

A Transdisciplinary Framework for SLA: Essential Understandings for L2 Researchers and Teachers

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ABSTRACT

The transdisciplinary framework, initially proposed by the Douglas Fir Group (2016) and elaborated upon in Essentials of SLA for L2 Teachers (Hall, 2019), is new intellectual structure for understanding the many dimensions of learning additional languages¹. In this paper, I first overview the framework, and then lay out eight fundamental themes on language and learning that derive from the framework and offer action possibilities for research. Finally, I offer six implications arising from the themes for L2 teaching.

Keywords: transdisciplinary framework; SLA; L2 learning; L2 teaching

OVERVIEW OF THE FRAMEWORK

The Douglas Fir Group (2016; henceforth DFG) comprises 15 scholars each of whom is intellectually rooted in a particular approach to SLA (See Figure 1). The approaches include the biocultural perspective, complexity and dynamic systems theory, conversation analysis, language socialization, social identity theory, the sociocognitive approach, sociocultural theory, systemic functional linguistics, usage-based approaches and variationist sociolinguistics. The proposal of the framework was fueled by a recognition of three major influences on modern day social life: globalization, technologization and large-scale migration. Together, these forces have given rise to communities that are increasingly more linguistically, socially and culturally diverse; to social activities and forms of meaning-making in these activities that are more diverse, more multimodal, multilingual, dynamic and open-ended and to individuals with multiple, intersecting and sometimes conflicting social identities that are marked by varying degrees of access to and options for participating in their activities (Douglas Fir Group 2016).

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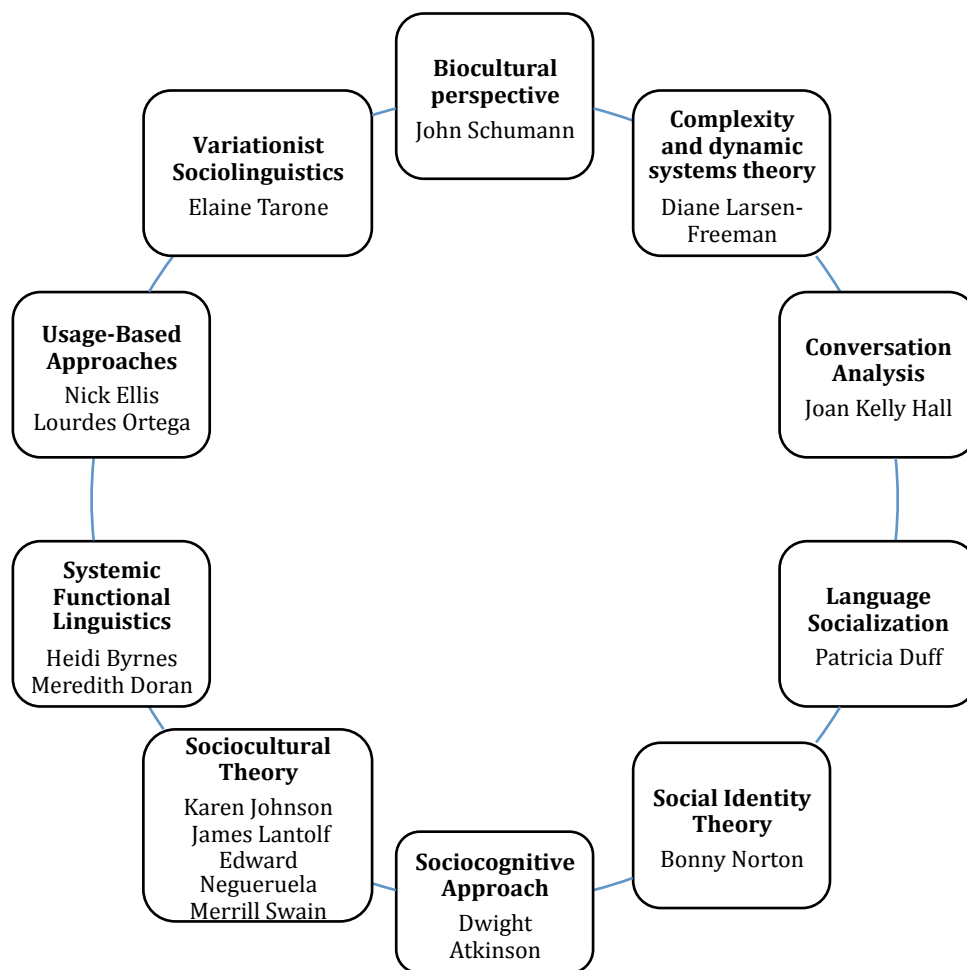


