
RESEARCH ARTICLE

Affect in ESP and Academic English: A Dynamic Systems Approach

Evangelia Xirofotou

Teaching Fellow in EAP, Foreign Language Center, University of Thessaly, Volos, Greece

Corresponding Author: Evangelia Xirofotou, **E-mail:** exirofotou@hotmail.com

ABSTRACT

Affect has long occupied an important place in second language acquisition (SLA), yet it has often been treated as a relatively stable learner variable that either facilitates or obstructs language input, participation and achievement. This conceptual paper argues that such a static treatment is insufficient for understanding academic English and English for Specific Purposes (ESP) learning in university English as a Foreign Language (EFL) contexts. Using a conceptual narrative review approach, this paper synthesizes foundational SLA theories, CDST scholarship, and contemporary research in ESP and academic English to reconceptualize affect as a dynamic, context-sensitive, and emergent system. It shows that emotions such as anxiety, confidence, enjoyment, boredom and self-efficacy fluctuate across tasks, assessment conditions, teacher feedback, peer interaction and disciplinary discourse demands. The argument is especially relevant to ESP and academic English classrooms, where learners are required not only to communicate in English but also to perform emerging academic and professional identities. The paper proposes pedagogical implications for task sequencing, classroom interaction, feedback and teacher responsiveness. It concludes by calling for longitudinal, classroom-based and process-oriented research that can capture affective change over time rather than relying only on one-time measures.

KEYWORDS

affect; academic English; Complex Dynamic Systems Theory; English for Specific Purposes; English as a Foreign Language; language anxiety; learner emotion

ARTICLE INFORMATION

ACCEPTED: 30 June 2026

PUBLISHED: 10 July 2026

DOI: 10.32996/jeltal.2026.8.8.8

1. Introduction

Affect is central to second language acquisition because language learning is never only cognitive. Learners can have knowledge of grammar rules; they can learn vocabulary and finish written assignments, but their attitudes to participate, persist, and identify as users of English are affected by anxiety, confidence, enjoyment, embarrassment, boredom, curiosity, and perceived legitimacy as language users. This is especially evident in the context of university EFL settings, where English is linked to social evaluation, career prospects, and the institutional norms of the fields of study. Motivation and other individual differences became important psychological factors of language learning as described by Dörnyei (2005), and foreign language classroom anxiety was found to be a unique type of situation-specific anxiety by Horwitz, Horwitz, and Cope (1986). Such contributions were significant, as they opened the door to a non-linguistic perspective on SLA and posited that the learners' emotional and motivational states are important. But much of the previous affective literature still predominantly regarded affect as something measurable that learners have to varying degrees, instead of something that is fluid and continually changing between the learner, the task, the classroom, and the social context.

In academic English and ESP settings, a more dynamic account is required. Academic English involves reading, writing, and speaking in ways valued by the institution, while ESP focuses on specialized registers and perceived needs in academic, occupational, and professional environments (Basturkmen, 2021, 2022). Similarly, Hyland (2016, 2018) emphasizes that academic literacy is embedded within the practices of particular disciplines rather than a general English system. Consequently, a university learner may converse fluently in general English but experience apprehension when composing a research abstract, describing technical processes, or defending a plan in a seminar. The emotional demands are generated as the learner interacts with disciplinary language, academic genres, and an emerging professional identity.

Complex Dynamic Systems Theory is a valuable paradigm in which to reframe these affective processes. Larsen-Freeman (1997) was the first to make the influential argument that SLA can be considered a complex nonlinear system because of the nature of the language development process, which includes aspects of variability, emergence, interdependence, and sensitivity to context. Larsen-Freeman and Cameron (2008) further developed this argument by demonstrating that applied linguistic phenomena can be researched as an open system, whereby several phenomena are altered simultaneously. The dynamic orientation has been reinforced by more recent work. Lowie and Verspoor (2019) have stated that there is no justification for generalizing average group-level features to individual learners because language development can be non-ergodic and very variable. Hiver, Al-Hoorie, and Evans (2022) conducted a review of the 25 years of research on language learning with the lens of CDST, revealing that complexity has been emerging as a lens to study development, agency, motivation, and classroom processes. Altogether, these studies indicate that affect should not be considered merely a stable learner characteristic but rather a system of relations that evolves over time.

This paper consequently proposes that affect in SLA should be regarded as a dynamic, context-sensitive construct, especially in the context of university EFL learning, such as academic English and ESP. It is a conceptual and not an experimental argument. It does not provide the results of a new empirical study but provides a synthesis of classic SLA theory and current CDST scholarship and ESP research to identify a more appropriate understanding of affective experience in university language learning. The paper begins by examining traditional notions about affect, namely the affective filter hypothesis and the problems with it. Next, it presents the relevant principles of dynamic systems theory in SLA, and then it reconceptualizes affect as fluctuating, context-dependent, and emergent. The perspective is then put in the context of the academic English and ESP classroom with illustrations from the special education classroom, primary education, and agricultural sciences. Finally, pedagogical implications for teachers of the classroom and researchers are offered, focusing on affect management, adaptive task design, supportive interaction, and longitudinal investigation.

