (24 CFU/CFA) adds a pedagogical component to specialist eligibility, but it remains a supplement to master's degrees whose published curricular profiles are substantially oriented toward movement and sport sciences. The available evidence suggests that the pedagogical aspirations visible in the *Indicazioni* and SISMeS document may not be fully aligned with the preparation structures described in the secondary literature. If such a mismatch persists, stronger subject classification could transmit specialised knowledge that is only partially aligned with primary PE's educational purposes. This possibility resonates with Evans's (2004) warning about instrumental health and sport-science discourses, Bleazby's (2015) account of PE's contested curricular status, and Kirk's (2010) concern that reform can reproduce established forms of practice rather than transform them.

The document analysis points toward differently organised specialist knowledge rather than simply less biomedical knowledge. The *Indicazioni* use the curricular expression *alfabetizzazione fisico-motoria* ('physical-motor literacy'), whereas SISMeS explicitly defines Physical Literacy. The two terms are conceptually distinct. Their shared emphasis on multidimensional development, everyday movement, and lifelong participation nevertheless provides grounds for interpreting Physical Literacy as a candidate pedagogical region for primary PE. In Bernsteinian terms, such a region would draw on biomedical singulars (for example, exercise physiology and motor development), psychological and social knowledge (motivation, self-efficacy, emotional regulation), and pedagogical knowledge, reorganising them around the educational purposes of primary PE (Cereda, 2026c; Whitehead, 2010; L. Young et al., 2021). Biomedical knowledge remains integral to specialist preparation. Physiology and biomechanics would function as contributing singulars within a professionally organised knowledge base that also integrates curriculum design, child development, inclusive pedagogy, and assessment for learning (Carl et al., 2026; Quennerstedt, 2019). As an interpretive proposal, this configuration describes a possible organisation of specialist knowledge rather than a uniform property of the Italian PRF.

From structure to practice: theory-derived expectations for the field of reproduction

The field of reproduction concerns how pedagogic discourse is enacted in practice. In the absence of classroom-level data, this subsection draws on secondary evidence and the conceptual framework to formulate theory-derived expectations for future empirical testing, following the precedent of Bernsteinian policy studies that trace policy intentions before examining enacted practice (Evans & Penney, 1995).

The existing Italian commentary broadly corresponds to expectations derived from classification theory: scholars have highlighted the structural tension of inserting a specialist into a cross-curricular environment (Piccioli et al., 2025) and prospective

methodological criticalities in the specialist–generalist coexistence (D’Isanto, 2023). International comparisons deepen the picture. Cruickshank et al. (2024) found that Australian primary PE specialists experienced profound professional isolation because their collection-code expertise sat uncomfortably within the integrated-code primary school. Brennan et al. (2025) documented analogous tensions in Ireland, where generalist teachers with a PE specialism had limited opportunities to enact their expertise and were encouraged to assimilate to generalist priorities. Clohessy et al. (2020) proposed ‘class swapping’ as a middle-ground model; Carse et al. (2018) argued for moving beyond the specialist/generalist binary toward complexity-informed collaboration.

The hybrid code structure is not an effect of Law 234/2021 alone. It arises from the interaction between three elements documented in the study: the specialist role and strengthened subject boundaries established by the law, the predominantly generalist organisation of Italian primary schooling, and the more integrated curricular orientation of the *Indicazioni Nazionali 2025*. Together, these conditions can be expected to position the specialist as a collection-code enclave within a largely integrated environment. Bernstein (1975/2003) anticipated that strong boundary changes can place established professional identities under strain. Assessment arrangements also remain only partly operationalised in relation to specialist–generalist collaboration, creating a potential point of misalignment among curriculum, pedagogy, and assessment (Penney et al., 2009).

The issue is accordingly twofold. First, it concerns the forms of knowledge with which specialists are equipped: contextual evidence raises the possibility that biomedical and technical singulars remain more strongly represented in specialist preparation than the pedagogically organised knowledge demanded by primary PE. Second, it concerns specialists’ organisational and social positioning within a school historically centred on the generalist class teacher. Teaching a single subject within such an organisation can create both professional recognition and the possibility of isolation. Whether the code shift ultimately strengthens PE and specialist teachers’ pedagogic identities therefore remains an empirical question for research in the field of reproduction.

