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Maximizing Learning of L2 Adult Learners in Higher Education

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The Challenge

With a third of the students enrolled in higher education being above the age of 25, second language programs should better integrate learning components that consider their specific challenges and strengths. How could current college classroom practices be adapted to better support the second language development of this group of students?

Abstract

In the fall of 2019, the age of 33.5% of students enrolled in US institutions of higher education was 25 and above. However, research in the fields of adult learning, developmental, cognitive, and socio-cognitive theories suggests that this group of students presents L2 instructors with a set of strengths and challenges. One specific concern is that empirical studies have indicated a steady decline in L2 success along with the age of the adult learners (Hakuta et al., 2003). The aim of this article is to examine how teaching practices may be derived from research findings, with a view to better supporting the development of L2 communicative competence among adult learners. As a result, guidelines for L2 instructional practices are proposed in alignment with the macro-strategies theoretical framework suggested by Kumaravadivelu (2006). In doing so, this study also recognizes the central role played by teachers, as they are uniquely positioned to identify challenges and strengths facing adult learners and adapt their instruction accordingly.

A commonly-held view is that higher educational institutions mostly cater to students who have freshly graduated from high school, and that these students seek to acquire skills that they plan to apply subsequently in their professional life.

In reality, over the past decades the number of postsecondary US students age 25 and above has been remarkably high and remains so in spite of an overall decrease in general enrollment (Figure 1).

Figure 1

Number of Students, by Age Group, Enrolled in US Postsecondary Institutions in the Fall (National Center for Education Statistics, 2003-2019)
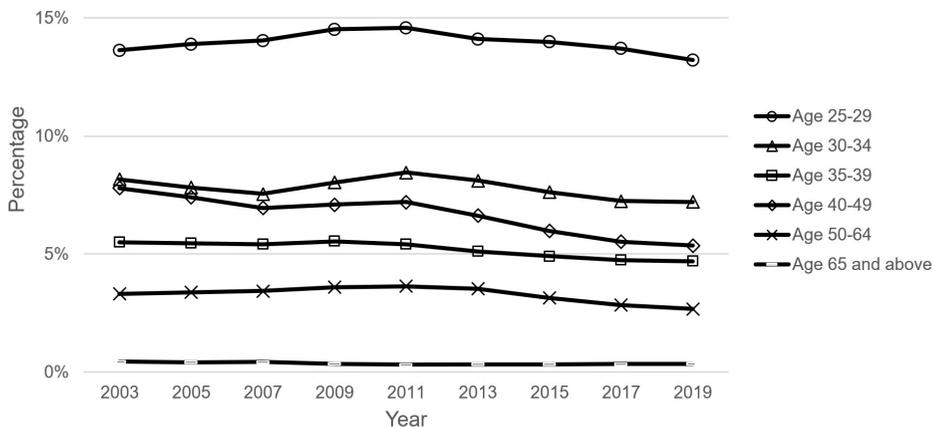
In view of older adult students' high participation in higher education, one must consider if commonly used instructional strategies and curricula are adequate for their second language (L2) development. In general, the notion that this portion of the student body presents educators with unique demands was well summed up by Kegan (1994):

> … adults go to school. And when they do … They are asked to leave the mental homes they have furnished and made familiar. Whether those who design their schools and teach in their classrooms fully understand it or not, what they are asking these adult students to   do is to go out of their minds (Kegan, 1994, p. 272).

As it happens, the learning of a second language in adulthood also brings its own challenges. Indeed, empirical data has shown that adult learners find it increasingly more difficult to learn an L2 as they grow older (Hakuta et al., 2003). The goal of this paper is thus to review existing learning theories and research findings in order to propose high-impact teaching practices for L2 adult learners. To this end, this article takes the following steps:

1. Review the learning profile of adult students in terms of adult learning, cognitive development, cognitive aging and socio-cognitive theories.
2. Review second language acquisition (SLA) theories, as they contribute to explaining the observed decline in L2 success with age and suggest techniques that mitigate these effects.