1.1 Contribution of the Paper

The contribution of this paper is threefold. First, it synthesizes traditional affective perspectives in SLA with contemporary Complex Dynamic Systems Theory (CDST) scholarship to propose a more dynamic understanding of learner affect. Second, it extends this perspective to academic English and English for Specific Purposes (ESP) contexts, which remain underrepresented in discussions of affective dynamics. Third, it offers pedagogical implications for university EFL practitioners by highlighting how task design, classroom interaction, feedback practices, and teacher responsiveness can support the management of affective trajectories in disciplinary language learning.

Figure 1. From Static to Dynamic Understandings of Affect in SLA

Traditional (Static) View	CDST (Dynamic) View
Affect is a stable learner trait	Affect is emergent and constantly changing
Anxiety is an individual characteristic	Anxiety fluctuates across contexts and tasks
Emotions are measured at one point in time	Emotions evolve across multiple time scales
Affect is mainly internal	Affect emerges through interactions between learner, task, peers and context
Focus on reducing negative emotions	Focus on managing affective dynamics
Learners are categorised as anxious/motivated	Learners experience shifting emotional trajectories

Source: Adapted from Krashen (1982), Horwitz et al. (1986), Larsen-Freeman and Cameron (2008), Hiver et al. (2022), and Wang et al. (2024).

2. Literature Review

The Affective Filter Hypothesis is significant because it turned the focus of SLA theory to the affective side when SLA was primarily focused on the input, grammar, and internal processing of language. Krashen (1982) argued that comprehensible input is necessary for acquisition, but input alone is not sufficient if affective conditions prevent learners from using it. The affective filter metaphor indicates that a learner who experiences low anxiety, high motivation, and high self-confidence will be more open towards the input, whereas a learner who experiences high anxiety and low self-confidence may be less tolerant of the input, hence less likely to process it for learning. The hypothesis in pedagogical aspects prompted teachers to have classrooms with less stress, meaningful communication, and learner confidence. Krashen's model provided teachers with a good rationale for concern about the affective environment of learning, in comparison with purely structural models.

Krashen's model also addressed affect, however, primarily with regard to input. Anxiety, motivation, and self-confidence were regarded as conditions that affect the availability of input for acquisition. The debate was furthered by Horwitz et al. (1986), who proposed that classroom anxiety in foreign language is a specific type of anxiety and enlisted two factors under its umbrella: communication apprehension and test anxiety and fear of negative evaluation. Their research varied from Krashen's in that they found a way to make anxiety measurable in class, while Krashen's affective filter was less tangible. Dörnyei (2005), in turn, extended the field by revealing that motivation is not just some quantity of desire but a psychological system related to intentions, self-concept, and learning histories. These writers thus took affective research in various directions: Krashen emphasized the need for

emotional openness to input, Horwitz et al. identified an affective classroom particular, and Dörnyei has proposed a more general psychology of the language learner.

The work of Krashen (1982), Horwitz et al (1986) and Dörnyei (2005) had all contributed to the relevance of affect in SLA, but these works all share a perspective of affect as a stable, internal state that learners have. Though this practice is important for confirming the role of emotional factors in the classroom, it sometimes presents anxiety, motivation and self-confidence as static rather than dynamic processes which vary according to the situational demands. Such models have one drawback: they view affect as a snapshot of the experience, which is not an accurate reflection of the fluid and context-dependent nature of academic English and ESP learners' experiences.

2.1.1 The Affective Filter Hypothesis

The Affective Filter Hypothesis is significant because it turned the focus of SLA theory to the affective side when SLA was primarily focused on the input, grammar, and internal processing of language. Krashen (1982) argued that comprehensible input is necessary for acquisition, but input alone is not sufficient if affective conditions prevent learners from using it. The affective filter metaphor indicates that a learner who experiences low anxiety, high motivation, and high self-confidence will be more open towards the input, whereas a learner who experiences high anxiety and low self-confidence may be less tolerant of the input, hence less likely to process it for learning. The hypothesis in pedagogical aspects prompted teachers to have classrooms with less stress, meaningful communication, and learner confidence. Krashen's model provided teachers with a good rationale for concern about the affective environment of learning, in comparison with purely structural models. Krashen's model also addressed affect, however, primarily with regard to input. Anxiety, motivation, and self-confidence were regarded as conditions that affect the availability of input for acquisition. The debate was furthered by Horwitz et al. (1986), who proposed that classroom anxiety in foreign language is a specific type of anxiety and enlisted two factors under its umbrella: communication apprehension and test anxiety and fear of negative evaluation. Their research varied from Krashen's in that they found a way to make anxiety measurable in class, while Krashen's affective filter was less tangible. Dörnyei (2005), in turn, extended the field by revealing that motivation is not just some quantity of desire but a psychological system related to intentions, self-concept, and learning histories. These writers thus took affective research in various directions: Krashen emphasized the need for emotional openness to input, Horwitz et al. identified an affective classroom particular, and Dörnyei has proposed a more general psychology of the language learner. The work of Krashen (1982), Horwitz et al (1986) and Dörnyei (2005) had all contributed to the relevance of affect in SLA, but these works all share a perspective of affect as a stable, internal state that learners have.

