Taking the Long View on Writing Development

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Studies on writing development have grown in diversity and depth in recent decades, but remain fragmented along lines of theory, method, and age ranges or populations studied. Meaningful, competent writing performances that meet the demands of the moment rely on many kinds of well-practiced and deeply understood capacities working together; however, these capacities' realization and developmental trajectories can vary from one individual to another. Without an integrated framework to understand lifespan development of writing abilities in its variation, high-stakes decisions about curriculum, instruction, and assessment are often made in unsystematic ways that may fail to support the development they are intended to facilitate; further, research may not consider the range of issues at stake in studying writing in any particular moment. To address this need and synthesize what is known about the various dimensions of writing development at different ages, the coauthors of this essay have engaged in sustained discussion, drawing on a range of theoretical and methodological perspectives. Drawing on research from different disciplinary perspectives, they propose eight principles upon which an account of writing development consistent with research findings could be founded. These principles are proposed as a basis for further lines of inquiry into how writing develops across the lifespan.

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In recent decades, our understanding of the complexity of writing in its many dimensions and manifestations has grown, with research, for example, on issues such as the psychological processes, social situations, motivations, and selfperceptions of writers. Study populations have included young children, adults in the workplace, the retired, marginalized populations, and people with different language experiences.

Yet this knowledge is fragmented along lines of theory, method, age range, or populations studied, with little done to create an integrated picture of writing development as a multidimensional process that continues across the lifespan. Even edited handbooks (e.g., Bazerman, 2008; Beard, Myhill, Nystrand, & Riley, 2009; Knapp, Perrin, Verspoor, Manchón, & Matsuda, 2016; MacArthur, Graham, & Fitzgerald, 2015; Smagorinsky, 2006) with separate chapters discussing different age ranges from different perspectives do little to create dialogue and multidimensional synthesis.

From a policy and curriculum perspective, the accountability and standards movement, by specifying benchmarks to be achieved and assessed at particular points in primary and secondary education, has de facto formulated developmental objectives, even though these may not be grounded in research or an informed model of writing development. It has not even been determined whether broadscale assessments based on the standards can be warranted by developmental research. Without such grounding, policy planners have at best only curricular fragments to paste together.

Taking the Long View Makes Sense

All complex arts take a long time to learn. Meaningful, competent performances that meet the demands of the moment rely on many kinds of well-practiced and deeply understood skills working together. Manipulation of tools, skills, discipline, and endurance must become deeply engrained, while certain modes of attention, perception, thinking, and creativity must be cultivated. All of these must then be mobilized at the moment of production in meaningful and well-planned action that pushes the boundaries of what one knows and itself becomes the substance of further development. Expertise is aided by the guidance of appropriate teachers and coaches who watch the development and select appropriate developmental challenges.

This complexity of mature performance is well respected in training for sports, music, dance, and even the graphic arts. When working with secondary or university writers, however, educators often fail to appreciate the long road that has brought students to the point of new challenges, and see students' struggles with these challenges as an indication of an inadequate past. James Moffett's work a half-century ago remains one of the few attempts to frame curriculum in the longer life trajectory that stretches beyond a year or a school (Moffett, 1968).

Because educators lack agreement on an integrated framework to understand

lifespan development of writing abilities, high-stakes decisions about curriculum, instruction, and assessment are often made in unsystematic ways that may fail to support the development they are intended to facilitate. Current expectations and practices may also limit conceptions about what learners can accomplish at different ages in school settings or out. While attempts to better regulate assessment and instruction are understandable, the cost may be the mismeasure of student writing skill and instruction that stunts rather than supports writing growth. If all writers and writing were the same and easily measurable against each other, each freshly written text would have little to tell us. For our policies and assessments to guide students toward competence and individuation, policy makers and educators need to recognize the unique and challenging paths of developing writers and the complexity of writing situations they address along the way.

Competence in writing involves making unique meaning relevant and effective within the particulars of situations, and this competence develops as an individual gains experience with a history of situations and forms. Writing is not played against a single opponent with fixed rules on a fixed court, nor performed on a stage before an audience awaiting entertainment. Writing occurs in almost all spheres of action and in many moments, each with separate demands and opportunities. Trajectories of writing development are intertwined with trajectories of intellectual, professional, and personal development, such that writing development contributes to personal uniqueness.

