**SECOND LANGUAGE LEARNING RESEARCH AND LANGUAGE EDUCATION**

**Goal of Language Learning Research**

Goal of language learning research has been a matter of deliberations among researchers for a long time. Long (2005) discourages the concept of language for no purpose and advocates language for specific purposes. According to him, ‘General (language for no purpose) courses at any proficiency level almost always teach too much, e.g., vocabulary, skills, registers or styles, some learners do not need, and too little, e.g., omitting lexis and genres that they do. Instead of a one-size-fits-all approach, it is more defensible to view every course as involving specific purposes. . . .’(Long, 2005, p. 19).

21st century classroom requires a learning environment where teaching and learning are facilitated and higher-order thinking skills are developed. The effectiveness of ESP learning is specific to the construction of knowledge in a social context (Duffy &Jonassen, 1991), such as, classrooms and language laboratories ‘where students join in manipulating materials and, thus, create a community of learners who built their knowledge together’ (Dewey, 1966).

The interplay between research and teaching is explained by the following researchers:

* Pica (2005) mentions that ‘as teachers and researchers, we cannot work in isolation to each other if we are to help our students meet their needs and accomplish their goals’ (p. 49).
* Teachers should know what students learn, how and why instruction influences such learning, and how lessons could be based on this information to be more influential when teaching them next time (Berk, Hiebert, Jansen, & Morris, 2007).
* Some linguists (cf. Robinson, 1991) believe that it is wrong to isolate language into items and present them according to the coverage, range, and frequency. It is believed that this is a mechanical way of introducing language. It is better to present language as a whole in chunks, however (cf. Widdowson, 1990). Language is for communication not for exercising linguistic items.

**Bridging Language Learning Research and Language Education**

Teaching devoid of research is viewed as obsolete. Language teachers are required to inculcate research in their teaching practices to keep pace with the latest methodologies. Knowledge is constructed in the context of the environment in which it is encountered through the social and collaborative process (Kanuka& Anderson, 1999).The teacher in the contemporary scenario is viewed as a consultant whose role is not to only impart knowledge but also negotiate with students for effective outcomes.The following factors are vital for bridging language learning research and language education:

1. Needs analysis: Needs Analysis calls for ‘situations where the student has some specific reasons to learn a language’ (Harmer, 1983, p. 1).
2. Determining methodologies include:
* Grammar Translation
* Direct Method
* Audio-Lingual Method
* Situational Language Learning
* Suggestopedia
* The Silent Way
* Total Physical Response
* Community Language Learning
* Communicative Language Teaching
* Task Based Learning
1. Evaluation includes:
	* Placement assessment
	* Observation of learning
	* Short-term achievement assessment
	* Diagnostic achievement assessment
	* Proficiency assessment

**SLA Research and Working Beyond Teaching Methods**

SLA research is a vast domain and includes both general as well as specific theories. The role of SLA in defining the theories for teaching methodologies has been instrumental in broadening the scope of SLA. According to Corder (1973) and Stern (1983), at the time of its emergence as a separate discipline, SLA was anticipated to be the most useful discipline for language teaching. Researchers have recently been emphasizing the role of SLA to raise teachers’ awareness of SLA concepts rather than affecting teaching directly; Markee (1993) for example, sees SLA research as ‘a resource for changing teachers’ professional cultures’ (Cook, 1999). Teaching, too, ranges from overall goals for language teaching to specific teaching techniques used with a particular group of learners (Cook 1992). Lightbown and Spada (1993) proposed the following for classroom teaching and research associated with each method based on:

* the behaviorist theory of language learning emphasizing accuracy and form and not allowing errors.
* the interactionist theory giving learners the opportunity for conversation where they receive meaningful input from teachers and students, which will in turn lead to acquisition of the grammar and words of the second language.
* the ‘comprehensible input’ theory most closely associated with Stephen Krashen, where the emphasis is not on the interaction, but on providing input through listening and/or reading.
* teaching what the learner is ready to learn, most closely associated with Manfred Pienemann.
* not only recognizing a role for instruction but also assuming that not everything has to be taught’ (Lightbown&Spada, 1993, p. 97).