2.1.2 Limitations of Static Models

The static models are limited because they have a limited representation of temporality. One of the disadvantages of these traditional approaches is that they assume that language-learning emotions are linear and predictable, with identical results and effects. This is a linear assumption meaning that a change in instruction or constraint is assumed to change an internal trait directly and proportionately. Affect, however, unfolds dynamically at different levels: within the lesson, within the semester, and within the program of study and is therefore always treated as language learning processes. Emotions never exist on their own but are connected with ecological factors in a non-linear way, so that a small change in a situation can produce a completely disproportionate emotional response. For example, a student's level of anxiety prior to the first ESP presentation could be reduced, or it could come at the end of the course, or it may come in piecemeal as he or she makes a transition to a new sense of belonging to a disciplinary community. The second limitation of static models is that in many situations they may not differentiate between affect and classroom interaction. The affective filter mentioned by Krashen (1982) can be assumed to be located within the L2 learner; however, classroom anxiety is caused by the way the teacher asks questions, how peers respond, the teacher's assessment expectations, the topic knowledge, and institutional norms. The traditional focus on anxiety in the actantial reading of this text is complicated by Dewaele and MacIntyre (2014) who show that enjoyment is not just a lack of anxiety. Learners feel challenged and anxious, and they enjoy interaction; when it is necessary to take risks in classroom conditions, it can make sense. MacIntyre and Gregersen (2012) also move the focus away from dampening down negative emotions and towards increasing the impact of positive emotions in learning. These studies suggest that affect has a relational and productive dimension, emotion can affect what learners notice, attempt, and remember, relative to Krashen's barrier metaphor.

2.1.3 Limitations of Specialized Context

A third limitation involves the critical omission of specialized context. University EFL learners are not acquiring a generalized linguistic code; rather, they are operating under intense disciplinary and institutional pressures. The focus on ESP studies is on the needs of language rather than the abstract notion of universal communicative competence, but rather on specific social practices, genres and professional communities. In the field of needs analysis for specialized populations, Serafini, Lake and Long (2015) hold that the communicative needs of different professional groups are intrinsically different and therefore the needs analyses for such groups must be methodologically rigorous. This is further confirmed by Basturkmen (2022) who found that the major goal of ESP acquisition is the development of specialized registers. The traditional models addressing affect and anxiety are general and provide little information regarding the amplification of affect through the use of discipline specific language, professional accountability, or academic identity performance. For instance, students of agricultural sciences are confronted with the double

burden of learning very technical processes and having to deal at the same time with the linguistic accuracy of the processes, the content of their meaning and with their professional credibility in the field. Finally, these static approaches ignore the complex and cumulative effects of wrestling with new disciplinary discourse and enacting a new professional identity upon the feelings of the learner. It is incomplete, not necessarily incorrect, that the static view of the world is insufficient. Krashen (1982), Horwitz et al. (1986), and Dörnyei (2005) made affect visible in SLA, but CDST allows researchers and teachers to ask more refined questions: When does anxiety rise? What classroom events trigger it? How does it interact with enjoyment? And how do these patterns change over time? Effective interpretation of the affective movement is a shift from affective level measurement to reading and in great need for academic English and ESP classrooms, where many studies have found the affective level closely related to the students' performance in the field of ESP.

