INTERNATIONAL JOURNAL OF INSTRUCTIONAL TECHNOLOGY AND DISTANCE LEARNING

December 2014
Volume 11 Number 12

ISSN 1550-6908

PUBLISHER'S DECLARATION

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International Journal of
Instructional Technology & Distance Learning

Vol. 11. No. 12.

ISSN 1550-6908

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Editorial

Sir John's Speech

Donald G. Perrin

Previous IJITDL editorials criticize the fragmented curriculum, lack of relevance to the world we live in, and failure to prepare a sufficient number of skilled candidates for 21st century jobs. The following paraphrased version of a news item from the BBC offers a solution for these problems. Educators and policymakers, pay attention!

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In this year's Mountbatten Lecture at the Royal Institution, Sir John O'Reilly argued that engineers should embrace the arts. They should recognise the role of the arts in their work and emphasise its creative side to encourage more young people to take up engineering as a career.

The lecture, *Full Steam Ahead for Growth*, advocated adoption of the acronym – STEAM - for Science, Technology, Engineering, Arts and Maths. Engineers should embrace the arts as a key to creativity and an important component of innovation, crucial to creating new products and boosting future competitiveness.

About 59% of engineering companies in the Institute of Engineering and Technology (IET) 2014 survey fear that skill shortages could threaten business. Science, Technology, Engineering and Mathematics - often known as "STEM" subjects, are vital for a modern knowledge economy. But there is a massive shortfall in the number of recruits. A recent study by the Royal Academy of Engineering showed the UK needs to increase by as much as 50% the number of STEM graduates it produces. Engineering is keen to widen the pool of recruits to the profession. STEAM would add emphasis to the creative side of engineering to improve the success of products. Aesthetics is part of it. Apple's iPod was not the first digital media player, nor the only one that worked, but it dominates the market "because it is nice to have for its aesthetic and functional values".

Universities would not require A-level art from engineering applicants. The key subjects for admission would continue to be maths and sciences. But an emphasis on creative skills would help "broaden the pool and attract more and diverse people into the profession".

The IET's skills survey raised concerns not only about the number of recruits to engineering, but about the diversity of the workforce, with only 6% being women. The WISE campaign to promote women in science and engineering commented: "People who are creative and imaginative are good at working out how to improve products, make them more useful and more attractive to customers. … Advertising for people with these characteristics would be a good way to attract more girls and women into science, technology and engineering."

National Union of Teachers general secretary Christine Blower said Sir John's comments illustrate the educational importance of arts subjects "to ensure students have a range of skills and knowledge to equip them for their future careers".

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Sir John's approach may be the first step in a movement to re-integrate the arts and sciences into broader disciplines consistent with the needs of the modern world.

Embrace engineering's creative side' to fix skills crisis, Judith Burns, BBC News, 21 November 2014
http://www.bbc.com/news/education-30136921

IET Chief Executive: Britain needs more engineers, 28 August 2014
http://www.theiet.org/membership/member-news/36a/nigel-times.cfm

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Editor's Note: In the traditional classroom, the textbook is a curriculum resource for teacher and student. It is not intended to be a workbook or self-instructional manual. Some publishers actually produce a second publication for this purpose. Publishers may provide additional resources, specifically for teachers and for students, on their webpage. These include activities that enrich the learning experience and components that can be integrated into the course by the instructor. This study is to determine the level of instructional design – objectives, strategies, activities, interaction, and evaluation – built into textbooks to facilitate language acquisition and the amount of work the teacher must do to adapt them for online or hybrid courses.

Crossing the bridge of communication: an analysis of ESL materials and a hybrid solution

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USA and Qatar

Abstract

Research suggests that many foreign language textbooks lack the necessary input-based materials needed to facilitate language acquisition, such as DeMil (2013a) for Spanish, DeMil (2013b) for French, and Lally (1998) for English as a Second Language (ESL). However, recent research has not investigated the activity type and distribution of publisher-sponsored curricular materials that are readily available for the use in ESL and English as a Foreign Language (EFL) classes. The purpose of the present study is to analyze six leading ESL/EFL books and determine the amount input-based activities that included in these materials. Based on the analysis in the present study, it is clear that there is a still a lack of input-based materials, and therefore, we discuss a pedagogical solution to the lack of input-based activities that can be used to complement these materials, regardless of the textbook, and that can be housed online and used as a hybrid language program or a technology enhanced language program. We discuss design of the suggested activities and their basis, which take into account learners' psycholinguistic processing strategies.

Keywords: classroom, communication, communicative, input, language, grammar, past tense, processing instruction, structured input, second language acquisition, SLA, English as a Second Language, ESL, English as a Foreign Language, EFL, teaching, textbook, hybrid, technology enhanced.

Introduction

All major theoretical frameworks in Second Language Acquisition (SLA) establish that there is a fundamental role for input (e.g., N. Ellis 2007; Gass & Mackey 2007; VanPatten 2007; White 2007). Simply put, in order for language acquisition to take place, learners must be exposed to input. VanPatten and Williams (2007: p. 9) state that "acquisition will not happen for learners of a second language unless they are exposed to input." In other words, regardless of the theory or model of language acquisition, learners must be provided repeated opportunities to process form for meaning during exposure to input. VanPatten (1996, 2004, 2007) proposes a model of input processing that "… attempts to capture under what conditions learners may or may not make connections between a form in the input and a meaning and the processes they initially bring to the task of acquisition" (p. 6). VanPatten's model proposes the following:

input → intake → developing system → output

Input processing is concerned with the first part of the model during which learners are exposed to input and then a filtered data set of that input is converted into intake. Input processing itself, is concerned with which form-meaning connections learners make (or don't make) and the conversion of the input to intake. Input processing is also concerned with "…the strategies and mechanisms learners use to link linguistic form with its meaning and/or function" VanPatten, 2004: p. 1). Based on the psycholinguistic processes involved during learners' initial exposure to input, VanPatten (2004: p. 14) also posits a series of principles that guide learners through initial

exposure to language data. One such primary principle and related subprinciples are the following:

Principle 1. The Primacy of Meaning Principle. Learners will process input before they process it for form.

Principle 1a. The primacy of Content Words Principle. Learners processes content words in the input before anything else.

Principle 1b. The Lexical Preference Principle. Learners will tend to rely on lexical items opposed to grammatical form to get meaning when both encode the same semantic information.

Principle 1c. The Preference for Nonredundancy Principle. Learners are more likely to process nonredundant meaningful grammatical form before they process redundant meaningful forms.

Principle 1d. The Meaning-Before-Nonmeaning Principle. Learners are more likely to process meaningful grammatical forms before nonmeaninful forms irrespective of redundancy.

Principle 1e. The Availability of Resources Principle. For learners to process either redundant meaningful grammatical forms or nonmeaningful forms, the processing of overall sentential meaning must not drain available processing resources.

Principle 1f. The sentence Location Principle. Learners tend to process items in sentence initial position before those in final position and those in medial position.

In cases such as, 'Yesterday, the cow jumped over the fence.', learners' tendencies to not attend to the verb inflection '-ed' are predicted by Principle 1 and subprinciples 1a, 1b, and 1f. For example, the verbal inflection illustrating past tense is also encoded with the temporal adverbial marker 'yesterday' which corresponds to subprinciples 1a and 1b. Additionally, given that the verb along with its inflection ('jumped') are located in the middle of the sentence, this is the last part of input to be processed by learners, as predicted by subprinciple 1f. All in all, what these principles predict is that learners will encounter challenges in attending to the target form for meaning which may, in turn, delay acquisition.

In response to this, VanPatten designed a pedagogical intervention known as Processing Instruction (PI) that seeks to alter learners' incorrect processing strategies and push them to adopt more optimal processing strategies to overcome their processing errors. This instructional tool is based on learners' default psycholinguistic processing strategies and therefore, the goal of PI is to push learners to attend to the target grammar form for meaning. PI in its entirety consists of three components: 1) explicit grammar information, 2) information about learners' processing strategies, and 3) Structured Input (SI) activities. The components of PI are illustrated as follows with the English past tense:

Component 1: explicit grammar information

The simple past tense in English is formed by adding the suffix –ed to the simple infinitive form of regular verbs. For example:

- To walk > walk + ed > walked.
- To talk > talked
- To help > helped

This structural grammar change applies for all persons, for example:

- I walked.
- You walked.
- He/she/it walked.

- We walked.
- They walked.

Component 2: Processing strategy information

Be careful! The ending of the verb is really easy to skip over for a couple of reasons. First, it is typically located in the middle of the sentence and surrounded by lots of other words. Second, there are typically words such as 'yesterday' or 'last year' that will let you know that a sentence is in the past tense, so be sure to still look for the verb form to see the time of the event.

Component 3:

What did you do last weekend? Indicate which items you did or did not do.

Last weekend, I…	Yes, I did.	No, I did not.
1. texted my relatives.	_____	_____
2. watched TV.	_____	_____
3. exercised.	_____	_____
4. talked to my friends.	_____	_____

PI has been compared with traditional output-based instruction types which represent popular or common ways of language teaching found globally. The operationalization of this approach in empirical studies is referred to as Traditional Instruction (TI). This output-based approach begins with mechanical drills, then moves to meaningful drills, and finally communicative drills. The explicit information component of TI is the same as PI, therefore, the following includes only the sequence of activities that constitute TI.

Activity 1: Mechanical Drill

Fill in the blanks with the correct past tense verb form.

1. My instructor _____ (enjoy) teaching.
2. We _____ (view) TV shows at home.
3. They _____ (play) a game of chess.
4. My friends and I _____ (exercise) in the gym together.
5. A big yacht _____ (travel) across the ocean.

Activity 2: Meaningful Drill

What did Martha do last summer? Select the verb that best completes each sentence and fill in the blanks with the correct verb form.

start travel learn talk play

1. She _____ how to ride a bike.
2. She _____ a game.
3. She _____ to Indonesia.
4. She _____ with her friends.
5. She _____ a new job.

Activity 3: Communicative Drill

Working with a partner, make statements about what you did during high school and ask your partner if they did also. Use the models below as guides. Be sure to use the past tense.

Model: Student 1: I played basketball almost every day last summer. Did you?

Student 2: No, I played soccer a lot.

1. travel
2. move

3. walk
4. surf
5. exercise

Mechanical drills as in Activity 1, are characterized by their having only one correct answer and their completion involves target structure production without requiring attention to meaning. Notice how learners can complete this activity without having to actually know the meaning of the verb used, as long as they can produce the correct grammatical form itself? Meaningful drills, on the other hand, require learners' attention to both the target form and meaning, however, there is only one correct response possible. In Activity 2, although there is only one correct response, successful completion of the activity requires learners to produce both the target form and make the correct verb selection based on meaning. Finally, the last activity type, communicative drills, have more than one possible answer and require learners to contribute new or unknown information during the task. However, communicative drills fall short of creating opportunities for learners to interpret, express, and negotiate meaning during completion of these drills. Typically during communicative drills, learners simply ask one question, receive the answer, and move on to the next item.

For over two decades in empirical based studies, PI has consistently shown its effectiveness across languages and target forms when compared with TI, such as with Spanish (VanPatten & Cadierno, 1993; Cadierno, 1995; Cheng, 1995; Leeser & DeMil, 2013; White & DeMil, 2013a), Italian (Benati, 2001), German (White, DeMil, & Rice, in press), French (VanPatten & Wong, 2004), and Japanese (Lee & Benati, 2007). PI has consistently performed better than TI on target form interpretation and as well as, or better than, TI on production tasks. What is intriguing about this is that at no time during PI do learners produce the target form, whereas TI is specifically focused on target form production.

In terms of language teaching, Byrnes (1988) points out that the textbook often dictates course syllabus and overall curriculum. Therefore, in terms of a language course, or a language program consisting of various course levels (as typically is the case with language studies), this makes the textbook choice an important consideration. That said, a few studies have delved into common curricular trends in language teaching materials. These studies have investigated the distribution of activities in leading Spanish intermediate textbooks (DeMil, 2013a) and French beginning textbooks (DeMil, 2013b) and they observe that there is still an emphasis on mechanical language exercises. Similar findings have been also found with beginning level French language textbooks. In a 1998 study, Lally observed that English as a Second Language (ESL) teaching materials were also mainly mechanical in nature following this pattern of mechanical, meaningful, to communicative drills. That said, we are not aware of any recent research that has analyzed current common publisher produced ESL pedagogical materials. There is a discussion in the fields of ESL and FL regarding pedagogical differences and their contributing variables both socially and culturally; however, a discussion on these differences is beyond the scope of the goals of present study, as we are focusing on the aspects of language acquisition and curricular materials that have demonstrated empirically to engage the processes required for acquisition.

