Implementing a Holistic Teaching in Modern ELT Classes: Using Technology and Integrating Four Skills

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Abstract

This conceptual paper explores the framework of which language teaching approaches are required to integrate the recent technologies in modern English Language Teaching (ELT) classes. Driven on the relevant literature of ELT and Computer Assisted Language Learning (CALL), we argue that integration of language skills in a holistic way and the technology as the enabler can facilitate the learners' obtaining the knowledge of the language and the knowledge about how to use the language appropriately in communicative situations.

Keywords: CALL, ESL, ELT, Holistic Learning, Integration/segregation of skills, Technology in ELT

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1. Introduction

There are different approaches to language teaching regarding skills. A quick review of literature shows us roughly two mainstreams of approaches about the skills; integrated or segregated skills (Oxford 2001). The hot debate of 80s and early 90s was on integration. But this seems to lose its fever. Researchers like Selinker and Tomlin (1986) contend that the best pedagogical decisions for students can be made only by taking into serious account systematic observations of student performance in specific learning situations in which differing integration/ segregated schemes are used. Separating the skills for discrete focus is based on the assumption that there are aspects of individual skills that specific learners from specific language backgrounds will need to focus on e.g. intonation difficulties (Nunan 1989). Some researches go even beyond the integration/segregated schemes of skills. Oxford (2001) participates in the topic by introducing the term of tapestry. This tapestry is woven from different strands including the teacher, learner, setting, and relevant languages besides the four skills. And Shen (2003) argues about the implementation of 'Language + Communication (L+C) Approach' in which closely integrates linguistic competence with communicative skills and communicative culture in the process of language teaching so that the learners' linguistic competence and their communicative skills can be improved simultaneously.

However, it has widely discussed and accepted that integration of four skills can develop communicative competence (Jing 2006). Because the real life demands from the learners not only immersion into the knowledge of language, but also into the knowledge about how to use the language appropriately in communicative situations. Jing (2006) highlights many situations in which more than one language skills are used to communicate in our everyday life. Furthermore, he alleges that integration leads the focus on realistic language and can therefore lead to the students' all-round development of communicative competence in English.

Likewise, Skehan, (in Bygate et al., 2001, p.10) (Cited in Nunn 2006) emphasizes whole task completion and outcomes, a relationship with real-world activities and giving priority to learners' own meanings.

Around the debates of integrating/segregating or segregating in need, the whole language approach (Schurr et al.1995), or sometimes known as holistic teaching (Myers and Hilliard 1997) has become prominent in the recent studies which highlight the integrating of the skills and the technology as the enabler (West 2002) as the dominant teaching approach. Nunn (2006) asserts that the language learning theory has seen a gradual move towards a more holistic view of language use. By referring Schmitt and Celce-Murcia (2002, p.12) he states that, "the last thirty years has seen a move towards viewing language in much more integrative and holistic terms". Nunan (1989, 2005)(Cited in Nunn 2006) considers skills integration as an important feature of language learning, appealing to such notions as interaction, task continuity, real world focus, language and learning focus and task outcomes.

Schurr et al. (1995) argue that the language use is holistic in the real world. Therefore, when teaching, the learners should immerse in reading, writing, speaking and listening. The effective classrooms should reflect the real world holism. The main task of the teachers must be departing from the separatist mentality. It is true that good readers are also good writers but at the other hand, those students are also effective speakers and listeners. So, it is not enough to exercise one or two language faculties; we need to provide ample opportunities for enhancing all facets of language. Using cooperative learning activities is one of the best ways to accomplish this. Teachers can take advantage of the social nature of reading and writing to promote paired, group and other cooperative learning activities (Myers and Hilliard 1997). In short, provide opportunities for the integrated practice of reading, writing, speaking and listening. According to Nunn (2001) language teaching is considered merely as an adaptive process. He posits that there is not an ideal method or approach. Teachers task are to develop a

repertoire of holistic activities within which a variety of approaches may be adopted. Among those includes activities such as simulated conversations in pairs and small groups, speech making or storytelling. All of these holistic activities act as a framework for the adoption of different approaches and roles, ranging from strictly and centrally controlled teacher-fronted interaction to devolved interaction in which students structure their own discourse (Nunn 2001).