2.2 Dynamic Systems Theory in SLA

Dynamic Systems Theory (or Complex Dynamic Systems Theory, as it is referred to within the field of applied linguistics) starts by assuming that language learning is a complex, adaptive, and context-dependent phenomenon. Development is not uniform, causes are not always directly proportional to effects, and change is the result of interaction between numerous components, these are common features of nonlinear systems, and they are also features of SLA, as stated by Larsen-Freeman (1997). Larsen-Freeman and Cameron (2008) add that language learning is a nested system, which includes cognitive, social, affective, linguistic, and contextual dimensions. This contrasts with linear models where a particular input or instructional approach has a predictable result. With a dynamic account, the same task could give confidence to one learner, silence to another, and anxiety or curiosity one day and the other for a third, depending on past experience, relations with peers, complexity, and relevance of the task. One of the key concepts of CDST is that of non-linearity. A linear model would reflect that the more motivated the individual becomes, the greater the effort, and the better learning results should be. A little incident, however, can have far-reaching consequences in actual classrooms. A single encouraging remark from a teacher may prompt a once reserved student to join in; a single public correction may for a couple weeks dampen another's desire to speak. According to Larsen-Freeman (2017), complexity theory focuses on the patterns of becoming, not the state of things. Lowie and Verspoor (2019) continue that variability does not necessarily mean error or noise; it might mean a sign of development. So, with respect to affect, this is not a problem if you are unstable in your emotions. A learner's back-and-forth between hesitation, curiosity, and confidence might indicate that the learner is reordering the relationship between English as a language and the self as a learner and between English and school life. Another principle is emergence. Higher-level patterns emerge from the interactions between lower-level parts in CDST but are not reducible to any one of those parts. The study of language learning informed by CDST has gradually dealt with how motivation and agency are created, and it has been approached from a broader dimension of the relationship between the subjects of the study and the other systems in which they are embedded that include engagement and development (Hiver et al., 2022). This is significant in affect because the emotion that is being experienced by the learner does not create the emotion in the classroom. Specific jargon, weighted assessments, peer comparison, teacher assessment, past negative experiences and professional identity uncertainties can cause feelings of anxiety when delivering an ESP presentation. How enjoyment might develop when students feel that English enables them to be a part of a community of a discipline, on the other hand, is the opposite. In a similar vein, Wang, Ganushchak, Welie, and van Steensel (2024) argue that "anxiety", "enjoyment" and "boredom" are not just variables but can be conceptualized as phases or transitions across two or more time scales when referring to language learning emotions. One more property of CDST is its interconnection nature which makes it different from the conventional system. Affect relates to cognition, language skills, identity and classroom environment. Knowledge of language has been used in two separate ways: explicitly and implicitly, according to Ellis (2005). Although it is the knowledge systems that were Ellis's concern, the same applies to affect: knowing explicit grammar will increase confidence in writing, but decrease anxiety in spontaneous speech; successful experiences will decrease anxiety and increase the willingness to experiment with language forms being learned in writing. Van Dijk, Lowie, Smit, Verspoor and van Geert (2025) highlight process research because it allows one to see the development of L2 over time. This implies that in academic English and ESP, teachers and researchers must be aware that affect is active in processes of doing an activity instead of it being background psychology. An affective perspective is not denying previous affective constructs. Anxiety is still a useful tool, motivation, confidence, and self-efficacy. One thing that changed is how they are understood. CDST prompts inquiry into shifts in anxiety, when anxiety stabilizes, what it connects with, and how classroom practices change the course of anxiety. From a CDST point of view, Piniel and Albert (2025) explored the evolution of motivation, self-efficacy, and various emotions over four semesters, revealing that certain affect-based variables can be considered linear, whereas others seem to be nonlinear. The results are important because they validate conceptually the dynamics of the theory, which they support on an empirical level: affect arises as soon as it is thought of and the different affects do not necessarily go in the same direction.

3. Methodology

This paper adopts a conceptual and narrative review approach. It synthesises foundational SLA theories, CDST scholarship, and contemporary research in ESP and academic English to reconceptualise affect as a dynamic phenomenon in university EFL settings. Rather than reporting findings from an empirical investigation, the article critically examines and integrates relevant literature to generate a theoretically informed framework and pedagogical implications.

4. Reconceptualizing Affect as a Dynamic System

4.1 Affect as Fluctuating

The first step to reconceptualizing affect dynamically is to think of emotion as not stable. Students are typically characterized as anxious, confident, motivated or not, but these broad generalizations can mask the movement moment-to-moment, task-to-task. Wang et al. (2024) explain that there are multiple temporalities in language-learning emotions, ranging from seconds while speaking to weeks or years of language development. That is, a learner's emotional reaction in one presentation does not represent his/her emotional attitude to English on the whole. A student might feel nervous when starting an academic presentation, feel good when peers respond positively, and feel confident when he/she has completed the task successfully. It is more important to focus on the underlying emotional pattern than the original label. This perspective is well supported by Piniel and Albert (2025) who demonstrated that change in affect can be different over time. Their CDST perspective is especially interesting because affect is considered a system that is being developed, as well as motivation and self-efficacy, enjoyment, curiosity, anxiety, boredom, and shame. While Horwitz et al. (1986) found the importance of language anxiety as a classroom construct, Piniel and Albert take the field to a temporal understanding of how affective constructs transform. This does not take away the validity of the previous anxiety model; it just indicates that anxiety should be studied in action. Fluctuation also has pedagogical significance. When affect is dynamic, temporary anxiety need not be construed as failure per se. Some anxiety can be an indicator of challenge, novelty, or learner awareness of the importance of the tasks. Dewaele and MacIntyre (2014) demonstrated that it is possible for both anxiety and enjoyment to coexist in the language classroom, and MacIntyre and Gregersen (2012) proposed that positive emotion can expand learning opportunities. A dynamic model thereby prompts teachers to differentiate between a negative anxiety that hinders participation and a constructive challenge that can be changed through scaffolding and peer support and feedback. For academic English and ESP, learners need some difficulty in the classes, which should be manageable to a certain degree due to the demandingness of the subject matter of the discipline. It is not to totally get rid of the negative emotion, but to not let it become stable avoidance.