3. Make recommendations for the implementation of high-impact teaching strategies for adult language learners.

Learning Profile of the Adult College Learner

It has been recognized for many years that the learning characteristics of adult students gradually changes over the years. Various educational theories may account for these trends.

Adult Learning Theory

Insights may first be gained from adult learning theory, which studies processes and practices by which adults learn in ways that are fundamentally different from children (Knowles et al., 2015). While these principles are proposed in contrast to the teaching of children (pedagogy), it is assumed within this framework that they focus on trends that become more prominent as students grow older, thus making its findings relevant to this discussion. A way to better understand the contributions of this field is to divide it into the following key concepts proposed by Merriam and Brockett, 2007:

- **Andragogy,** as defined by Knowles (1980, 1984), relies on several tenets (Merriam & Bierema, 2014), namely: as students mature, they move from dependency to self-direction; adults grow a reservoir of experiences from which they can draw; adults show a readiness to closely relate their personal development with their social role; adults tend to focus more on problems rather than subjects in their learning; adult learning activities are usually internally motivated; and adults feel the need to understand the reasons for their learning.
- **Self-directed learning (SDL)** is an approach that recognizes that adult learners tend to adopt a "process in which [they] take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing learning strategies, and evaluating learning outcomes" (Knowles, 1975, p.18).
- **Transformative learning** is a movement based on adult education, which is defined as … the process by which we transform problematic frames of reference (mindsets, habits of mind, meaning perspectives) sets of assumption and expectation to make them more inclusive, discriminating, open, reflective and emotionally able to change (Mezirow, 2009, p. 22).
- **Adult development** is a group of loosely connected theories that consider "physical changes, cognitive or intellectual development and, personality and lifespan role development" (Knowles et al., 2015, p. 86).

Within the framework of this study, the concept of SDL appears especially fruitful in defining how a learning environment may be adapted to match the strengths of L2 college students above the age of 25. There are several reasons to support this viewpoint. First, while andragogy makes the claim that adults are more inclined to learn independently, this assumption is not based on empirical results. In contrast,

SDL research relies on studies that demonstrate and exemplify its links with learning success. For example, a meta-analysis study conducted by Boyer et al. (2014) concluded that "self-directed learning can also lead to improved performance" and "implementing SDL may help students improve their self-efficacy" (2014, p. 28). As another example, Yarahmadzehi and Bazleh (2012) carried out a quasi-experimental design study in an ESL classroom, which pointed to the potential benefits of learning the class material autonomously (2012).

Secondly, SDL has been used by many L2 researchers, who recognized that this concept is well-suited to their field. In addition to the two studies mentioned in the previous paragraph, Gan (2004) used the notion of self-directed learning to describe positive attitudes in EFL, and Hawkins (2018) submitted that SDL was an essential component to be integrated in an English learning program taught at the college level.

Finally, the promotion of SDL skills in language learning is aligned with current pedagogical guidelines, as formulated in the *21st Century Skills Map*, published by the Partnership for 21st Century Learning (P21) (2011), which states that "students as life-long learners are motivated to set their own goals and reflect on their progress as they grow and improve their linguistic and cultural competence" (Partnership for 21st Century Skills, 2011, p. 15).