In terms of technology, particularly in modern ELT classes, we argue that all skills should be integrated (Darn 2006). The core reasons of why technology integration is useful, Lee (2000) points out, under the general context of CALL, experiential learning, motivation, enhancement of student achievement, authentic materials for studying, greater interaction, individualization, independence from a single source of information, and global understanding.

This conceptual paper explores the framework of which language teaching approaches are required to integrate the recent technologies in modern ELT classes. By doing this, we try to answer the following questions:

1. Why is integrated-skill approach postulated in language teaching?
2. Are there any adequate models on how to integrate the technology into the classrooms?
3. What type of specific integration strategies can the teachers incorporate into their teachings?

2. Integrating the Traditional ELT Classes

In terms of integration skills Oxford (2001) introduces the word "tapestry". She argues that this tapestry does not only consist of traditional four skills but additional strands such as the characteristics of the teacher, the learner, the setting, and the relevant languages (i.e., English and the the learners' and teacher's native tongue). Further she extends her point by including

associated or related skills such as knowledge of vocabulary, spelling, pronunciation, syntax, meaning, and usage. This, according to her, forms the integrated-skill approach.

But, on the other hand, the absence of such threads may lead to a discrete, segregated skills-like in a real tapestry "parallel threads not touching, supporting, or interacting with each other" (Oxford 2001:1).

Likewise, Blanton (1992) criticize traditional mainstream classes due to their segregated skills teaching. She put forth a number of reasons such as depriving students of linguistic and intellectual immersion necessary for language acquisition and cognitive development to take place. To avoid these she suggests whole language approach by drawing on a content-oriented model.

Wills (2000) joins our discussion by highlighting and implementation of task-based course design and hence, a holistic approach. Similarly, she asserts the language learners should engage actively in processing the meanings of whatever they hear and read. The example course design that she introduces, through its holistic nature, requires computer and human interaction. Akiko and Nelson (1997) contend the CALL use of teachers in Japan driven on task-based instruction materials under the integrated skills. Students choose a specific topic about which to create a computer presentation. Next they study the topic, reading articles and books, listening to radio and television broadcasts, recording interviews, taking pictures, taping video, and composing text. Finally, students combine these elements into a coherent presentation in a computer using multimedia authoring software.

Mohan (1986) states the need for skill integration in language learning since each language skill is not used separately in real life communication. According to Scarcella and Oxford (1992), the combination of theme-based and task-based instruction is the most effective way to teach language in an integrated manner.

Oxford (2001) elaborates the integrated skills through two forms of instruction; content-based language instruction and task-based instruction.

2.1. Content-based Language Instruction

In content-based instruction, students practice all the language skills in a highly integrated, communicative fashion while learning content such as science, mathematics, and social studies. Content-based language instruction is valuable at all levels of proficiency, but the nature of the content might differ by proficiency level. For beginners, the content often involves basic social and interpersonal communication skills, but past the beginning level, the content can become increasingly academic and complex. The Cognitive Academic Language Learning Approach (CALLA), created by Chamot and O'Malley (1994) shows how language learning strategies can be integrated into the simultaneous learning of content and language.

Crandall (1994) mainframes three general models of content-based language instruction: theme-based, adjunct, and sheltered. The theme-based model integrates the language skills into the study of a theme (e.g., urban violence, cross-cultural differences in marriage practices, natural wonders of the world, or a broad topic such as change). The theme must be very interesting to students and must allow a wide variety of language skills to be practiced, always in the service of communicating about the theme. This is the most useful and widespread form of content-based instruction today and it is found in many innovative ELT textbooks. In the adjunct model, language and content courses are taught separately but are carefully coordinated. In the sheltered model, the subject matter is taught in simplified English tailored to students' English proficiency level.

There are various examples suggested in literature. Sagliano and Greenfield (1998) report about the use of videos in a content-based history course for Japanese university students.

Kasper (2002a) argues that visual aids, such as movies, graphic organizers, and hypermedia technology, can make content-based materials more cognitively accessible. Short stories are also useful. Kasper (2002b) describes how short stories can act as a bridge to content for lower level students enrolled in CBI courses. In addition to videos, visual aids and short stories, trivia can also serve to ease the transition from regular language classes to content-based classes.

