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Conceptualizing Vocabulary Teachers' Competencies (VTC) Framework: A Response to Green and Coxhead (2026)

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Abstract

The Vocabulary Teachers' Competencies (VTC) framework fills a gap by specifying 18 competencies across knowledge of vocabulary research and resources, vocabulary analysis and instructional skills, and professional and socio-cultural capabilities. It also carries a second, quieter representation, a Möbius strip signaling continuity, interdependence and return. This conceptual article takes that second representation seriously. It identifies five frictions teacher educators meet when using the framework, uneven grain size, unexplained overlap, competencies that depend on institutional opportunity rather than individual capability, a wide intended population, and the late placement of equity. It then proposes a complementary process architecture: a recursive continuum of vocabulary-teaching enactment, with four overlapping functional zones (lexical-research foundations; pedagogical reasoning and selection; diagnostic and adaptive design; instructional enactment and professional renewal), a cross-cutting socio-cultural orientation, and feedback returning from teaching to judgement and knowledge. All 18 competencies are mapped onto this architecture, and each is sharpened for use. The model does not replace the VTC's content specification. It explains how the competencies work together, and why teacher education should teach lexical knowledge alongside decisions about learners, texts and evidence rather than before them.

Keywords: teacher competence; vocabulary instruction; pedagogical content knowledge; teacher education; conceptual framework; enactment

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1. Introduction: why the shape of a framework matters

The Vocabulary Teachers' Competencies (VTC) framework developed by Green and Coxhead (2026) responds to a gap. Vocabulary is central to language, literacy and disciplinary learning, yet teacher preparation has lacked a consolidated account of what effective vocabulary teaching requires (Teng, 2023); other areas of practice have acquired such frameworks, for instance, teacher digital competence (Falloon, 2020), while vocabulary, despite a mature research base, has not. Drawing on an integrative review, the VTC specifies 18 competencies across three domains: knowledge of vocabulary research and resources; vocabulary analysis and instructional skills; and professional and socio-cultural capabilities. It makes the field's dispersed expectations visible, teachable and discussable.

This conceptual article asks a complementary question. If the VTC tells us what teachers should be able to mobilize, how are those resources related when a teacher is actually planning, teaching and responding? The three-domain presentation suggests a categorical answer: knowledge is acquired, skills translate it into action, and professional capabilities govern the wider conduct of practice. Yet the Möbius-strip metaphor suggests continuity rather than separation. The VTC contains two organizing logics: a categorical taxonomy and a recursive pathway. Only the first has been elaborated.

The distinction matters because knowledge does not enter teaching intact. Teachers must interpret learners, texts, purposes and institutional conditions before knowledge can inform action, e.g., the transformation Shulman (1986, 1987) named pedagogical content knowledge (PCK). Teacher knowledge is often organized by its function in practice rather than by its epistemic type (Ball et al., 2008; Depaepe et al., 2013), and knowledge closer to instructional reasoning is more consequential for classroom processes than general content knowledge alone (Baumert et al., 2010; Kunter et al., 2013). In reading specifically, teachers' knowledge of literacy concepts relates to student growth largely through what it enables them to do in lessons (Adi, 2025; Tabata-Sandom & Ikeda, 2024). Blömeke et al. (2015) draw the general conclusion: competence is best modelled as a continuum running from dispositions, through situation-specific perception, interpretation and decision-making, to observable performance.

This conceptual article therefore appraises the VTC as it stands, identifying where its architecture strains under the uses it invites, and proposes a recursive continuum of vocabulary-teaching enactment: four overlapping functional zones, a cross-cutting socio-cultural orientation, and explicit feedback from teaching back to judgement and knowledge. The continuum does not rank competencies by importance and is not a developmental staircase. It distinguishes them by functional proximity to situated action, by how much a competency requires the teacher to interpret a particular learner, text, purpose or classroom response. Because the argument concerns use as much as theory, one ordinary classroom case runs through the paper (Box 1).

Box 1. The running case
Sam teaches a Year 6 class in an English-medium primary school. About half the class use another language at home; two students have individual support plans; the reading range spans roughly four years. This week's science unit is on erosion. The class will read a textbook extract containing, among others: erosion, eroded, weathering, sediment, deposit, deposition, transported, particles, abrasion, dissolve, layer, river bed, and the phrases wear away and break down. Sam has one 50-minute lesson to prepare and a Year 6 team planning meeting on Thursday. Every zone of the model proposed below is visible in this single week. The question is not which competencies Sam needs — the VTC answers that well — but how they have to work together for Thursday's lesson to be any good.