4.2 Affect as Context-Dependent

Affect is also context-dependent. It varies based on task, interaction, assessment pressures, and content/discipline/classroom norms. Hiver, Al-Hoorie, and Mercer (2021) speak about student engagement as a multi-dimensional concept comprising behavioral, cognitive, affective, and social dimensions. Their work is useful because it translates emotion into participation, rather than an individual's internal world. Some learners may seem disengaged in a whole-class discussion but may participate confidently in a problem-solving activity in a small group setting; another learner might be confident writing in their coursework but may remain silent during an oral examination. The affective system is altered due to an altered social and task environment. This dependency is especially noticeable in ESP situations. According to Basturkmen (2022), the language practices of specific fields need to be taken into account when learning a specialized register. Disciplinary meanings of words or vocabulary are not limited to a list of words, but rather to disciplinary procedures and identities. For instance, Green and Lambert (2019) share some examples of using disciplinary phrase lists in the context of specialized literacy and Huang and Yu (2023) offer an example of a nursing ESP course design with an emphasis on communication and based on professional communication. The various studies have different focuses, but all show that learning ESP is an emotional experience due to the usage of English, which is judged based on both language and disciplinary criteria. Importantly, this emotional experience shows that learners are not passive, uniform or uniformed in their response to these classroom contexts. Rather, they actively negotiate and make sense of institutional and disciplinary expectations in the context of their individual personal experiences, past education, and evolving sense of self. Assessment adds a level of contextuality. Horwitz et al. (1986) have already incorporated test anxiety in their model, but in academic English and ESP, tests make presentations, research writing, case reports, and disciplinary project(s). These genres put on emotional demands, which differ with the general languages. According to Gardner and Nesi (2013), university student writing is composed of a series of genre families; in each of these, different communicative purposes are identified. Hyland (2016) states that EAP should take account of the disciplinary specificity and not assume the existence of a common academic language. The emotions of students can rapidly change when they encounter unfamiliar genres. Regardless of confidence acquired in vocabulary exercises, this may not get transferred to confidence in writing a literature review or a fieldwork report. This change is accounted for by a dynamic model, which presumes that affect is related to the current needs of the communicative situation.

4.3 Affect as Emergent

Emergence is the third aspect of the reconceptualization. Affect is the product of the interplay of the learner, teacher, peers, task, and environment/institutional expectation. It is not just brought into class by the student. Hiver et al. (2022) state that the CDST approach can stimulate and encourage the researchers to consider patterns arising from the interactions between subsystems rather than from the individual causes. Larsen-Freeman and Cameron (2008) also stress that complex systems are open and adaptive; that is, they are influenced by their relationships with the world. In the context of classroom emotion, this is the process of interaction that is repeated to cause emotion. Confidence can develop through a series of successful small tasks and positive feedback from peers and teachers. Avoidance can develop through them being corrected in front of others several times and unclear instructions or perceived inability to discipline. Because an affective state emerges nonlinearly from a complex combination of overlapping factors including classroom climate, task complexity, peer dynamics, and hidden personal histories it becomes

methodologically and practically nearly impossible to isolate a single, definitive classroom trigger. Where traditional models offer reductive, deficit-based accounts of low participation by pointing to isolated traits like high anxiety or low motivation, a dynamic framework shifts the explanatory burden to the overall dynamics of the classroom environment.

5. Application to Academic English and ESP Contexts

Academic English and ESP offer a particularly well-suited context for a dynamic theory of affect since it involves both language learning and disciplinary learning, assessment, and identity formation. General EFL courses can be oriented towards communicative fluency, grammar, and words for general purposes. In academic English/ESP, however, learners are asked to perform certain roles, e.g., novice researcher/future teacher/agricultural specialist/healthcare worker/business student and engineer. ESP has been influenced by the materials and teaching practices developed from the learner needs a lot of times, as pointed out by Basturkmen (2021), and there is a need to focus more on methods for how learners acquire specialized registers, as stated by Basturkmen (2022). This shift from overall competence to specialized involvement alters the effect of learning. Academic discourse is highly demanding cognitively and emotionally. On the cognitive level, the student has to deal with abstract words, complicated constructions, genre conventions, quoting and referencing, and building up a disciplinary argument. Emotionally, they may feel vulnerable as they know that academic English puts their thinking on display before the teachers and other students. Hyland (2016) argues that academic communication is discipline-sensitive, while Gardner and Nesi (2013) show that university writing consists of diverse genres rather than one general academic form. The following insights may help explain the fluctuation of affect between tasks. A student might be able to write a summary of a short article but get nervous if asked to compare two authors, synthesize evidence, or defend a claim in a seminar. The emotional challenge is not incidental but part of the academic challenge, which involves transition from comprehension to disciplinary positioning. This dynamic can be exacerbated by the language used in ESP. There are questions about specialized vocabulary, which is related to expert identity. The classroom environment transitions from a space of supportive socialization into a site of identity tension. Learners who cannot access the terms they might be expected to use in their field may feel that they are not proper users of academic English. For instance, students enrolled in a Department of Agricultural Sciences may have command of the key concepts in the native tongue yet have trouble explaining irrigation, soil fertility, or crop disease management in English. This anxiety is not just linguistic but stems from the interplay between content expertise and the feeling of not being able to convey content in the target language. In ESP/EAP settings, identity conflicts extend beyond specialized terminology to encompass resistance toward the institutional values embedded within a discipline's discourse. When instructional practices demand linguistic and behavioral convergence without acknowledging these internal tensions, it can create severe affective barriers, turning what appears to be an acquisition deficit into a protective strategy of silence. The argument is supported by examples from a university EFL classroom. When professionals and ethically loaded words such as Individualized Education Plan, inclusive evaluation, and inclusive behavior intervention are used in an ESP class for special education, it may be disturbing for students at first. As the teacher leads students from exploring vocabulary to analyzing a case to finally presenting to their peers, anxiety can turn to confidence. In an academic English subject for primary education, the students may complain about the dull reading assignments at the beginning; however, they will be drawn into and motivated to develop and explain a plan for children in English based on educational principles. Agricultural Sciences learners might be reluctant to speak using technical terms for oral presentations, but they are more willing to speak when dealing with a practical scenario in the management of a farm. As illustrated in these examples, affect is not a continuous background state. Changes depending on task purpose, disciplinary relevance, peer interaction, and teacher support.

