

Research Article

**Addie Model Of Instructional Design In An Online Course At Higher Education**

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**Abstract**

In the digital age, instructional designers must possess both a sound instructional design knowledge that will enable them to develop, design and deliver effective courses. In the current study a course on Linguistics is designed and evaluated using ADDIE model. Effective delivery include the ability to apply a strong instructional design framework However, courses in the higher education do not follow a stringent framework. In this paper, the author draws on the research findings of ADDIE model of instructional design to examine this gap. The author argues that the alignment between instructional design and classroom practices will lead to effective course delivery. The authors propose some guidelines for instructional design in a Linguistics course .

**Keywords:** Instructional Design, Linguistics Course, ADDIE Model, Online Course, Programme Evaluation.

**Introduction**

The ADDIE instructional design process (i.e., Analysis, Design, Development, Implementation, and Evaluation) is a common approach widely used in the development of instructional courses and training programs. This approach provides educators with useful, clearly defined stages for the effective implementation of instruction. (Allen, 2006). Consisting of five phases, the ADDIE framework was implemented in the development of an instructional design course on Linguistics. First, the ADDIE framework was used in the planning of the instructional design course. Subsequently, the framework proved useful as a scaffold for students developing courses. The ADDIE framework brought the instructional design course to life by providing a process that actively engaged developers in problem achieving the learning outcomes.

**Instructional Design**

Instructional Design is a systematic approach dealing with planning and developing effective instructional materials focused on individual learning, used for producing educational and training programs usually in the form of online courses, providing a framework for learning.

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(Molenda & Reigeluth, 1996). This approach is based on both theoretical and practical research in the fields of cognitive psychology, educational psychology and problem solving. It is particularly beneficial to distance students and students studying online courses because of its efforts to present content effectively and reinforce interaction. “The purpose of instructional design is to maximize the value of instruction for the learner - especially the learner's time with the main goal “to ensure instructional quality, effectiveness, efficiency and enjoyment”.”(“ADDIE”, 2003). The role of instructional designers is to focus on the instruction, particularly its design, feel, organization and functionality.

Their work can be compared to the work of architects who design specific features and blueprints as well. However, instructional designers do so for the purpose of a course/training program development. To briefly discuss what the job of an instructional designer involves, it is analyzing learning needs and developing instruction, studying instructional theories, tools and resources to create methods that would facilitate learning, using pedagogical teaching methods and the latest technology to develop effective learning products such as online learning courses, tutorials, training manuals, workshops, seminars etc., planning and implementing the most effective training strategies, integrating feedback, assessment and evaluation of the course into the training program and evaluating its effectiveness.

### **Application of ADDIE Model in a Linguistics Course**

Extensive narrative references to the ADDIE Model in the academic literature is found in earlier research studies (Andrews & Goodson(1980) ; Gustafson & Branch, (2002). Their studies attempted to capture the current consensus regarding the characteristics of the systems approach to ID. We chose the term ADDIE as an umbrella term for Instructional design models because that's the term we heard most often in research on instructional designs. The different phases of ADDIE model are presented in Fig-1.



**Fig-1 ADDIE Model**

The implementation of all the five phases of the model for a linguistics course is presented below.

#### **Phase-1 Needs Analysis**

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There is an urgent need for courses of all kinds to be relevant - and to be seen to be relevant - to the needs of specific groups of learners and of society at large. (Almelhi, 2021). In the analysis phase the researcher clarifies the instructional problems and objectives, and identifies the learning environment and learner's existing knowledge and skills. At the outset the students are introduced to the scope of applied linguistics and the importance of the course. After watching the video the students are supposed to have an online discussion with the instructor on the scope and importance of Applied Linguistics. A Screen shot of the instructors online classroom on Linguistics is shown in the fig-2



**Fig-2: Screen shot of Instructors online classroom**

According to Branch, (2018), Many secondary school students and, especially, adults with serious academic, occupational, vocational, or 'survival' needs for functional L2 proficiency, as well as their sponsors, are increasingly dissatisfied with lessons, materials and methodology developed for someone else or for no-one in particular. At the societal level, the need for language is generally defined within very general social goals, such as 'national security', 'social justice', or the like. So the importance of the needs analysis is justified in stage-1.