While no easy answer presents itself to form a multidimensional picture of development that respects the complexity and individuality of writing, meaningful steps can be taken toward this goal. With sponsorship from the Spencer Foundation, the coauthors of this essay have been meeting since 2012 to share perspectives on what is known about writing development among various populations, including multilingual and monolingual writers, struggling writers and high-achievers. As researchers, we study different points in writing development, from early childhood through adulthood, and represent varied theoretical and methodological perspectives, including linguistic, psychological, curricular, and sociocultural viewpoints.

Our method was designed to serve as a meta-review of the literature through our understandings from our own disciplinary perspectives. Each of us identified points that would be important to incorporate into a set of proposed principles that research on writing development might take as a starting point. We were not in search of one unified framework, but rather worked to identify convergences in perspective. Our greatest challenge was to appreciate the substance, scope, and implications of each other's perspectives, and how these different perspectives might be integrated. The eight principles proposed below represent an account of writing development consistent with the research findings in our various areas of study, and their intersection. While different aspects of these principles may seem familiar to people of different perspectives, it is noteworthy that they represent a consensus of scholars working from different traditions. The principles offer implications for policy, research, pedagogy, and practice that this group will elaborate and expand on in later publications.

1. Writing can develop across the lifespan as part of changing contexts.

Each individual's lived history influences writing development (Herrington & Curtis, 2000), from earliest childhood through adulthood, in the context of accumulating yet changing forms of engagement in families, communities, schools, and workplaces, in different language communities and in multiple languages (Leki, Cumming, & Silva, 2008). As roles and responsibilities expand across the lifespan, people reconsolidate past learning while encountering new demands and challenges. How people are able (and invited) to bring their writing pasts into new contexts provides a basis for further writing development, as new and often escalating demands of school, work, civic, and family life favor proliferation and specialization of genres, identities, voices, and skills in the maturing writer (Brandt, 2001; Dyson, 1999). This principle implies that educators must keep in mind the long sweep of individual learning and experience, even as they ask students to address particular tasks at any moment.

2. Writing development is complex because writing is complex.

Each act of writing involves multiple processes, each of which draws on different domains of development, which may interact among themselves. Berninger (2015) reviews the research on five established developmental domains in child psychology that interact with writing development in the K-12 years: sensorimotor, language, cognitive, social-emotional, and attention/executive functions. These developmental processes are themselves affected by biological, cultural, social, and linguistic differences. Further, each act of writing is a unique performance, creating locally relevant meanings fitting the situation to achieve the writer's needs and purposes. Much of the work of writing occurs in the mind of the writer, who draws on histories of meaning-making, language experiences, social relations, and communicative interactions. The writer's thinking also draws on knowledge about the world, the topic, text forms and structures, and strategies for regulating the writing process (including planning, monitoring, evaluating, and revising) (Bazerman, 2013), in interaction with the external world-other people, technologies used in composition, and other texts seen as relevant to the current situation (Spinuzzi, 2015). One implication is that educators need to facilitate writers' ability to orchestrate these many internal and external processes and variables.

3. Writing development is variable; there is no single path and no single endpoint.

Groups of writers observed over time appear to develop toward more specific, effective, and conventional understandings of writing. Yet in looking at individuals, researchers find that the trajectories and endpoints of development are much more variable (Rijlaarsdam et al., 2012). Writing development is neither singular nor smooth in its trajectory (Sternglass, 1997). Because writing is not generic, neither is its development. Across the lifespan, writers have differential access to sociocultural events involving writing—including those introduced in instructional contexts at school or occurring in different languages. Developmental trajectories and endpoints are shaped by differential experiences with writing genres and their

social uses (Dias, Freedman, Medway, & Pare, 1999). They are also shaped by writers' personal interests, learning histories, and abilities. Individuals' developmental trajectories are marked by normal variation in the pacing and sequence of learning, and by both forward movement and "backward transitions," where writers use less sophisticated strategies in more difficult tasks or unfamiliar social situations (Rowe & Wilson, 2015). For writers who write in multiple languages, the aspects of literacy that can be transferred from one language context to another are variable, and the transfer is not always direct. This principle suggests that writing instruction needs to be differentiated to respond to students' current understandings, and designed to provide challenges that nudge students toward possible next steps, while expecting variation in student responses.

4. Writers develop in relation to the changing social needs, opportunities, resources, and technologies of their time and place.