2.2. Task-based Instruction

In task-based instruction, students participate in communicative tasks in English. Tasks are defined as activities that can stand alone as fundamental units and that require comprehending, producing, manipulating, or interacting in authentic language while attention is principally paid to meaning rather than form (Nunan, 1989). Willis (1998) asserts that task-based learning activities are like adventures full of surprises.

Oxford (2001) describes the applicable model framework of task-based instruction in the classroom. By emphasizing the importance of pair and group work to increase student interaction and collaboration she gives examples of the students' tasks such as working together to write and edit a class newspaper, develop a television commercial, enact scenes from a play, or take part in other joint tasks.

She continues her standpoint by giving formative and structured cooperative learning formats which can also be used in task-based instruction. Regardless the level of language proficiency task-based instruction is relevant to all. However, the nature of the task varies from one level to the other.

"Tasks become increasingly complex at higher proficiency levels. For instance, beginners might be asked to introduce each other and share one item of information about each

other. More advanced students might do more intricate and demanding tasks, such as taking a public opinion poll at school, the university, or a shopping mall." (Oxford 2001).

3. Integrating Technology in Modern ELT Classes

Developments in technology over the last two decades have been nothing short of dramatic and their potential impact on language teaching and learning no less so. Whereas earlier developments such as the language laboratory were considered in their time to be quite revolutionary in their potential effects on language learning, they proved to have had few lasting or dramatic effects; however, there are certain fundamental differences in kind between earlier technological developments and the present. Whereas the language laboratory, for instance, facilitated wide language experience and intensified the rote memorization of language patterns, these effects were largely peripheral. To the extent that the earlier technology helped to provide communicative experience, that communication was human-to-machine, which is not the way that language normally works.

The current developments are such that they can impact on the central learning processes and better match the real nature of language as well as support the peripheral processes. In particular, modern technology has the ability to facilitate person-to-person interaction with learners interacting via telecommunications and computer networks both with other learners of the same language and with native speaking peers in other parts of the world.

According to Lao (2000) technology integration is such a broad term that is not easily understood by those involved in the area of teaching and learning. From the perspective of an educator who utilizes technology daily, technology integration can be defined as the utilization, combination, mix, and supplementation of technology tools with instruction to aid and improve learning in the classroom.

Gunn and Brussino (1997) underline the current theories of ELT through the learners' engagement in purposeful interactions with real audience and explore the research literature which repeatedly points to four conditions in that optimum language learning can take place. These are (p.2);

• opportunities for learners to interact and negotiate meaning with an authentic audience;

• involvement for learners in authentic tasks which promote exposure to and production of varied and creative language;

• opportunities for learners to formulate ideas and thoughts and where intentional cognition is promoted;

• an atmosphere with ideal stress/anxiety levels in a learner-centred classroom.

They argue that to meet these opportunities, the integration of CALL and holistic language skills is a must. This integration draw up for a system which will allow the learners to get involved in true-to-life situations, actively engaged in problem problem-solving and task-based activities, and exposed to authentic characters and accents.

3.1. A Brief History of Technology in ELT

With the term technology in our paper, we mean computer and related technologies. Unlike the technologies of 1960s and 1970s, the computer itself along with its related technologies is disruptive in nature. In general technology will be used interchangeably with the term CALL.

Warschauer and Meskill (2000) assert that almost every type of language teaching has had its own technologies to support it. They categorized the technology according to the dominant methodologies of their era. The grammar-translation method relied on one of the most ubiquitous technologies in education, the blackboard—a perfect vehicle for the one-way

transmission of information that method implied. The blackboard was later supplemented by the overhead projector, another excellent medium for the teacher-dominated classroom, as well as by early computer software programs which provided what were known as "drill-and-practice" grammatical exercises. Later, the audio-tape became the perfect medium for the audio-lingual method. Language classes in the 1970s and '80s generally included obligatory visits to the audio lab, where students would perform the dreaded repetition drills. Then, by the late 1970s, the audio-lingual method lost its reputation because of the poor results achieved from expensive language laboratories. The writers (Warschauer and Meskill 2000) emphasize that, regardless of learning environment, repetitive drills which focused only on language form and ignored communicative meaning achieved poor results.