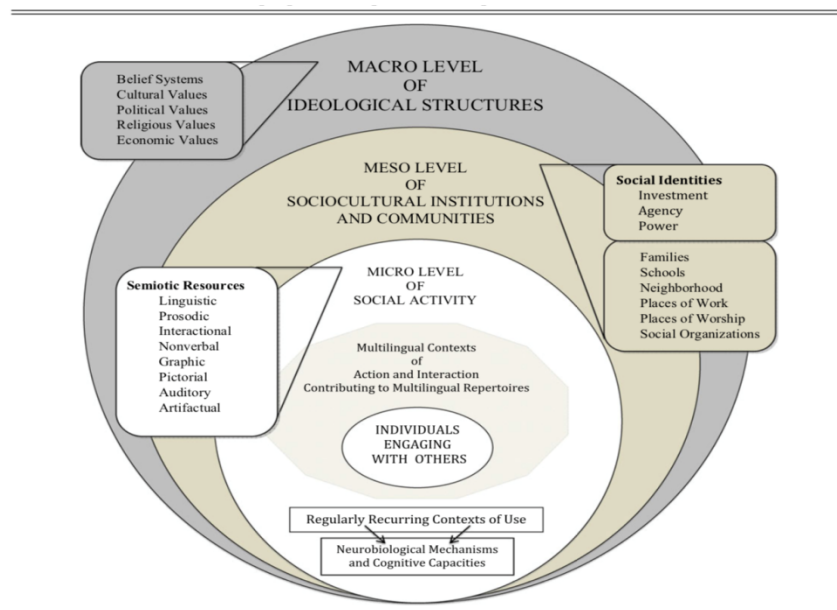
FIGURE 1. Approaches to SLA comprising the transdisciplinary framework

The DFG (2016) argued that the field of SLA needed alternative or more expanded research agendas and innovative pedagogies that are responsive to the challenges of L2 learning arising from contemporary conditions. The group further agreed that staying within disciplinary boundaries to address concerns restricts the research questions that are asked, the methods that are used to address the questions, and ultimately what can be seen and understood. Crossing disciplinary boundaries to engage with other perspectives can broaden frames of reference, however, the usefulness of such bridge building can be limited in that the gaps over which the bridges span are still there.

Having debated the possibilities and challenges of forming alliances across the many approaches to SLA, the group came to appreciate the power of transdisciplinarity. A transdisciplinary approach is problem-oriented and seeks to transcend the boundaries of disciplines and generate understanding by unifying the many layers of knowledge about L2 learning and deriving coherent patterns and configurations of findings across domains, across time periods and across different levels of details. As importantly, it seeks to address issues and problems in socially useful and participant relevant ways.

The DFG (2016) created the diagram in Figure 2 to represent the transdisciplinary perspective on SLA. As can be seen, three mutually dependent levels of social activity are distinguished. It is on the micro-level of social activity where L2 learning begins. At this level, individuals recruit their neurological mechanisms and cognitive and emotional capacities as they engage with others in specific contexts of interaction. The meso level of social activity is concerned with the institutions and communities in which L2 learners

participate, such as the family, school, neighborhood, places of work and of worship, social clubs, political parties, online forums of various kinds, and so on. It is also concerned with learners' social identities that are formed within their institutions and communities, and the particular types of social experiences their identities make possible. The macro level is concerned with the ideological structures about language and learning that influence institutional expectations and the ways that individuals and groups view their worlds and act within them. While each level has its distinctive characteristics, no level exists on its own; all are considered essential to understanding SLA.