2. What the VTC achieves, and what kind of claim it makes

The framework's most important contribution is to treat vocabulary teaching as a field with its own knowledge base, technical work and ethical responsibilities. In many programs vocabulary appears as a minor element inside literacy or general language teaching, a fortnight, a lecture, a handout of strategies (Teng, 2023). The VTC makes the breadth of the expertise visible, and the evidence its review assembles warrants that breadth: vocabulary instruction improves vocabulary knowledge reliably and comprehension more conditionally (Cervetti et al., 2023; Elleman et al., 2009); morphological instruction supports literacy outcomes (Teng, 2026); and academic vocabulary functions less as a list to be learned than as a set of tools for making meaning in disciplinary text (Nagy & Townsend, 2012).

Two further strengths deserve emphasis. The framework is non-prescriptive: it names research-supported pedagogies without requiring one branded model, which matters because learner age, curriculum, language background and purpose change what counts as an appropriate application. And it extends beyond content and technique to professional learning, collaboration, differentiation, equity and inclusion, positioning vocabulary teaching as a continuing and socially situated practice (Clarke & Hollingsworth, 2002). The attention to language, identity and power is significant: word knowledge is not socially neutral, and decisions about which registers and varieties are valued can expand access or reproduce deficit assumptions about students whose home language practices differ from school norms (Flores & Rosa, 2015).

The framework's evidential status should nevertheless be stated plainly rather than treated as a criticism. VTC explains why the 18 topics matter; it cannot establish that three domains are the best organization, that the set is exhaustive, or that users interpret the wording consistently, nor does it establish performance levels, developmental order or causal relations with student outcomes. Equal allocation across domains creates visual balance, but balance is not equivalence: Domain 3 carries curriculum planning, professional learning, motivation, assessment, feedback, collaboration, differentiation and equity in the same six slots. The VTC is best described, for now, as an expert-informed content framework with preliminary content validity: a strong reference point, not a basis for total

scores, domain scores or certification without studies of interpretation, scoring, reliability, fairness and consequences.

3. Two organizing logics inside one framework

The distinction among knowledge, skills and dispositions is durable, and the VTC explicitly relates its domains to these categories from instructional-design research (Richey et al., 2001). A categorical structure supports coverage and accountability. It also risks reifying boundaries that practice crosses constantly. Selecting high-utility words is classified as a skill, yet the decision rests on claims about frequency, text criticality, generativity and how word knowledge develops. Understanding research-supported pedagogy is classified as knowledge, yet it is meaningful only when a teacher can judge when and how a principle applies. The same professional act routinely involves theoretical knowledge, interpretation, ethical judgement and performance at once, as the framework itself concedes when it states that PCK is embedded across all three domains.

This is the difficulty PCK was introduced to address. Shulman (1986, 1987) defined a professional form of understanding created when subject matter is represented and adapted for learners: not another store of information beside content knowledge, but a transformation performed for teaching. Ball et al. (2008) divided mathematical knowledge for teaching by function rather than epistemic type; Baumert et al. (2010) found that content knowledge and PCK had different relations with instruction and student learning; Kaiser et al. (2017) showed that cognitive and situated accounts of teacher competence measure different things. It implies that disciplinary knowledge becomes professionally consequential through reasoning that connects it to tasks, learners and representations.

The VTC framework develops from words and language, through vocabulary and literacy development, to selecting words, implementing instruction and assessing learning, a movement from conceptual resources towards situated decisions. The Möbius strip avoids a hierarchical pyramid, but a metaphor of seamless integration does not specify how knowledge becomes judgement, how classroom feedback changes future knowledge, which capabilities mediate between others, or where socio-cultural commitments enter a decision. A teacher educator sequencing a module cannot act on it. The metaphor should be kept as a mnemonic and supplemented by a process model that makes its implicit claims explicit. The 18 competencies remain the content specification; what changes is the account of their relationship. This distinction between content specification and process architecture is the central move in this conceptual article.

4. Five frictions teacher educators meet in use

First, the competencies are not the same size. Some name a bounded capability, such as analyzing word structures. Others bundle several: teaching; student interest, assessment and feedback; identity, diversity, equity, inclusion and power. A teacher can be strong in one part of a compound competency and weak in another, which makes any single judgement uninterpretable and domain comparison meaningless.