Based on the work of previous scholars, Grow (1991) developed a model for self-directed learning that is especially well-suited for a formal education setting and is referred to as Staged Self-Directed Learning (SSDL). A central aspect of this approach is that it offers the view of a dynamic relationship between teacher and students that reflect different levels of progress. This gradation was described in terms of four specific stages (Grow, 1991). In Stage One, the learning process is centered around the teacher, who acts as an authority on the subject matter: "Many students at this stage expect discipline and direction" (Grow, 1991, p. 130). In Stage Two, learners display a natural interest, which is reinforced by the enthusiasm and expertise of the teacher in the subject matter: "Learners at this stage go along if they understand why and the instructor provides direction and help" (Grow, 1991, p. 131). In Stage Three, learners are actively involved, while the teacher becomes more of a facilitator: "Teachers and student share in decision-making, with students taking an increasing role" (Grow 1991, p. 133); and in Stage Four, learners pursue their goals independently while teachers act as their mentors: "Stage 4 learners can learn from any kind of teacher, but most Stage 4 learners thrive in an atmosphere of autonomy" (Grow, 1991, p. 134). In sum, as it is recognized that self-direction is an important skill to be capitalized on and fostered among L2 adult students, it is essential for instructors to be cognizant of the stage of self-direction of the students in the classroom in order to "prepare the learner to advance to higher stages" (Grow, 1991, p. 129).

Cognitive Development Theories

Cognitive theories consider a mode of learning that examines how new information is integrated into a learner's preexisting mental network of assumptions and ideas (Horwitz, 2013), which may be described as a framework that provides a wide perspective to explain the impact of age in the pursuit of higher education by adult learners. Such an approach is found in cognitive development theories.

As a pioneer in this field, Piaget identified four stages from birth to the age of twenty (Merriam et al., 2008; Piaget, 1972). A later phase enabling the use of more complex abstract thinking by the age of thirty was subsequently proposed (Knight & Sutton, 2004). Building on this and other works, Kegan (1982) identified levels of conceptualization that are well-suited to differentiate traditional college-age students (order 3—interpersonal) and adult learners (order 4—institutional). Based on this insight, Kegan (1994) suggested that the latter stage of development is a condition of success in the pursuit of a higher education, seeking "the cognitive sophistication to construct complex systems, the structure of the fourth order" (Kegan, 1994, p. 286). Accordingly, the higher likelihood for the adult learner to have reached this phase may be viewed as an asset that may support them in their post-secondary studies. As with SSDL, the teacher plays a key role in identifying and accounting for the level of development reached by the adult learners.

Cognitive Aging Theories

Another insightful perspective stemming from the field of cognitive learning is derived from investigations on the impact of aging on cognitive functions. This field of inquiry emerged with the proposal of the dual concepts of crystallized and fluid intelligences (Cattell, 1963), where the former "reflects consolidated knowledge gained by education, access to cultural information and experience" and the latter one refers to "the capability to solve problems for which previous experience, learned knowledge and skills are of little use" (Hong et al., 2016, p. 76). Critically, research has shown that fluid intelligence decreases with age, while crystallized intelligence tends to increase or vary little over time (Horn & Cattell, 1967; Schaie, 2005). A range of empirical studies have demonstrated that several essential cognitive functions decline with age. For instance, in a study involving 301 participants, Park et al. (1996) found that speed, working memory, free recall, cued recall and spatial memory all correlated negatively with age. Critically, the onsets of such cognitive losses coincided with the typical transition period into an adult learner status. Indeed, as reported in a meta-analysis conducted by Salthouse (2004), reasoning, spatial visualization, episodic memory and perceptual speed all dropped significantly between the ages of 20 and 30. Within the framework of a longitudinal study including 1500 participants, Cansino et al. (2013) observed a similar trend among students in their twenties and thirties engaged in various memory tasks A useful categorization within this framework is the distinction that can be made between declarative and procedural learning. The former category refers to the acquisition of factual information (i.e., the "what"), while the latter relates to the learning of routines and behaviors (i.e. the "how"). As pointed out by Cox (2013), research has found that declarative learning is linked to the cognitive decline experienced by older learners, while procedural processes are more immune against this influence, so that the impact of aging on the learning accomplishment depends on the nature of the task at hand (Cox, 2013), thus reaffirming the abovementioned ideas about fluid and crystallized intelligence. In sum, studies have demonstrated a general decline of important cognitive learning functions as adult learners grow older.