(Douglas Fir Group 2016, p. 25)

FIGURE 2. The multifaceted nature of language learning and teaching

EIGHT THEMES ON THE NATURE OF LANGUAGE AND LEARNING

From this framework, eight themes about the nature of language and learning can be derived (Hall, 2019). Two themes are about language and six are about learning.

Theme 1: L2 knowledge is complex and dynamic

Addressed here is the composition of language knowledge. In contrast to a view of language as a fixed system of abstract structures, research from fields such as child language development (e.g. Tomasello 2003 & 2006), neurolinguistics (e.g., Lee et al. 2009, Schumann 2010), and several branches of cognitive linguistics (e.g., Bowerman & Levinson 2001, Bybee 2006, Bybee & Hopper 2001) reveals language to be a “massive collection of heterogeneous *constructions*, each with affinities to different contexts and in constant structural adaptation to usage” (Bybee & Hopper 2001, p. 3, emphasis in the original). The constructions comprising language are fundamentally functional; they are developed and used as means for taking action.

Constructions are not special units, distinguishable from what we conventionally recognize as grammar. Rather, constructions include all linguistic phenomena, from very small conventional units such as morphemes, to phrases and clauses, along with their learned functions. They are represented in our minds as “pragmatically-driven, networked collections

that are learned via a complex adaptive system” (Hall 2019, p. 25, Five Graces Group 2009, Larsen-Freeman & Cameron 2008). Pragmatically driven means that the constructions comprising our knowledge are experience based, developing as a consequence of the myriad ways we organize, experience, and interpret our social worlds (Goldberg 1995, Halliday 1978, Hymes 1972). They also arise from continual interaction of internal cognitive-emotional capacities such as attention, perception, memory and motivation, of sensory systems such as the auditory and visual as well as of domain-general cognitive processes such as categorization, sequential processing, and problem solving (Lee et al. 2009, MacWhinney 2015, The Five Graces Group 2009, Ellis & Larsen-Freeman 2009). This is the case for knowledge of all languages, in all kinds of contexts. This understanding of language knowledge is referred to as usage-based.

Theme 2: L2 knowledge is a repertoire of diverse semiotic resources

Addressed in this theme is the understanding of L2 knowledge as more than just linguistic resources. In fact, it comprises a wide range of semiotic resources for making meaning including nonverbal means such as facial expressions, eye gaze, gesture, body positionings and movement. Additional resources include graphic and pictorial modes such as diagrams and maps, and artifactual modes such as objects, writing implements and electronic devices.

All of our semiotic resources have *meaning potentials*. Meaning potentials are conventionalized meanings that develop from their uses and so represent the ways that groups and communities in the past have used them to accomplish particular goals. The meaning potentials are considered *affordances* in that use, they offer particular visions of the world, that is, different possibilities for action and interpretation (Byrnes 2006, Hall 2011, Jewitt 2008).

For example, consider a greeting between two English speaking professionals, one a man and the other a woman. There is an array of conventional linguistic resources that they can choose for taking such actions, including ‘hi’, ‘hello, how are you’, ‘good day’, ‘hey, babe’, ‘sup’, ‘yo’, and ‘what it be’, among many others. Each of these resources has a history of meaning that calls to mind particular contexts of use by particular individuals with particular communicative goals. Their use affords, i.e., makes possible, particular meanings and interpretations of experiences. The specific greeting the two professionals choose to use will construe their experience differently, from very informal to very formal and their relationship from close, perhaps even intimate friends, to neighbors, or to colleagues.

As learners’ life experiences change, so do the resources comprising their repertoires. The greater the diversity of experiences they have, linguistically and otherwise, the more diverse their repertoires are.