Second, overlap is mostly productive but unexplained. This is not a defect. PCK is intrinsically integrative. What is missing is a statement of the changing function of repeated content: morphology is conceptual knowledge of a system; later it is the analysis of a target

word; then it becomes representation and instruction; and then finally it supports transfer across a family. Naming that transformation turns apparent redundancy into developmental coherence, and gives a teacher educator a defensible reason to return to morphology four times.

Third, some competencies require opportunity, not only capability. Collaboration, long-term curriculum development, and professional renewal depend on timetable, leadership, roles and access to credible research. A rubric that ignores opportunity will label teachers deficient for conditions outside their control; conversely, self-report will overestimate competence where performance evidence is absent, a documented risk in literacy, where teachers' confidence in their word-level knowledge is poorly calibrated to their actual knowledge (Cunningham et al., 2004). The framework should distinguish individual capability, enacted performance and enabling conditions, and record which of the three an assessment has sampled.

Fourth, one framework serves several teaching populations. Early literacy teachers need oral – print mappings and beginning word recognition; secondary subject teachers face technical terminology and disciplinary discourse; additional-language teachers work with cross-linguistic knowledge and very different exposure histories. A stable core plus contextual profiles, specifying priority, expected depth and representative evidence for each setting, would serve better than a single undifferentiated list, and would make adaptation principled rather than left to each program to reinvent.

Finally, equity arrives last but operates first. Differentiation and equity and inclusion sit at the end of Domain 3, implying a sequence: acquire knowledge, develop skill, then add inclusion. But equity commitments operate before the lesson exists. They shape what a teacher notices, which words and varieties are legitimized, how resources are evaluated, whose language practices are recognized as assets, and what counts as successful participation (Flores & Rosa, 2015). Broad wording compounds the problem. A framework that lists equity last may invite programs to teach it last.

5. What a process account has to do

A complementary process account must preserve the 18 competencies rather than replace them. Three literatures supply the components. The competence-continuum account shifts attention from what kind of mental content a competency contains to where it operates in relation to performance: dispositions at one end, situation-specific perception, interpretation and decision-making in the middle, observable performance at the other (Blömeke et al., 2015). Research on professional vision shows that what teachers notice and how they interpret it is itself a learnable, measurable competence (Seidel & Stürmer, 2014). Research on teacher learning shows that change does not flow one way from knowledge to practice: enactment and reflection are themselves mechanisms of professional growth (Clarke & Hollingsworth, 2002), and professional learning is better modelled as a complex system than a linear process (Opfer & Pedder, 2011).

Vocabulary teaching makes the functional distance concrete. Knowing that English words have morphological, phonological, orthographic and semantic structure can remain decontextualized. Deciding that a particular word merits attention in a particular text is more proximal. Diagnosing why a learner struggles, choosing a representation,

differentiating a task and responding to evidence of learning are progressively more situated. One caution: proximity to enactment is not value, difficulty or temporal order. Distal knowledge may be essential even when it does not itself specify an action; proximal performance may be fluent but poorly grounded; and teachers move in both directions. The relevant image is a recursive gradient, not a one-way pipeline.

Box 2. Four terms, in plain language
Distal/proximal: how far a competency sits from the instructional moment. Distal does not mean less important; it means the competency does not, by itself, tell you what to do.
Mobilization: what a teacher does to turn a resource into an action for these learners, this text, this purpose. Possessing knowledge and mobilizing it are different achievements, assessed differently.
Recursive: teaching produces information that changes the reasoning and the knowledge that produced it.
Zone: a group of competencies sharing a professional function: not a stage, a module or a measurement factor. Zones overlap, and a competency can shift zones depending on how it is enacted.

The internal organization of the VTC proceeded in four moves: separating the framework's organizing principles; examining each competency by the instructional function it primarily serves rather than by whether its wording says 'understands', 'identifies' or 'develops'; positioning the competencies by proximity to enactment using four criteria (contextual specificity, interpretive demand, temporal proximity to action, observability of consequences); and checking the result against PCK and competence-continuum theory. The zones are not latent factors or developmental stages, and their boundaries are permeable.

6. A recursive continuum of vocabulary-teaching enactment

Figure 1 presents the proposed architecture. Four functional zones move from relatively distal resources towards situated enactment. A cross-cutting professional and socio-cultural orientation shapes every zone, and feedback from practice returns to earlier reasoning and knowledge. The arrows indicate functional relations, not a compulsory sequence for every instructional event.