SLA gives ‘focus on form’ which enables learner to face the challenge regarding form-focused activities in communicative contexts. The suggested uses of form-based knowledge are planning and monitoring output, noticing features in the input, noticing the gap between learner’s own production and the target, and speeding passage through developmental sequences (Haley &Rantz, 2002).

**DIRECTIONS FOR RESEARCH IN LANGUAGE LEARNING**

**Research Within Applied Linguistics**

Research within ‘Applied Linguistics’ requires the understanding of what the field of applied linguistics deals with. Davies and Elder (2007) emphasized that it deals with the social problems that involve language. Major issues that require inquiry include teaching of language effectively, training of translators and interpreters, diagnosing speech pathologies more efficiently, evaluating a bilingual programme, setting a valid language test, helping to discuss the language used in a text, deciding on the literacy levels of a population study, and comparing and contrasting the acquisition of different languages.

The term ‘Applied Linguistics’ has been defined by many researchers, some of them are:

**Grabe** (2002, p. 10) defines applied linguistics as *a* ‘practice-driven discipline that addresses language-based problems in real-world contexts.’ **Schmitt and Celce-Murcia** (2002): applied linguistics is using what we know about language, how it is learned, and how it is used, in order to achieve some purpose or solve some problem in the real world. Applied linguistics covers eighteen topic areas. These are: language and its acquisition, language and culture, language and cognition, language and the brain, language and media, language and assessment, language and interaction, language and ideology, language and listening, language and instruction, language and reading, language and policy, language and writing, language and speaking, language and society, language and research methodology, language and technology, and language and translation/interpretation. Out of these areas, the dominant area has been second/foreign language acquisition and teaching.

**Grant** (2010) explains that research in applied linguistics is a process of arriving at answers to questions situated in current understanding, employing a methodologically rigorous way.**Alami**(2015) proposed five main characteristics of research within applied linguistics namely: empirical, logical, reductive, planned, and imaginative; whereas,**McDonough and McDonough** (2005) sum up research in four features: interest, originality, specificity, and dissemination of both research questions and findings. **Nunan** (2005, p. 226-227) contribution in determining the nature of the term rests on the concept of enquiry: product and process.

**Explicit and Implicit Learning and Awareness**

Rod Ellis (2009) proposed the distinction between implicit/explicit learning and implicit/explicit knowledge and asserted that though they are related terms but need to be analyzed separately as the former is related to the processes of the learning and the latter with the products of learning.

Schmidt believes that it is not necessary that implicit instruction results in implicit learning; therefore, learning needs to be distinguished from instruction. Learners have minds of their own and may follow their own inclinations irrespective of the nature of the instruction they receive (Allwright, 1984).

Dornyei’s (2009) distinction: Explicit learning refers to the learner’s conscious and deliberate attempt to master some material or solve a problem, and implicit learning involves acquiring skills and knowledge without conscious awareness, that is, automatically and with no conscious attempt to learn them. Awareness, according to Tomlin and Villa (1994, p. 193), is ‘a particular state of mind in which an individual has undergone a specific subjective experience of some cognitive content or external stimulus.’

Allport (1988) believes that cognitive changes and reporting of experience or metalinguistic description of rules are the factors that are responsible for creating awareness. In connection to the concept of awareness, Schmidt (1990) proposed noticing hypothesis, ‘the necessary and sufficient condition for the conversion of input into intake.’

**Input, Output,and Frequency**

Corder emphasized that language input needs to be differentiated for intake. According to him, input deals with utilization of existing rules, whereas, intake is a part of input and results from the comprehension of intake. Two factors ‘Availability’ and ‘Accessibility’ determine the input. For comprehensible output, the input has been observed to be comprehensible too. The language users use correct forms of utterances for successful transmission of the intended meaning; ‘sometimes, under some conditions, output facilitates second language learning in ways that are different from, those of input’ (Swain and Lapkin, 1995, p. 371). For the development of frequency, processing is the key factor that has the ability to match the outcome with the intended meaning.