Fundamentally anchored in social activity, writing has evolved as society's needs and technologies for writing have changed. The use of papyrus and parchment facilitated the production of more extended, more numerous, and more easily circulated documents than ones incised on stone or clay. In turn, such advances fostered new social arrangements and uses for writing. While, in its earliest forms, writing served limited social needs through a small number of genres, writing today serves a myriad of social practices and purposes within a wide range of organized social activities (Bazerman, 2006). Yet, since not all persons have the same access to social opportunities, resources, and technologies, writing development is inequitably distributed across populations (Graham, 2006). To address this inequality, educators should provide opportunities for all students to become familiar with both the current technologies of text production and manipulation (whether pencil and eraser on paper or digital word-processing), and the different domains of writing that will be relevant to their lives (whether academic, civic, personal, creative, financial, or legal).

5. The development of writing depends on the development, redirection, and specialized reconfiguring of general functions, processes, and tools.

Because writing developed late in human history, it makes use of cognitive, linguistic, social, and cultural capacities and conventions that evolved independently from it. As a result, many of the functions, processes, and tools relevant to writing are not specific to it, but require development, redirection, and specialized reconfiguration so that they are put into the service of writing (Carroll, 2002; Graham, 2006). Writing development depends on cognitive capacities and processes (e.g., perception, attention, memory, learning, executive functioning), language capacities, motor systems, motivational dispositions (e.g., efficacy, values, attributions), and social practices (e.g., expression, seeking response, marking and labeling), which are applied and reshaped to create text. A basic implication of this principle is that learning to write, as well as teaching writing, involves developing the specialized social, motivational, linguistic, and cognitive practices and skills needed to write effectively (Graham, Harris, & Santangelo, 2015).

6. Writing and other forms of development have reciprocal and mutually supporting relationships.

Writing development influences and is shaped by development in a variety of areas, including speech, hearing, reading, literacies in multiple languages, learning, emotions, identity, politics, sense of efficacy, and collective actions. Take, for instance, writing's influence on learning and learning's influence on writing. Writing about content material enhances the learning of it, and as students acquire more knowledge, these new ideas can be applied when writing (Bangert-Drowns, Hurley, & Wilkinson, 2004; Langer, 1986). Similarly, writing instruction improves reading ability, and reading instruction improves writing ability (Graham & Hebert, 2011). A basic implication of this principle is that writing should be taught and used in conjunction with other developing areas, such as reading and content learning in the disciplines, to mutually facilitate their development.

7. To understand how writing develops across the lifespan, educators need to recognize the different ways language resources can be used to present meaning in written text.

Learning to write draws on meaning-making experiences gained through prior language experience, whether with the related oral language or with another (oral or signed). Learning to write, however, calls for a more self-conscious perspective of language, as learners navigate the orthographic, lexico-grammatical, and organizational challenges of presenting meaning as written text. The grammatical resources that writers draw on have evolved in ways distinct from those used in oral language (e.g., Halliday & Martin, 1993; Schleppegrell, 2001). Such resources include expansion of the nominal group and nominalization in service of abstraction, use of passive voice in service of information structuring, and distinctive ways of using modality and other resources for expressing evaluation (Christie, 2012). Writing development-typically supported through schooling, but practiced and extended through a variety of out-of-school activities, including use of digital media-is also sensitive to the opportunities learners have to engage in writing for various purposes and in different languages. An implication of this principle is that teachers need to understand the grammatical patterns of written language and how they develop across the school years in order to help learners draw on the language resources they need to write for different purposes (Schleppegrell, 2007).

8. Curriculum plays a significant formative role in writing development.

As writing development is very much a function of the situations, practices, and communities in which one participates, and since schooling forms such an important part of literacy experiences, curriculum has a strong influence on writing development. Students are likely to learn those genres, skills, and strategies that they experience in school and less likely to learn those that are ignored or rejected (Applebee & Langer, 2013), although implicit and explicit learning can occur outside schooling. Variations in writing curricula and assessments across US states and across countries influence the writing skills that students develop, as do variations in writing expectations in different disciplines. One implication

of this principle is that a writing curriculum should provide students with access to and effective participation in a range of genres. Another implication is that the writing curriculum should support learning in specific disciplines and writing for specific purposes. But if writing development is influenced by the curriculum a student encounters, it is also influenced by the students a curriculum encounters. Each child brings experiences that can contribute to and shape learning within a curriculum, including experiences with multiple languages and literacies. A third implication, then, is that a writing curriculum needs to enable a broad participation of all students and include a wide range of writing experiences.