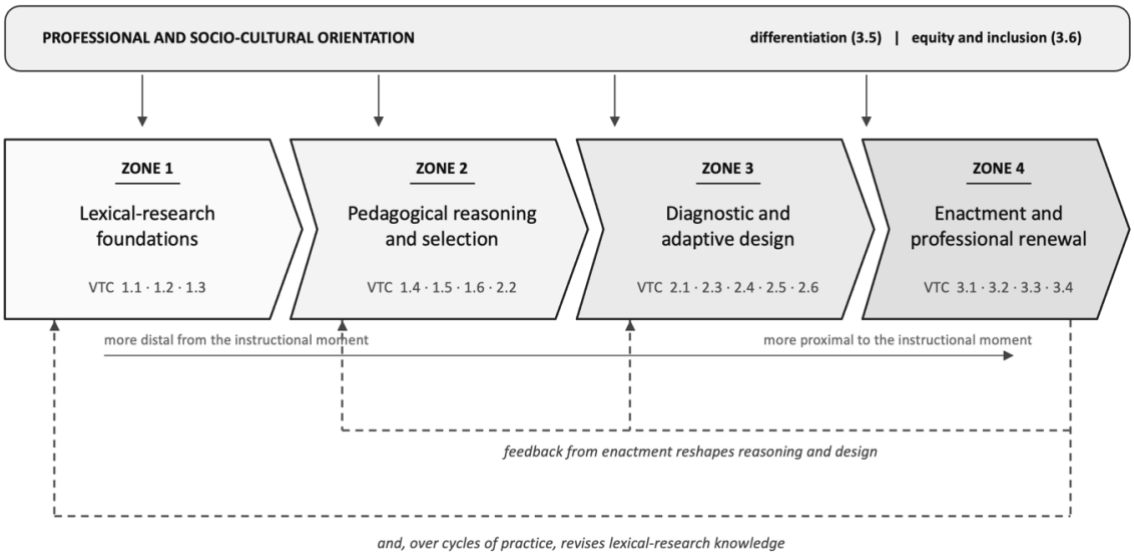


Figure 1. A recursive continuum of vocabulary-teaching enactment.

Zone 1, lexical-research foundations, contains relatively decontextualized resources for reasoning about vocabulary: the statistical nature of language, the structures of vocabulary, and the characteristics of vocabulary types. These make patterns available for professional use, including frequency, dispersion, collocation, morphology, orthography, semantic relation, register (Bauer & Nation, 2020). Without them, teachers may misanalyse words, rely on weak selection criteria or overlook relations that would support learning. Calling them foundational does not mean they cause effective teaching or must be taught first: a teacher can hold accurate lexical knowledge without recognizing when it bears on a learner's difficulty, and a novice can enact a strong routine while explaining its linguistic basis poorly. The zone's distance from action is conceptual, not evaluative.

Zone 2, pedagogical reasoning and selection, concerns the formation of instructional judgement: sourcing and critically evaluating resources, understanding research-supported pedagogies and theories of vocabulary learning and development, and identifying and teaching high-utility instructional words. These competencies connect evidence with purpose, which words deserve attention, what counts as a defensible rationale, which resources can be trusted. Placing word selection beside theory is deliberate. Selection is not a technical act performed after knowledge has been acquired: frequency, coverage, generativity, learner knowledge and text criticality become criteria only through a theory of what learners need and how word knowledge develops (Beck et al., 2013; Nagy & Townsend, 2012; Nation, 2022), and a theory acquires instructional meaning only when it constrains choices. This zone converts descriptive knowledge into reasons for action.

Zone 3, diagnostic and adaptive design, brings reasoning into contact with particular words, texts and learners: accurate analysis of word features; teaching interrelated components of word knowledge; addressing atypical development; analyzing text demands and aligning instruction with learner need; teaching relationships between words; and, as a bridge to the cross-cutting orientation, designing differentiated instruction. These competencies are more situated because the same principle produces different decisions under different conditions. A word may be central in one text and peripheral in another;

morphological analysis may unlock a generative family for one group and overload another. This is the vocabulary-specific form of the situation-specific processes described by Blömeke et al. (2015) and studied as professional vision (Seidel & Stürmer, 2014); competency sits here because noticing persistent difficulty and working within multi-tiered systems of support are interpretive acts before they are procedural ones (Alves et al., 2018). The same lexical object is thus encountered differently in Zone 1 and Zone 3, first as a structure that can be known, then as a feature that can be made instructionally useful.