6. Pedagogical Implications

6.1 From Control to Management of Affect

Controlling the affective dynamics implies recognizing that the meaning of negative emotions can be distinctive. The anxiety prior to an evaluated presentation might indicate fear of failure in front of the public, but it also might indicate a task is significant and personally meaningful. When students say they get bored during terminology practice, it can be a sign that the activity is not doing the students a service, but it can change when the terminology is connected to a problem in the discipline. Positive and negative emotions can probably coexist; teachers should not take it for granted that anxiety is necessarily a sign of bad learning conditions, as Dewaele and MacIntyre (2014) demonstrated. Rather, they should inquire about the presence of clear scaffolding for anxiety, whether there are opportunities for recovery from anxiety, and if classroom interaction enables emotional progress to approach confidence and participation.

6.2 Task Design and Sequencing

Task design is the key, as tasks are substantial attractors in the affective system. Dynamic means moving from less demanding to more demanding performances with discipline connection. This could be done in ESP by, for example, noticing vocabulary, using it to explain in a little short talk, using it in problem-solving with peers, and using it in an academic presentation or writing. Basturkmen (2022) highlights the importance of specialized registers, but CDST also says that learners should be given time to emotionally re-organize around such registers. Instructors must recognize that simply teaching a learner a word from the technical vocabulary cannot be expected to elicit confidence in the learner's use of that word. Confidence is built as they use it repeatedly and in meaningful ways, supported. Task sequencing should also provide opportunities for affective success as well. According to

Hiver et al. (2021), there are links between engagement and affective, cognitive, behavioral, and social aspects, indicating that tasks should be oriented towards participation and emotional involvement as well as linguistic production. For instance, agricultural sciences students could row match technical vocabulary to pictures, then in pairs describe a technical process, then in groups apply this to a crop problem, and then present their recommendations to the class. The affective demand varies from one stage to another. The sequence will give anxiety smaller bites or chunks, rather than having it all lumped in one big performance. Thus, the design of tasks turns out to be effective management.

6.3 Classroom Interaction and Safe Participation

Classroom interaction is another pedagogical site. The question now is the pattern of interaction that teachers will develop so that their interaction is not shallow and, at the same time, to make learners feel safe to interact. Learners will have opportunities to experiment with academic English in small group discussion and collaborative writing, which can help them get ready for public speaking. There is evidence that positive emotion broadens learners' openness to using language (MacIntyre and Gregersen 2012) and that enjoyment is socially situated (Dewaele and MacIntyre 2014). These studies suggest that collaboration and interaction are not just a way of communicating; they can have an impact on the affective system, changing the emotional price of participation. One does not do safe participation without correction. Learners should receive feedback on accuracy, register, and genre/disciplinary appropriateness in academic English and ESP. Feedback, however, must be controlled in time and formulated in a way that fosters growth and not the extinction of fear. A teacher who halts all mistakes in the presentation of ESP might actually make evaluation more salient and lower willingness to speak. A teacher who observes, provides feedback at a later stage, and requests revisions can support students to understand the errors as an apprenticeship of the discipline. As Hyland (2016) points out, academic writing pedagogy should consider disciplinary expectations, and a dynamic affective approach suggests that disciplines should be introduced in supporting cycles, rather than a high-stakes judgement.