**Current Trends and Research in Pakistani Context**

The statistics regarding English language research show that:

* English language is a global language and more than 1.5 billion people in total (native and non-native combined) speak English.
* Extensively spreading in important fields including international commerce, education, and communication.
* Plays an important role as a channel of communication (Kannan, 2009).
* Asia is not an exception to such a global trend which is concerned with students’ personal, linguistic, social, and cultural development (Le, 2004, p. 167).

Current trends and issues in English language education in Asia survey that SLA faces great challenges with regard to the L2 learning difficulties, unrealistic teaching material, and teaching strategies. Challenges of ESL teachers include teaching English as a second language in different situations, assessing second language learners with different abilities, and facilitating the procedure of second language acquisition.

**AUTOMATICITY, RESTRUCTURING AND NOTICING**

**Mclaughlin’s Automaticity and Restructuring**

McLaughlin (1990) introduced the distinction between controlled processing and automatic processing. He claimed that SLA has no adequate theory that could explain the mental states or operation that can be determined as ‘conscious’ or ‘unconscious.’ He did not discard SLA’s claim of unconsciousness and proposed that distinction should be between the controlled and automation processing instead of conscious and unconscious dichotomy.

Controlled processing requires attention, and attention has a limited capacity; automatic processing does not require attention, and takes up little or no processing capacity. McLaughlin uses the twin concepts of Automaticity and Restructuring to describe the cognitive processes involved in SLA*.*

**Example of McLaughlin’s Automaticity and Restructuring:**Automaticity occurs when an associative connection between a certain kind of input and some output pattern occurs. Many typical greetings exchanges illustrate this:

Speaker 1: Hi.

Speaker 2: Morning. How are you?

Speaker 1: Fine, and you?

Speaker 2: Fine. (Jordan, 2004)

McLaughlin, (1987, pp. 134-135) introduced three information processes: automatic processing, controlled processing, and restructuring. He presented the process starting from attention and ending at intention.

**Attention →Rehearsal→ *Retrieval*→ *Intention***

**Schimdt’sNoticing Hypothesis**

Schmidt proposed the concept of ‘Noticing’; he believed that ‘noticing is the necessary and sufficient condition for converting input into intake’ (Schmidt, 1990, p. 130). The concept came in response to Krashen’s claim that subconscious processes can guarantee successful L2 acquisition. Schmidt argued that noticing is important for L2 learning.

The role of noticing and awareness in SLA has been explained by Schmidt in the below given video link:

<https://www.youtube.com/watch?v=0OfM2nIX4r455:00-58:35/>

From Schmidt’s perspective, for learning to occur, attention and a low level of awareness (i.e. noticing)–‘conscious registration of the concurrence of some event’ (Schmidt, 1995, p. 29)–are necessary, but high level awareness (i.e. understanding)–‘recognition of a general principle, rule, or pattern’ (Schmidt, 1995, p. 29)–is not required *(*Ahn, 2014).

The following are the features of Noticing Hypothesis:

* 1. Noticing as focal awareness
	2. Noticing refers to a private experience
	3. Consciousness as knowledge

To overcome the ambiguities between conscious and unconscious learning, Schmidt explained that unconscious learning deals with unawareness of having learned something.Conscious learning establishes the awareness at the level of noticing, whereas, unconscious learning ends into picking up speech without noticing. He calls this process ‘subliminal’ learning.

**INTERACTION HYPOTHESIS, PROCESSABILITY THEORY, AND TOWELL AND HAWKINS MODEL OF SLA**

**Long’s Interaction Hypothesis**

Long’s (1981) Interaction Hypothesis refers to the participation in conversation with native speaker. The process may include modification of interaction and plays important role in second language acquisition. Long (1981) defines, ‘*Input* refers to the linguistic forms used; whereas, *interaction* means the functions served by those forms, such as expansion, repetition, and clarification’ (p. 259).Ellis (1991) explains the states, IH propagates, as follows:

1. Comprehensible input
2. Modifications to the interactional structure

Long’s Interaction Hypothesis was analyzed by a number of researchers. The leading among them were Pica and Ellis. Pica (1987) empirically investigated the hypothesis and Ellis (1991) summarized it as:

* Comprehensible input is necessary for second language acquisition.
* Modifications to the interactional structure of conversations help to make input comprehensible to a second language learner.
* Tasks and a situation where there is a need for the participants to exchange information.

