Teaching Linguistics during the Pandemic

Rashid Al-Balushi

Sultan Qaboos University

rash5222@squ.edu.om

Abstract— **This paper discusses the critical nature of linguistics courses, and shows how they are usually sacrificed, especially in times of crisis, which results in passive learning. The paper highlights the fact that great potential is wasted when language, which is acquired largely through exposure, experience, and problem-solving strategies employed by language learners, is studied through instructor-directed lectures. It also presents some of the teaching approaches known for being effective in promoting active learning in general. It then provides a step-by-step application of two of the advocated teaching approaches as applied to linguistics courses. Next, the paper discusses the recommended procedure for the application of these effective teaching methods during the Coronavirus (Covid-19) pandemic. The discussion also provides conceptual justification for advocating these active learning approaches.**

Index Terms— **linguistics courses, Covid-19 crisis, distance education, active learning, intellectual skills.**

I. INTRODUCTION

Linguistics is the scientific study of language. Language is the complex and creative system that human beings learn and use for communication. It is something that we all use, all the time, even in our dreams. The critical nature of linguistics courses then stems from the unique nature of language. In fact, the ability to learn language-related concepts, i.e. "names of all things" [1], including names of objects, actions, feelings, etc…, was the evidence that our race is different from that of the angels [2]. We are created as researchers to find out about Allah; and the evidence for our research-potential is manifested through our ability to acquire language, the only domain that all (normal) human beings naturally explore [3]. Language (acquisition) sets us apart as thinking, learning creatures. Unlike angels, who are programed to only worship Allah, we are given the ability to choose whether to do good or evil. Unlike animals, we are created with an intellect that helps us make choices and decisions, which is

why we have to go through the accountability stage before we head to Paradise or Hellfire. This makes language a unique domain of our intellectual activity and a unique aspect of our lives. Learning it says a great deal about our ability to learn and discover anything else, including finding the way to God. "Grammar is actually a much more complex phenomenon than anything that could ever be taught in school" [4].

If 'learning' language is evidence for our intellectual superiority, then 'studying' language should provide an unparalleled opportunity for strengthening our learning and discovery powers. In other words, investigating language and examining its elements and structures, at all levels (sound, word, sentence, meaning, etc…), should in itself be a mental exercise that serves at least two goals. The first is that it introduces us to the wonders of the languages of the world, what they share and how they differ, as well as the cultural and social aspects of the contexts in which they are used. The second one is that studying language and learning about its features and properties, i.e. linguistics, using the right learning approaches can reinforce our general learning strategies and develop the techniques that we employ to acquire knowledge, in general, firsthand, by doing, through experiencing knowledge.

Linguistics courses fall within the large group of content courses, ones which present facts, theories, principles, and concepts, as well as research findings. Content courses introduce students to the subject matter of their specializations, the body of knowledge that they should be armed with as they proceed to the job market, as well as towards their postgraduate studies. Although, as their name suggests, content courses present students with the 'content' or the 'subject matter' of courses in various disciplines, these courses can be taught in a manner that consolidates 'skill development', rather than the mere 'mastery of content'.

With such active-learning instructional approaches as those that will be discussed in section II, the benefit of linguistics courses is maximized, since not only will the students gain the knowledge, but they will acquire it through their God-given learning capabilities, an exercise that should also result in developing these capabilities and sharpening them. This is achieved through problematizing the subject matter of linguistics courses, and exposing the students to the phenomena and concepts related to the specific disciplines of linguistics courses, to prompt them to engage in active class discussions, and also carry out thorough examination of the relevant data-sets.

Nonetheless, in times of crisis, linguistics courses are usually sacrificed. They are either taught using the direct approach, which is based on lectures and presentations of the subject matter of the course, by the instructor, or through assigning the students the reading of certain sections/chapters/papers, and then testing them on how well they have mastered (i.e. memorized) the content of the reading material. Thus, at hard times, linguistics courses are treated as just 'courses of content', when in fact they are much more than just content.

In times of crisis, and sometimes even in normal times, linguistics courses are taught using the direct approach, which "emphasizes teacher control of most classroom events and the presentation of structured lessons. Direct instruction programs call for active teaching: Clear lesson organizations; step-by-step progression between subtopics; and the use of many examples, demonstrations, and visual prompts" [5]. Although the direct approach could be practical for language skills courses (and technical skills courses), it is very likely to bring about the opposite of the desired results when applied to linguistics courses, since it consolidates 'content' rather than nurturing 'skill' development.