Zone 4, instructional enactment and professional renewal, concerns the sustained organization, observation and renewal of practice: a structured approach to vocabulary instruction, pedagogical development through engagement with new research, cultivating interest while assessing progress and providing feedback, and collaborating across the curriculum. These are visible in programs of action over time rather than in isolated choices. Enactment is broader than delivering a technique: it includes sequencing opportunities to learn, noticing whether word knowledge changes, adjusting feedback so that it names a next action rather than a correction (Hattie & Timperley, 2007), coordinating across subjects and revising practice in light of research. Professional renewal belongs here because engagement with evidence is not complete when research has been read; it becomes consequential when it changes routines, designs or interpretations (Clarke & Hollingsworth, 2002).

Box 3. Sam's week, zone by zone

Zone 1: what is there to be noticed. Erode, eroded, erosion and erosive form a family, and the alternation in erode → erosion is the pattern of decide → decision: a regularity to make visible, not an irregularity to apologize for. Deposit, transport, bed and solution are high-frequency general words carrying technical senses here. Polysemy, not rarity, is the likely obstacle.

Zone 2: what deserves the fifty minutes. Four candidates survive a rationale: erosion, deposit/deposition, sediment and wear away. Weathering is deferred: it looks transparent and is not, but it is next lesson's central term.

Zone 3: what these learners actually need. Several multilingual students know deposit only in its banking sense; one student decodes eroded but does not connect it to erosion. So deposit gets a two-sense contrast, erosion a family web, sediment a labelled diagram and a sentence frame. Differentiation here is not three worksheets at three levels; it is one ambitious goal reached with different supports.

Zone 4: beyond one lesson. At Thursday's meeting the Year 6 team agrees that deposit, transport and solution carry technical senses across three subjects, and that all three teachers will contrast the everyday and technical senses. Whether Sam's practice improves this term depends on the timetable as much as on Sam, a fact about competency, not about Sam.

Table 1 places all 18 competencies within this architecture. The mapping is a claim about primary professional function, not about exclusive membership.

Table 1. Functional mapping of all 18 VTC competencies onto the proposed continuum.

Position	Primary VTC competencies	Conceptual role
Zone 1 Lexical-research foundations	1.1 Statistical nature of language; 1.2 structures of vocabulary; 1.3 characteristics of vocabulary types	Provides the resources that make principled reasoning possible, without specifying an action.
Zone 2 Pedagogical reasoning and selection	1.4 Source and evaluate resources; 1.5 research-supported pedagogies; 1.6 theories of learning and development; 2.2 high-utility instructional words	Turns evidence into instructional reasons: what deserves attention, why, and which approach is defensible.
Zone 3 Diagnostic and adaptive design	2.1 Analyze word features; 2.3 teach components of word knowledge; 2.4 address atypical development; 2.5 analyze text demands and learner needs; 2.6 teach word relationships	Interprets particular words, texts and learners; adapts representations, sequences and supports.
Zone 4 Enactment and professional renewal	3.1 Structured instruction; 3.2 research-engaged development; 3.3 interest, assessment and feedback; 3.4 cross-curricular collaboration	Organizes, observes and improves vocabulary teaching over time and across professional communities.
Cross-cutting orientation	3.5 Differentiated instruction; 3.6 equity and inclusion	Shapes what is noticed, selected, adapted and assessed in every zone; an ethical condition of enactment.

7. Sharpening the 18 competencies for use

The continuum reorganizes the competencies. The frictions in Section 4 are competency-level as well as architectural, and a framework used for program design needs wording precise enough to plan and assess against. Table 2 offers a short sharpening for each entry, with its position on the continuum. Three principles run through them. Name the boundary with the neighboring competency, since the recurring pairs — 1.2 with 2.1, 1.5 with 1.6, 2.3 with 2.6 — are functional transformations rather than redundancies. And protect the competencies where overreach is a professional risk: teachers can notice indicators of persistent difficulty and initiate referral, but should not be positioned as diagnosing disorders outside their expertise. The wording should carry the safeguard, because the wording is what ends up in the rubric.

Table 2. Sharpening each VTC competency for teaching, learning and assessment.