Theme 3: L2 learning is situated, and attentionally and socially gated

That L2 learning is situated, and attentionally and socially gated means that language learning is driven by the human need to communicate and occurs as a matter of making meaning with others in the social contexts of daily life. The scope of these contexts is wide-ranging and includes informal contexts such as gatherings with friends and family and more formal contexts such as educational classrooms, and professional and workplace settings. The activities that form part of these contexts also range from very informal to formal. Informal activities include, for example, interacting face-to-face or via social media with friends and family. More formal activities include participating in classroom instructional interactions, engaging in professional meetings and other proceedings.

Two key aspects of social experiences that contribute to the development of individual language knowledge at the micro level of social activity are, first, the recurring

nature of the experiences, and second, the distribution and frequency with which specific constructions are encountered in the experiences (Boyd & Goldberg, 2009; Bybee, 2003). The more routine learners' social experiences are and the more frequent, predictable and stable the uses of particular constructions are in the experiences, the more likely they will become part of learners' repertoires. All else being equal, the more wide-ranging, complex, and emotionally rewarding the contexts of interaction become over time and the more enduring individuals' participation is in them, the more complex and enduring their repertoires will be (Hall, 2019).

Theme 4: L2 learning is mediated and embodied

This means that learners' cognitive processes are supported by cues used by others, typically more experienced participants, that indicate or call attention to particular constructions and assist L2 learners in noticing and remembering them (Ellis & Larsen-Freeman 2006, Tomasello 2003 & 2008). The cues can take many verbal and nonverbal forms. They can be for example, repetitions, sound changes as one speaks, eye gazes, gestures, and so on. Emotion also plays an important role in cueing learners' attention to key aspects of their social contexts. Cues that are emotionally charged are more attention-getting than neutral cues, while negatively charged cues can hinder or block attention to them.

Another way to refer to the action of using cues to draw learners' attention to aspects of their contexts of interaction is *mediation*. A key concept of Vygotsky's (1981 & 1989) theory of development, mediation takes place through the use of various semiotic resources as L2 learners move through, respond to, and make sense of their social worlds. The process by which learning is mediated in learners' varied contexts is referred to as *language socialization* (Ochs 1988, Ochs & Schieffelin 2017).

A great deal of research on L1 socialization has revealed how children's language learning is intimately tied to the processes of being socialized into their families and communities. In the process, they learn to connect the semiotic resources used in their social activities to their indexical meanings, and to use the resources to recreate their contexts of use.

L2 learning is based on the same principles as L1 socialization. However, research has also shown that the processes and outcomes are much more complicated for adolescents and adults as they come to their L2 contexts of learning having already been socialized into wide-ranging activities as part of their upbringing in their first language(s) social groups and institutions (Duff 2007 & 2011). These experiences influence how learners' take up L2 socialization processes.

Theme 5: L2 learning is mediated by learners' social identities

This theme is concerned with the variable role that learners' identities play in L2 learning. One facet of learners' identities is defined by macro-level demographic categories that are linked to the social groups into which they are born. These categories include social class, gender, race, ethnicity, nationality, and so on. These have been referred to as *transportable identities* as, for the most part, they stay with learners as they move across situations (Zimmerman 1998).

A second dimension of social identities is defined by the roles and role relationships that are ascribed to learners through their involvement in their social institutions, such as school, church, family, and the workplace. These institutions shape the kinds of social groups to which learners have access and to the role-relationships they can establish with others. For example, in schools, they take on roles such as students, teachers, or members of the administrative staff and in these roles, they assume particular relationships with others. Likewise, in the workplace, learners assume roles as supervisors, managers, or colleagues

and interact with others in workplace contexts through these roles. These have been referred to as *situated identities* (Zimmerman 1998) and *role-relational identities* (Gee 2017).

A third component of learners' social identities is defined by the activities in which they are involved. This component is referred to as activity-based identities (Gee 2017). These identities are wide ranging and can include, for example, birders, carpenters, writers, gardeners, sports fans and so on. The expansion of digital technologies and social networking sites has created new transnational, online social spaces, which have become increasingly important arenas for the development and display of multiple activity-based identities, such as bloggers, gamers, web designers, fanfiction writers and readers. These spaces and identities afford L2 learners multiple and varied opportunities to connect with others who share these interests.