### **Phase-2: Design Stage**

The design stage also called the planning stage includes determining how the objectives of the online course on linguistics will be met, the instructional strategies that will be employed to achieve the objectives, and the media and methods that will be most effective in the delivery of the objectives. The instructor followed a five step process during this phase. They are 1) articulation of course objectives: The learners were told that they will be introduced to the main approaches used in linguistic research, and will explore the key areas in linguistics on everyday 'myths' about language. 2) Setting clear outcomes: The target learners were told that they will discover how linguistic researchers turn ideas about language into linguistic knowledge. 3) Design of Learning components: The learners were given the learning components along with the lesson plan (Annexure-1) 4) Selection of Media for Delivery: Learning Management system 'Edmodo' was used as a platform for online course delivery. 5) Activity and assessment types:

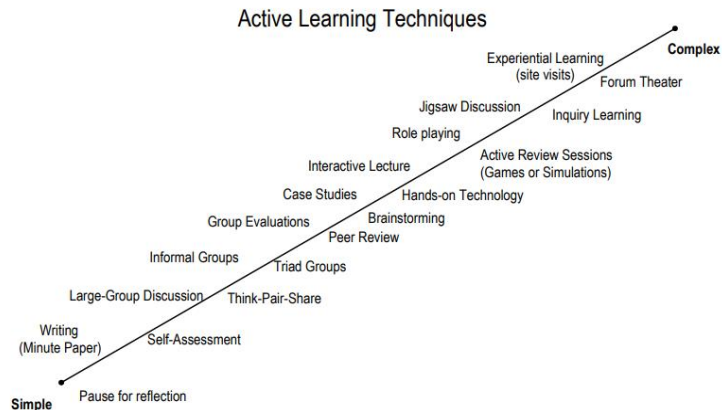
The activity and assessment types were decided eventually. A sample online activity after lesson-1 is given below.

**Activity-1**

- The impact of applied linguistics in your professional lives.
- Types of linguistics and role of applied linguistics.
- Online discussion on one area of applied linguistics that intrigues you.

**Phase-3&4: Development and Implementation Stage**

Active learning techniques were followed for the development of the course. Del Campo and Clements (1987) presented a model which contrasted the nature of teachers’ and students’ roles as they are displayed through various classroom activities, ranging from passive to receptive to active on the part of students. Students’ role as problem posers is “active,” in contrast to their “receptive” role when teachers (or other students) model a solution to a problem, or their “passive” role when they read examples in a textbook. Although some teachers may have incorporated problem posing activities into their classrooms, little has been reported on how it is used in an EFL or ESL context. Active learning techniques were followed in the development and implementation stage. Chris O’Neal and Tershia Pinder framework is given in figure-3



**Figure-3:Source: Chris O’Neal and Tershia Pinder-Grover**

**Implementation of Active Learning Techniques in the Linguistics Course**

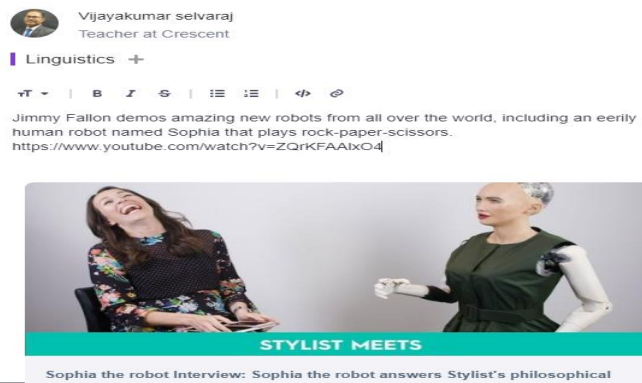
A detailed view on the activity types of the Linguistics course is presented in Table-1

**Table-1-Sample Online recorded Lecture Activites on the scope of Applied Linguistics**

Activity Types	Description from the course
Clarification pauses	When the instructor described the types of linguistics there was a long pause,wherin a student had to either post a question or present a view in the textbox,
2-minute free writing	In the discussion section the students were asked to distil the essence of the lecture on the types of linguistics in 2 minutes Example: Which area of Linguistics Intrigued you? Why?

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Short Quiz	The students were given different terminologies related to Historical Linguistics and they were asked to match the expressions with meanings
Group Discussion	Applied Linguistics play an important role in our professional lives. To what extent do you agree or disagree with this statement . Discuss.(Present your views in the discussion box)
Collaborative discussions	Respond to others views by replying or commenting in the Edmodo classroom
Assignment	Present a short essay in 500 words on one area on Linguistics that you find appealing
Peer review	The students are supposed to peer review atleast two of their exercises.
CaseStudies	The students were given some case studies on language related issues such as Aphasia, and other speech disorders and they were asked to solve the cases.
Simulations	The students were asked to listen to the speaking robot in the edmodo classroom.(See Figure-4).They were asked to present their views on Simulation softwares.