Thus, the purpose of the present study is to investigate whether the observations made by DeMil (2013a; 2013b) and Lally (1998) for ESL are still accurate representations of activity type and distribution of the English simple past tense now found in five leading ESL books. Based on the findings of this analysis, we may provide a solution to the lack of effective input-based activities based on research in language acquisition that can be used to complement these materials, regardless of the textbook, and that can be housed online and used as a hybrid language program.

Review of literature: textbook distribution of activities

DeMil (2013a) set out to examine the type and distribution of activities targeting the Spanish preterit tense in seven widely-used intermediate-level Spanish language textbooks. In this study, he established the following four distinct categories of activity types: input activity, mechanical drill, meaningful drill, or communicative drill. DeMil (2013a) defined an input activity as an activity during which students read or listen to the target form and respond to the content in some way, and attend to the meaning. However, they are not required to produce the target form during activity completion. He also defined a mechanical drill as an activity during which learners must produce the target form, but they do not have to understand the meaning in order to do so. A meaningful drill, on the other hand, requires that learners attend to meaning in order to complete the task; however, there is a limited option of responses given the inherent restrictions of the task. A communicative drill requires learners to contribute new or unknown information during the task. It is important to note that if a student were to be required to understand what another student said, and then ask a follow-up question or do something else with that information, then the activity would be considered a different type of a communicative activity such as an information exchange task or an information gap task, and not simply a drill. Thus a "communicative activity" requires a student to 1) understand the meaning of the target form and 2) utilize the new information gained from the input. Across all seven language textbooks, DeMil counted a total of 48 activities. Of these 48 activities, DeMil identified one input activity, two communicative activities, and thirty two mechanical drills disguised as communicative activities. DeMil concluded that despite the wide body of research on various processes and products of second language acquisition research and the need for materials to take into account the cognitive factors of language learners, these well-known and widely used Spanish intermediate textbooks did not reflect the state of the science. He recommends that textbooks be changed to include more input, which is required for acquisition, and communicative activities.

As a follow up study, DeMil (2013b) assessed six beginning-level French language textbooks for activity type and distribution targeting the French passé composé (simple past tense). All the textbooks were the most recent editions (the oldest was published in 2008) and self-identified as based on the "communicative approach." Throughout these language textbooks, there was a combined total of 65 activities. Using the same criteria as DeMil (2013a) to analyze the textbook activities for type and distribution, he classified 12 activities as input based, 20 as mechanical drills, 12 as meaningful drills, 21 as communicative drills, and 3 as communicative. DeMil concluded these textbooks seem to be starting to take into account SLA research, but 3 total communicative activities is still a very small percentage of the total. For students to be able to acquire a foreign language, textbooks need to be more input-based and more communicative.

The current study is therefore modeled after DeMil (2013a) and DeMil (2013b) and investigates the activity type and distribution of activities in popular ESL language textbooks. The purpose of the present study is to extend the body of research on language textbook activity type and distribution and determine of the design of these curricular materials is fueled by research in language acquisition and if not, to seek a solution to supplement these materials with the types of activities that foster language acquisition.

Current study

Method

The present study examined 4 popular elementary-level grammar textbooks designed for ESL/English as a Foreign Language (EFL) courses: *MyGrammarLab Elementary* and its accompanying online activities for *MyGrammarLab, Grammar and Beyond 1, Practical Grammar 1, Grammar Dimensions 1*, and *Basic English Grammar.* These particular textbooks were chosen because they are commonly used in ESL language programs and several explicitly

tout a communicative approach in their introductions (i.e., *Grammar Dimensions, Grammar and Beyond, and Basic English Grammar*). *Grammar Dimensions* (Heinle/Cengage, 2007) is in its 4th edition, the first having been published in 1994. *Basic English Grammar 1* (2006) is in its third edition; the first of which was published in 1984, and is widely known as a "favorite" or go-to text for ESL/EFL teachers. *Grammar and Beyond 1* is in its first edition (Cambridge, 2012) and is described in the preface to be a product of corpus-based research. *Practical Grammar* (Heinle/Cengage, 2011) is also in its first edition, as is *MyGrammarLab* (Pearson, 2012), and similar to *Grammar and Beyond*, uses examples based on a corpus (Longman Corpus Network) and self-identifies as a contextualized grammar book.

The current study focuses on the activity type and distribution of the activities targeting the simple past tense of regular verbs and therefore only the chapters covering this particular grammar form were included in the analyses of the present study. This target form was chosen for analysis for the following reasons: 1) all ESL textbooks dedicate significant time to this target form, 2) it is problematic for learners given the processing strategies associated with the target form, 3) it is a target form used in everyday English speech and is therefore important for learners to acquire during early stages, and 4) previous research has also investigated the types of activities targeting the simple past tense equivalent in language textbooks (i.e., DeMil, 2013b).

As established in previous research, we analyzed the chapters' textbook activities and in the case of MyGrammarLab, examined the online components in which students can be exposed to grammar principles by watching a video and subsequently doing a series of practice exercises. For the purposes of the present study, only the practice activities were studied, not the videos, as the videos did not require any sort of response on the part of the students. We studied these materials for the following activity types: 1) the overall number of activities, 2) specific activity types (input based, mechanical drill, meaningful drill, communicative drill), and communication. We also included 'combination' activities which indicate that there are multiple steps that differ in the nature of the task (i.e., step one is mechanical and step two is meaningful). The last activity type, 'communication,' refers to any activity included in the activity set that promoted communication indicated by whether learners were asked to exchange and demonstrate comprehension of previously unknown information such as during open-ended communicative activities. Additionally, we chose to include an analysis for meaningful drills as this particular activity type has been included in Traditional Instruction as operationalized in research.

Table 1
Analysis of Simple Past Tense Activities

Textbook Titles	*Number of Simple Past Tense Activities*	*Input*	*Mechanical Drills*	*Meaningful Drills*	*Communicative Drills*	*Communicative*	*Combination*
MyGrammarLab Elementary	10	0	9	1	0	0	0
MyGrammarLab Elementary (Online)	30	0	15	15	0	0	0
Grammar and Beyond 1	43	0	19	13	8	1	2
Practical Grammar 1	15	1	12	2	0	0	0
Grammar Dimensions 1	27	1	8	11	4	3	0
Basic Grammar	82	0	43	24	15	0	0
Total		*2*	*106*	*66*	*27*	*4*	*2*

Findings

MyGrammarLab Elementary

MyGrammarLab Elementary contained a total of 10 activities, eight of which were mechanical in nature and two of which were meaningful drills. None of the activities in this chapter were either communicative drills nor communicative. One of the mechanical drills was a focus on forms activity in which students were presented with several sets of simple past tense verbs, and had to choose one which was irregular. One mechanical drill simply involved conjugating the verb to match the correct place in the verb paradigm. As a follow up, a meaningful drill immediately followed requiring students to use these same verbs in these same forms to complete sentences with blanks.

MyGrammarLab Elementary (Online activities)

Half of the activities in the online portion of *MyGrammarLab* were mechanical drills, while the other half were meaningful drills. All of the mechanical drills require students to provide the correct form of the verb given the infinitive, either by typing it or by selecting it from a list of other conjugated verbs. There are also some activities in which students had to find verb forms in a word search or match verbs with infinitives. The meaningful activities mostly require students to produce the correct verb forms given a verb list rather than a parenthesis for each entry, which means students have to attend to meaning to decide on the appropriate verbs. A few meaningful drills asked students to write a brief paragraph telling about an event they experienced, using the simple past tense.

Practical Grammar 1

Practical Grammar 1 first presents grammatical explanations followed by a series of practice activities. This textbook contains a total of fifteen activities, twelve of which are mechanical in nature, two are meaningful drills, and one input-based activity. There were no communicative drills or communicative activities. The mechanical drills mainly require students to produce the past tense form of the given verb by correcting spelling mistakes of given irregular past tense forms; providing the past tense form when given an infinitive; or by responding to a prompt of the subject pronoun and a verb in parenthesis with the correct past tense form. The remaining few activities involve sentence completion by using the correct form of the verb provided, writing questions or statements by using a provided verb.

There is one input activity that asks students to read a curriculum vitae, and respond to true/false questions about the content in the document, such as "He started work in 2006." Then the students simply indicated if the statements were true or false based on the information provided. There are two meaningful drills, one of which is a matching activity which students to select the already written answer to an already written question. In order for successful completion, learners must attend to meaning. Another meaningful drill asks students to create their own questions (although the *wh-* words provided, i.e., *who, what, when*) to preface a list of answers. Of the fifteen total activities, only these last two activities required learners' attention to form and meaning in order to complete the task.

Grammar and Beyond 1

The *Grammar and Beyond* series are contextualized grammar books—each chapter boasts a "theme" by incorporating theme related vocabulary throughout the textbook—and also advertises the series as corpus-based, meaning that the content is taken from the most frequently used words in English. Each chapter in *Grammar and Beyond 1* begins with a paragraph and comprehension questions based on the content of the paragraph or direct attention to certain grammatical features in the text (the latter were not included in the present analysis). Following the story passages, there is a series of activities, and the chapter ends with extended writing exercises requiring

further paragraph reading, feature noticing, and learner paragraph production. Most activities proceed in the following fashion: Part A asks students to simply read and notice something. Part B requires students to answer questions or provide a verb paradigm. Part C requires students to ask classmates questions or share information. For the purposes of the present analysis, all of the various parts of the activities were counted as individual activities, thereby, resulting in a total of 27 activities.

There are not any input activities in this book and there are a total of 19 mechanical drills. Some mechanical drill tasks are: verb form production (with one verb provided for each) via fill-in-the-blanks, question formation using provided verbs, oral repetition of verbs in the correct target forms, circling or underlining instances of the target from in a paragraph, and in one case, completion of sentences in the past tense using time expressions (i.e., ago, last, on). One mechanical drill requires students to transform sentences in their present tense form to past tense using the long form (instead of the contracted form of the verb, such as "did not" instead of "didn't"). Several focus on forms activities contain paragraph length discourse with some incorrect verb forms and for which the instructions direct students to find the errors and provide the correct verb forms.

There are a total of thirteen meaningful drills, many of which require students to read a paragraph and answer one content based comprehension question. Several activities involve paragraphs with blanks where the verbs should be. The instructions ask students to fill in the blanks with the past tense verb form from a list of provided verbs. This is a meaningful drill because learners must understand meaning of the sentence in order to select the appropriate verb. Another activity requires that students indicate if they believe their partners did or did not do a series of activities on a list. In this case, not only do students need to produce the target form, but they need to understand the meaning of the sentences in order to decide if the action is something their partner might have done or not. There are also several meaningful drills in the form of writing activities which require students to answer a prompt in either an explanatory paragraph or in a set of interview questions. The verbs are not provided, and so students must understand both the prompt—such as write about what you were like as a child—in addition to the verbs they wish to use in order to write effectively. Some other activities require that students write complete answers to comprehension questions based on a paragraph they filled in or questions they completed in the previous activity. Thus, students must understand what they produced (mechanically) in the previous activity in order to correctly answer the questions (and produce the target forms) in the proceeding activity.

The eight communicative drills require that students simply share information with a partner or compare answers. One of them is a writing activity in which students must write about an event that their partners tell them about. Another has the potential for being a communicative activity, as it requires that students ask and answer comprehension questions, but it does not require them to evaluate if their partners' answers are correct or not. The only communicative activity in this particular textbook, immediately follows a meaningful drill requiring students to guess what their partners did yesterday. In the proceeding communicative activity, students share their guesses and then evaluate if the guesses are correct or not. This means that students must listen to another student's output, attend to it for meaning, and then make an evaluation based on that information.

There are two activities that combine approaches. One activity asks students to answer questions about their grandfathers (meaningful drill) and then share these answers with a partner (communicative drill). Another activity requires that students read a paragraph, write questions about the paragraph using the provided verbs (mechanical drill), and then answer the questions using information in the passage (meaningful drill).

Grammar Dimensions 1

This book is similar to *Grammar and Beyond* in that it begins the unit on the simple past tense with a reading. The activities in *Grammar Dimensions* are also broken down into multiple steps, which were counted individually and classified as such for the purposes of this analysis. There is one input activity, which asks students to read statements about the reading passage and indicate if they are true or false, thereby, requiring learners to attend to the meaning of the forms in order to determine if the statements are factual. There are 8 mechanical drills: one asks students to underline instances of the simple past tense in the reading passage; another has students correct spelling errors in past tense sentences; one prompts students with time expressions such as "Yesterday, I…" and asks them to supply a verb, however, there is now second step which means they do not have to attend to meaning, and the rest require students to provide the correct form of the past tense verb using the infinitive provided in parentheses.