Another aspect of L2 learners' social identities that shapes their learning opportunities are their *imagined identities* as part of memberships in *imagined communities* (Kanno & Norton 2003, Norton & Toohey 2011). Many L2 learners desire to become members of imagined communities because they perceive that the communities can offer them opportunities to increase their access to social, educational and financial resources. Their imagined identities in their imagined communities can push them to seek out and pursue L2 learning opportunities that might not otherwise be available to them.

All identities are significant to the development of learners' semiotic repertoires in that they mediate in important ways learners' access to their L2 learning opportunities. For example, in the United States and in many other parts of the world, depending on, for example, their ethnicity, gender, and/or social class, some L2 learners may find that their learning opportunities are limited or constrained by the ways in which they are positioned by others, while other L2 learners may find their opportunities to be abundant and unbounded (Collins 2014).

Theme 6: L2 learning is mediated by motivation, investment and agency

One of the most researched constructs in SLA, motivation has been considered a key variable in explaining success in L2 learning. Early research operationalized motivation as a static individual trait, intrinsic to the learner. As understandings of language and learning have changed, so have understandings of motivation. It is now understood to be a dynamic construct that is constantly evolving from the interrelations between individuals and their social contexts (Ushioda & Dörnyei 2009, Al-Hoorie 2017). A growing body of research shows that there are many types of motivations for learning another language in addition to forming relationships with speakers of the L2 such as enjoyment with the learning environment, and educational and economic aspirations (e.g., Dobs 2016, Richards 2006).

A companion concept is *investment*. The term refers to "the socially and historically constructed relationship of learners to the target language and their sometimes ambivalent desire to learn and practice it" (Peirce, 1995, p. 17). Research shows that learners who invest in learning another language may do so with the aspiration that they will acquire a wider range of symbolic and material resources, which will in turn increase the value of their cultural capital and social power.

Agency is the socioculturally mediated capacity to use resources to take action (Ahearn 2001, Bucholtz & Hall 2005). It varies across contexts in that the ways that learners can use resources to make meaning and give shape to their relationships with others are both afforded and constrained by specific historical, social and contextual, circumstances of local contexts of action. For example, in many formal learning settings, there is more authority ascribed to teachers' identities than to students' identities. Consequently, teachers have greater power and more agency to determine the types of activities and resources to which

learners will be given access and the opportunities they will have to engage in the activities and use their resources.

As L2 learners' access to opportunities varies so does their L2 learning. Those who are afforded more opportunities are more likely to be more positioned as 'good' learners. Others who are afforded fewer opportunities are more likely to be positioned as 'poor' or 'resistant' learners. As learners' motivation, investment and degree of agency vary, so do their trajectories of experiences in and outside of the classroom, and, ultimately, their academic outcomes and semiotic repertoires (Norton & Toohey 2011).

Theme 7: L2 learning is mediated by literacy and instructional practices

Literacy here is understood as more than just as a cognitive phenomenon, something that happens inside one's head. It is social phenomenon as well - it is set of social practices, of *literacies*, that are tied to social, institutional and cultural contexts (Gee 2010, Lankshear & Knobel 2011). Fueled by the proliferation of digital technologies such as computers, video games, and the Internet, the shapes and purposes of literacy practices have expanded well beyond conventional print literacies. We now have literacies such as texting, tweeting, facebooking, video gaming, producing web sites and podcasting, to name just a few. The ways in which learners make meaning with these new technologies have also expanded. They are increasingly multimodal, with graphic, pictorial, audio, and spatial patterns of meaning combined within or even replacing traditional written texts (Lankshear & Knobel 2011).

Scholars interested in L2 learning in schools have used the theoretical framework and methods of language socialization as a springboard for research on the language and literacy practices found in L2 classrooms and their consequences for learner development (e.g., Huang 2004, Toohey, Day & Manyak 2007). This research draws attention to the important role that the language and literacy practices of educational settings play in shaping L2 learners' academic success.