With the advent of communicative language teaching in 1980s and 1990s, however, learners became the center of teaching activities in which engagement with authentic, meaningful, contextualized discourses are required. This new trend led to the exploration of integration technology into the classroom. Authors (Warschauer and Meskill 2000) demonstrates two distinctive approaches; cognitive approaches and socio-cognitive approaches.

Warschauer & Healey (1998) divide the history of CALL into three main phases: behavoristic CALL, communicative CALL, and integrative CALL. Each stage corresponds to levels of technology as well as research in the field of Educational Psychology and Applied Linguistics.

Behavioristic CALL was grounded in Skinner's stimulus-response (S-R) theory and Pavlov's famous classical conditioning experiments. Basically, students completed repetition and drill type exercises on the computer. The computer was an at-home "mechanical tutor" (Warschauer & Healey, 1998), where students memorized word lists and completed fill-in-the-blank exercises over and over again, echoing the Audio-lingual Methodology use in the

classroom at this time. As the instructor was the drill leader in the classroom, the computer was the drill leader at home. Answers were either right or wrong, and reinforcement was given for 'correct' grammar. Because SLA theories in the 1960s were influenced by research in educational psychology, with heavy reliance on the first language (L1) of the student, translation tests were also facilitated via the computer. A significant contribution of behavioristic CALL was that students could progress at their own pace outside classroom. In the late 1970s and 1980s behavioristic theories of SLA were rejected, and innatist theories (Krashen, 1982) became the foundation of L2 teaching methodologies, such as communicate language teaching, that were utilized in the classroom. These innatist theories had a profound impact on CALL as they focused on "meaning" rather than "form." Grammar was taught explicitly through authentic communication. Students no longer memorized lists, rather, they were encouraged to use the target language in meaningful situations where the instructor asked questions and students answered them. The questions were tailored to student interests and daily lives. Accordingly, students used the computer as a means to answer questions posed by the instructor. The focus on language use in culturally authentic contexts led to the phase of "Integrative CALL" (Warschauer, 1996), where speaking, listening, reading and writing were integrated through the use of the computer across the stages of acquisition. Beforehand, under the influence of behavioristic and communicative CALL, the computer was utilized in isolated instances for limited phases of time. Integrative CALL is the foundation for current trends in technology-based language materials. The new interactive technologies include developments such as accessing video so that students see and hear "real" culture and language (Bush, 1997) where students interact with each other (not just the instructor) at the computer in task-based contexts.

3.2. Technology Integration in Language Teaching

3.2.1. Pierson's Integration Model

Pierson (1999) (Cited in Woodbridge 2004) defined technology integration as teachers utilizing content and technological and pedagogical expertise effectively for the benefit of students, learning. Pierson's integration model consists of three intersecting circles representing the three types of knowledge. Content knowledge is what is known about the subject matter being taught. Pedagogical knowledge describes the structure, organization, management, and teaching strategies for how particular subject matter is taught. Technological knowledge includes the basic operational skills of technologies and how technologies can be used in the classroom (Pierson, 1999).

3.2.2. Cognitive Integration Models

With the introduction of communicative language teaching Warschauer and Meskill (2000) describes two basic approaches for technology integration; cognitive approaches and socio-cognitive approaches.

3.2.3. Cognitive Approaches:

Cognitive approaches claims that learning a language is a unique psycholinguistic process. This process motivates language learners to construct a mental model of a language system, based on innate cognitive knowledge in interaction with comprehensible, meaningful language rather than on habit formation. Errors are accepted not as bad habits to be avoided but as natural by-products of a creative learning process that involves rule simplification, generalization, transfer, and other cognitive strategies (p.3-4). Technologies allow learners maximum opportunity to interact within meaning-rich contexts through which they construct and acquire competence in the language. Text-reconstruction software, concordancing software, telecommunications, and multimedia simulation software are examples of these technologies. Those are often used in pairs or groups, the software programs by

themselves do not of themselves necessitate human-to-human interaction (Warschauer and Meskill 2000).