There are a total of eleven meaningful drills; many of which require students to answer comprehension questions (or, in one case, select the correct response from a list of answers)—either orally or on paper—based on the initial reading or on a separate very brief passage. Several meaningful drills ask students to provide the correct form a verb in a passage, and the verbs are chosen from a list of infinitive verbs; therefore, students must select the correct verb based on meaning. In one activity students fill in sentences with the correct time expressions (i.e., last, ago, in, on) with the correct forms of the verbs provided, so students have to understand the meaning in order to decide which time expression are appropriate. Another meaningful drill is a "Jeopardy game" in which students are divided into teams and must answer comprehension questions based on the initial reading passage. One final pair of activities moves from meaningful to communicative by having students listen to an alternate ending to a written story passage, contrast it with the actual ending, and explain, in their own opinion, which ending they prefer.

There are four communicative drills. The first requires students to ask a partner questions regarding their opinions about information in the initial reading passage, and two similar exercises require students to ask their partners' predictions about events in a brief passage. Another communicative drill has the potential to be a communicative activity: it asks students to share a story about an unlucky situation they were in. The activity says "your classmates can ask you questions," but these instructions are not explicit enough to render true communication, as other activities do. A similar activity uses the topic of a previous vacation. The initial activities require that students evaluate or ask specific follow-up questions about other students' output.

A series of four communicative activities proceed the communicative drills. The first is an information gap activity in which students work in pairs and look at two different sets of sentences that describe a story about a woman. In each text, some sentences are missing information, such as objects of verbs that complete the sentences, and others are just statements of facts with no missing information. The two texts are the "reverse" of one another, in that Text A contains the information that completes the sentences in Text B, and vice versa. The students must ask questions to "close the information gap" and complete the story. There is also a similar communicative activity in which students play "20 questions": they take turns thinking of a famous celebrity or person and the other students must ask up to 20 questions in order to try to guess who the person is.

One is a sort of game in which students work in groups of three. They decide on a true story that happened to one of their group members, and then share three versions of the story with the class: one that is true, and the other two fabricated. Then the rest of the class must ask follow-up questions to find out which person in each group is telling the truth. This activity can be adapted to work for different group numbers, and can be replicated many times for different tenses or grammar focuses. Another communicative activity requires students to write their own endings to a story they read in a passage in a previous activity, compare their endings with each other, and

decide who has the best ending. The last activity asks students to think about what sort of classroom activities they did or did not do in their home country, and compare these with both activities discussed in the chapter's initial reading passage, as well as activities done in the students' current classrooms. Based on all these activities, students should decide which activities are the most useful and why. These particular activities foster the actual interpretation, expression, and negotiation of meaning.

Basic grammar

This book is in its 3rd edition and is a very popular choice, as it is often considered the "most communicative" of grammar textbooks, and also has the largest number of activities for each grammar lesson. The author's foreword touts its communicative method; however, upon further analysis, it is not in fact a contextualized approach to grammar. It devotes two entire chapters to the past tense, totaling 82 exercises. The majority of them (43) are mechanical drills which require students to simply provide the correct verb form, given the infinitive form. There are not any input or communicative activities, and only 15 communicative drills. The communicative drills mostly require students to answer questions about activities they have done. The 24 meaningful drills mostly ask students to provide the correct verb form in a sentence by attending to meaning rather than using a provided parentheses, or by choosing from a set of conjugated verbs. A few activities ask students to put sentences in order to make a story, or to answer questions about themselves. Some also asked students to write questions using given answers. Although this particular textbook has the most activities, they also follow the sequence of activities in what is considered Traditional Instruction; the movement from mechanical drills, to communicative drills, to meaningful drills.

Discussion/solution: hybrid model with input activities housed online

Based on the findings of the analysis of these 6 different commonly used language textbooks, it is clear that the materials in these textbooks emphasize explicit grammar instruction, error correction activity types, and output-based activities, which are mostly mechanical in nature. There are some input-based activities, however, the types of input-based activities are either simple reading passages or perhaps input flood activities, which in input that has more than the normal amount of target items with the goal of increasing the probability that learners will notice the target forms (see Wong, 2005 for a detailed discussion on input flood and other input enhancement techniques). As per typical input flood activities, learners' attention is not purposefully directed to the target forms, however, there are content questions that follow the reading passages. The idea behind input flood is that with increased frequency, learners will be more likely to notice the target forms. Be that as it may, discourse length input, with or without modifications to deem it input flood, it leaves us with the consideration by VanPatten and Leeser (2006: 9), "But is comprehensible input enough? It might be in the long run – but the business of language teaching is to help acquisition in any way it can."

Fernandez (2011) points out, "What types of teaching techniques are most helpful for learners to start building a mental representation of the L2 grammar?" is of interest to language educators. These materials simply do not include the input-based tasks that learners need in order for successful language acquisition to take place. How then can we offer the types of activities necessary for learners to maximize their language acquisition? Again, as Byrnes (1988) points out, the textbook often dictates the course syllabus and overall course curriculum, and given that across materials the input-based activities are lacking (or non-existent), therefore, we must create these activities in order to supplement the publisher-sponsored materials.

One option would be to use class time to complete the types of input activities needed for successful language acquisition, however, there are two options that would keep class time reserved for interactive communicative activities; both of which involved housing the input-based

materials online and having learners complete them prior to arriving to class. The first option is what is considered a hybrid language program design in which class contact time is reduced and supplemented or replaced by online activities. The second option is to have a technology enhanced class design in which class contact hours are maintained and the course is enhanced or complimented by additional materials online. Both course design options include housing these input-based activities online. Hybrid language programs are popping up in universities all over the world and some have adopted designs that take into account the science behind language acquisition. Florida State University, Michigan State University, and Florida Atlantic University all use a shared language program design for Spanish which does exactly that; takes into account how languages are acquired in their language program design. This same design can be used for any language program, such as with ESL language programs which as we have established, lack the input-based activities necessary for language acquisition, and because these learners require engagement of the same cognitive processes as learning any other language, they need to have this type of input exposure.

These programs involve input-based online activities that are completed prior to students' arrival to class. These input-based activities represent the first formal presentation of the grammar or vocabulary for the day, to be followed up with opportunities for interaction during class time. Learners complete these activities prior to arriving to the class session during which they will use these grammar topics and vocabulary items while engaged in interactive activities during class. In other words, students complete activities on grammar and vocabulary topics online that they have not yet covered during class. The online activities are used to prepare themselves for the interactive in-class activities that follow. The premise is that because these particular types of activities are input-based and designed to push learners to attend to meaning, they can complete them online and use them as learning-centered activities, as opposed to practice as homework is typically constructed. These activities are mostly multiple choice, matching, limited selection, or binary options, allowing them to be automatically graded by the computer. This particular aspect frees up instructor resources for grading so that they can dedicate their time to actual class teaching. Additionally, it behooves the instructor to incentivize students by placing a significant percentage of their course grade on these activities.

Based on empirical studies investigating the effects of input-based activities, the findings suggest that Structured Input activities are effective at pushing learners to attend to the target form for meaning, altering their incorrect non-optimal default processing strategies, which results in language acquisition. The following activities are examples of SI activities that can be completed online prior to learners' arrival to the classroom which will prepare them for interactive communicative activities during class. There are two types of SI activities: referential and affective. Referential SI activities have one correct answer and are based on fact. Affective SI activities vary in their answers and are based on opinion. Let's take a look at the sequence of two referential activities and finally an affective activity that can be used as the first step in a multi-step activity that learners can carry to fruition during class. The examples are as follows:

Activity 1: Referential SI activity

Determine whether the these statements refer to what either Bart or Lisa Simpson in the popular TV show 'The Simpsons' did last night. Answer with a check mark in the appropriate space.

	Bart	Lisa
1. studied.	_____	_____
2. played in the treehouse.	_____	_____
3. practiced the saxophone.	_____	_____
4. insulted Homer.	_____	_____

Activity 2: Referential SI activity

Determine whether the following statements refer to what either Bill Clinton as President or Hillary Clinton as First Lady did.

	President Bill Clinton	First Lady Hillary Clinton
1. signed documents.	_____	_____
2. created laws.	_____	_____
3. played saxophone.	_____	_____
4. owned a cat named Boots.	_____	_____
5. served as a governor.	_____	_____
6. served as the Secretary of State.	_____	_____

Activity 3: Affective SI activity

When you were a child, what were your favorite activities? Indicate how often you did the following activities when you were a child.

	Never	Sometimes	Often
I…			
1. visited the beach or pool.	_____	_____	_____
2. learned how to ride a bike.	_____	_____	_____
3. played video games.	_____	_____	_____
4. chatted with my friends.	_____	_____	_____
5. toured museums.	_____	_____	_____

Notice how the first three referential SI activities can be completed online and learners receive direct correct/incorrect feedback for their answers? Also, notice how these activities take into account learners' psycholinguistic processing strategies by requiring learners to process the target grammar form for meaning? In these activities, they 1) separated the adverbial past tense markers from the past tense verb forms, 2) placed all past tense verb forms in utterance-initial position, and 3) focused on only one form (first person singular). The final activity in this series is an affective SI activity that also requires learners to attend to the target form for meaning, however, this requires learners to extend an opinion or belief and there is more than one correct answer. The extension of this activity can then be completed during class on the following day. The instructor can use this activity as the first step for the initial class time interactive activity in which students can compare answers, perform interviews, write summary comparisons, or make true/false statements based on the information they gather from their classmates.

Limitations

One of the limitations of performing a study that analyzes textbooks ignores how the instructors can, and actually, supplement the activities in a textbook given possible institution restrictions. Many teachers do not have a choice about what textbook they use, nor have any say in the content or format of an exam; but they often do have control over how lessons are taught and what is included day-to-day. Therefore, many instructors may supplement the textbook activities with effective communicative activities, leading to better acquisition of the target language than if only the textbook activities were utilized. DeMil makes a similar point and concludes that textbooks should be reformed so that teachers are not responsible for continually adapting activities. However, the PI approach requires, in order to be the most effective, that students receive SI and then practice using communicative activities. As communicative activities require other students,

and SI activities can be housed online, in either aural or written form, therefore, it makes sense to not use class-time resources to complete SI activities. Instead, SI activities can be conducted at the student's leisure using the textbook, or more ideally, computer software. This way, class time can be used optimally for the crucial communicative activities. Therefore, a reformation of textbooks as well as an addition of an online platform is the most optimal change we can make to improve students' acquisition of a new language.

Conclusion

Although it appears that many ESL materials lack the input-based activities necessary for L2 acquisition, this can be supplemented by the creation of local activities that students can complete online prior to arriving to class. Given that these activities are designed to facilitate language acquisition by requiring learners to attend to the target grammar form for meaning, they are automatically graded, they can be completed at learners' own pace and time as long as it is before the deadline, and learners receive immediate feedback, they can complete these activities prior to class in order to prepare them for the in-class interactive and communicative activities. While we wait for publisher-sponsored materials to include these types of activities, we are able to provide the exposure that students need for successful language acquisition on a local level.

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He is also interested in implementing what we know about language acquisition through research and theory in the design of hybrid-language programs. Of particular interest are the creation and implementation of psycholinguistically motivated materials into the L2 hybrid-course design. He views SLA research being at the core of decisions we make in language instruction and seeks to increase awareness and accessibility for educators and researchers to these findings. He also views the textbook publishers' role in providing sound materials as instrumental in this process.

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Editor's Note: This study compares demographic characteristics of online students compared to the national population of K-12 students in the United States. This data will be especially valuable to policy makers, funding agencies, and groups intent on equalizing learning opportunities for minority students.

Understanding online K-12 students through a demographic study

Michael Corry, William Dardick, Robert Ianacone, Julie Stella
USA

Abstract

Online K-12 learning opportunities have proliferated, but much remains to be understood about the characteristics of participating students. This study presents a demographic profile of full-time, K-12 online learners today and compares them with public school students nationwide in the United States. The data was collected from a parent survey that produced 119,155 valid responses/records for students enrolled full-time in online K-12 public schools in 43 states. The study shows that the online student population includes somewhat more females than males, and more middle school than elementary or high school students. White students are overrepresented among full-time online learners compared with their share of the nationwide student population, while Hispanic/Latino and Asian/Pacific Islander students are underrepresented. Gifted and talented students and English language learners (ELLs) are also underrepresented. These data provide a baseline for more detailed explorations and can assist practitioners, policy makers, and researchers in making important decisions about online education that have implications for all students.