Socio-Cognitive Theories

Yet another view explores the social context, and how students interact with their environment (Merriam et al., 2008). These parameters have been studied within the framework of social cognitive theories, which posit that individuals are not spurred by internal and/or external learner factors, but instead that their learning path is derived from reciprocal experiences encountered at the personal and collective levels (Bandura, 1976). Accordingly, it leads to the ability to comprehend and assimilate a large body of knowledge by observing how it is being used rather than laboriously reconstructing it step by step (Bandura, 1976). These ideas have been further articulated into teaching practices, such as implicit learning opportunities and collaborative-interactional approaches, which have been found to be beneficial to young and old learners alike (Howard & Howard, 2013; Laal & Ghodi, 2012; Lindberg, 2003; Wismath & Orr, 2015). Yet another critical aspect of the learner's social environment linked to age may be inferred from Cross' work (1981) on adult learning, which further divides learner characteristics into personal and situational categories. The latter one is especially relevant to this discussion, in that it is associated with a social reality that can have a significant impact on the academic performance of adult learners. Such situational barriers may include: cost of living (such as tuition, books, childcare and transportation), available time, home / job responsibilities, and family support (Osam et al., 2017). Thus, adult learners face the challenge of securing the benefits of a socially stimulating learning environment while coping with situational barriers. Consequently, the following guidelines could help mitigate these effects: first, flexible schedules and deadlines should be afforded; second, various delivery modes of instruction (such as synchronous and asynchronous) should be made available; and third, alternate opportunities for social interaction and collaboration should be provided (Aud et al., 2012; Dolch & Zawacki-Richter, 2018; Romero et al., 2012; Kara et al., 2019).

SLA Theories for Adult Learning

While learning theories presented in the previous section are generally valid, it is critical to recognize the specific nature of L2 learning and its relationship with aging in the field of second language acquisition (SLA). First, it is important to dispel the misconception that the acquisition of a new language may only occur at an early age. Indeed, while it is widely accepted that the learning of a first language (L1) must be initiated before a critical period that ends around puberty, these views cannot be transposed to the acquisition of an L2. On this topic, Bley-Vroman (1990) formulated an influential Fundamental Difference Hypothesis suggesting that L2 adult learners do not rely on inherent L1 learning abilities, but make use instead of acquired knowledge and problem-solving skills that allow them to make use of specific components of the L1 into the L2. An implication of this hypothesis is that cognitive abilities (and their interaction with the aging process) are central to the learning of an L2, an assumption that is confirmed by studies showing a strong correlation between cognitive abilities and L2 achievement among adult learners (e.g., Sawyer & Ranta, 2001; Serafini & Sanz, 2016). Nevertheless, many studies have shown that an adult's ability to develop proficiency in an L2 gradually

decreases with age (Scott, 1994; Schultz & Elliot, 2000; Hakuta et al. 2003). How may SLA theories account for this trend?

In this regard, an essential contribution in the field of cognitive theories was made by McLaughlin, who considered L2 learning to be "the acquisition of a complex cognitive skill" (1987, p. 113) and viewed it from the perspective of information processing. As an implication, he proposed that several processes were required to enable L2 learners on their path to proficiency, which involve practice, automatization, integration and internal organization of the acquired information (McLaughlin, 1990). Among these categories, automatization, which refers to "the process of making a skill routine through practice" (Hadley, 2001, p. 70), is of special relevance to adult learners, as it relies on their attentional capacity, which is a cognitive ability that is affected steadily with age. As explained by Horwitz (2013):

> At first, learners must pay close attention … as they produce the language, searching their memories for vocabulary words and remembering to use grammatical rules correctly … At this stage, learners' capacity to produce language is limited because the amount of information they must process exceeds their attention capacity (2013, p. 32).