Situating the Italian case within the Bernstein–PE tradition

The analysis makes three contributions to the Bernstein–PE literature. First, it represents, to the best of current knowledge, one of the first English-language applications of Bernstein’s framework to Italian PE curriculum reform, bringing a significant but under-represented national context into the international conversation. Second, it introduces the ‘hybrid code structure’ – a collection-code enclave produced when a specialist subject role is inserted into an otherwise predominantly integrated-code primary school – with broader relevance for contexts considering specialist PE provision. Australia (Telford et al., 2016), Ireland (Brennan et al., 2025), and England (Griggs & Randall, 2019; L. Jones & Green, 2017) have all grappled with variants of the specialist/generalist question, and the hybrid code concept provides a Bernsteinian vocabulary for comparative examination.

Third, the analysis identifies a configuration not foregrounded in previous Bernsteinian PE research: an intra-ORF contradiction between a strongly classified legislative structure and a more integrated curricular orientation. Previous studies have examined

ORF–PRF dynamics (Evans & Penney, 1995; Penney & Evans, 1999), curriculum–classroom gaps (Ekberg, 2016; Herold, 2020), and assessment recontextualisation (Tolfors et al., 2022). The Italian case adds a contradiction between legislation and curriculum within the same official field. While previous critical policy analysis has highlighted the ‘Translator’s Dilemma’ within the *Indicazioni Nazionali* – a disjuncture between its salutogenic vision and its operational objectives (Cereda, 2026b) – this Bernsteinian reading adds a structural layer, demonstrating that incompatible logics of knowledge organisation exist not only within single texts, but across the architectural structure of the ORF itself. Penney and Alfrey (2022) called for studies of policy enactment across contexts; here, the enactment challenge is visible before policy reaches practitioners because state-authored instruments encode different organising principles.

Limitations and future directions

The limitations of document-based analysis must be acknowledged. A first limitation is procedural: coding was conducted by a single researcher in a theory-led interpretive design; whilst consistent with the tradition of Bernsteinian policy analysis, this design does not generate the inter-coder checks of content-analytic approaches, and the codings in Table 1 should be read as argued interpretations open to contestation. A second limitation concerns the corpus, which does not include the ministerial degree-class tables for LM-67 and LM-68 or the L-22 bachelor’s degree that precedes the master’s programmes. Applying the same coding instrument to these documents would extend the analysis of specialist preparation. The field of reproduction – the classroom where specialists teach – remains empirically uncharted. Existing Italian commentary (Casolo & Tosi, 2023; D’Isanto, 2023; Piccioli et al., 2025) and international parallels (Brennan et al., 2025; Cruickshank et al., 2024) can inform expectations but cannot substitute for sustained classroom-level investigation.

A multi-level qualitative study interviewing specialist PE teachers, generalist class teachers, school principals, and university programme coordinators across several Italian regions would test the theory-derived expectations developed here. Do specialist teachers experience the intra-ORF tension? How do they negotiate the hybrid code structure? How does their prior preparation shape what they select, teach, and assess? These questions provide a clear agenda for extending the framework through multi-level empirical research.

A further limitation concerns temporal sequencing. The *Indicazioni Nazionali* 2025 were formally enacted (MIM, 2026) after specialist teachers had been in schools for over two years, creating a period guided by the 2012 framework. While the new curriculum is now legally defined and scheduled for phased implementation from 2026/27, this analysis focuses on the structural tensions present at formal introduction. Future studies should attend to how the ORF’s legislative and curricular tiers relate as the reform matures.