Keywords: K-12, online, distance, learning, education, demographics, gender, grade, race, ethnicity, socioeconomic status, gifted, talented, English-language learners, special education

Introduction

Enrollments in K-12 courses offered via distance education have grown remarkably. In 2003 in the United States, 317,070 public school students were enrolled in technology-based distance education courses in grades K-12 (Zandberg and Greene, 2008). By 2010, that number had increased to 1,816,390 students (U.S. Department of Education 2011). During this same period of 2003-2010, the percentage of K-12 school districts enrolling distance education students grew from 36% to 55%.

Research into this fairly new method of instructional delivery is in its earliest stages (Barbour 2013). This study seeks to expand our understanding of K-12 online students by collecting, aggregating, analyzing, and reporting data about their demographic characteristics. The demographic characteristics of online students are then compared with those of the K-12 public school student population nationwide, using data from the U.S. Department of Education (2012; 2013). The end result of this study is to better understand answer the question of "Who are the current online K-12 learners?" and thus give researchers and practitioners additional information when making decisions relating to these learners and their learning opportunities. Without a solid understanding of who the learners are, it is difficult to make sound decisions affecting the online learners of today and the future.

Demographic data can be particularly useful for helping practitioners, researchers, and policy makers make proactive decisions about learning initiatives, projects, curriculum, and policy affecting K-12 online students. For example, a study published by the U.S. Department of Education reports that public school districts across the nation actively collect and electronically

maintain demographic data about students. Many school districts use this demographic information to inform data-driven decisions about effective instruction, student placement, program evaluation, principal and teacher evaluation, and teacher professional development (Means, Padilla, and Gallagher 2010).

In a similar vein, the demographic profile of today's K-12 online students emerging from this study can assist researchers and practitioners in interpreting test results and informing customized projects, initiatives, and curriculum. This information can also help innovators achieve the goal of improving education for all learners.

Methods

Participants and procedures

Previous research studies that reported demographic data about online learners have relied on data collected by online/paper surveys or interviews (Ashong and Commander 2012; Glick 2011; Yee 2006). These techniques can yield a rich set of information.

In the current study, a survey was administered online to parents when they enrolled their child in an online school. The questions in the survey instrument collected demographic information about the students being enrolled in online school. Records were examined for the validity and completeness of responses, and any incomplete records were removed. Additionally, records for students who were being enrolled to study part-time were removed. Any identifying information about the students was also removed, resulting in de-identified records for each student. The resulting dataset for the study included 119,155 valid records of students enrolled full-time in online public schools in 43 states.

In some cases, as described below, responses were combined to form a more meaningful measure. For example, the racial/ethnic groups used for this analysis were consolidated from 63 distinct groups into 6 groups, consistent with the categories used by the U.S. Department of Education (2013). These include White, Black, Hispanic/Latino, Asian/Pacific Islander, American Indian/Alaskan Native, and two or more races.

The study collected and analyzed data for seven major demographic characteristics of students: (1) gender, (2) grade level, (4) race/ethnicity, (5) socioeconomic status (SES) as indicated by eligibility for free or reduced-price school lunches, (6) participation in gifted and talented programs, (7) English language learner (ELL) status, and (8) participation in special education.

Results of K-12 online learners for these seven demographic variables were compared with estimates for the public school population as a whole from the U.S. Department of Education (2012; 2013).

Results

The results of the analysis are grouped below into relevant categories. Data on students' gender and grade level are presented first, followed by data on race/ethnicity, socioeconomic status, and participation in special programs (gifted and talented, services for English language learners, and special education).

Gender

Online students are slightly more likely to be female than male, as displayed in Figure 1. According to the data, 51.84% of the students in the online sample were female, and 48.16% were male. By contrast, 48.60% of all K-12 students nationwide are female, while 51.40% are male.

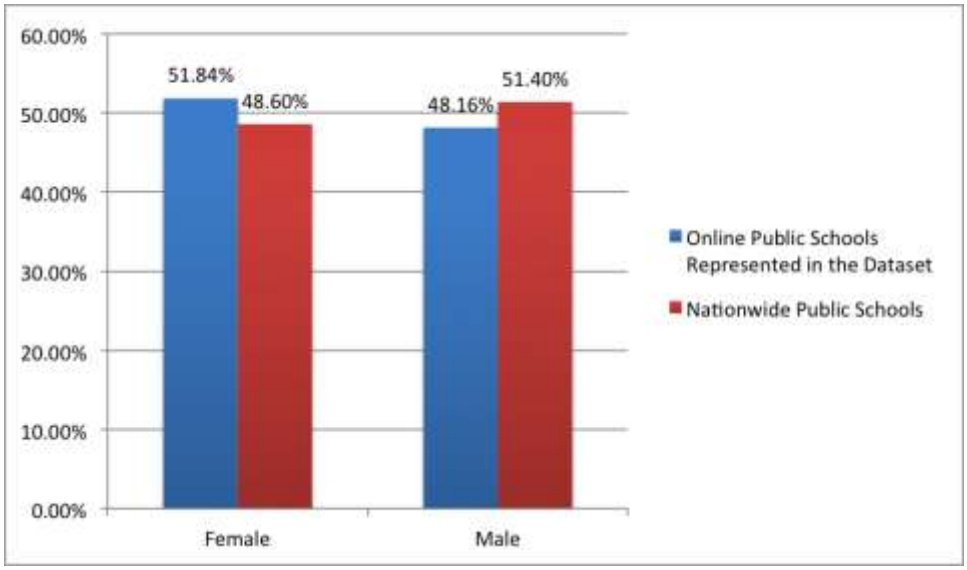

Figure 1. **Percentage of enrollment by gender for online students and public school students nationwide.**

Grade level

The highest percentages of online K-12 students are in grades 7 through 10. As shown in Figure 2, there are fewer online students in the elementary grades, but enrollments bulge during the middle school and then taper back off during high school.

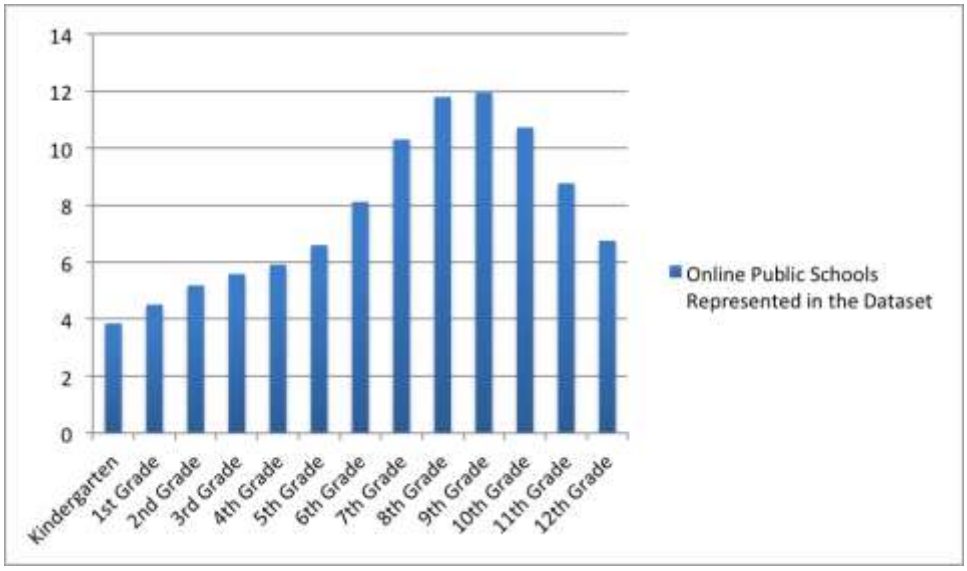

Figure 2. **Percentage distribution of online student enrollment by grade.**

Race/ethnicity

Figure 3 shows the race/ethnicity of online K-12 students. The vast majority (68.23%) of online students are White, while 15.82% are Black, 7.86% are Hispanic/Latino, 3.52% are Asian/Pacific Islander, and 1.59% are American Indian/Alaskan Native. The remaining students have two or more races/ethnicities (0.80%) or were reported as other/no response (2.19%). This "no response" group also includes students who reported a race/ethnicity that did not conform to the definitions set by the U.S. Department of Education (2013).

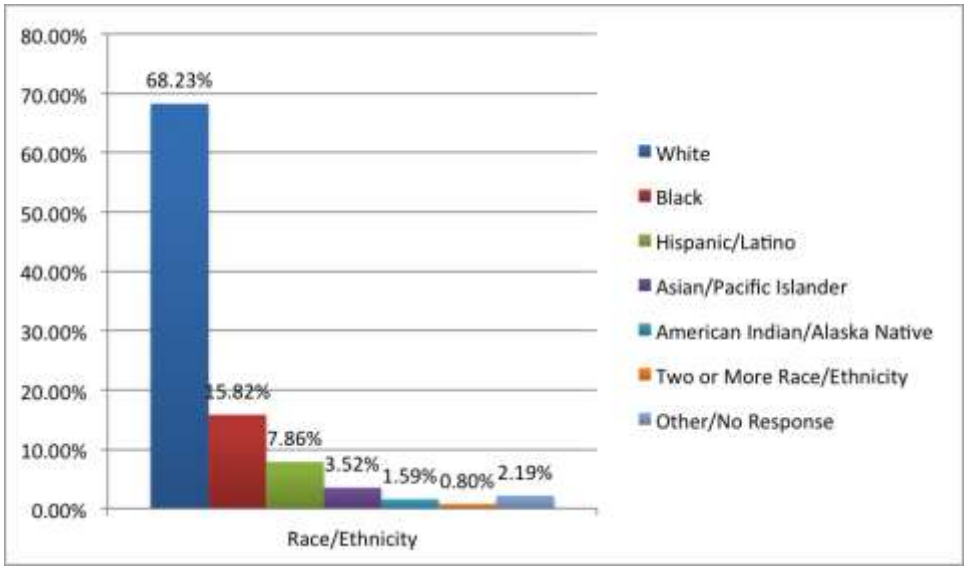

Figure 3. **Race/ethnicity of K-12 online students.**

Figure 4 compares the enrollment percentages of different racial/ethnic groups in online classes and in K-12 classes nationwide. The percentage of White students enrolled in online classes (68.23%) is much higher than the percentage of White students nationwide (51.7%). The percentages of online students who are Hispanic/Latino (7.86%) and Asian/Pacific Islander (3.52%) are much lower than their representation among students nationwide (23.7% and 5.1% respectively).

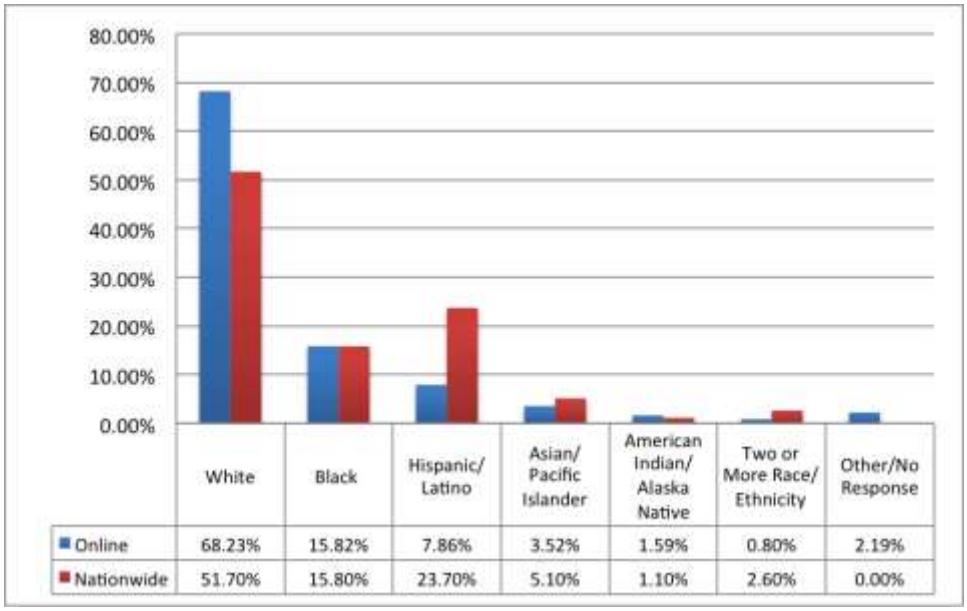

Figure 4. **Race/ethnicity of online students compared with students nationwide.**

Socioeconomic status

Socioeconomic status is often determined by a student's eligibility for free or reduced-price lunches through the National School Lunch Program (National Forum on Education Statistics 2006; Sirin 2005). As Figure 5 indicates, nearly half (49.15%) of online students in this dataset are eligible for free or reduced lunch, which is quite similar to the 49.6% of students who are

eligible nationwide. The remaining online students are either not eligible for free or reduced lunch or their eligibility is unknown.