An instructional implication is that L2 material should not be presented to older students in ways that overly tax some of their attentional resources. For instance, studies have shown that older adults do not perform as well as their younger peers with respect to selective attention, which relates to the ability to solely focus on the information relevant to a single task while disregarding other content, and divided attention, which denotes the ability to carry out more than one task or process more than one source of information at once (Hawkins et al., 1992; Zanto & Gazzaley, 2014).

Another interpretation of the automatization of L2 learning refers to the process of implicit learning, which may be defined as "learning without awareness of what is being learned" (DeKeyser, 2003, p. 314). Among such processes, the subset involving incidental learning, i.e., ones that take place without the intent to learn, may be especially helpful to the older L2 learner, as they would give them a way to recognize language structures just by being exposed to them (Ellis & Shintani, 2014). For example, within the framework of a study that trained adult learners in the use of an artificial language under incidental conditions, it was found that an automatic usage of grammatical structures in an L2 was gained by witnessing how they were used, implying that some implicit learning had occurred in the course of the study (Rebuschat & Williams, 2012). In this regard, it is then worthwhile pointing out the lesser role played by attention in this learning mode, as studies suggest that this mode of learning does not rely on the type of focused thought mechanisms that are involved in explicit learning processes (Williams, 2009). It can thus be inferred that implicit learning conditions have the advantage of not putting older students in a position of cognitive overload with respect to their attentional capacity.

Another strand of research related to L2 information processing is concerned with working memory (WM). Generally, WM can be defined as a multicomponent

mental system consisting of central executive, phonological loop, and visuospatial sketchpad elements that "combine(s) the temporary storage and manipulation of information in the service of cognition" (Baddeley & Hitch, 2013, p. 3015). It has been submitted by several researchers that the task of acquiring an L2 is very demanding from a cognitive point of view and is thus highly dependent on WM (Wen, 2015, p. 60). Several studies have also shown significant links between L2 performance and measures of WM, such as phonological memory and working memory capacity (O'Brien et al., 2006; Hummel & French, 2010; Juffs & Harrington, 2011). On the other hand, several investigations also established that there is a significant negative correlation between WM processes and age (Borella et al., 2008; Cansino et al., 2013; Kirasic et al., 1996). The logical implication is that of an unfavorable relationship between L2 learning and aging (Olivares-Cuhat & Ploof, 2017).

Otherwise, a central aspect of SLA theories focuses on the importance of interactions between speakers and listeners in the L2 learning process. Rationales that support the role played by social interactions stem from different research perspectives. From a cognitive point of view, an Interaction Hypothesis was formulated by Long (1983), which stresses that such a communication level is necessary to induce modifications of the language as a way to promote acquisition and achieve mutual comprehension. Another approach emphasizes the sociocultural dimension of L2 learning (Vygotsky, 1978), suggesting that while social interaction facilitates the assimilation of knowledge, the negotiation of meaning is associated with assuming command of and restructuring the cognitive process (Lightbown & Spada, 2006, p. 47). Accordingly, these insights may shed light on difficulties encountered by L2 adult learners in finding a sustaining educational environment. First, they may have reached a higher stage of maturity than their younger peers, leading to a lower willingness to engage in interactions framed in a context they could deem to be below the level of self-directed learning and developmental growth they have already attained. For instance, in an analysis by Schultz and Elliot (2000) on diaries entries of an older L2 learner in a Spanish immersion setting, it is observed that: "it is frustrating, challenging, exhilarating, tiring, rewarding and sometimes discouraging for a relatively articulate adult to have to regress linguistically to an infantile level in terms of topics and style of discussion" (p. 113). Second, a cultural mismatch may be experienced by older participants in an L2 classroom, who may feel that they do not fit in and, as a result, may not seek to participate fully in conversations.

In summary, SLA theories may account for the gradual decline observed in the ability to acquire an L2 as adult learners grow older. They suggest adverse effects in the automatization process, attention capacity, working memory capacity and participation to interactive activities on the older students' development of their communicative ability in the L2. All in all, the insights obtained from SLA theories are generally consistent with the principles of adult, cognitive and socio-cognitive learning presented in the previous section. Next, it is examined how an awareness of these factors may shape instructional practices in the post-secondary L2 classroom.