3.2.4. Socio-cognitive Approaches:

Unlike cognitive approaches, these approaches accentuate the social aspect of language acquisition; in other words, learning a language is viewed as a process of apprenticeship or socialization into particular discourse communities (Schieffelin & Ochs, 1986 cited by Warschauer and Meskill 2000). Learners should be given maximum opportunity for authentic social interaction, not only to provide comprehensible input but also to practice in the kinds of communication they will later engage in outside the classroom. This can be achieved mainly through collaboration on authentic tasks and projects while simultaneously learning both content and language. May be the best example of the technologies under this context is the Internet. The Internet is a vast medium that can be applicable into the classroom and outside the classroom in numerous ways.

3.2.5. Content and Language Integrated Learning Model:

Darn (2006) by referring Coyle (1999) suggest following elements in the model:

- **Content** - Progression in knowledge, skills and understanding related to specific elements of a defined curriculum.

- **Communication** - Using language to learn whilst learning to use language.

- **Cognition** - Developing thinking skills which link concept formation (abstract and concrete), understanding and language.

- **Culture** - Exposure to alternative perspectives and shared understandings, which deepen awareness of otherness and self.

The lessons should comprise certain characteristic such as integration of skills under receptive and productive contexts, authentic materials based on reading or listening

text/passages, not considering structural grading in language focus, language is functional and dictated by the context of the subject, approach is mainly lexical rather than grammatical, and learner styles are taken into account in task types.

3.2.6. Teachers' Role in Integration:

The traditional view (Liu and Huo 2007), also known as the progressive view, suggests that the teacher's role is a less intrusive one in ELT. This perspective points out that teachers are not the only source of language information in these days of global interconnectedness, and the language teachers should understand that students need to develop strategies to respond and adapt to changes rather than approaching the task of language learning in a uniform way (Warschauer & Healey, 1998). Warschauer and Healey (1998) advocate that the teacher should play the role of facilitator rather than being the fount of all knowledge. Likewise, the other researchers such as Gruba (2004, p.637) refers to the teacher as a "mediator" between the computer and students throughout the learning process, serving the role of "keeping things running smoothly". The more progressive view can find support by many researchers, to name only a few of whom, Debski et al. (1997), Chapelle (2001), and Wang (2004). The roles of the teachers in classroom are as follows:

Circulating	Modelling
Monitoring	Clarifying
Guiding	Motivating
Facilitating	Assessing
Troubleshooting	Moderating
Observing	Redirecting
Encouraging	Suggesting

Table 1. Teachers Roles in the Classroom Environment

Source: McKenzie, J. (1998).

3.2.7. Computer-mediated Communication

Computer-mediated communication (CMC) (Levy,1997), which has existed in primitive form since the 1960s but has only became wide-spread in the last ten years, is probably the single computer application to date with the greatest impact on language teaching. Language learners can communicate directly, inexpensively, and conveniently with other learners or speakers of the target language 24 hours a day, from school, work, or home. This communication can be asynchronous (not simultaneous) through tools such as electronic mail (e-mail), which allows each participant to compose messages at their time and pace, or in can be synchronous (synchronous, "real time"), using programs such as MSN Messenger, which allow people all around the world to have a simultaneous conversation by typing at their keyboards, talking, and seeing. It also allows not only one-to-one communication, but also one-to-many, allowing a teacher or student to share a message with a small group, the whole class, a partner class, or an international discussion list of hundreds or thousands of people.

CMC allows users to share not only brief messages, but also lengthy (formatted or unformatted) documents--thus facilitating collaborative writing--and also graphics, sounds, and video. Using the World Wide Web (WWW), students can search through millions of files around the world within minutes to locate and access authentic materials (e.g., newspapers and magazine articles, radio broadcasts, short videos, movie reviews, book excerpts) exactly tailored to their own personal interests. They can also use the Web to publish their texts or multimedia materials to share with partner classes or with the general public.

It is not hard to see how CMC and the Internet can facilitate an integrative approach to using technology. Nevertheless, it is not necessary to wait for further technological developments in order to use the Internet in a multi-skills class.