In terms of instructional approaches, findings show that while communicative approaches may offer ample opportunity for language use, they are inadequate in promoting L2 learning. This is because they do not intentionally call learners' attention to L2 constructions that learners may not perceive on their own (Schmidt 1990, Ellis 2002 & 2008).

For a number of years, L2 educators have advocated task-based approaches as the ideal way to bring learners' attention to particular constructions within purposeful communication. In fact, there is abundant research showing that instructional practices that combine explicit instruction that draws learners' attention to L2 constructions that they may not notice on their own with meaningful meaning-making activities are powerful learning environments (Bowles & Adams 2015, Ellis 2009, Gass, Mackey & Ross-Feldman, 2005).

One approach that has garnered a great deal of attention for bringing together meaningful tasks and explicit instruction is the Task-Based Language Teaching (TBLT) approach (Long, 2014). What distinguishes TBLT from other task-based approaches is the fact that curricular goals, instructional activities and assessments are organized around real-world tasks that L2 learners designate as those that they need to or want to be able to do in the L2. Other promising instructional approaches include concept-based instruction (Williams, Abraham & Negueruela-Azarola 2013), the multiliteracies pedagogy (Cope & Kalantzis 2015), and content-based and translingual approaches (Byrnes & Machon 2014, García & Li 2014). Like the other factors involved in shaping L2 learning, the degrees of variation in the types of literacy and instructional practices into which learners are socialized will lead to variations in the development of learners' L2 repertoires.

Theme 8: L2 learning is mediated by language ideologies

We all hold beliefs about language. We may think that one language sounds more refined than others, or that one language is more difficult to learn than another. These beliefs constitute language ideologies. While, on one level they may appear to be commonsense, unbiased views of language, in fact, they are rooted in and responsive to the interests of social groups with high levels of power and prestige (Irvine & Gal 2000, Milroy 2001). Three language ideologies are of particular relevance to L2 learning: the standard language ideology, the ideology of monolingualism and the ideology of the monolingual native speaker. The standard language ideology is the belief that one variety of a language is superior to other coexisting ones (Makoni & Pennycook 2007). Despite the fact that most of the world's inhabitants are bilingual or multilingual, the ideology of monolingualism asserts monolingualism as the natural human condition, and bilingualism and multilingualism as deviations (Wiley 2014).

Alongside the belief in monolingualism is the ideology of the monolingual native speaker (Ortega 2013). The term 'native speaker' refers to a language user who is a member of a monolingual community of standard language users who possess an ideal state of linguistic competence. This ideology has had a particularly negative influence on the research agendas of SLA research around the world. Despite substantial evidence on the diverse and adaptable nature of individual language knowledge, much SLA research continues to rely on "the monolingual native speaker's idealized competence as a benchmark for defining and evaluating L2 learning" (Douglas Fir Group 2016, p. 35). The same ideology has also had a negative effect on language education programs as they also continue to rely on the construct of a monolingual native speaker in designing curriculum, instruction and assessment tools (ibid.). In fact, the *native speaker fallacy* (Phillipson 1992), which asserts that the ideal L2 teacher is a native speaker of the target language, remains a prominent component of language teacher preparation programs and hiring practices.

These ideologies are especially significant to L2 learning in that they mediate decision making in educational institutions in significant ways by shaping the types of language education approaches that are offered, the languages of instruction and even the terms used to refer to L2 learners. They also influence people's decisions to study additional languages, their choices for which languages they want to learn and their investments in and motivations for seeking out opportunities to use the target languages.

Together, these eight themes on the nature of language and learning seek to promote innovative research agendas that further understandings of the conditions that both enable and constrain opportunities for L2 learning across all three levels of social action. They also give rise to 6 significant implications for L2 teaching.