The main problem with the direct approach is that knowledge is delivered to the students through lectures and presentations made by the instructor (i.e. it is a one-way street). This leads to minimal student involvement in the learning process. In normal times, the students' role is listening, taking notes and maybe asking some questions. In times of crisis, their role becomes listening or reading (i.e. reception), and then getting prepared for a test that measures how well they have received the material from the instructor or book. The problem with this approach is that it gives the students the impression that linguistics courses are all about content, which leads to a learning style that is mainly based on memorization of the content for the sake of passing tests, a practice not related to education, let alone to linguistic studies.

The reasons for using the direct approach (i.e. instructor-directed instruction) for linguistics courses (and other content courses) include the fact that teaching is given more emphasis than learning (i.e. teaching precedes learning), and therefore, teaching methods are given more importance than learning styles. Besides, if instructors miss their classes, that is, if the teaching is suspended, it is a big problem, but if students miss classes, that is, learning is suspended, it is not, at least from an administrative point of view; the teachers are paid to teach, but the students are not paid to learn/study. There is also this assumption that there should be teaching for there to be learning, which is not entirely accurate, since learning at

an early age proceeds without instruction, and the most vivid example to support this claim is the task of first language acquisition and multilingualism among pre-school children.

Another reason is that most university instructors are not aware of the different teaching approaches and the courses that these approaches are suitable for. Hired as professors, linguistics instructors think that their task is transmitting knowledge to students; they feel tempted to summarize content from textbooks and lecture it. Also, many students resist teaching methods that require them to have a more active role in the learning process [6]. Such attitudes lead to minimal use of the discussion approach; for example, Commeyras & Degroff found that only 33% of the surveyed instructors reported applying the discussion approach in their literature classes [7]. Watters & Watters' findings also reveal that "most students tend to adopt beliefs that knowledge and learning involves the accumulation of information and the capacity to reproduce on demand in examinations. Approaches to learning reflect these beliefs and are dominated by rote learning and preference for assessment by examination" [8].

The consequences of using the direct approach include promotion of 'passive learning', which is not much different from the 'absence of learning'! This results in linguistics graduates lacking higher order intellectual skills (i.e. analysis, synthesis, critical thinking, problem solving) and research skills, which leads to a gap between graduates' levels and employers' needs and expectations. The fact that graduates of especially theoretical linguistics programs are not readily suited for the job market means that emphasis should be placed on skills rather than on content, since these graduates are not likely to use their linguistics knowledge (i.e. the content/theories) to carry out the duties of their jobs. Rather, they are definitely going to need their intellectual and research skills for any job.

Section II presents some of the teaching approaches that promote active learning. Section III shows how the discussion and problem-based approaches can be applied to the teaching of linguistics courses. Section IV discusses some procedures and precautions related to teaching linguistics courses during times of crisis. Section V concludes the paper.

II. Active Learning Approaches to Linguistics Courses

Given the shortcomings of the direct approach when applied to content courses in general, we should explore alternative approaches to linguistics courses, ones that could give better results, through acknowledging the fact that linguistics courses investigate the vitally

important domain of language, the arguably only intellectual domain that we explore without formal instruction. The sought results are also in terms of ensuring more active student involvement in the learning process, thus making the students keen on learning the material and actually seeking to 'know more' about it. The solution to the aforementioned problems lies in preparing the students to independently seek knowledge and understanding through reading, examination of problems, having first-hand experience with various phenomena, asking questions, and pursuing answers and negotiating them. This strategy is effective because education is about learning, not about teaching; that is, learning, not teaching, must be active; teaching must be effective!

Therefore, we call for the application of teaching approaches that promote active learning in linguistics programs, given the unique nature of language and its properties. These include the discussion approach to instruction, which emphasizes "open-ended, collaborative exchange of ideas among a teacher and students or among students for the purpose of furthering students' thinking, learning, problem solving, understanding, or literary appreciation. Participants present multiple points of view, respond to the ideas of others, and reflect on their own ideas in an effort to build their knowledge, understanding, or interpretation of the matter at hand" [9]. Experimental results indicate a positive association between the discussion approach various practices and reading comprehension of literature texts measured by recall and depth of understanding [10][11]. These approaches also include the problem-based approach, which is another "student-centered approach in which students learn about a subject by working in groups to solve an open-ended problem" [12]. In the problem-based approach, "complex, real-world problems are used to motivate students to identify and research the concepts and principles they need to know to work through those problems" and find solutions [13]. Research findings suggest that the problem-based approach nurtures competencies and skills required in fields like education, political science, social work, architecture, and business [14][15].