**Fig-4 Witnessing a Speech Simulation in an online class.**

**Phase-5 Evaluation**

Another facet during the design process is assessment. As a vital component of the instructional plan, designers determine how objectives will be assessed and what forms of assessment will be used prior to implementation. The objectives and assessments should align and be meaningful. A course evaluation question was framed for this purpose. The framework for course evaluation and modification was based on McDonough & Shaws Framework (2003). There was a brainstorming session with the course instructors and the students on the areas in the course that needs expansion, extension, subtraction, abridging, rewriting, restructuring simplifying and reordering.

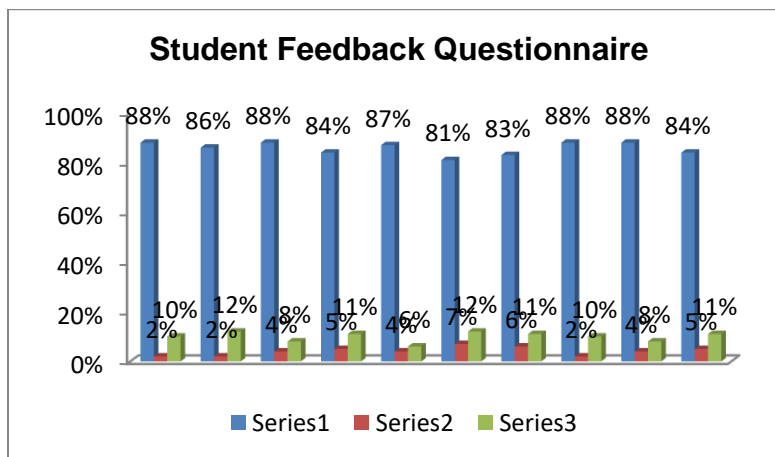
McDonough & Shaw (2003)	Expanding	Supply more of the same (quantitative nature); the model is not changed.
Congruence  Reasons: personalization, individualization, localization, and modernization.  Techniques • Adding (expanding/extending) • Deleting (Subtracting/abridging) • Modifying (Re-writing/Re-structuring) • Simplifying • Re-ordering	Extending	Supply more by moving outside the methodology and developing in new direction (qualitative nature).
	Subtracting	Reducing the length of material (quantitative nature).
	Abridging	Taking out material for pedagogical reasons (qualitative nature).
	Rewriting	Some of the linguistic content is modified.
	Re-structuring	Some of the lesson procedures need modification.
	Simplifying	Changing style, content, presentation.
	Re-ordering	Putting parts of a course book in a different order.

**McDonough & Shaws Framework (2003)**

Eventually the student feedback questionnaire on course evaluation was conducted.

Table-2 Student Feedback Questionnaire on the effectiveness of ADDIE Model

Feed Back Questionnaire	Yes	No	Cannot Say
The online method of delivery was engaging	88%	2%	10%
The course objectives were clearly articulated	86%	2%	12%
The production of online assessment materials were effective	88%	4%	8%
The Learning Management system was effective	84%	5%	11%
The course materials were context centered	90%	4%	6%
We had clear understanding of the needs of the course	81%	7%	12%
The materials met with our learning goals	83%	6%	11%
The activities were enjoyable	88%	2%	10%
The video lectures were engaging	88%	4%	8%
The outcomes of the course were achieved	84%	5%	11%



The student feed back questionnaire indicated that the learners found the delivery engaging as an overwhelming 80% of them have agreed. 86% of the students agreed that the course goals were clearly articulated in the implementation of ADDIE framework. Majority of the learners i.e 88%

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of them have stated that the online assessment materials were effective. 84% of them found the learning management system to be effective. 90% of the learners found the course materials to be context centered. Most of the learners have agreed that the course materials were context centered. They also agreed that they had clear understanding of the course.83% of the learners agreed that the course met up with their learning goals.88% of the learners found the activities engaging and 88% of them found the video lectures engaging. 84% of them agreed that they achieved the learning outcomes in the ADDIE model of Instructional Design.

### **Discussion**

This study was designed to find out the effect of ADDIE model in a linguistics course. The main question was to check the utility of all 5 phases of the model. The effectiveness of the model was checked out using a student questionnaire. The results indicated that the students found the ADDIE model very effective. The results of this study concurred with the earlier studies (Horton, 2011) and Selinger, M. (2001). This level of success of the online course on linguistics is attributed to the Addie model of instructional design. Based on the results of the study, the researcher can conclude that that design will be practically relevant and effective for delivering language based courses online. Most importantly it is understood that this framework will not be engaging but will lead the learners to achieve the learning goals and outcomes.

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