IMPLICATIONS FOR L2 TEACHING

First, understanding language knowledge as repertoires of complex semiotic resources changes how we understand the objects of L2 learning. What we teach is not a set of decontextualized, fixed grammar rules. Rather, the objects of L2 learning are fundamentally variable culturally meaningful semiotic resources of various shapes and sizes and that include far more than linguistic constructions (Hall 2019). Rather than constraining learners' choices for meaning making, through our teaching we need to expand opportunities for learners to adopt new resources and use them to bring their social worlds into existence and transform them for their own purposes.

Second, understanding L2 learning as situated, and attentionally and socially gated makes apparent the interdependent relationship between teaching and learning. The contexts

of action we create in our classrooms have a significant effect on how and what learners learn. The environments we create in our classrooms do not just simply awaken what is already in learners, facilitating some kind of fixed, stable course of development. Rather, they give fundamental shape to the paths that learning takes and the compositions of learners' repertoires. Simply, What and how we teach have a significant impact on what and how learners learn.

Third, understanding the interdependent relationship between teaching and learning makes clear the significance of our instructional environments to learners' motivation for and investment in learning the L2. Learning environments must be structured in ways that allow students to examine their experiences as L2 learners and users, in and outside of the classroom, and to identify opportunities and possible roadblocks to realizing their visions. More generally, L2 teaching practices must engender an environment that is supportive, safe, motivating and meaningful to learners' real and imagined lives.

A fourth implication has to do with learners' social identities. L2 learners typically enter our classrooms with institutionally ascribed learner roles such as 'good' or 'struggling', 'diligent' or 'indifferent', as defined by institutional standards. If we take into consideration only these identities, we render invisible the fact that students participate in our learning environments from multiple and complex identity positions.

Our teaching practices cannot ignore these identities but, instead, must treat them as primary resources. In our practices, we must provide learners with a range of diverse opportunities and positions from which to engage in learning the L2. Our teaching practices must not only help learners recognize how their varied identities mediate their learning. They must also provide them with strategies and practices for drawing on and transforming their identities in ways that positively impact their learning.

Digital technologies and social networking sites will continue to expand the possibilities for learner identity construction. While we do not have to be experts in these technologies and virtual social worlds, we must be aware of their affordances and able to design contexts of learning that facilitate our learners' participation in appropriate social networking sites.

Fifth, understanding that L2 learning is mediated by literacy and instructional practices makes apparent that L2 classrooms are significant socializing contexts, L2 teachers are significant agents of socialization, and the resources we use to teach are significant mediational means (Hall, 2019). In addition to language, these means include written and digital materials like textbooks and videos, various types of instructional activities, and even the spatial arrangements of our classrooms. The decisions we make in terms of what to teach and how to teach it, and what counts as student participation and demonstrations of learning are consequential to learners' developing L2 repertoires.

A last implication has to do with our beliefs about language and learning as they mediate every decision we make as L2 teachers regarding curricular content, instructional resources and activities and assessment measures (Hall, 2019). L2 teachers also play an active role in (re)creating language policies in our professional contexts. A significant way this is done is through the words we use to refer to L2 learners in our interactions with other professionals. Labels and terms such as *nonnative* and *deficient* mark L2 learners as incomplete, lacking something.

One way to counteract these ideologies is to create a 'personal' language policy to be mindful of the words we use and to encourage others in our professional contexts to do the same. Actions we can take include omitting words such as *deficient* and *remedial* in descriptions of courses or programs and trading out *nonnative* for *multilingual* in our descriptions of our learners. Providing explanations for our word choices to our students,

colleagues and administrators and to parents and other stakeholders can help to create more informed understandings of the multilingual worlds of our L2 learners.

CONCLUSION

To conclude, the framework of SLA that I have summarized here calls for innovative SLA research agendas that can best be addressed by collaborations undertaken from multiple perspectives and in a true spirit of transdisciplinarity. It also calls for reimagined learning environments and designs of pedagogical opportunities where our students' semiotic resources are explored and drawn on, that position L2 learners as creative and competent, where learners are able to imagine, transform or take on new identities; and more generally that seek to improve the material and social conditions of L2 learners' social worlds.

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