VTC	Competency (abbreviated)	Zone	How to sharpen it for use
1.1	Statistical nature of language	1	Define a teacher-appropriate statistical literacy: interpreting frequency and dispersion evidence, and explaining the limits of lists and corpus counts — not calculating them.
1.2	Structures of vocabulary	1	Conceptual understanding of form–meaning–use relations; reserve 2.1 for context-specific analysis. Include multiword units and polysemy.
1.3	Types of vocabulary	1	Classifications are purpose-dependent tools, not natural kinds. Require teachers to compare two systems and justify one.
1.4	Source and evaluate resources	2	Reword to 'sources, evaluates and adapts'. Supply a protocol covering evidence base, validity, bias, accessibility and AI-generated materials.
1.5	Research-supported pedagogies	2	Assess appraisal and adaptation of instructional principles, not recall of program names. Replace the unstable word 'current'.
1.6	Theories of	2	Specify a small set of theoretical functions rather than a reading

	vocabulary learning		list; assess use of theory in cases.
2.1	Accurate lexical analysis	3	Accurate, pedagogically relevant analysis. Specify sufficient depth by role and phase; recognize dialectal and register variation.
2.2	High-utility instructional words	2 → 3	Score selection rationale and enactment separately. Replace 'high utility' with 'instructionally consequential for specified learners and purposes'.
2.3	Components of word knowledge	3	Allow selective emphasis: diagnose what is known, target what is consequential, design connected encounters.
2.4	Atypical vocabulary development	3	Protect boundaries: 'recognizes indicators, responds instructionally, documents and collaborates in referral'. Safeguard the difference/disorder distinction.
2.5	Text demands and learner needs	3	Retain as the strongest bridge competency. Require quantitative, qualitative and learner-specific evidence, and what would change if that evidence differed.
2.6	Relationships between words	3	Require accurate, generative and relevant relations, distinguished by type and tied to an explicit transfer goal.
3.1	Structured approach to instruction	4	Define structural features, not the label: outcomes, principled selection, distributed encounters, monitoring, revision. Assess a unit's coherence.
3.2	Research-engaged development	4	Require individual and organizational evidence: inquiry into practice, documented change in reasoning or design, ethical appraisal of AI resources.
3.3	Interest, assessment and feedback	4	Split into engagement and assessment–feedback. Require proximal and distal evidence, and feedback tied to a next action.
3.4	Cross-curricular collaboration	4	Define observable products, shared text-demand analysis, aligned goals, joint review of learner evidence, and record opportunity to collaborate.
3.5	Differentiated instruction	cross-cutting (strongest in 3)	Cross-cutting and evidence-based. Preserve ambitious goals and participation; include multilingual repertoires; ask whether the adaptation improved learning.
3.6	Equity and inclusion	cross-cutting (all zones)	Position across all domains with observable indicators: asset-based representation of multilingual repertoires, teaching dominant academic forms without devaluing other varieties, scrutiny of biased assessments.

8. Implications for teacher education

If competence is mobilized across a continuum, teacher education should resist a curriculum in which lexical content is completed in one module and pedagogical application is expected to appear later. Morphology, frequency, word knowledge and vocabulary types should be revisited through instructional problems: selecting words from authentic texts, diagnosing learner responses, designing explanations, comparing resources, interpreting assessment evidence. This does not reduce disciplinary knowledge; it gives that knowledge repeated occasions to become professionally functional, the argument made more generally for practice-based teacher education by Ball and Forzani (2009), Grossman et al. (2009) and Zeichner (2010). The four zones can serve as a planning lens without becoming new silos: each substantial learning experience should make visible how at least two zones interact, and how socio-cultural considerations change the resulting judgement. Vocabulary teaching suits decomposition and approximations of practice unusually well, because its core decisions leave a documentary trail, a text, a word list, a rationale, a lesson, some student writing.

Box 4. A four-week sequence built on the continuum

Week 1 (Zones 1→2). Input on frequency, dispersion and morphological families. Analyze a text you will actually teach; identify the ten most consequential words and write a 150-word rationale. Peer critique targets the rationale, not the list.

Week 2 (Zones 2→3, with the cross-cutting orientation). Bring two learner profiles, one multilingual. Revise the selection and name what changed. Prompt: whose linguistic knowledge did your first list treat as an asset, and whose as a gap?

Week 3 (Zones 3→4). Design and micro-teach a ten-minute segment; record it. Stimulated recall in pairs: at which moment did you change your plan, and what did you notice that prompted it?

Week 4 (Zone 4→1, the return path). Analyze the student work produced. Identify one misconception and trace it: design problem, selection problem or knowledge problem? Revise one element of your Week 1 analysis accordingly.

The same content is covered as in a domain-based sequence; what differs is that every zone is visited four times, and the return path is assessed rather than assumed.