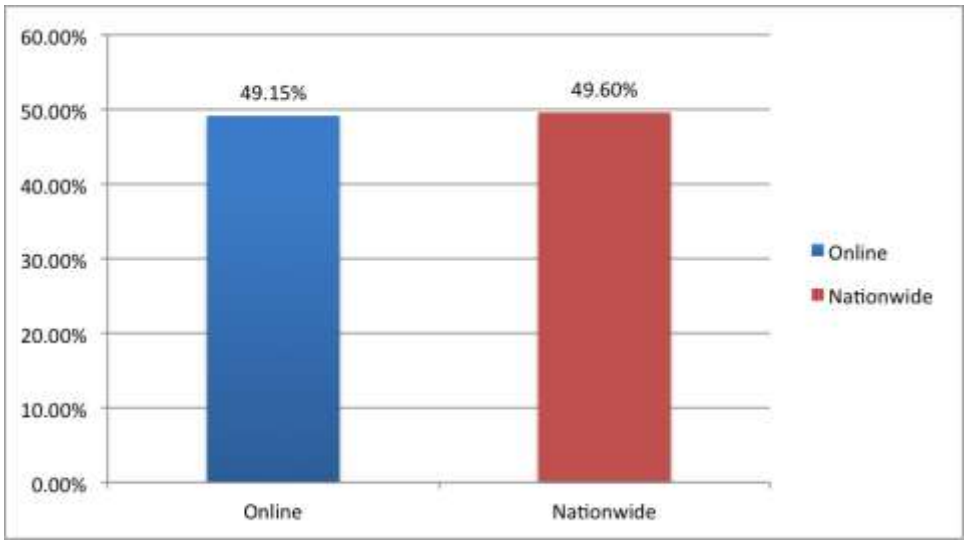

Figure 5. **Percentage eligible for free and reduced-price lunch among online students and public school students nationwide.**

Figure 6 shows the percentage of students eligible for free or reduced lunch by race/ethnicity for online students in the dataset. There are clear discrepancies between the percentages of the groups. The vast majority (63.38%) of the online students eligible for free or reduced lunch are White, while 20.82% are Black, 8.73% are Hispanic/Latino, 2.50% are Asian/Pacific Islander, and 1.92% are American Indian/Alaskan Native. The remaining students have two or more races/ethnicities (0.94%) or were reported as other/no response (1.71%).

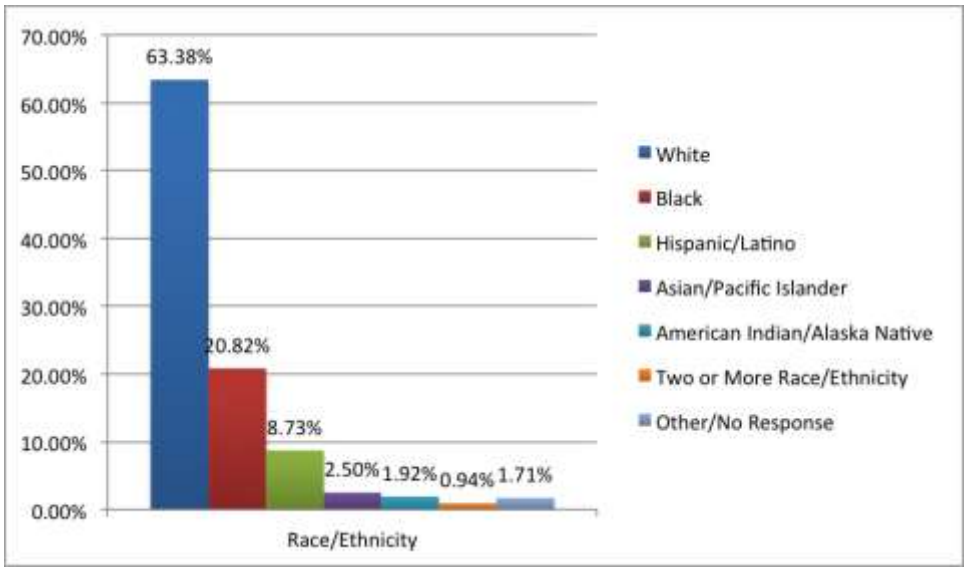

Figure 6. **Percentage of students eligible for free or reduced-price lunch by racial/ethnic group.**

Gifted and talented

As Figure 7 shows, 3.22% of online students are reported as participating in gifted and talented programs. This compares with 6.7% of students nationwide.

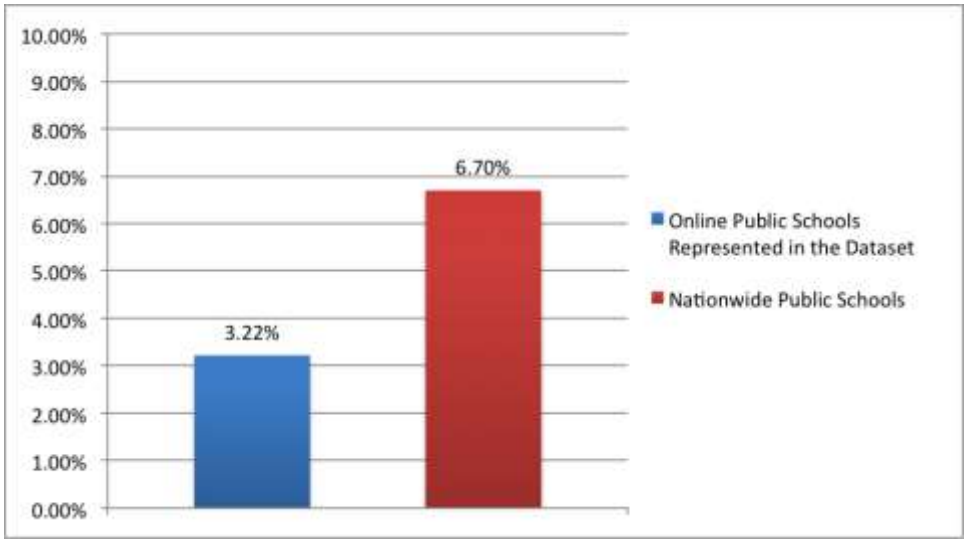

Figure 7. **Percentage of gifted and talented students online and nationwide.**

English language learners

As Figure 8 indicates, just 1.08% of the online students in the dataset are ELLs, which is much lower than that 9.8% of students nationwide who are ELLs.

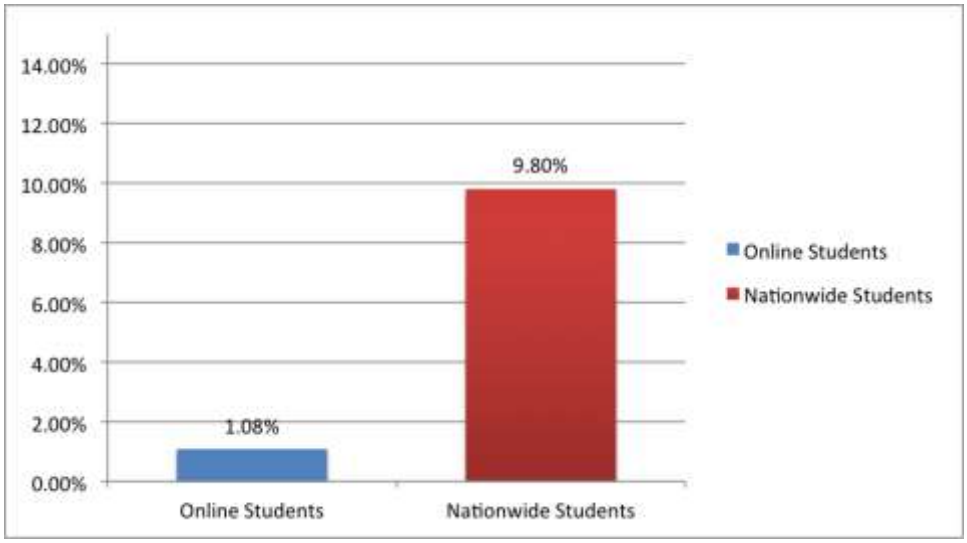

Figure 8. **Percentages of students online and nationwide who are English language learners.**

Special education students

According to parents' reports from the study survey, 13.30% of online K-12 students receive special education services. As shown in Figure 9, this is very similar to the 12.90% of students nationwide who receive special education services.

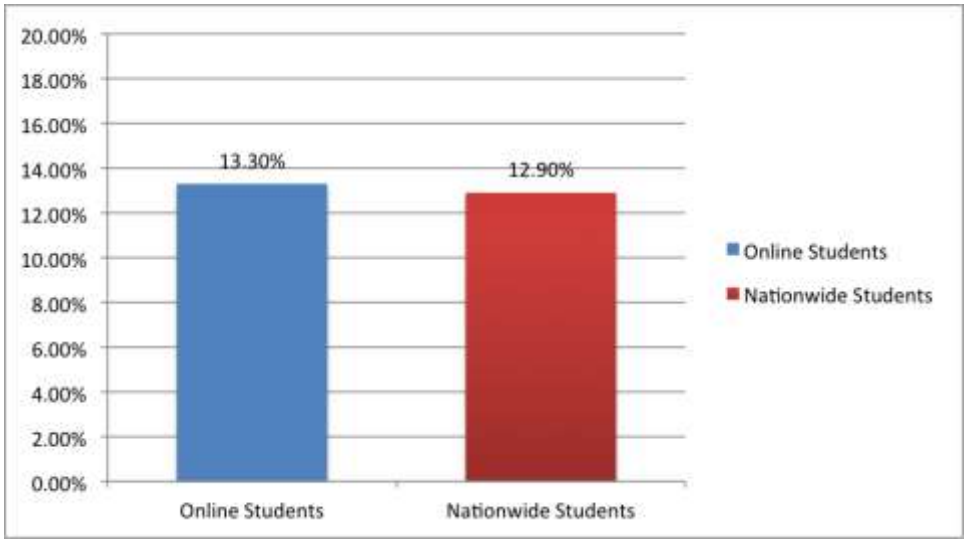

Figure 9. **Percentage of online students and students nationwide who participate in special education.**

Discussion

The purpose of this study was to develop a profile of the demographic characteristics of full-time, K-12 online learners and answer the question of "Who are the current online K-12 learners?" This is clearly the primary question to be answered by this research study. However, the findings of this research lead us to consider additional research questions for the future. In fact, this study will raise a significant number of important future research questions. At the current stage of growth for online K-12 learning, identifying these future research questions is very important to the healthy growth and understanding of the field. The demographic information from this study along with the identification of the future research questions will assist researchers moving forward and ultimately will impact policy makers, practitioners, and others in developing customized, innovative education solutions that could ultimately benefit all learners. While the data in this study represent a snapshot in time, the researchers intend to conduct the study on an annual basis so that future reports will include data on year-to-year trends. The discussion below reviews the findings from this study and introduces additional research questions that should be considered.

Gender and grade

Among the online K-12 students in this study, females slightly outnumbered males. This is the opposite in absolute value of the national data for all students, in which males slightly outnumber females. Why might more females be attracted to online learning than their male counterparts? Also, conversely, why might male students be less attracted to online learning? These are interesting questions to be considered and further research into adoption rates, satisfaction and success in online learning by gender may yield unique findings. Furthermore, studies of gender combined with achievement data may also show interesting results and should be pursed. This is of particular interest when examining the STEM areas of study for both genders of online learners.

Student grade level may offer another avenue for fruitful research. At the lower end of the spectrum, it is understandable why fewer students in the early elementary grades participate in online learning because younger students generally need more hands-on teacher support and are less technologically adept. However, the data in this study show student enrollments gradually increasing from grades K through 9, and then gradually decreasing from grades 9 through 12.

This finding leads to the question "Where do those 10th grade (and older) students go if they are not enrolled in online schools?" Do they return to traditional brick and mortar schools? Do they lose interest in online schooling? Could it have anything to do with shortages of specialized teachers to oversee high school level online courses (e.g., in more advanced science and math)? Is there something that attracts them back to a brick and mortar environment? Or do the online students have a higher dropout rate from schooling altogether than those in brick and mortar schools? While the current result may reflect where students in this study were enrolled, more research should be done to compare students in similar face-to-face schools and broken down by geographic regions. Anytime a national study is performed, it has the potential to miss more localized findings that could be significant.

Additional issues involving gender and grade that could be investigated include student social components, parent influence, cultural impacts and availability/skill with technology among the varying ages and grades of students.