The limitations of Interaction Hypothesis were identified by Ellis as following:

* Interaction facilitates comprehension (not causes it): when learners have opportunity to signal their non-understanding and try to ask for clarification.
* There are individual differences with regard to the amount of their participation.
* Comprehension does not depend on negotiation; learners may benefit from the dialogic interaction by other learners.
* Modified input facilitates acquisition of word meanings.
* The most important factor to acquisition of word meanings is range (different contexts).

**Processability Theory**

‘Processability Theory’ was proposed by Manfred Pienemann, and it refers to the grammatical development of learners’ interlanguage. The theory has been explained as ‘cognitively founded (hence applicable to any language), formal and explicit (hence empirically testable), and extended, having not only formulated and tested hypotheses about morphology, syntax and discourse-pragmatics, but having also paved the way for further developments at the interface between grammar and the lexicon and other important modules in SLA.’

The core characteristic of processability theory is that in the process of second language acquisition, learners can produce and comprehend those L2 forms which their L1 process can manage. It refers to two formal models, describing and interfacing: (a) language generation, and (b) linguistic knowledge.Pienemann (2012) considered the following factors in their explanation of the processability theory:

* Second language development progresses according to universal stages.
* Variability of interlanguage is limited and regular.
* Transfer from the first language is limited by the ability to process a certain structure.
* Differences in tasks are limited by the language processing hierarchy.
* Acquisition of both the first and the second language is limited by the language processing hierarchy.
* Bilingual language development can be universally compared for different languages using the language processing hierarchy described in the PT.

**Towell and Hawkin’s Model of SLA**

Towell and Hawkins were the first ones to propose the concepts of ‘Declarative Knowledge’ and ‘Procedural Knowledge.’ They believe that SLAresearch has to deal both with the learner’s attempts to learn the system and the learner’s attempts to learn to use of the system*.*‘Multiplicity of knowledge sources,’ was the term used by Towell and Hawkins which according to them is the result of learner’s exposure to SLA after 7 years of age.

Towell and Hawkins (1994) proposedfive main questions addressing English as a second or foreign language:

1. **Transfer:** of grammatical properties from L1 mental grammar into the mental grammar that learners construct for L2.
2. **Staged Development:** L2 learners go through a series of ‘transitional stages’ towards the target language.
3. **Systematicity:** in the growth of L2 knowledge across learners.
4. **Variability:** in learners’ intuitions about, and production of, the L2 at various stages of L2 development.
5. **Incompleteness:** most L2 learners do not achieve native-like competence. This phenomenon is referred as fossilization by Selinker (1972) and as incompleteness by Schacter (1990). (Towelland Hawkins, 1994, p. 15).

**RESEARCH TRENDS IN ESP CLASSROOM**

**Trends and Issues**

Researches on trends and issues have highlighted the differences between the general purposes language and specific purposes language. According to Long (2005), ‘General (language for no purpose) courses at any proficiency level almost always teach too much, e.g., vocabulary, skills, registers or styles some learners do not need, and too little, e.g., omitting lexis and genres that they do. It is more defensible to view every course as involving specific purposes instead of a ‘one-size-fits-all approach’ (Long, 2005, p. 19).

Some of the emerging trends in ESP are:

* Teaching and learning is to create such a learning environment where students’ knowledge construction can be facilitated. Such an environment is one in which students are challenged without being frustrated, and in which they are focused on intentional learning to fulfill a set of learning goals (Jonassen et al., 2003).
* ESP digital learning environment that is ‘learner-centered, knowledge-centered, community centered and assessment-centered’ (Bransford et al., 2000).
* Blended Learning (BL) and attitudes of ESP students towards it. Tafazoli (2012) argues that technology-based course is best regarded as a student motivator.
* Replacing traditional ESP classroom with flipped classroom.
* Authentic material for situated learning.
* Training for ‘skills gap analysis’ *–* assess the current state and formulate a desired state.