Another active-learning approach is experiential learning, which "is best considered as the change in an individual that results from reflection on a direct experience and results in new abstractions and applications. Experiential learning rests within the student and does not necessarily require a teacher" [16]. Thus "the learners are physically active in the learning situation and the learning is first hand" [17]. Another student-centered teaching approach is project-based learning, which "allows students to learn by doing and applying ideas. Students engage in real world activities that are similar to the activities that adult professionals engage

in. Project-based learning is a form of situated learning … and it is based on the constructivist finding that students gain a deeper understanding of material when they actively construct their understanding by working with and using ideas. In project-based learning, students engage in real, meaningful problems that are important to them and that are similar to what scientists, mathematicians, writers, and historians do" [18].

These and other student-centered approaches may be applied using different forms of what is called 'cooperative learning', which "refers to students working in teams on an assignment or project under conditions in which certain criteria are satisfied, including that the team members be held individually accountable for the complete content of the assignment or project" [19]. These approaches all suggest that learning can happen by the individual student, or by a group of students, but essentially without the control and direct management of the instructor. As pointed out earlier, this mimics learning language by little children, which makes these approaches most suitable for teaching and studying linguistics.

The advantage of these approaches lies in the roles that they assign to the instructor and students. The instructor is considered as a facilitator of learning and the students as active knowledge and understanding seekers and negotiators. Thus, these approaches seek to produce independent life-long creative learners, ones who have re-gained the curiosity of little children and are equipped with the researchers' passion to discover answers, ones who will keep thinking of language no matter what they are doing, since they use it no matter what they are doing. The next section illustrates how the discussion and problem-based approaches are applied to the conducting of lessons and course design in two types of linguistics courses.

III. The Discussion and Problem-based Approaches at Work

This section discusses how the two advocated approaches can be used for teaching two broad varieties of linguistics courses, especially at the Bachelor's degree level; this includes how lessons are conducted through e-forums, and how courses are designed. Lasnik demonstrates how in-class discussion is effective in teaching syntax classes and in getting the students to be part of the discovery process [20]. Likewise, Filimonova, who examines the application of the problem-based approach to a Spanish linguistics course, argues that "this approach has proven effective for stimulating such higher-order thinking skills as (i) applying knowledge of the material to solving linguistic problems, (ii) developing skills in research and critical analysis, and (iii) developing a professional work ethic" [21].

Some linguistics courses are characterized by long readings (e.g. book chapters or journal articles) as a way to learning the concepts of the discipline, as well as to getting introduced to research methods and findings, which makes the discussion approach a very suitable option. Disciplines that belong in this variety include sociolinguistics and psycholinguistics. Other linguistics courses, like phonology, morphology, and syntax, are mainly characterized by data examination as a way to approach the course concepts, which makes the problem-based approach the right option. While the discussion approach provides for the students' close examination of the concepts obtained through reading, the problem-based approach provides for the problematization of the concepts in the examined data.

A. Application of the discussion approach

To engage the students in active class discussion, e-sessions of linguistics courses may be conducted in the following manner. First, the instructor assigns the students the reading of a certain section (or chapter/article/paper) in the book (or from any other source).[1] The students are required to understand as much of the assigned reading as they can, even if that were 10%, but that they have to, (1) 'try to read with interest', (2) 'finish the reading', and (3) 'write down questions' about the parts or concepts that they could not understand.

Usually, non-native speaker students understand 40-50% of the material (i.e. content) when they read it on their own, and, I think, this is great! The remaining 50-60%, which they could not understand on their own, serves as the trigger that prompts them to form questions, to 'pursue the answers to', and is obtained during the e-session, through a question-answer exchange that includes discussion of those answers. One main advantage of this approach is that the students also know what they could *not* understand on their own, hence the questions.