The continuum also clarifies what different assessment formats can and cannot show (Table 3). A knowledge test can establish whether foundational resources are available; it cannot show whether the teacher selects the relevant information or adapts it to a learner. A lesson plan reveals design but not noticing during interaction; observation reveals enactment but may obscure the reasoning behind it. Self-report is only one single source. The assessment side would also benefit from distinctions vocabulary research already draws between breadth and depth, receptive and productive knowledge, and proximal and distal measures (Schmitt, 2019).

Table 3. What different assessment formats can and cannot show.

Evidence source	What it can show	What it cannot show
Knowledge test, viva or resource audit (Zones 1–2)	Whether foundational resources are available and accurate; the criteria used when evaluating materials.	Whether the teacher selects relevant information, or whether the judgement survives contact with a class.
Word selection with written rationale (Zone 2)	The reasoning that converts lexical evidence into an instructional decision.	Whether the selection is enacted coherently, or revised when it fails.
Annotated lesson plan (Zones 2–3)	Anticipated design, intended representations, planned differentiation.	Noticing during interaction — what the teacher does when the plan meets the room.
Observation or recorded micro-teaching (Zones 3–4)	Enacted performance: representation, sequencing, interaction, responsiveness.	The reasoning that produced it, and whether it was principled or habitual.
Student work and assessment interpretation (Zone 4 → return path)	Whether instruction changed word knowledge, and whether the teacher reads the evidence accurately.	Attribution to any single competency; effects of opportunity and prior teaching.
Stimulated recall or self-assessment (across zones)	Reasoning behind observed decisions; priorities for professional learning.	Protection against retrospective rationalization; a defensible basis for high-stakes judgement.

A defensible system is therefore programmatic: evidence accumulates across tasks and time, high-stakes judgements are not made from self-assessment, and domain totals are not calculated until the structure and scoring model have been validated (Kane, 2013). Initially the framework suits formative profiling better than certification. One integrated task can nonetheless sample the whole continuum while still permitting analytic scoring: give a candidate an authentic text and a real class profile, then ask them to analyze the vocabulary demands (2.5, drawing on 1.1 – 1.3), select instructional words and justify the selection (2.2, drawing on 1.6), anticipate two learner difficulties and design a representation for each (2.1, 2.3, 2.6, 3.5), teach a recorded segment (3.1, 3.3), and interpret the resulting student evidence in order to state one change to the original rationale (3.3, and the return path to Zone 2). The last step is the one most assessment systems omit, and the one the continuum says matters most.

For in-service teachers, the model favors professional learning, like which words students fail to learn across a unit, how the same word is explained by different colleagues, and what the lexical demands of a disciplinary text actually are. Research and resources enter as tools for resolving these problems, and classroom evidence supplies feedback for continued inquiry: the pattern that distinguishes professional development which changes practice from professional development and which does not (Kennedy, 2019). Collaboration matters because the vocabulary demands of schooling cross subject boundaries, and content-area teachers, language specialists and special educators notice different aspects of the same text. Workload discipline is part of this: 18 broad competencies expand rapidly if each generates separate content and separate assessment, whereas one rich task can address text demands, selection, analysis, differentiation, instruction, assessment and equity provided the scoring makes the connections visible.

For the framework itself, the analysis suggests two layers rather than a revised single one. Layer 1 retains the 18 competencies as a content inventory under the three domains, answering ‘What resources and capabilities should be present?’ Layer 2 shows how they function in practice, answering ‘How are they mobilized and renewed?’ Keeping both prevents a false choice between clarity and complexity, and makes the Möbius metaphor operational. The reconstruction also refines Domain 3, currently the least homogeneous: structured instruction, assessment, feedback, collaboration and research-engaged renewal are tied to sustained enactment, whereas differentiation, equity and inclusion operate as orientations shaping decisions throughout. Each competency would then gain a short construct definition, boundaries, representative evidence and proficiency descriptors.

9. Boundary conditions and limitations

The model is a conceptual proposal, not an empirically recovered structure. The four zones are proposed because they give a coherent account of functional proximity to enactment, not because analysis has established four factors; other numbers may prove more useful, and boundaries may shift across early literacy, second-language teaching and multilingual education. The placement of individual competencies is contestable in an instructive way: evaluating a resource is distal as a generic review and proximal when a teacher selects material for a particular class; differentiation is cross-cutting but most visible in adaptive design; research engagement belongs to renewal yet changes foundational knowledge.