Current L2 Instructional Practices

Over the years, many methodologies have been applied to the field of L2 instruction, which encompass a spectrum of approaches ranging from non-communicative to collaborative.   Nowadays, a general consensus has emerged among L2 educators to view the development of communicative competence as the primary goal of language instruction (Celce-Murcia, 2014). As suggested in the *21ˢᵗ Century Skills Map* (2011):

> The language classroom in the U.S. has been transformed in the last 20 years to reflect an increasing emphasis on developing students' communicative competence. Unlike the classroom of yesteryear that required students to know a great deal of information about the language but did not have an expectation of language use, today's classroom is about teaching languages so that students use them to communicate with native speakers of the language. (Partnership for 21ˢᵗ Century Skills, 2011, p. 4)

With this goal in mind, a next logical step would be to identify a language teaching method that would best serve this purpose. At this stage, one is faced with a large variety of choices, including (Klee, 2000; Larsen-Freeman & Anderson, 2011; Horwitz, 2013; Duff, 2014):

- **Direct method:** also known as the Berlitz method, which emphasizes listening and speaking abilities, while the teacher relies on the use of various teaching aids (e.g. gestures, props) and the content is solely provided in the target language.
- **Natural approach:** which relies on listening and reading as the main mode to induce the acquisition of the language, as it provides students with a diversity of input of different types.
- **Communicative language teaching (CLT):** which focusses on learning the language for the purpose of communication and applies techniques such as the use of authentic materials, language games and role-plays.
- **Proficiency-oriented instruction:** which complements CLT with explicit content devoted to grammar explanations and error correction.
- **Content-based instruction (CBI):** which is also part of the family of communicative approaches and incorporates the learning of other topics (e.g. geography, history, social studies) into the content of language instruction.
- **Language for specific purposes (LSP):** which is similar to CBI but concentrates on the preparation of language students to meet their specific professional needs.
- **Task-based language teaching (TBLT):** which takes advantage of CBI while centering on the execution of tasks that simulate real life situations involving ongoing communications between peers.

However, it is widely recognized today that no single method is sufficient to address all pedagogical needs that L2 students may encounter under their various circumstances (Celce-Murcia, 2014). As stated by Prabhu (1990, p, 175): "There may be some truth to each method, but only in so far as each method may operate as one or another teacher's sense of plausibility, promoting the most learning that can be promoted by that teacher" (p. 175). Following this lead, Kumaravadivelu

(2006, p. 201) submitted that the teaching profession may be entering a post-method era, which could be defined by three characteristics, namely, i) the recognition that no method may perfectly address the actual situation encountered in the L2 classroom, ii) the belief that teachers ought to be empowered to apply in the classroom their own understanding of how the class should be taught, while using their classroom experience to further shape this understanding, and iii) the reliance on the idea on principled pragmatism, by which teachers may find the resources to adapt their teaching based on an honest assessment of their work and informed instructional decisions (Kumaravadivelu, 1994). On this basis, Kumaravadivelu (2006) proposed a practitioner strategy-based framework relying on a set of ten macro-strategies, which are instructional guidelines that are not specific to any given teaching method:

1. maximize learning opportunities;
2. facilitate negotiated interaction;
3. minimize perceptual mismatches;
4. activate intuitive heuristics;
5. foster language awareness;
6. contextualize linguistic input;
7. integrate language skills;
8. promote learner autonomy;
9. ensure social relevance;
10. raise cultural consciousness.

In sum, the post-method condition seems to provide the best framework to address the challenges of L2 postsecondary classroom encountered by older adult learners.