At the beginning of the e-session, the instructor provides a very short (2-3 minutes-long) presentation that (unlike conventional presentations of the class/lesson material, orally, using slides, OHP, PowerPoint, etc…) includes linking the assigned reading to material learnt/discussed in previous e-sessions, as well as definition of some of the new terminology. Then, the instructor asks what the first point or topic is; and then he/she asks about it? The questions could be about the topic of the chapter and the relevant details, or the purpose of

[1] It should be noted that the concept of 'reading' is not just limited to reading (i.e. decoding print into sound and meaning) from books and written material. A more liberal conception of reading is needed, where 'reading' also includes 'watching videos' and 'listening to recordings', especially if we are seeking to replicate the little children's learning experiences, which are based on 'watching' and 'listening'.

the study and its details including the findings and how they are related to the course theme(s).

The instructor elicits answers, and based on those answers, he/she can assess how much the students were able to understand on their own, and how much clarification they still need. When the students have no more answers, the instructor tells them to start asking questions, and also be ready to provide answers after he/she throws in some clues. Then, the students take the floor to ask questions about the topics or points that they still do not understand, the instructor walking them through the sections that they have read. He/she takes the questions and addresses them back to the class, seeking answers and providing prompts and hints as needed, as well as checking for agreement on answers and linking the new material to the previously learnt concepts. If no student could reach an answer, the instructor provides the answer, and, where relevant, points out that there might be other possible answers.

During the discussion, novel ideas and new implications for the examined topics emerge. Whenever relevant, this activity is followed by a practice exercise (usually a problem or a question) that the students perform with the instructor's guidance. This exercise includes application of the learnt concepts and examined topics to other languages or contexts or linguistic forms, through examples and discussion centered around them. So basically, the reading provides the students with the linguistic phenomenon that allows them to make observations, and the teaching method allows them to form questions and pursue answers, steps necessary for the consolidation of higher order intellectual skills. The discussion approach has been shown to promote problem solving and reasoning. For example, Gillies, who identified the types of questions teachers use and "the types of discourse students use to problem-solve and reason during their small group discussions", concludes that "when teachers explicitly guide and scaffold children's thinking, children, in turn, use many of these dialogic exchanges in their interactions with each other to problem-solve and reason together" [22].

To make the most of the discussion approach in terms of student involvement, linguistics courses can be designed as follows. After leading the discussion for a couple of weeks, the instructor assigns the students the task of presenting the remaining lessons (i.e. sections/chapters/articles) in the e-forum, through leading the discussion. Making the students step in the instructor's role makes them obliged to read the material, try to understand as much of it as they can, and seek the instructor's assistance with the points they

cannot comprehend for the purposes of the discussion-based presentations. E-sessions led by students have proven to be more successful in getting the students to think critically and participate in the discussion. For example, Oh et al., who explored the effect of peer-facilitation, as opposed to instructor-facilitation, on critical thinking and collaborative discourse during asynchronous online discussion, found that the "peer-facilitation approach is more effective for fostering critical thinking and collaborative discourse" among adult learners [23].

Also, it must be made clear to the students that the purpose of the presentation is *not* delivering the content of the read chapter/article, but rather *moderating* the discussion, intriguing the students, and leading a lively question-answer exchange e-session. Xie et al. found that "when students were assigned to the moderator position their participation quantity, diversity, and interaction attractiveness increased significantly and their non-posting participation significantly influenced the group interaction. Students' participation quantity and diversity also significantly influenced their interaction attractiveness" [24]. Depending on the size of the class, e-sessions may be conducted by one or two students, with the rest of the class required to do the reading and actively participate in the discussion. For this purpose, presentations and participation must be graded so that the students take them seriously.

B. Application of the problem-based approach

To promote active learning, the problem-based approach may be applied to the conducting of linguistics e-sessions in the following manner. At the beginning of the e-session, the instructor takes possible questions about the last e-session, and then asks 'reminder questions', the answers to which should refresh the students' memory about the relevant topics (i.e. content) of the previous couple of e-sessions. Then, the instructor introduces the topic of the lesson (i.e. says what it is about and how it is related to previously learnt topics, in 1-2 minutes). Next, the instructor presents the students with a problem-solving exercise (i.e. a data-set that revolves around a linguistic concept or principle in the course). This includes presenting the relevant data-set (e.g. words (in transcription) or phrases or sentences, etc…) on an e-slide, and asking the students to make observations about the data and try to find a pattern (or patterns).