These are not counterexamples but a claim the model makes deliberately. Position is partly a property of how a competency is enacted, not only of how it is worded, and that claim could be refuted.

Nor is movement towards performance always linear or desirable. Teachers act before they can articulate a rationale, revisit assumptions mid-lesson, and suspend familiar practice when equity concerns require it. Institutional conditions matter throughout: time, curriculum, assessment policy and collegial support enable or constrain mobilization even where individual knowledge is strong, and a model that ignores this will misattribute organizational failure to teachers. Finally, the synthesis is anchored in literature selected for direct relevance to the VTC's organizing problem; its value rests on conceptual coherence, explanatory usefulness and the questions it generates, criteria that must be supplemented by empirical comparison with alternative architectures.

10. A staged program of validation

No single study validates a framework. What a framework can have is a cumulative program that progressively justifies particular uses, professional discussion first, then program design, then formative profiling, and only much later anything resembling certification (Kane, 2013). Table 4 sets out five stages, each depending on the one before. Stage 1 comes first for a reason: if teachers and teacher educators do not organize the competencies the way either architecture predicts, both models need revision before anything is measured. Stage 5 is the test that matters for teacher education. A comparative study, one program teaching VTC content in domain-based modules, another organizing the same content around connected problems of practice, would give the continuum its most consequential test: it gains support if integrated designs improve mobilization without weakening foundational understanding, and loses it if they do not.

Table 4. A staged program of validation.

Stage	Question	Methods
1. Representation	Do teachers, teacher educators and observers organize the 18 competencies by the three domains, by the four zones, or by something else?	Card sorting; think-aloud; expert elicitation; cognitive interviews on each competency's wording.
2. Measurement	Can the competencies be measured in ways that distinguish resources from mobilization?	Instrument development across all 18 competencies: lexical-analysis, word-selection and justification, learner/text diagnostic, observed instruction. Confirmatory models only once instruments exist.
3. Mediation and development	Does lexical-research knowledge act through reasoning and adaptive design, and do the zones develop unevenly (Propositions 1, 2, 6)?	Longitudinal or experimental designs; cohort studies from entry through practicum into early career; repeated performance tasks; tests for threshold effects.
4. Recursion and equity	Does classroom evidence actually change selection rationales and word analysis, and does socio-cultural responsiveness operate across zones (Propositions 3, 4)?	Video-supported reflection; stimulated recall; design-based professional learning; studies spanning multilingual learners, disability and disciplinary settings.
5. Consequences	Does organizing a program around connected problems of practice	Comparative intervention studies, with outcomes spanning knowledge, reasoning, adaptive design

produce better mobilization than domain-based modules?	and observed enactment; plus fairness and consequential evidence for any assessment use.

11. Conclusion

The VTC makes a major contribution by specifying the knowledge, skills and professional capabilities vocabulary teaching requires. Its three domains provide clarity, coverage and a practical basis for program development, and its attention to professional renewal, differentiation and equity distinguishes it from frameworks that stop at technique. Its limitations are those of any initial conceptual framework: imported domain categories, porous boundaries, uneven grain size, compound entries and limited specification of evidence or progression.

Teachers do not first finish knowing, then begin doing, and finally add professional or socio-cultural judgement. They mobilize resources through interpretation, adaptation, action and reflection, in situations where linguistic, pedagogical and ethical considerations are inseparable. Sam's week is not unusual in this respect; it is what the work is. The recursive continuum offers a complementary process architecture: foundations support reasoning and selection; reasoning is fitted to learners and texts through diagnostic and adaptive design; design is realized and renewed through enactment; socio-cultural responsiveness shapes the whole; and feedback returns from consequences to knowledge and judgement. The proposal is open to revision, its zones are not validated factors and its propositions require direct tests, but its immediate value is practical. It distinguishes possessing resources from mobilizing them, and gives teacher educators a way to connect curriculum, assessment and professional learning around the actual work of teaching vocabulary. A refined VTC would keep the 18-competency map, add the process architecture, make equity cross-cutting, specify evidence and progression, and validate in stages — honoring the framework's own insight that vocabulary teaching competence is not the sum of separate boxes, but the coordinated, context-sensitive and ethically responsible mobilization of knowledge in practice.

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The authors used ChatGPT to improve language, clarity, and readability. The authors reviewed and edited all AI-generated content as necessary and take full responsibility for the content of the published article.

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Conflict of Interest

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