Overall Implications

The complex, multidimensional portrait of writing development presented here strongly suggests that writing education needs to address all the elements of writing, be built on meaning-making and effective communication, and recognize social, linguistic, cognitive, affective, sensorimotor, motivational, and technological dimensions of writing development. Each dimension matures and develops across many experiences, but each writing experience brings all the dimensions together in a unified communicative event. This means while teaching moments may focus attention on aspects of one of the dimensions, all dimensions are always present, and students may find challenges coming from any of them at any time. Thus, a difficulty in meeting a linguistic demand in a class activity may be due to working memory or social understanding of the communication or a lack of relevant linguistic resources or a difficulty in manipulating a new technology—or some combination of these, or something else. Further, overall growth relies on development in each of the dimensions that are brought together in writing.

Because all of these dimensions take time to develop, and then must be brought together in complex writing performances, learning to write takes many years. Even apparently undistinguished performance may reflect years of practice. Every level of schooling makes new demands and requires new learning. Students need time to learn what is necessary to succeed and create new meanings appropriate to each new situation, meeting the new criteria of the new context. Further, students who have moved from one linguistic environment to another may have had different exposure to literacy experiences and different values placed on literacy. Teachers at more advanced levels should not be too quick to blame prior teaching and learning, when the real issues could be the time necessary to develop as a writer and unfamiliarity with new expectations. Students need to experience success with writing in order to stay engaged and develop dispositions that are needed to drive future development. That is why teachers need deep understandings about writing development to guide instruction.

Because of the complexity of writing and its long learning over many experiences, students within the same classroom may show varying strengths and weaknesses in different aspects of writing, varying control of different genres, different repertoires of expressive resources, different motivations and purposes for writing, and unique meanings to express through writing. For curriculum, this calls for flexibility in design. While it is possible, even necessary, to differentiate instruction at different levels, instruction also should be mindful of individual differences, whether in prior language experience, prior school curriculum and extracurricular writing, identity constructs, social relations, cognitive strategies, or neural and biological organization. Fair and authentic writing assessments that display the full range and variation of student writing development are needed. In addition, teachers need to be prepared to engage students in the genres of their disciplines, to assess the spectrum of their students' abilities, and to tailor instruction to meet their students' needs. This calls for specialized linguistic knowledge, as well as pedagogical knowledge, for apprenticing students into new discursive practices.

For research, the challenges are many. While there is research in some dimensions of writing development at all age levels, there is not adequate research in all dimensions at all the levels. Further, at any age level, it is rare that all the dimensions are studied simultaneously as brought together within a single writer's performance and development. There is even less research that moves across age levels. Researchers have carried out some longitudinal studies within some age ranges (such as the early years of emergent literacy or the years of undergraduate education), but fewer longitudinal studies have been performed in the age ranges of primary and secondary school because of the difficulty of tracking students across school years and classrooms. Thus, educators have no coherent, well-substantiated picture of what writing development across the lifespan looks like, even in a few individual cases, let alone in a more comprehensive model that incorporates the kinds of variety we have presented here, sensitive to the varying social needs, opportunities, resources, and technologies of writers' times and places. Such fundamental research can inform assessment, instructional practice, curriculum, and policy that support the full development of writers.

AUTHOR NOTE

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REFERENCES

APPLEBEE, A. N., & LANGER, J. A. (WITH WILCOX, K. C., NACHOWITZ, M., MASTROIANNI, M., & DAWSON, C.). (2013). Writing instruction that works: Proven methods for middle and high school classrooms. New York: Teachers College Press.

BANGERT-DROWNS, R. L., HURLEY, M. M., & WILKINSON, B. (2004). The effects of schoolbased writing-to-learn interventions on academic achievement: A meta-analysis. *Review* of Educational Research, 74, 29–58. BAZERMAN, C. (Ed.). (2006). The writing of social organization and the literate situating of cognition: Extending Goody's social implications of writing. In D. Olson & M. Cole (Eds.), *Technology, literacy and the evolution* of society: Implications of the work of Jack Goody (pp. 215–239). Mahwah, NJ: Erlbaum.