Race and ethnicity

According to the results shown in Figure 3, an online student is more than twice as likely to be White as to be Black, Hispanic/Latino, Asian/Pacific Islander, Alaskan Native, or two or more races. As can be seen in the comparisons in Figure 4, White students are far more represented in the online schools in this dataset than in schools nationwide, and Hispanic/Latino and Asian/Pacific Islander students are far less represented. The underrepresentation of Hispanic/Latino students in online schools has been noted in other recent studies of the demographics of online students (Glick 2011; Molnar, et al. 2014). It is not yet known to what extent the distribution of online schools throughout the nation affects the results. For example, are states with lower populations of Hispanic/Latino students providing online K-12 schooling options? An analysis of this issue is greatly needed to answer this question and to consider other research question concerning "Why Hispanic/Latino and Asian/Pacific Islander students are underrepresented in online learning?" A rich area for further research would involve a comparison of online and face-to-face schools in similar regions. Additional questions about possible effects of culture, technology access and adoption, language, and other effects could be examined in future studies.

Socioeconomic status

In this study, socioeconomic status is determined by students' eligibility for free and reduced lunch. The study found (Figure 5) that the percentage of eligible online students is fairly similar to the nationwide percentage. However, when comparing the overall percentages of race/ethnicity of online students (Figure 3) to percentage of online students eligible for free or reduced lunch by racial/ethnic group (Figure 6), some interesting findings are observed. The percentage of White online students eligible for free or reduced lunch (63.38%) is somewhat lower than the overall percentage of White online students (68.23%). The percentage of online Black students eligible for free or reduced lunch (20.82%) is somewhat higher than the overall percentage of Black online students (15.82%). The percentage of Hispanic/Latino online students eligible for free or reduced lunch (8.73%) is slightly higher than the overall percentage of Hispanic/Latino online students (7.86%). The percentage of Asian/Pacific Islander online students eligible for free or reduced lunch (2.50%) is lower than the overall percentage of Asian/Pacific Islander online students (3.52%). The percentage of American Indian/Alaska Native online students eligible for free or reduced lunch (1.92%) is slightly higher than the overall percentage of American Indian/Alaska Native online students (1.59%).

Further research on the SES of online learners is warranted. One logical next step is to compare students against national and regional socio-economic data. Additionally, a comparison of free

and reduced lunch eligibility by grade and for English language learners, special education students, and gifted and talented students, might yield interesting and informative results.

Gifted and talented

The percentage of online gifted and talented students in the dataset is less than half the nationwide percentage of gifted and talented students (Figure 7). These findings are somewhat striking because gifted and talented students are often considered especially suited to online learning (Duke University Talent Identification Program 2011; Johns Hopkins Center for Talented Youth 2013; Wallace 2009). In fact, some experts suggest that the advanced cognitive skills of gifted and talented learners may naturally manifest in an affinity for and success with technology (Karnes and Siegle 2005), although this may not always be the case (Cope and Suppes 2002; Periathiruvadi and Ninn 2012; Siegle 2002).

This result must be taken with extra caution for two reasons. First, the data were collected from parents, who were asked whether their child had participated in programs for the gifted and talented; however, "gifted and talented" may not have been defined for the parent at the time the information was collected, and students in the lower grades (K-2) may not yet have been identified as gifted and talented. Consequently, the data may be underreported or over reported. Second, only the records of full-time online students were included in the analysis. Since gifted and talented students may use online learning to supplement the offerings of their home school (Barbour and Reeves 2009; O'Dwyer, Carey, and Kleiman 2007; Wallace 2009), they may be enrolled online as part-time students. This is especially true for students who live in rural areas or who desire to learn about a low-demand school subject. Therefore, some data about gifted/talented students may be missing, and additional investigation to confirm the results is needed.

With these cautions in mind, it is also possible that gifted and talented students may not be utilizing full-time online schools because they are already rewarded and prospering in face-to-face programs. All of these factors indicate a need for additional research about the use of online education by gifted and talented students.

English language learners

In this study, the percentage of English language learners enrolled in online classes is strikingly lower than the nationwide percentage (Figure 8). Many factors may have influenced this result, such as race/ethnicity differentials (see Figure 4), mastery of the English language, availability of appropriate curriculum, or the amount of support ELLs need to be successful in online education (Glick 2011; Molnar, et al. 2014). Still, questions remain.

One such question may be asked against the backdrop of the wide and successful use of technology in second language (L2) and foreign language learning, which has grown significantly since 1991 (Garrett 1991; Thorne, Black, and Sykes 2009). According to most researchers, language learning may be enhanced with the use of language and text-heavy technologies, such as chat rooms, internet discussion boards, and social media, where students can readily use and practice their second language. Even though this practice is not without criticism, the relatively successful combination of technology and second language learning, along with the underrepresentation of ELLs online uncovered by this and other recent demographic studies, may lead researchers to explore questions related to the effective use of online learning for K-12 ELL students.

Another question is whether ELLs, who have specialized learning needs, could benefit from increased access to online education because of the personalized and self-paced nature of online learning, which is highly desirable in today's education climate (as demonstrated in the *U. S. National Technology Plan* (2010) and the U.S. Department of Education's *Race to the Top* (2010;

2011; 2012) and *ConnectED* (2014) Initiatives). Accordingly, an ELL student could use online learning especially for language-heavy subjects that require time-consuming translation of the material. In the final analysis, further research into online learning by English language learners appears necessary in order to enact proactive education policies.

Special education

The percentage of online students identified as special education students by their parents is very similar to the nationwide percentage (Figure 9). This is a somewhat surprising result given that some of these students might require face-to-face hands on assistance from teachers and other specialists. Research into how this is achieved and examining outcome and success data for online special education students would be very interesting. Additional future research could disaggregate the data for online special education students by grade, gender, race/ethnicity, socioeconomic status, gifted and talented status, and ELL status. It would also be of interest for researchers to examine the different categories of special education disabilities and the level of services provided for online students.

Conclusions

This study has taken an important step toward advancing understanding of K-12 online learners by collecting, analyzing, and reporting the latest demographic information about current K-12 students enrolled full-time in online learning. The primary research question answered in this study is "Who are the current online K-12 learners?" However, the study also identified many important future research questions that should be answered to assist in better understanding this important area of K-12 learning. Future studies can build on the results of this study by digging more deeply into the effectiveness of online learning and best practices for online learners.

Findings from this type of research can be used for proactive, data-driven decision making. For example, the field of research on distance education and online learning will benefit from more granular data about K-12 online students with special statuses (special education students, gifted and talented students, English language learners, and students from low-SES families). Regional and local groupings of the data will help researchers better understand the localized implementations of online learning programs. Additional information about the interplay among the variables of region, gender, racial/ethnic identity, and special statuses will help researchers, policy makers, and teachers make better decisions about online learning and develop high-quality educational options for all students.

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Editor's note: In selecting faculty, enthusiasm, energy and competence are paramount. Do they find their job rewarding and challenging? Are they placed where they feel comfortable, productive, well supported, and continue to enjoy what they do? What happens if they are stressed, overburdened, depressed, or in need of change? This study is seeks to identify specific characteristics and measures that van be applied to alleviate job burnout challenges experienced by online faculty.

Online faculty burn out, best practices and student engagement strategies

Lisa Marie Portugal
USA

Abstract

This study was a phenomenological study examining the experiences of faculty in an online learning environment in order to identify the factors that could produce job burnout and stress in master's programs in education. The challenges and related stress-producing factors were also explored to identify best practices for online faculty and attributes most suited for the demands and expectations required in the online teaching environment. The study's insights and findings are based on perspectives from online faculty who have been teaching in the modality for three or more years. These findings may be useful to stakeholders such as administrators, faculty mentors, faculty trainers, and faculty interested in employment in the modality so that identifiable and realistic criteria may be available upon which to base future hiring standards, employment practices, training, and decisions about teaching online. Insights about procedures and practices have been identified that may be effective in helping to develop initial training programs, faculty mentor supports, administrative decisions, and on-going faculty training. Based upon the findings, institutional leaders have information that could help identify best practices for online faculty and attributes most suited for the demands and expectations required in an online teaching environment. Institutions and administration can seek out and recruit the best possible online faculty who have the necessary skills, abilities, and characteristics required in this modality rather than hiring based merely upon academic credentials that would fail to identify specific attributes necessary for online teaching. Finally, those specific characteristics can then be applied to alleviate job burnout challenges online faculty would experience. The study will help institutional leaders (a) identify faculty earlier who will be better suited to the modality; (b) identify how to offer relevant, on-going faculty supports and training practices; and (c) prevent online faculty job burnout.

Introduction

Institutions of higher education in the United States are offering increasing numbers of online programs and courses (I. E. Allen & Seaman, 2007). While traditional faculty members who are engaged in face-to-face lectures have recognized online teaching as a new teaching method that reaches potential university enrollees, traditional faculty continue to remain doubtful regarding the efficacy of online learning (Adams, DeFleur, & Heald, 2007; I. E. Allen & Seaman, 2006; Carnevale, 2007; Columbaro & Monaghan, 2009; Mills, Yanes, & Casebeer, 2009). The suspicion and continued distrust of faculty toward online learning have been depicted in traditional universities' preference to hire faculty who earned their degrees at traditional institutions (Adams et al., 2007; Carnevale, 2007; Columbaro & Monaghan, 2009). This preference for hiring faculty who prefer the traditional methods of teaching has the potential to result in a shortage of faculty who appreciate online learning.

Having online faculty, who can be most involved and fulfilled in an online environment, is imperative for the growth and success of institutions of higher education. However, only a small

percentage of academic leaders believe that their faculty members subscribe to the legitimacy and value of the online modality (I. E. Allen & Seaman, 2005, 2006, 2007, 2008, 2011). It is essential that online faculty be encouraged about the academic success of their online learners because the expansion of online learning requires committed and competent faculty in sufficient numbers to meet student demand. This study sought to examine the experiences of faculty in an online learning environment in order to identify the factors that can produce job burnout and stress in master's programs in education.

Literature review

The primary objective of this study was to explore the experiences of faculty in an online learning environment as it related to job burnout and stress in master's programs in the discipline of education. The study also identified the teaching strategies, personal attributes, organizational skills, software competencies, and job satisfaction of faculty who taught in online master's degree programs in education to overcome the burnout problem. The literature review was done to ascertain the theoretical foundation of the topic being studied. After an exhaustive literature review search on the topic of engaged and experienced characteristics of online faculty who have taught three or more years in master's degree programs in education, it became evident that there were no studies done in this specific area. There was a dearth of literature that dealt with online faculty teaching at the master's level in the education field, which warranted this study.

Perceptions of faculty concerning online teaching

Effective faculty training and mentoring are crucial to the successful use and integration of technology for online and distance education. A teacher's attitude toward technology is a significant factor in how and if technology is integrated with the curriculum. The faculty's attitude toward technology can be greatly influenced by the infrastructure support, training, and mentoring provided (Bahr, Shaha, & Farnsworth, 2004; Beer, Slack, & Armitt, 2005; Helton & Helton, 2005). In places where a well-developed plan for teacher training and mentorship was instituted, teachers were very receptive and even eager to integrate technology into their curriculum (Grove, Strudler, & Odell, 2004; Tallent-Runnels et al., 2006).

When faculty have been surveyed, they often have said they want better technology training, but sometimes when it is offered they do not take advantage of it, due to lack of faculty release time and to the fact that training does not cover specific areas that faculty need. Tallent-Runnels et al. (2006) found that it often helps to have better organized and better designed training schedules for faculty to alleviate difficulties in enticing faculty participation. It also helps to have follow-up sessions with mentors who can help reinforce or demonstrate what was taught in the classroom.

Bruner (2007) discussed how one small university used surveys to solicit feedback from the faculty on how to approach the implementation of a new online learning program. The anonymity of the survey process allowed those who agreed or disagreed with the process to freely indicate their agreement or objections without fear of consequences. Open-ended questions gave administrators good insight into what the faculty liked, disliked, wanted, needed, or feared. Findings were that university administrators should seek to reduce the "hassle factor" by using market research to decide which courses learners might pay for, implementing a sound online delivery system, and providing supporting resources (Bruner, 2007). Motivating faculty with release time and financial incentives were also key factors in study findings. Finally, older and younger faculty members believed their role as educators would be decreased as the use of technology expands (Bruner, 2007).

There are also different types of infrastructure support needs for different types of faculty. Faculty members teaching purely online from their home with little or no physical contact with the home campus are naturally going to have different support needs and expectations from

faculty who teach online in a campus setting or who teach both online and on-campus courses (Meyer, 2009). McLean (2006) outlined how faculty who teach online from home must be very independent, self-starters, with no need for constant supervision in order to be successful in the solitary online teaching environment. Someone who needs to feel a strong connection or affiliation with other faculty or to the university campus may not do well as a stay-at-home online instructor. The online teaching environment is also much different from face-to-face teaching because many professors get the sensation that their job is never done. Administrators of online learning programs need to be sensitive to the stresses of the online environment and the danger of faculty burnout that is very real. Administrators and faculty need to work together to set limits on the intrusion into personal time and to ensure the technology does not create an unhealthy environment for the faculty (McLean, 2006).