After 10-15 minutes, the instructor starts eliciting answers, and those are the students' observations about the data, or the sought out pattern(s). The observation-elicitation

component of the lesson might take 15-25 minutes (depending on the size of the class), and it is worth it! Sometimes the instructor has to provide clues and hints to help the students find the pattern(s). Even if the right pattern (i.e. the correct answer) is discovered early on in the elicitation task, the instructor does not point that out, and keeps eliciting answers, for two reasons. The first is to reward thinking in general; when people are asked to discover something, they deserve the chance to say what they have found. The second is that the students might sometimes provide insightful answers and point out patterns that are actually beyond the level of the course/problem (i.e. insights provided by well-known scholars); though these are not incorporated in the exercise, the students' efforts are acknowledged and praised. If the pattern is not found, more time and clues are given for the observation-elicitation component.

Once the pattern is found (i.e. after the observation-elicitation component is over), the instructor points out the pattern and checks whether the other students can see it in the data on the e-slide. When the instructor is certain that all the students see the special pattern in the data, he/she asks the students to apply their knowledge (i.e. information and skills developed in the course and previous courses) to provide an analysis of the pattern, which is usually a new concept or principle, in the form of a rule or a figure. The students take time (15-20 minutes) to think of an analysis that suits the newly discovered principle or concept; the analysis is written on a piece of paper.

Then, the analysis-elicitation component starts, where the instructor asks the students to upload their answers (i.e. proposed analyses) onto e-slides to share them with the class, and also for the answer-discussion component of the lesson. Again, even if the correct answer is provided by a student early on in this component of the e-session, the instructor keeps eliciting answers from students, on the e-slides. Once all the students have posted their answers on the e-slides, the answers are reviewed. Here, the instructor does not point out the issues or problems with those answers. Instead, he/she asks the students to critique their own and their classmates' answers, thus helping them to realize the violated topics and components of the theory, which counts as a revision exercise. One virtue of continually eliciting answers is that it gives the students the impression that the instructor is serious about them engaging in a thinking and discovery exercise to reach an answer, and so they have to come up with an answer. The answer they should provide does not have to be the correct one, but just one that does not violate any of the theoretical elements or principles that they have learnt.

At the end of the answer-elicitation component (i.e. once the correct answer is reached by the students), the instructor discusses it formally, and shows how the reached answer follows from the pattern(s) observed in the data-set as well as from what has been learnt before. After this discussion and revision, it is time for the practice component of the lesson. The instructor provides other problems, ones that include the investigated concept/topic on an e-slide, and asks the students to make observations and try to solve the problem by providing an analysis. When the students are ready, volunteers are asked to post their answers/analyses on e-slides. Then, the other students are asked to judge the answers. The presented problems become increasingly more difficult, so that each one of them involves something new for the students to discover. This process is repeated until all the problems are solved.

The solution to these problems leads the students to reach generalizations and later to draw conclusions regarding the discovered concept or principle. So, basically, the lessons turn into e-sessions of question-answer exchanges (i.e. two-way street) that result in gradual build-up and negotiation of knowledge. The problem-based approach was shown to enhance cognitive functions and abilities as well as critical thinking. Chua et al., who probed into the different cognitive stages employed during problem-solving tasks, found that the examined "learners perceived themselves as employing certain cognitive functions, with each function specific to different PBL [problem-based learning] stages. The cognitive functions were (i) looking from different perspectives, (ii) generating many ideas, (iii) making connections and (iv) synthesis." [25]. Besides, Hussin et al. conclude that "PBL with the aid of online tools is the best teaching strategy to enhance students' critical thinking skills" [26].

The aforementioned procedure may be followed in all the lessons of a theoretical linguistics course. Basically, the instructor problematizes the various concepts and principles in the course, designing a problem the solution to which leads the students to figure out the concept or principle and then make generalizations about its nature and also draw conclusions about its value and relevance to the course or to the theory. In other words**,** content is presented in the form of problem-solving exercises, and the students' task is to learn it through working the exercises with the instructions and guidance of the instructor. This approach to instruction ultimately leads to creating students who are able to apply the learnt content and skills to solve new problems. The curriculum of such courses is structured such that each e-session builds, in terms of content and skills, on what is achieved in the previous e-sessions. Therefore, instead of asking the students to read the book (since it includes the answers to

the exercises), the students are asked to read the notes of the previous two or three e-sessions. This reading should remind them of the topics needed to solve the exercise of the following e-session. In line with the practices of the discussion and problem-based approaches, Johnson & Palmer conclude that "instructors in online linguistics courses must devise and implement more interactive exercises that help students remain engaged with the highly technical content of the discipline" [27].