BAZERMAN, C. (2008). Handbook of research on writing: History, society, school, individual, text. New York: Routledge. BAZERMAN, C. (2013). A theory of literate action. Fort Collins, CO: WAC Clearinghouse.

BEARD, R., MYHILL, D., NYSTRAND, M., & RILEY, J. (2009). *The SAGE handbook of writing development*. London: SAGE.

BERNINGER, V. W. (2015). Interdisciplinary frameworks for schools: Best professional practices for serving the needs of all students. Washington, DC: American Psychological Association.

BRANDT, D. (2001). *Literacy in American lives*. New York: Cambridge University Press.

CARROLL, L. A. (2002). Rehearsing new roles: How college students develop as writers. Carbondale: Southern Illinois University Press.

CHRISTIE, F. (2012). Language education throughout the school years: A functional perspective [Monograph]. *Language Learning*, 62(Suppl. 1).

DIAS, P., FREEDMAN, A., MEDWAY, P., & PARE, A. (1999). Worlds apart: Acting and writing in academic and workplace contexts. Mahwah, NJ: Erlbaum.

Dyson, A. H. (1999). Coach Bombay's kids learn to write: Children's appropriation of media materials for school literacy. *Research in the Teaching of English*, *33*, 367–402.

GRAHAM, S. (2006). Writing. In P. Alexander & P. Winne (Eds.), *Handbook of educational psychology* (pp. 457–478). Mahwah, NJ: Erlbaum.

GRAHAM, S., HARRIS, K. R., & SANTANGELO, T. (2015). Research-based writing practices and the Common Core: Meta-analysis and meta-synthesis. *Elementary School Journal, 115*, 498–522.

GRAHAM, S., & HEBERT, M. (2011). Writingto-read: A meta-analysis of the impact of writing and writing instruction on reading. *Harvard Educational Review*, *81*, 710–744.

HALLIDAY, M. A. K., & MARTIN, J. R. (EDS.). (1993). Writing science: Literacy and discursive power. Pittsburgh, PA: University of Pittsburgh Press.

HERRINGTON, A., & CURTIS, M. (2000). Persons in process: Four stories of writing and personal

development in college. Urbana, IL: NCTE.

KNAPP, K., PERRIN, D., & VERSPOOR, M. (SERIES EDS.), MANCHÓN, R. M., & MATSUDA, P. K. (VOL. EDS.). (2016). *Handbooks of Applied Linguistics: Vol. 11. Handbook of second and foreign language writing*. Berlin: De Gruyter Mouton.

Langer, J. A. (1986). *Children reading and writing: Structures and strategies*. Norwood, NJ: Ablex.

LEKI, I., CUMMING, A., & SIIVA, T. (2008). *A* synthesis of research on second language writing in English. New York: Routledge.

MacArthur, C. A., Graham, S., & Fitzgerald, J. (Eds.). (2015). *Handbook of research on writing* (2nd ed.). New York: Guilford Press.

MOFFETT, J. (1968). *Teaching the universe of discourse*. Boston: Houghton Mifflin.

RIJLAARSDAM, G., VAN DEN BERGH, H., COUZIJN, M., JANSSEN, T., BRAAKSMA, M., TILLEMA, M., VAN STEENDAM, E., & RAEDTS, M. (2012). Writing. In K. R. Harris, S. Graham, & T. Urdan (Eds.), *APA educational psychology handbook* (Vol. 3, pp. 189–228). Washington. DC: APA Press.

Rowe, D. W., & WILSON, S. (2015). The development of a descriptive measure of early childhood writing: Results from the Write Start! Writing Assessment. *Journal of Literacy Research*, *47*, 245–292.

SCHLEPPEGRELL, M. J. (2001). Linguistic features of the language of schooling. *Linguistics and Education*, *12*, 431–459.

SCHLEPPEGRELL, M. J. (2007). The meaning in grammar. *Research in the Teaching of English*, 42, 121–128.

SMAGORINSKY, P. (ED.). (2006). Research on composition: Multiple perspectives on two decades of change. New York: Teachers College Press.

SPINUZZI, C. (2015). All edge: Inside the new workplace networks. Chicago: University of Chicago Press.

STERNGLASS, M. (1997). *Time to know them: A longitudinal study of writing and learning at the college level.* Mahwah, NJ: Erlbaum.

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