Implications for curriculum policy

For Italian policymakers, the analysis points to a need for closer alignment between the curriculum’s holistic orientation and specialist teacher preparation. If the *Indicazioni*

Nazionali 2025 are to be enacted as intended, programme design for the degree routes that feed specialist recruitment warrants attention not only to biomedical and technical depth but also to curriculum theory, child development, inclusive pedagogy, and cross-curricular competence. The 24 CFU/CFA pedagogical requirement contributes to this alignment, but its adequacy cannot be inferred from credit quantity alone and should be evaluated against the professional knowledge required for primary PE. Biomedical depth remains an important component of specialist expertise; the policy issue is how that knowledge is reorganised for educational purposes. As Carl et al. (2026) showed across European curricula, aspirations associated with Physical Literacy can be difficult to realise when teacher preparation and delivery structures are not aligned. At school level, clearer institutional guidance for specialist–generalist collaboration may also be needed so that responsibility for resolving structural tensions does not fall solely on individual teachers.

For international contexts, the Bernsteinian paradox carries a transferable lesson. Introducing specialist teachers into primary PE may strengthen subject classification, but stronger boundaries alone do not determine the educational quality or curricular fit of the knowledge transmitted. Where specialist preparation and primary-school purposes are poorly aligned, disciplinary expertise can become organisationally isolated rather than pedagogically integrated. Conversely, specialist depth can be an educational asset when it is recontextualised through a professional knowledge base responsive to curriculum, pedagogy, and child development. As Lambert and Penney (2020) have shown, teacher educators are key policy actors in this process. The relevant policy question is therefore not whether specialists possess disciplinary knowledge, but how that knowledge is transformed for the educational purposes of primary PE.

Conclusion

Italy's Law 234/2021 enacted a structural shift in the classification and framing of primary PE by introducing a specialist teacher into grades 4–5. The analysis identifies that this shift is not internally uniform. Within the ORF, the legislation institutionalises a collection-code arrangement while the *Indicazioni Nazionali 2025* articulate a more integrated curricular orientation. Within the PRF corpus, the SISMeS consensus document explicitly defines Physical Literacy, promotes a multidimensional conception of PE, and rejects a narrow biomedical vision. On these dimensions, the SISMeS position converges substantially with the curricular orientation of the *Indicazioni*. Contextual evidence on specialist preparation raises a separate question of alignment between those aspirations and the knowledge structures through which specialists are prepared. At the level of reproduction, the interaction of the specialist role, the generalist primary-school organisation, and the curriculum's integrated orientation supports the theory-derived expectation of a hybrid code structure.

The 'Bernsteinian paradox' proposed here is therefore best understood as a classification–recontextualisation problem: stronger subject classification does not, by itself, secure curricular coherence or educationally powerful professional knowledge. What a specialist reform transmits depends on how disciplinary knowledge is selected and reorganised for the field of practice. Physical Literacy is advanced here as one possible pedagogical region through which biomedical, psychological, social, and pedagogical

knowledge could be brought into relation with the educational purposes of primary PE. As an interpretive implication, this proposition requires empirical testing in teacher education and school practice.

This paper has provided, to current knowledge, the first English-language Bernsteinian analysis of Italian PE curriculum reform. The field of reproduction now requires empirical investigation. Specialist teachers' experiences, adaptations, and negotiations with the institutional tensions identified here have not yet been examined directly. That task belongs to subsequent studies.

Notes

1. In the Italian higher education system, 'LM' stands for Laurea Magistrale (a two-year Master's degree equivalent to 120 ECTS – European Credit Transfer and Accumulation System- credits, following a three-year Bachelor's degree). Specifically, these degree classes denote specialised programs within the field of kinesiology and sport sciences: LM-67 pertains to Preventive and Adapted Physical Activities; LM-68 to Sport Sciences and Techniques; and LM-47 to Management of Sport and Motor Activities. These programmes are therefore oriented primarily toward the sport and exercise sciences rather than toward primary education.
2. The '24 CFU/CFA' refers to 24 university credits – Crediti Formativi Universitari (CFU) or Crediti Formativi Accademici (CFA), the Italian equivalent of ECTS credits- in anthropo-psycho-pedagogical disciplines and teaching methodologies, which were required as a minimum pedagogical supplement for these subject specialists to qualify for teaching.

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