Inclusive Core Practices for Teachers of L2 Adult Learners

Using Kumaravadivelu's model (2006) and the abovementioned research findings about the profile of the L2 adult learners, this section makes recommendations for the integration of core practices intent on making the L2 classroom more inclusive for adult learners. Accordingly, guidance is provided with a view to supporting and/or capitalizing on the adult students' stage of cognitive development, self-directed learning, cognitive constraints, and socio-cognitive environment.

Stages of Cognitive Development and Self-Directed Learning

With respect to these categories, the guiding principle to be followed by the teacher is to prevent the occurrence of mismatches between the role of the teacher and the developmental stage of the students. Along these lines, Cox (2013) discussed the need to adapt teaching materials to the maturity of the audience:

> Older adults are likely to not feel included in activities that relate to girl/ boyfriend since they may have moved beyond that stage of life … On the other hand, topics that pertain to older adults' lives such as their children and grandchildren may not be relevant to younger adult students (Cox, 2013, p. 103).

Accordingly, it is necessary to match the topics of the lesson and mode of interactions to the cultural and intellectual stage of the learners. As was mentioned by Grow (1991), instructors should also be able to modulate their teaching style in function of the learner's SSDL stage. As described in an example given by Hawkins (2018), a teacher may initiate a lesson with a Stage Three activity, for instance by directing the students to analyze a text by taking advantage of verb tenses to infer meaning. Then, the teacher could revert to a Stage Two lecture-style activity, in which the use of new tenses is explained and subsequently practiced under their close guidance.

Spurred by the feedback from the classroom, the teacher may then switch to Stage Four activities   that could involve independent projects or let the students initiate discussions (Grow, 1991). These practices align well with the following macro-strategies from Kumaravadivelu's concept of the post-method condition (2006): maximize learning opportunities, minimize perceptual mismatches, promote learner autonomy, and ensure social relevance (in that an accurate assessment of the developmental stage of the learners goes hand in hand with an awareness of their social circumstances).

Cognitive Constraints

As demonstrated in many studies, adult learners experience on average a gradual decline of essential cognitive functions as they grow older. As suggested by Hakuta et al. (2003), this process of mental aging could explain this slow but steady degradation in the capacity to acquire proficiency in an L2. Specific effects of aging that interact with the L2 learning process include a weakening of attentional capacity, working memory, processing speed and retrieval processes (Olivares-Cuhat, 2018). From a teaching point of view, the main counter-strategy is to prevent occurrences of cognitive overload for the older adult learners participating in the L2 class. Among such countermeasures, classroom activities could be presented more incrementally, additional visual and oral support could be provided, information that is not relevant to the content could be removed, other distractions and activities that require multi-tasking could be avoided, and more time for repetition of content and practice could be afforded in language activities (Gathercole & Alloway, 2008). Effective practices also include a simplification of complex tasks, the signaling of specific linguistic items to focus students' attention, the minimization of grammatical explanations, and a general decrease in the pace of the activities (Cox, 2013; Olivares-Cuhat, 2018). It should also be noted that the inclusion of technology-enhanced language learning tools (TELL) is beneficial to avoid cognitive capacity overload through compensatory strategies such as utilizing bimodal modes of instruction, omitting redundant information, and better controlling the timing of the activities (Pass et al., 2005; Mayer at al., 2019). To be able to react to these constraints, the teacher must first be able to read related signs of impairment from the students who experience such issues. In a typical classroom situation, it could be noticed from the following signs: a difficulty to stay on task, the inability to follow complex instructions, a lack of perseverance, and an inability to concentrate (Gathercole & Alloway, 2008)

A different strategy to limit an overload of attentional capacity is to rely on providing more implicit/incidental learning opportunities. In this regard, Marsick and Watkins (2001) have listed a number of conditions that characterize environments favorable to this mode of learning, which include the integration of daily classroom routines, the use of reflection and action to spur the process, and peer collaboration. As it happens, these features are congruent with practices promoted by the task-based language teaching approach, which would typically involve the following procedure: An instructor provides students with the linguistic material needed to complete the task. Such tasks are characterized by having clear outcomes, being relevant to the students' lives, and promoting collaboration and real-life skills. Upon completion of the task, the learners engage in reflective practice and analysis of the outcome, which further reinforces their learning process (Larsen-Freeman & Anderson, 2011).