6.4 Teacher Role and Adaptive Responsiveness

In the case of the dynamic approach, the role of the teacher is adaptive instead of only instructional. While adaptive teaching is desirable, institutional constraints such as large class sizes and standardized assessment requirements may restrict teachers' ability to respond individually to learners' affective needs. The teacher must be attuned to changes in emotion, understand what happens in the classroom that leads to disengagement or lack of confidence, and make appropriate changes in instruction. Larsen-Freeman and Cameron (2008) state that complex systems are sensitive to context and interaction; therefore, teaching should not be broken down into content delivery. An ESP teacher can observe in an ESP classroom that students have no reaction when asked to define technical terms one by one, but the students are active when using technical terms within the context of a case. As a result of this observation, the teacher should come to a pedagogical adjustment that they can employ problem-based tasks to scaffold more formal academic explanation. Teachers also need to support learner identity in order to be adaptively responsive. In university EFL settings, students might not feel that they are good users of academic English yet. This is where the concept of investment introduced by Norton (2013) can be helpful, as it is connected to identity and imagined futures. While not necessarily CDST in the strictest sense of the term, Norton's work is in keeping with the notion of affect as socially located. If learners feel they can pursue desired academic and/or work roles with the use of English, motivation and confidence might be more sustained. ESP teachers can do this by linking in-class activities with real-life disciplinary activities like writing a policy recommendation in special education, a lesson rationale in primary education, or a field observation report in agricultural sciences. Lastly, affective awareness needs to be part of ESP pedagogy and academic English pedagogy in teacher education. Many teachers know how to detect language mistakes; few of them know how to detect emotional patterns. But a CDST-informed teacher does not need to be a psychologist, just attuned to patterns that emerge, for example, when a student repeatedly persists at being silent after being corrected in front of the class, or their participation in group tasks becomes more and more active, or suddenly when assessment terminology is used. Hiver et al. (2022) argue that CDST has contributed to the methodological imagination of language learning research and, so too, of language learning pedagogy. Teachers need to be encouraged to utilize reflective journals, short learner feedback, classroom observation, and task review to gain insight into the working of affective systems in their classroom. Consequently, unless institutional frameworks shift away from rigid bureaucratic control and toward flexible, ecology-conscious course designs, everyday educators are left attempting to manage complex dynamic systems within rigid frameworks that demand strict conformity.

7. Future Research Directions

A methodological shift is also needed in order to have a dynamic reconceptualization of affect. Most effective studies have used cross-sectional questionnaires, which have their value in determining general trends and patterns but are not well suited for process. According to Van Dijk et al. (2025), there is a need for process oriented studies in the realm of second language development, especially in the study of academic English and ESP effects. These include a fine grained task analysis, learner diaries, stimulated recall, classroom observations, repeated measures and a longitudinal design. Also, multiple time scales are highlighted by Wang et al. (2024), and a number of emotions can be studied within one task or within a semester or extended academic pathway. It may also be necessary to address future research focusing on particular ESP areas instead of taking learners in universities as a single group. Prior studies in ESP show that there are differences in language needs among fields (Basturkmen, 2022), while needs analysis research already reveals that specialized populations can only be investigated with utmost caution

within their context (Serafini et al., 2015). A dynamic affective research agenda might be developed to evaluate the affective aspects of learning in special education, primary education, agricultural sciences, nursing, business, or engineering ESP. This work would help to determine if there are any kinds of tasks, genres, or assessment practices that have been recurring affective turning points. It would also enable the researchers to explore the trajectory of learners' transitional experiences from outsider to insider to academic and professional discourse of English. Another direction is intervention research in the classroom. Researchers could also investigate how task sequencing influences the emotional trajectory, rather than simply focusing on whether or not an intervention is successful in reducing anxiety. For example, an ESP course could include collaborative rehearsal prior to individual presentations, while a discipline-based course could include discipline-based case tasks prior to academic writing. A traditional pre-test/post-test design may demonstrate a difference in mean anxiety scores, but a dynamic design may demonstrate when a change in the mean anxiety score happened, which learners changed, and the interaction of confidence and the use of vocabulary, participation, and feedback. This would yield more evidence for pedagogical decision making.

8. Conclusion

This paper has argued that affect in SLA should be reconceptualized as a dynamic, context-sensitive, and emergent system, particularly in a context like academic English or ESP focused in universities. Traditional theories like Krashen's (1982) Affective Filter Hypothesis are important, as they rendered affect visible in L2 writing and motivated teachers to provide a supportive learning environment. Respectively, Horwitz et al. (1986) contributed by merging foreign language classroom anxiety, and Dörnyei (2005) contributed by broadening the field of psychology of language learning in the area of motivation and individual differences, respectively. But the models are restricted if affect is perceived as a static learner attribute and not as a changing pattern that is influenced by tasks, interaction, assessment, and identity. A better conceptual understanding of these patterns is provided by the complex dynamic systems theory. All together, these authors demonstrate that second language development is nonlinear, variable, interconnected, and processual. If we take up this frame of thinking for affect, then the focus is on the ways affect flows across time, across the other affects, and in the emergence of learning ecologies. This is especially significant in academic English and ESP, as learners are using English as well as engaging in negotiation of disciplinary knowledge and professional identity. The primary contribution of this paper is to develop a link between SLA affect theory and ESP and academic English teaching. It indicates that teachers should attempt to neither generally diminish anxiety nor increase motivation. Instead they should rely and utilize task sequencing, safe participation, discipline appropriate interaction, adaptive feedback, and identity sensitive pedagogy to control affective dynamics. Also, the paper recommends that affective change be captured in the form of longitudinal studies and in-class studies. Finally, future studies should focus on systematically and empirically testing the proposed dynamic framework in a range of institutional settings and across a variety of disciplinary fields in order to more thoroughly establish the generalizability and local instructional effectiveness. However, the conceptual model presented in this research needs to be tested empirically in various university EFL and ESP environments.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