In the online setting for students in various healthcare fields, the technology for online instruction can often go beyond the traditional computer Internet learning environment. Students must stay current in other technologies that are being used in the healthcare field, such as portable devices used for bedside patient diagnosis or home visits, tablet PCs, and other similar devices, which means that faculty members must also stay up-to-date on these types of technologies (Meyer, 2009). P. Allen, Schumann, Collins, and Selz (2007) discussed how one university system partnered with rural clinics to provide mentors and preceptors that committed to providing the hands-on practice for online students so they could get practical experience with the technology they learned online. This process requires a great deal of flexibility on the part of administrators in providing release time for faculty to be able to take part in the extensive orientations, mentoring, and training needed to make the program a success (Meyer, 2009). The discussion of the different adult learning theories is presented in the subsequent sections.

Job burnout and stress

Maslach (1993) defined burnout as "a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment" (p. 20). Emotional exhaustion means being overextended and having depleted one's emotional resources. Depersonalization refers to an excessively detached response to other people. Reduced personal accomplishment results from diminished feelings of competence and achievement at work (p. 21).

The research literature acknowledged difficulty in pinpointing a single definition of the term *stress*. A frequently cited definition of stress has been provided by Selye (1974): "the nonspecific response of the body to any demand made upon it" (p. 27). The term has been further defined by Gold and Roth (1993): "a condition of disequilibrium within the intellectual, emotional and physical state of the individual; it is generated by one's perceptions of a situation, which result in physical and emotional reactions. It can be either positive or negative, depending upon one's interpretations" (p. 17).

Rubino, Luksyte, Perry, and Volpone (2009) investigated the stressors that lead to burnout and the role of intrinsic motivation in mediating this phenomenon. Stressors related to burnout include fit and role ambiguity. *Fit* is the compatibility between a person and the work environment. Rubino et al. found that a misfit leads to negative attitudes and discourages people from acquiring expertise in a particular area. *Role ambiguity* is a lack of clarity or job-related information. One's role includes standards used to evaluate performance, expectations for task completion, and information about the time needed for, and the order in which one should perform, tasks. Role ambiguity can lead to burnout because uncertain situations are inherently stressful. In addition, individuals waste valuable time seeking information to clarify ambiguities, thereby depleting their energy reserves.

When examining the development of burnout among professionals, literature suggests that burnout may be related to past anxiety, guilt, pain, and sensitivity (Ochberg, 2007). Thus, it can

be deduced that role and ambiguity experiences of employees constitute stress and, consequently, can lead to their burnout. According to Ahola et al., (2006), burnout is determined through physical exhaustion, headaches and hypertension, emotional exhaustion, depression, anxiety, boredom, decline in performance, insomnia, increase of addictions or dependencies, self-doubt, blame, and general disillusionment. These burnouts have contributed to workers' inability to perform their jobs adequately, which, in turn, may have resulted in a decline in their feelings of professional efficacy (Bakker & Heuven, 2006).

In one of the few studies to involve physical education teachers, Fejgin, Talmor, and Erlich (2005) investigated the relationship between including special needs students in mainstream classes and burnout among Israeli physical education teachers. Challenges reported by participants about special needs students included inadequate facilities, difficulties with timely assessment and diagnosis of such students, the necessity of modifying teaching methods, and the need for increased parental communication. Fejgin et al. found that the number of special education students in class positively correlated with burnout, while the degree of assistance provided to teachers in caring for these students negatively correlated with burnout.

Faculty job burnout and stress studies

In a study conducted by Beam et al. (2003), findings revealed that stressors relating to technology contributed to lower job satisfaction and higher burnout of faculty in the discipline of mass communication and journalism in higher education. In this study, technology-related stressors stood out among other job stressors, and in most cases these stressors seemed to take precedence over other factors such as seniority, age, tenure status, gender, academic rank, or course load. In addition, the study identified how administrators could help alleviate this stressor amongst their faculty members by (a) improving the quality of their technical supports and (b) improving or adding support to faculty, such as tutorials and workshops, to help alleviate the demands placed upon them to learn and adapt to new hardware and software. Job satisfaction or dissatisfaction has been linked to absenteeism, turnover, motivation, performance, and burnout (Beam et al., 2003; *Iiacqua et al.,* 1995; Terpstra & Honoree, 2004).

In the study by *Iiacqua et al.* (1995), the impact of the workplace and socio-demographic factors on job satisfaction was examined. Herzberg's (1987) model was used to test the validity of the two-factor hypothesis regarding the influence of extrinsic and intrinsic variables on job satisfaction in higher education. By testing Herzberg's hypothesis, the study indicated that 83 faculty members who participated in the study could experience both job satisfaction and dissatisfaction simultaneously. For example, one could be fulfilled and satisfied with one's professional occupation, yet be exceptionally unfulfilled and dissatisfied with the work environment. This study postulated that faculty members may be fulfilled and satisfied with their chosen academic profession, yet if they are not intrinsically motivated by the various levels of technology skills required, they may be extremely inefficient, dissatisfied, and unfulfilled by the realities of working in an online environment. Moreover, faculty who are new to the modality may be unaware of the personal attributes necessary to be engaged and satisfied in an online environment. Understandably, one may enjoy being an academic professor in higher education but may be unfulfilled working in an online environment.

According to eminent researchers in the study of burnout, such as Maslach (2003), Freudenberger and Richelson (1989), and Pines and Aronson (1989), burnout can be attributed to significant health challenges, exhaustion, cynicism, poor job performance, and overall inefficiency. These researchers discussed how individuals exposed to prolonged chronic emotional and interpersonal stressors can negatively affect relationships in the workplace. Job burnout has been attributed to serious workplace challenges in many sectors but has been particularly present in higher degrees in many human services occupations.

In the study by Claybon (2008), the frequency of burnout in faculty who taught online graduate courses within institutions in the Tennessee Board of Regents system using the Maslach Burnout Inventory-Educators' Survey (MBI-ES) was determined. Using the participant responses to the Perceptions of Burnout of Online Instructors (PBOI) survey, the study identified possible contributing factors for those who experienced burnout, and resources and strategies that could effectively mitigate potential for burnout among those who taught distance learning graduate-level courses. The study indicated that online faculty members teaching graduate-level coursework who scored lowest in the areas of emotional exhaustion, personal accomplishment, and depersonalization experienced job burnout more often than online faculty members who scored higher in these three areas.

Moreover, online faculty members often experience a compelling emotional pull to review their courses before or after traditional working hours. Working during off hours can lead to faculty burnout, which affects teaching performance and ultimately the learning experience of the students. In the study by Perry (2008), the reasons for online faculty returning to the online environment after hours were identified, as well as ways through which they could manage that tendency. Using an in-depth online survey, Perry posited that many online faculty members tend to experience an emotional pull into their online classrooms during off hours. This off-hours pull can lead to job burnout, which eventually can negatively affect faculty performance as well as negatively impacting students. Findings in this study revealed that faculty who felt supported were more satisfied, and this factor led to greater student satisfaction as well. Furthermore, Perry posited that stress and job burnout are possible for online faculty who feel compelled to constantly go online and check their classrooms. If not managed well, this compelling pull can contribute to online faculty experiencing negative feelings about their workload, mismanagement of time, and intrusion into personal time or time off.

Research showed that avenues of opportunity have opened for students and faculty as distance education initiatives flourish throughout higher education. Using Delphi methodology, McLean (2006) identified stressors and levels of job satisfaction among faculty teaching exclusively at a distance. According to McLean, online faculty job burnout appeared to be a problem when faculty members were unable to manage and set reasonable guidelines for classroom involvement. Furthermore, establishing boundaries for work and personal life could create stress if online faculty were unable to manage a balance between these areas. Researchers Shi, Bonk, and Magjuka (2006) stated that online faculty must learn how to manage their time effectively. While these researchers suggested various strategies one could use to overcome feelings of being overwhelmed, they believed these strategies could improve instruction.

Moreover, Oliver (2004) examined the everyday work experiences of college professors who taught online, including their work responsibilities as online faculty within the larger university system. Oliver conducted a survey on 17 faculty members to examine community college online faculty. The study reported that longer work hours significantly affected life and work time management challenges. In addition, along with longer hours being a significant problem, larger online class sizes also affected overall faculty job dissatisfaction.

Summary

Online learning communities and modalities offer the online learner flexibility, autonomy, and self-direction. The three learning theories highlighted relate well to these concepts, and coursework designed for the online learner is well accommodated by each of these theories. Higher education pursuit via an online modality is an excellent equalizer because physical appearance, age, race, weight, clothing, disability, and the prejudices, biases, and assumptions of others do not necessarily play as large a role as they would if one were sitting in a physical classroom.

Although the three theories of adult learning discussed in this chapter have significantly defined the field of adult education, "no single theory of adult learning has emerged to unify the field. Rather, there are a number of theories, models, and frameworks, each of which attempts to capture some aspect of adult learning" (Merriam et al., 2007, p. 103). Knowles, Mezirow, and Rogers are known as humanistic theorists, and each wrote extensively on the notion of self-directed learning, which is a concept well-suited to the development of modalities specifically created for the online learner. Facilitators, program developers, and curriculum writers who incorporate adult learning theories such as andragogy, transformative learning, and student-centered learning will find that their online programs will benefit the online learner immeasurably.

According to Merriam et al., (2007), a humanistic orientation to learning emphasizes human nature, human potential, human emotions, and affect (p. 294). Choice, motivation, and responsibility are necessary factors related to the online learning process. The role of prior knowledge and experiential learning must be incorporated into any online learning classroom environment. These factors, when allowed to manifest in an online environment, may significantly affect the learning experiences of the online learner in positive ways. The study provides insight into online faculty burnout and methods and strategies faculty use in their classrooms. Previous studies have not interviewed online faculty in master's programs in the college of education.

Research questions

1. Why do faculty choose to facilitate an online course(s)?
2. How do faculty prepare for this assignment?
3. What do faculty find are the major differences between lecture/discussion face-to-face instruction and online learning?
4. In what ways has facilitating an online course been both rewarding and challenging?
5. What do faculty find to be the most challenging aspects of facilitating an online course?

Methodology

The purpose of this phenomenological qualitative research study was to identify the teaching strategies, personal attributes, organizational skills, software competencies, and job satisfaction of faculty who teach in online master's degree programs in education. Qualitative data were gathered through semi-structured, open-ended interview questions with 12 online faculty to gain insights and a detailed view of online faculty and their teaching strategies, personal attributes, organizational skills, and job satisfaction. This qualitative research used a modified van Kaam method developed by Moustakas (1994). The modified Kaam method was based upon recorded and transcribed interviews using semi-structured questions to capture the lived experiences of online faculty.

Sample

The participants were determined according to their expertise and appropriateness to represent the population for the study via purposeful sampling (Cassell & Symon, 2004). The population of this study included online faculty teaching in a master's degree program in education at various institutions within the United States. The determination was based upon the potential for the research participants to provide valuable information on the concept of online teaching because of their personal lived experiences. The lived experience was based on courses taught, years of teaching, and position in the institution (Marshall & Rossman, 1999). The expert population group included online faculty members who had taught at least four online courses within a year,

taught for three or more years, and taught in a master's degree program in education. Brockhoff (1975) argued that demonstration of knowledge or recourse to confirmation by third parties proves expertise.

Recommendations of potential participants by experts in the field assisted in avoiding selection bias. Berg (2004) stated, "When developing a purposive sample, researchers use their special knowledge or expertise about some group to select subjects who represent this population" (p. 32). The participant recommendation panel included the researcher and members of the teaching faculty.

The nature of the online teaching experiences, accomplishments, positional authority, and recognition by others of contributions of the recommended research participants was reviewed and evaluated to form the basis of the sampling frame to ensure that participants had met the basic parameters of online teaching expertise.

Sampling procedure

The study used a purposeful sampling method for understanding and exploring specific purposes and judgments of a select group or case of individuals who had experienced the same phenomenon (Fitzpatrick, Sanders, & Worthen, 2004; Lincoln & Guba, 1985). Participants were chosen based upon the following inclusion criteria:

1. Taught at least four online courses within a year;
2. Taught for three or more years; and
3. Taught in a master's degree program in education.