IV. Teaching Linguistics and Distance Learning

Given the nature of these approaches and the roles they assign to the instructor and students, they seem to be very suitable for distance learning (i.e. e-learning). This is because the instructor can either assign readings or present problems, and then lead the discussion of the assigned readings or the examination of the relevant problems in a live video conferencing platform. This section argues that teaching approaches based on a learning style that involves making observations (obtained through reading or examination of problems), asking questions, and pursuing answers is suitable for running linguistics courses using e-learning programs.

Most current practitioners of teaching (whether educationists or not) recognize many e-learning programs and applications, like Moodle, Google classroom, Google meet, padlet, streamyard, Zoom and others. They are also aware of the many and magnificent features that these programs have. These programs are so rich in features as to simulate an actual classroom (so-called virtual classroom), with the instructor, students, and relevant educational resources, including e-slides and access to previously prepared material, all available in the same virtual setting.

Thus, what is undeniable is the high degree of sophistication of these virtual classroom programs or platforms, as well as the lavish features that they can provide for the teaching-learning process. Nonetheless, what is deniable is the claim that all of these advanced and very convenient features are suitable for the teaching of all course types. Differently put, we need to realize that not all these features are compatible with all course types (e.g. language skills, content courses, training, etc…). Plainly stated, the application of all the features available in these e-learning programs in all course types might do more harm than good. The bottom line is that some of these features are not suitable for linguistics courses.

I greatly value the desire on the part of instructors to do their best as instructors. They always try to be available for the students, try all possible means to make the class material as easy as possible, make the students feel secure, indulge in the practice of simplifying the course material, explain every point or idea in as many ways as it takes to make the students understand it, and more. And I would like to thank them for this dedication to the profession and to their students. But I believe that we should view these e-learning program features as 'educators' (who consider what is applicable to produce the best results), not as 'instructors' (who want to make use of all the available features regardless of their suitability for the task).

Therefore, I think 'more' might sometimes mean 'less'. In other words, using many e-learning features trying to explain the material in linguistics courses may bring about the opposite results. It is not about the instructors and students indulging themselves with the many features of these e-learning technologies. Rather, it is about using the right applications and features to achieve the course and program objectives, as well as the main goal of education, which is creating thinking individuals who appreciate knowledge, seek it, and aim to use it for the good of humanity. Outside of the charming field of education, I am sure at least some people would blame modern technologies for our children's preference to sit with laptops, iPads, and cellphones, rather than with their parents and peers. The point here is that we should not fall in love with e-learning technology, though fascinating, but rather love our profession and fulfill our duty to the students and to the society. Evidence for this view comes from the fact that the language acquisition task did not require any sophisticated settings or apparatus or procedures, or even comfort provided by parents or caregivers.

Therefore, speaking for linguistics courses, I believe that an e-learning program (or feature) that allows the instructor to assign readings or present problems and the students to ask and answer questions about those readings or make observations about those problems is the most optimal one for all the purposes of education. The students read the assigned chapter/article, try to understand as much of it as they can, discover what they still need to understand, form the right questions about it, and address those to the instructor who then redirects them to the rest of the class to start a discussion. Or, the students examine the problems and share their observations and later present their analyses to the class live e-forum. Thus, it starts with reading or examining problems (i.e. exposure to phenomena) and ends with asking questions and pursuing answers, a replication of the children's learning style or an emulation of the scholars' discovery process [28].

Any attempt to explain before they do the reading or before they examine the problem would be to supply them with answers to someone else's questions. Any attempt to explain everything after they have read or examined the problem will get them confused as to the purpose of assigning the reading or the examination of the problem. It is sometimes necessary to explain everything, but only after they have asked the questions that they formed based on the reading or the problem. This explanation should take the form of a recapitulation that recognizes what they were able to learn on their own and stresses what they could not and so asked about. Accordingly, any attempt to simplify or summarize the material or explain it in as many ways as one can, or to use as many features as possible from those e-learning technologies would not create independent learners, but ones who depend on the instructor and technology. This is because, in times of crisis, and away from the university atmosphere, the students can easily turn into passive beings that wait for content to be delivered to them while comfortably seated during e-sessions.