The practices suggested in this section are well aligned with the following macro-strategies from Kumaravadivelu's post-method condition (2006): maximize learning opportunities, activate intuitive heuristics, foster language awareness, contextualize linguistic input, and integrate language skills (since they are being used concurrently in the process of completing the task).

Socio-Cognitive Issues

Given the very beneficial role played by social interactions in the L2 learning process, it is critical to ensure that older adult learners are well integrated into these activities and fully committed to participate. Accordingly, teachers must be cognizant of how possible developmental and SSDL mismatches may impede this goal, and they must seek instead to achieve a good balance in all these interactions. To this end, it is first helpful for the teacher to be able to draw from a variety of interactional patterns ranging from teacher-led to student-initiated activities (Ur, 1996). A task-based language teaching approach offers a good foundation to promote such communicative exchanges, as it includes problem-solving activities and meaningful and collaborative assignments (Eastment & Dooly, 2008).

One should not underestimate the potential impact that situational barriers may exert on the ability of nontraditional students to be fully integrated in classroom activities (Cross, 1981). To alleviate this type of difficulty, one option is to offer more blended learning opportunities, e.g. through computer-mediated communication such as chats, e-mails, tele-collaboration and video conferencing events.

Looking back at Kumaravadivelu's post-method condition (2006), the macro-strategies that are embodied in these practices consist of: maximize learning opportunities, facilitate negotiated interaction, activate intuitive heuristics, integrate language skills, ensure social relevance, and raise cultural consciousness—as the learners may find more reason to be fully engaged in class by being assigned the role of "cultural informant" (Kumaravadivelu, 2006, p. 208).

Conclusions

Reviews and analyses were conducted to identify college classroom practices that would best support older adult learners enrolled in post-secondary L2 courses. This effort brought forward a number of important considerations.

First, it is important to recognize that a large proportion of students in higher education are 25 and older, a situation that has essentially not changed over the last 20 years. Second, multiple studies have shown that the success in the acquisition of an L2 decreases steadily with age, which may be explained by various theories of learning (adult, cognitive development, cognitive aging, socio-cognitive factors, and SLA). Thus, there are good reasons to pursue the development and implementation of instructional practices that aim at fully integrating and supporting older adult students in the L2 classroom. The argument proposed in this paper is that this goal may be achieved by developing communicative competence through the implementation of well targeted and effective teaching practices. A central finding of this inquiry is that teachers must play a central role in this undertaking, as they are uniquely positioned to recognize specific challenges and strengths of the adult learners and devise effective measures to mitigate and/or reinforce these attributes. To do so does not require teachers to adopt new language teaching methods. Rather, they are encouraged to further capitalize on existing approaches, such as task-based language teaching and implicit learning conditions.

All the while, teachers ought to be especially attentive to the risk of alienating older adult students as a result of mismatches that may arise with respect to self-directed learning and socio-cognitive developmental stages. Teachers should attempt to minimize the impact of social barriers. They should remain aware of specific learning difficulties that are linked to a gradual decline of cognitive functions associated for instance with working memory capacity, attentional resources, and processing speed, and therefore use a body of teaching practices specifically devised to mitigate such challenges. As a guiding principle, classroom interactions may be articulated in terms of practices that remain consistent with a large framework of macro-strategies, as set forth by the post-method condition framework. With all these factors in mind, what emerges is a system where teachers may increase their impact by continuously changing the perspectives on which their decisions are based, i.e., to be alternately focused on the macro-strategic level and fine-tuning a set of specific classroom procedures aimed providing highly effective and inclusive L2 instruction.

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