Al-Juhani (1992) suggests that the computer can serve a variety of uses for language teaching'. It can be a tutor which offers language drills or skill practice; a stimulus for

discussion and interaction; or a tool for writing and research. With the advent of the Internet, it can also be a medium of global communication and a source of limitless authentic materials.

But as pointed out by Garrett (1991:76), "the use of the computer does not constitute a method". Rather, it is a "medium in which a variety of methods, approaches, and pedagogical philosophies may be implemented".

3.2.8. Network Based Language Teaching (NBLT)

With the widespread use of the Internet and related technologies in ELT, NBLT involves the use of computers connected to one another in either local or global networks. Whereas CALL has traditionally been associated with self-contained, programmed applications such as tutorials, drills, simulations, instructional games, and tests, NBLT represents a new and different side of CALL, where human-to-human communication is the focus (Kern & Warschauer, 2000).

However, language learning activities which involve the use of the Internet needn't be limited to computer mediated human-to-human communication. Traditional CALL activities can also be developed in NBLT and are actually found in most language teaching sites. The Web is full of authentic, reference and didactic materials useful for language learning. It also provides excellent tools for the interaction with those materials, processing information (input) and student production (output). And for linguistic contents and skills work, either integrated or specific.

Examples of activities using the Internet (or NBLT activities):

1. Lexical quizzes, games and other **vocabulary** learning specific activities (e.g. lexical maps, concordancers use, class dictionary building ...).
2. **Grammar** tutorials, exercises, simulations and games.
3. **Listening** and pronunciation virtual lab activities.

4. **Reading** and **writing** webtasks: treasure hunts, webquests, ...
5. **Multimedia webtasks**: scrapbooking, samplers, podcasting, tasks with authentic multimedia materials from social sites, ...
6. Computer Mediated **Communication** activities (email exchange, collaboration projects, CoP, ...)
7. Use of blogs and wikis for individual or group language learning **e-portfolios**.

3.2.9. Teaching Resources on the Internet

It is frequently said that the Internet contains quite a number of teaching and learning resources. But what kind of language teaching resources can be found on the Internet? Teaching resources in general are a source of aid or support that may be drawn upon when needed to enhance the quality of teaching and therefore facilitate learning. They may be physical (board, book, poster, video projector, chart, ...) or conceptual and methodological. When we refer to web teaching resources we are talking about the different kinds of materials and tools that we can find on the Internet, with the same purpose of improving the quality and efficiency of learning in activities which make use of those resources. Therefore, a first distinction can be made between materials, which provide contents, and tools, which let us process those contents, create our own materials or interact and collaborate with other people in learning environments. The type of web resources to be used will depend on the kind of activity to be developed.

By searching the Internet, not only can we find text documents, but also images, videos, audio files, presentations, conceptual maps or documents with a diverse kind of interactivity and graphic or multimedia combinations. And what more, most of those are for free. Whatever their form of presentation, web materials can be categorized for educative use according to their types (see Table 3).

1. Teaching materials	They are usually created with a curricular didactic aim and may include different kinds of documents and activities: practice exercises (grammar,

	vocabulary, skills), tutorials, simulations, games, etc.
2. Authentic materials	Their communicative or social function is authentic; they haven't been modified or adapted for teaching purposes. They can be used as a resource in discovery based learning activities and web tasks for language learning.
3. Reference materials	Dictionaries, encyclopedias, manuals, concordancers online

Table 3. Web Materials Categorized for Educative Use

Source: englishteachinglab.blogspot.com/2007/09/types-of-web-resources-for-language.html.

4. Conclusion

Holistic teaching demands technology. And technology has the potential to play a major role in ELT. First of all, a more authentic learning environment is created, since listening is combined with seeing, just like in the real world. Secondly, skills are easily integrated, since the variety of media make it natural to combine reading, writing, speaking and listening in a single activity. Third, students have great control over their learning(autonomy), since they can not only go at their own pace but even on their own individual path, going forward and backwards to different parts of the program, refining in on particular aspects and skipping other aspects altogether. Finally, a major advantage of technology is that it facilitates a principle focus on the content, without sacrificing a secondary focus on language form or learning strategies.

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