Differently stated, using all the possible technological means or features to make the linguistics course material easily accessible to university students might lead them to the false belief that what is important is the material (i.e. mastering the content) and using it to pass the test. It is false because learning the material and passing the test are not the ultimate goal (unless it is TOEFL, GRE, or IELTS, or some other entrance or placement test). The ultimate goal of education is to create independent learners who can learn on their own and can tell what they do not understand, and can seek to learn it through asking questions, and can later use it to make a valuable contribution to the broad study of language and related fields.

Of course, we all want instructors to take their job seriously and do it with both energy and dedication; the influence of this on the students is both academic (i.e. their achievement is higher) and affective (i.e. they learn the values of dedication and competence). So, there is no question about instructor's active involvement in the teaching-learning process. Nonetheless, I believe the main determinant of 'successful learning' or 'good education' is 'how active the students are in seeking knowledge as well as acquiring skills', in being interested in asking about what they do not understand, not in the many ways in which we, instructors, try to deliver the material to them.

If the instructors are more active in education (i.e. in delivering presentations and giving lectures), students will end up learning content, and the inevitable result is that they are going to be tested solely on content, which is undesirable, by all standards. If, on the other hand,

students are more active (i.e. their role is central), they learn the content on their own, and also develop their learning skills, which allows the instructor to assign homework and exam questions that require the application of critical thinking and problem solving. The natural outcome of these teaching approaches is that students are trained to be learners, not just passive receivers.

Given these teaching approaches to linguistics courses, e-learning (i.e. virtual) classes can in fact be bigger than conventional (i.e. face-to-face) classes in terms of the number of students. If the teaching approaches are themselves based on learning styles that involve observations, questions and answers, faculty members may be able to teach more students than they usually do. Besides consolidating concepts like 'active learning' and 'potential discovery', such approaches may require less faculty members to run courses. A possible problem is that faculty members will have to handle a lot of test papers, but this problem can be solved if a single faculty member is assigned the task of administering the tests and marking them using e-learning application features.

To reveal how compatible the discussion approach with distance learning, several authors utilized the on-line medium to develop discussion environments, strategies, and techniques to promote effective interaction and develop metacognitive knowledge and skills, and also make discussions more connected and sustained [29][30][31]. The problem-based approach was also shown to be suitable for e-learning. Phungsuk et al. found out that the "selected student group in the problem-based learning model via VLE [virtual learning environment] achieved higher test scores compared to a group of students in a normal classroom with a statistical significance of .05 … and that they gained more knowledge of information technology as well as access to up-to-date information" [32]. Likewise, de Freitas & Roberts' results indicate that "distance e-learners score as well and sometimes better than face-to-face learners" [33]. This indicates that these two approaches can produce good results if applied in distance learning programs, in general.

Moreover, several studies have shown that e-learning is as good as face-to-face classroom learning in terms of measures (or achievement) of learning outcomes. For example, although Johnson et al.'s results "revealed that the students in the face-to-face course held slightly more positive perceptions about the instructor and overall course quality … there was no difference between the two course formats in several measures of learning outcomes." [34] Also, Jahng et al.'s results "indicated *no significant difference* in student achievement

between ODE [online distance education] and F2FE [face-to-face education] (d = +0.023, k = 20)" [35]. Similarly, Davis et al.'s results also showed that the "participants' improvement in knowledge in the computer based group was equivalent to the lecture based group (gain in score: 2.1 [S.D = 2.0] versus 1.9 [S.D = 2.4]; ANCOVA p = 0.078)" [36]. Ladyshewsky found that "students, on average, did better in the EL [electronic learning] mode although at the individual unit level there were minimal if any significant differences" [37].