References

- [1] Basturkmen, H. (2021). Is ESP a materials and teaching-led movement? *Language Teaching*, 54(4), 491-501. <https://doi.org/10.1017/S0261444820000300>
- [2] Basturkmen, H. (2022). Learning a specialized register: An English for Specific Purposes research agenda. *Language Teaching*, 56(1), 95-108. <https://doi.org/10.1017/S0261444822000139>
- [3] Dewaele, J.-M., & MacIntyre, P. D. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *Studies in Second Language Learning and Teaching*, 4(2), 237-274. <https://doi.org/10.14746/ssllt.2014.4.2.5>
- [4] Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Lawrence Erlbaum.
- [5] Ellis, N. C. (2005). At the interface: Dynamic interactions of explicit and implicit language knowledge. *Studies in Second Language Acquisition*, 27(2), 305-352. <https://doi.org/10.1017/S027226310505014X>
- [6] Gardner, S., & Nesi, H. (2013). A classification of genre families in university student writing. *Applied Linguistics*, 34(1), 25-52. <https://doi.org/10.1093/applin/ams024>
- [7] Green, C., & Lambert, J. (2019). Position vectors, homologous chromosomes and gamma rays: Promoting disciplinary literacy through secondary phrase lists. *English for Specific Purposes*, 53, 1-12. <https://doi.org/10.1016/j.esp.2018.08.004>
- [8] Hiver, P., Al-Hoorie, A. H., & Evans, R. (2022). Complex dynamic systems theory in language learning: A scoping review of 25 years of research. *Studies in Second Language Acquisition*, 44(4), 913-941. <https://doi.org/10.1017/S0272263121000553>
- [9] Hiver, P., Al-Hoorie, A. H., & Mercer, S. (Eds.). (2021). *Student engagement in the language classroom*. *Multilingual Matters*. <https://doi.org/10.21832/9781788923613>

- [10] Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125-132. <https://doi.org/10.1111/j.1540-4781.1986.tb05256.x>
- [11] Huang, Q., & Yu, J. (2023). Towards a communication-focused ESP course for nursing students in building partnership with patients: A needs analysis. *English for Specific Purposes*, 70, 57-69. <https://doi.org/10.1016/j.esp.2022.11.006>
- [12] Hyland, K. (2016). General and specific EAP. In K. Hyland & P. Shaw (Eds.), *The Routledge handbook of English for academic purposes* (pp. 17-29). Routledge.
- [13] Hyland, K. (2018). English for Specific Purposes: Some influences and impacts. In X. Gao (Ed.), *Second handbook of English language teaching* (pp. 337-353). Springer.
- [14] Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Pergamon Press.
- [15] Larsen-Freeman, D. (1997). Chaos/complexity science and second language acquisition. *Applied Linguistics*, 18(2), 141-165. <https://doi.org/10.1093/applin/18.2.141>
- [16] Larsen-Freeman, D. (2017). Complexity theory: The lessons continue. In L. Ortega & Z.-H. Han (Eds.), *Complexity theory and language development: In celebration of Diane Larsen-Freeman* (pp. 11-50). John Benjamins.
- [17] Larsen-Freeman, D., & Cameron, L. (2008). *Complex systems and applied linguistics*. Oxford University Press.
- [18] Lowie, W. M., & Verspoor, M. H. (2019). Individual differences and the ergodicity problem. *Language Learning*, 69(S1), 184-206. <https://doi.org/10.1111/lang.12324>
- [19] MacIntyre, P. D., & Gregersen, T. (2012). Emotions that facilitate language learning: The positive-broadening power of the imagination. *Studies in Second Language Learning and Teaching*, 2(2), 193-213. <https://doi.org/10.14746/sslt.2012.2.2.4>
- [20] Norton, B. (2013). *Identity and language learning: Extending the conversation* (2nd ed.). Multilingual Matters.
- [21] Piniel, K., & Albert, A. (2025). Changes in language learners' affect: A complex dynamic systems theory perspective. *Language Learning*, 75(3), 863-897. <https://doi.org/10.1111/lang.12686>
- [22] Serafini, E. J., Lake, J. B., & Long, M. H. (2015). Needs analysis for specialised learner populations: Essential methodological improvements. *English for Specific Purposes*, 40, 11-26. <https://doi.org/10.1016/j.esp.2015.05.002>
- [23] van Dijk, M., Lowie, W., Smit, N., Verspoor, M., & van Geert, P. (2025). Complex dynamic systems theory as a foundation for process-oriented research on second language development. *Second Language Research*, 41(4). <https://doi.org/10.1177/02676583241246739>
- [24] Wang, P., Ganushchak, L., Welie, C., & van Steensel, R. (2024). The dynamic nature of emotions in language learning context: Theory, method, and analysis. *Educational Psychology Review*, 36, Article 105. <https://doi.org/10.1007/s10648-024-09946-2>