Issues in Pakistani contexts are related to lack of understanding of differences between EGP and ESP, larger class size, lack of content appropriacyand relevancy, outdated teaching practices, teacher’s lack of expertise, and learner’s motivation.

**Needs Analysis for Curriculum Development**

 The term ‘Needs Analysis’ has been defined as ‘…. Needs is actually an umbrella term that embraces many aspects, incorporating learners’ goals and backgrounds, their language proficiencies, their reasons for taking the course, their teaching and learning preferences, and the situations they will need to communicate in … (3, pp.73-74). (Hyland) and NA is ‘the cornerstone of ESP and leads to a much focused course’ (1, p. 122).

According to Allwright:

* Needs: arethe skills which a student sees as being relevant to him or herself.
* Wants: are those needs on which students put a high priority in the available, limited time or in other words it is what learner feels she/he needs.
* Lacks: are the difference between the students’ present competence and the desired competence.

Dudley-Evans and St. John proposed the following as key characteristics for needs analysis:

1. Professional information about the learners
2. Personal information about the learners
3. English language information about the learners
4. The learners’ lacks:  the gap between (C) and (A) – lacks.
5. Language learning information
6. Professional communication information about (A)
7. What is wanted from the course?
8. Information about the environment in which the course will be run

**Assessment Issues in ESP Teaching**

 The assessment issues in ESP teaching are primarily concerned with the ongoing evaluation of the course’s learning objectives and learners’ performance. The basic purpose of assessment is to provide learners with useful feedback to develop the required competence in ESP.

Types of monitoring and assessment in ESP contexts include:

1. Placement assessment
2. Observation of learning
3. Short -term achievement assessment
4. Diagnostic assessment
5. Achievement assessment
6. Proficiency assessment

According to Bojović (2006), the four basic components of teacher training are:

1. Selection, initial and terminal, is necessary because not every human being would become an adequate language teacher,
2. Continuing personal education–the assumption is that graduates level of education is insufficient.
3. General professional training as an educator and teacher. It involves what all teachers need to know regardless of which subject they teach.
4. Special training as a teacher of a foreign or second language.

**Teachers Training in ESP**

The emphasis on teachers training in ESP emerged in 1970s by J. R. Ewer with a limited scope, only concerned with students’ conceptual weaknesses, material analysis of scientific texts, and the organization of the program. It was McDonough (1984) who broadened the scope of teachers training in ESP by redefining the term to include the areas of classroom skills as well as teachers’ education. The training aims at providing the teachers with the necessary knowledge and tools to deal with their own students’ specializations.

 Dudley-Evans and St. John (1998) prefer the term ‘ESP Practitioner’ and distinguish the following roles of ESP practitioners:

1. Teacher
2. Course Designer
3. Researcher
4. Collaborator
5. Evaluator

 Abdulaziz et al. (2012) in their article ‘Change from a General English Teacher to an ESP Practitioner: Issues and Challenges in Pakistan’, highlighted the following challenges for ESP teachers in Pakistani context:

* ‘In the future, students will come up with different objectives, specialized vocabulary, and expressions. More field-specific vocabulary will emerge.…In order to overcome situations as these, the ESP practitioners need to be more dynamic in their approach; keep themselves sentient and updated about the demands of the world, learn to make use of the internet….’
* ‘More trained teachers are needed and teacher training institutions are required because the teacher training programs run by the Government offer a very minute number of seats and cannot supply sufficient amount of trained English teaching faculty.’
* ‘Team teaching of subject/content teacher and language teacher is a new concept. Therefore, issues might emerge regarding this new notion of their working in collaboration for course designing implementation, etc.’
* ‘Some ESP practitioners are not aware of the fact that they are teaching ESP.’
* ‘ESP practitioners should be good researchers as well. Nowadays, however, the researches done are focused more towards achieving fame and not for learning.’