Other studies even report relative preference or effectiveness for e-learning in terms of gained knowledge or learning outcome achievement, or self-regulated learning. For example, Bhatti et al. found that "there was a significant increase in the marks gained in group B (E-learning) compared with group A (lecture-based learning)" and concluded that "using augmented Web-based educational tools reduces demands on teaching time with no decrease in quality for selected parts of the curriculum" [38]. Likewise, Liu's findings "suggested e-learning in all offers a higher level of learning effectiveness than traditional face-to-face learning. Moreover, students who used e-learning method were more satisfied on learning materials and learning environment compared to those who used traditional face-to-face learning method" [39]. Also, Paechter & Maier's results indicate that "students appreciated online learning for its potential in providing a clear and coherent structure of the learning material, in supporting self-regulated learning, and in distributing information" [40]. Revealing the opposite pattern, Khalil, who investigated distance learning during the Covid-19 pandemic, found that it was perceived as less effective than face-to-face classes, and also associated with dissatisfaction and lack of comfort among students in two Lebanese universities [41]. This indicates that e-learning may be as effective as conventional learning, and that lack of effectiveness may be ascribed to lack of teacher commitment or student interest or the overindulgence of both parties in e-learning program features or even sociocultural factors including beliefs about the role of technology in our life, development vs. entertainment.

Not relying on face-to-face communication, the teaching approaches recommended for linguistics courses are compatible with e-learning programs because they are based on question-answer exchanges in live e-forums. The e-learning program can be designed to instruct the students to do the assigned readings and then the teacher leads the discussion during the e-sessions. Also, the e-learning program can present the problems (or data-sets), to which the students can later respond with observations, patterns, generalizations, analyses and conclusions. Indeed, the advocated approaches are well suited for distance education,

especially for linguistics courses, in the sense that they allow for effective teaching through promoting active learning.

By contrast, indulgence in the attractive features of e-learning programs can easily lead to the application of the direct approach. It is undesirable in a highly competitive world where knowledge changes and becomes obsolete very rapidly to place emphasis on content delivery; for one thing, content delivery can happen without the intervention of the instructor. Therefore, importance should be given to intellectual skills, since those are necessary for discovery and invention of new knowledge, hence the application of the discussion and problem-based approaches to teaching linguistics in e-learning contexts.

V. Concluding Remarks

It is very easy for us, linguistics instructors, to require students to be creative and innovative in their studies. Is it equally easy for us to be creative in delivering our classes and carrying out the teaching? Can we, administrators, be innovative in our policies and teaching- and learning-related regulations? We need to remember that if the students cannot think during the e-sessions, chances are that they will not be able to think during the tests, and if they cannot do independent learning as university/college students, they will not be able to be independent learners as employees.

The fundamental difference between the direct approach, on the one hand, and the discussion and problem-based approaches, on the other hand, as far as linguistics courses are concerned, is in the amount and nature of instructor involvement, *controller* vs. *facilitator*. Thus, louder calls have emerged for sustaining the facilitator role of instructors. Since linguistics is about language, knowledge should not be imposed on the students; rather, they should be exposed to linguistic phenomena through independent reading and examination of data-sets. In this regard, the current paper calls for going back to the roots, especially that the advocated approaches aim to replicate genuine learning experiences that the human race naturally engages in, most notably language acquisition.

The difference between ‘instructor’ and ‘teacher’, and consequently between ‘student’ and ‘learner’ is revealed by the following terminology from the traditional Indian educational system. While a ‘guru’ is an information-provider and skill-developer, which is the instructor in our terminology, an ‘acharya’ is someone who shows you the path to ‘salvation’, which corresponds to the teacher or the guide. Consequently, a ‘vishayadhari’

is an information holder, like a container or a hard-disk, whereas a ‘gnani’ is the one who knows the true meaning of knowledge, which is the true active learner.

A simple saying goes “necessity is the mother of invention”. Thus, once the students discover that certain knowledge or training is necessary, they will figure out (or ‘invent’) a way to learn it. The recommended approaches teach the students about their own general abilities, not just the academic ones, and also help develop these abilities during the university experience, since the purpose of university education is not obtaining a certificate, but rather being a good employee, parent, and citizen. We need to remember that we were able to ‘learn language’ firsthand, without instruction, which means that we are equipped with the means to ‘study language’ firsthand, too, through instructional approaches that promote active learning. This fact should not be neglected even with the hardships that accompany times of crisis, and even with the conveniences offered by technology.

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Dr. Rashid Al-Balushi received his Ph.D. in Linguistics from the University of Toronto, Canada in 2011. He is currently an associate professor of linguistics at the Department of English Language and Literature at Sultan Qaboos University in Oman. He has published in linguistics and other language-related fields. His research interests include clause structure and case theory. Dr. Al-Balushi has also published in the media on linguistics, education, religion, administration, economics, and politics, in Arabic and English.