In order to recruit participants for the study, the researcher used purposeful sampling by inviting online faculty to participate such as colleagues and acquaintances based upon years of experience in the field of online teaching in the college of education at many institutions. Those to be interviewed were from many different settings, were nominated by those that knew their online work, and were responding as individuals not faculty at a specific institution. In fact, some did not have any institutional affiliation whatsoever.

Data collection

The factors included the need for data from subject matter experts based upon lived experiences, access to a representative population, and varied perspectives from diverse participants. Unstructured observational data in different venues as a participant observer or non-participant observer were not available, and this precluded the opportunity to take field notes or to record data to inform the research. The most appropriate and available data collection method to achieve data validity and reliability in the target population frame was the semi-structured interview (Elliott, 2005).

This research study utilized telephone interviews to capture a wider range of participants in terms of geographic locations. Telephone interviews, however, permit less time to collect data but allow better access to research participants, especially for those in different geographic locations. Thus, this research study utilized telephone interviews. Participants were informed that the conversation would be recorded and would be transcribed for data analysis. The interviews lasted approximately 20 to 30 minutes, and interviews took place only once.

The researcher invited online faculty such as colleagues and acquaintances to participate based upon their years of experience in the field of online teaching in the college of education at various institutions. Instructions as to how to participate in the study were made available. Interested participants received an overview of the study. If their qualifications matched the criteria considered in this study, they were included as potential participants. All potential participants were contacted to arrange for telephone interviews. During the interview process, participants

were informed that audio tapes were to be employed to ensure that their responses could be transcribed appropriately. A transcribed copy was also provided to each participant for approval after the interview process. The data collection process ended when the researcher received the approved copy of the transcribed interview. After that, the data was inputted to the NVivo© qualitative analysis software program for data analysis.

Data analysis

The study was analyzed using triangulation techniques, which included the use of multiple data collection methods, analysts, data sources, or theories as collaborative evidence for the validity of standard qualitative research findings (Gall, Gall, & Borg, 2003, p. 640). For the study, multiple methods employed included qualitative analysis as well as the use of multiple analysts in the development of the qualitative component.

The triangulation method condensed, clustered, and sorted the data by implementing the following steps:

> Step #1: Interview participants were selected in the following order: (a) three participants from a public university, (b) three participants from a private university, (c) three participants from a for-profit university, and (d) three participants from a research 1 university to triangulate how participants from four different types of institutions respond to the qualitative questions.
>
> Step #2: Interview participants via phone with qualitative questions.
>
> Step #3: Transcribe and give responses to the participants for review and approval.
>
> Step #4: Collaborate with outside evaluator on the study to evaluate the transcriptions. Outside evaluator will collaborate to identify and analyze meaning units and assign themes (Creswell, 1998).

Data analysis and results

The result of the analysis yielded the following thematic categories and thematic subcategories: (a) category 1: factors that drive faculty to facilitate an online course; (b) thematic subcategory 1: challenges that were overcome by online instructors; (c) thematic subcategory 2: effective teaching-learning practices in an online learning environment; (d) thematic category 2: faculty preparation for online teaching assignment; (e) thematic subcategory 3: personal attributes of instructors in an online learning; (f) thematic category 3: perceived differences between lecture/discussion face-to-face instruction and online teaching; (g) thematic category 4: elements of online teaching that reward online instructors; and (h) thematic category 5: challenging elements in online course facilitation. In the analysis of the first thematic category, two subcategories emerged: (a) challenges that were overcome by online instructors, and (b) effective teaching-learning practices in an online learning environment.

Discussion of the results

The thematic categories of the present study were the lived experiences of the online instructors with regards to teaching in an online environment. The majority of these participants had many years of teaching experience in a traditional classroom environment before joining the pool of online instructors. These faculty members were specifically exposed to various traditional and progressive teaching methods and strategies and had worked with diverse adult and minor learners extensively before teaching online. These teaching experiences gave them advantages in taking classes via the online learning environment. In fact, these experiences have become significant factors driving their decisions to handle online classes.

While the participants had several advantages, they also indicated several challenges to overcome before they became generally satisfied with online teaching. The theme *ability to cope with the challenges in an online teaching-learning environment* arose from this observation. The inherent challenges of online teaching are manageable among instructors with wide teaching experience and innate time-management ability. The challenges to becoming effective in online teaching included the following: (a) management of students' behaviors, (b) the innate limitations of online learning, (c) learning online technologies, (d) management in responding to multiple e-mails, and (e) individualized teaching strategies. These challenges among others were overcome even without instruction from the administrators.

Managing student behaviors involves helping students understand how to address peers and professor in a professional, academic tone in all activities and correspondence in the classroom. This may include posting specific announcements regarding the issue, modeling an academic, professional tone in all materials the faculty present in the classroom, and quickly and professionally addressing any misbehavior or unprofessional tone that may be presented by students.

Innate limitations of online learning include the fact that faculty cannot meet with learners face to face to explain concepts, lecture material, or answer questions in person. For some students, this may be a challenge that online faculty must address in other ways. Faculty can address this by being present daily in their classrooms, being present before and after typical working hours of 8am to 5pm, being present in the classroom on weekends and nights, answering questions in detail within 24 hours, presenting various ways to contact faculty via e-mail, phone, social media, classroom chat room, faculty website, instant messaging, creating questions to the instructor section or links within the classroom, and posting answers to common questions.

Learning online technologies involves learning new software and programs quickly and effectively so that there is little to no down time in the online classroom. Faculty are required to learn new online technologies on a regular and consistent basis. Online coursework often requires changes to the curriculum and systems need to be altered, removed, changed, and newly created. Faculty need to be able to learn these new skills as quickly and effectively as possible so that students and teaching ability are not negatively impacted. Learning online technologies quickly and adeptly is a fundamental and significant skill for faculty to possess.

Management in responding to multiple e-mails is required by online faculty. Most universities with online coursework require faculty to respond to students within 24 hours. Faculty are required to manage student e-mails and questions with individualized attention and in a timely manner. Finding ways to do this on a daily basis is necessary for faculty.

Individualized teaching strategies may involve faculty using progressive teaching strategies that address various learning styles with significant, specific feedback to each learner that is unique to each learner's needs. A one-size-fits-all approach to teaching does not address individualized teaching strategies. Faculty should be addressing students on an individual basis, meeting the student where he or she is, and working toward bringing each student to a higher level. This approach requires that faculty respond to each student according to his or her needs rather than using a cut-and-paste-the-same-information-to-all-students approach. All correspondence to each student should be created uniquely for each student based upon students' comments, assignment submissions, e-mails, questions, and so on.

Among the driving forces that attracted retention among the online instructors was the flexible time that is inherent in the online teaching environment. The instructors are able to travel without compromising their responsibilities with students. In addition, working mothers prefer to teach online because it allows them to perform their familial roles while practicing their teaching profession. Although faculty have specific deadlines for posting, grading, and answering student

questions, teaching online can take place 24/7 and asynchronously. This allows faculty the opportunity to schedule other personal and professional duties as they chose. Online faculty are not micromanaged in a physical office or a campus-based classroom on a Monday through Friday, 8am to 5pm schedule. For example, if faculty must post grades every week by Wednesday, midnight Central time, this can be done days before the deadline, on the weekend, or hours before the deadline. Faculty can manage other personal and professional duties however and whenever they choose as long as that deadline is met each week. This allows faculty the opportunity to create flexibility in their lifestyles and other commitments and duties however they choose as long as university deadlines and expectations are met. An example of flexibility is that faculty can be present and post in online classrooms for fifteen minutes daily and yet meet weekly deadlines and work for many hours on one or two days of the week.

Another example of flexibility is that faculty can be present and producing in the online classroom while completing other personal and professional computer or Internet research-related tasks. Depending upon how adept faculty are at multitasking, they can be present in the online classroom while pursuing these other activities simultaneously. Another example be may be where faculty can be producing and present in multiple online classrooms simultaneously. In addition, faculty can check into several classes within the same half-hour or hour timeframe without the constraints of physical buildings, walls, or walking great distances across campus. This may not be as easily accomplished in campus-based courses as instructors can only be present in one place at one time. Online faculty can be in many online classrooms simultaneously while producing quality work depending upon the technological savvy and time management skills they may possess.

Other examples of flexibility include mothers working from home while caring for and managing children and family commitments. Faculty can travel for personal or professional reasons and with an Internet connection they are able to be present in the online classroom. Faculty can work for multiple universities in an online capacity. Faculty can have full-time, ground-based, 8am to 5pm employment and also teach several online classes. Many online faculty in the College of Education are working mothers who teach full-time in public K-12, campus-based schools and work for a variety of universities in an online teaching capacity. Some online faculty teach campus-based university courses in addition to their online courses. Time management is left to faculty to handle as they see fit rather than being micromanaged by the university as long as faculty expectations and deadlines are met.

Other factors faculty considered important in their decisions to teach online were the reduction of the physical stress from the time spent driving to and from their respective universities and exposure to new teaching pedagogy. These factors contributed to the positive work satisfaction of online instructors in this study.

While the participants are professionally and technically prepared for online teaching, they noted the recruitment process as a crucial stage that determines the success of universities in offering online courses. These participants articulated that online instructors should have personal characteristics that are aligned with the demands of online teaching, ability to manage students' behaviors, and knowledge in teaching styles that are appropriate to the diverse needs of online students. These characteristics of online instructors include (a) good organization skills, (b) effective time management, (c) positive work attitude and behavior, (d) comfort in an online learning environment, (e) technological competence, and (f) flexibility in dealing with students' needs. Instructors with these characteristics can be identified via new faculty training programs such as an online faculty training classroom where new faculty are required to perform specific tasks. In addition, reviewing faculty resumes and asking specific interview questions related to experience with the management of students' behaviors, online learning and teaching, learning online technologies, time management, working with students in a timely manner, and

individualized teaching strategies should be considered in the hiring process. Meeting criteria in these areas and performing according to specific expectations in an online training classroom would be first steps to identifying online faculty candidates. Peer monitoring, monitoring in the first class one is assigned to teach, and monitoring over a yearly basis would be further steps in identifying faculty who could perform at expected and required levels.

The required attributes of an online instructor were based on the pedagogical differences between face-to-face instruction and online teaching, where the former emphasizes a less individualized approach to learning than the latter. The participants have cited that with online teaching, instructors are required to monitor and evaluate each student's learning progress and behavior in the online classroom. Unlike in traditional classrooms, teaching online requires the instructor to post, review, and synthesize the online discussion as means to encourage students' participation in the online classroom.

In addition, the nature of the online classroom requires more time in the preparation of instructional materials and evaluation of students' performance than face-to-face instruction. The online instructors must be sensitive to the difficulties students may encounter with online learning such that they can appropriately design instructional materials that are effective for students who may experience difficulties. Moreover, online instruction imposes urgency in reviewing and providing feedback to keep the online discussion and coursework active. Based on these responsibilities and work expectations, online instructors must have competency in written instruction.

The thematic category *elements of online teaching that reward online instructors* reiterated the factors that motivate educators in teaching online. The perceived rewards among the educators involved in the study were (a) continuing enhancement of technological competence, (b) meeting of personal and professional satisfaction, and (c) opportunity for new learning and improvement. These themes were consistent across the responses of the participants.

While these elements focus on the individual needs of the educators in an online learning environment, the degree of academic support from the school administration has also been examined. Accordingly, online course facilitation needs appropriate guidelines, policies, and procedures to protect the integrity of education and the online instructors. In this study, job burnout and stress were associated with decisions of the administration to favor students' unjust complaints over the online faculty.

Discussion of the results in relation to the literature

While the present study also aims to understand the job burnout and stress among online faculty in relation to their responsibilities in teaching the students enrolled in a master's education program, the researcher was unable to collect this information from faculty who have several years of teaching experience in both traditional and online classrooms. The faculty who participated in the present study denied experiencing job burnout and in fact suggested that online teaching offers them satisfaction, as they can practice their teaching profession while performing their familial roles. The perceived work satisfaction motivated them to learn available technology so they can further enrich their teaching strategies and become effective in teaching students with diverse learning needs.

In effect, their years of online teaching gave them expertise in the management of online discussion as well as the management of students' behavior, even without guidance from online classroom administrators. For instance, one participant claimed that as she earned experience in teaching, she adopted a random selection of students' online postings for evaluation and feedback. From the experiences of the faculty, it was evident that fit and role ambiguity are related to years of experience (Rubino, Luksyte, Perry, & Volpone, 2009). This means that as

years of teaching experience of faculty increase, fitness for the work environment increases while role ambiguity decreases (Rubino et al., 2009).

This level of comfort in the work environment is evident in the deep concern faculties have demonstrated to their students. Within the online learning environment, the instructors possess higher commitment in terms of providing individualized teaching and mentoring, particularly to those students who have learning difficulties as well as difficulties in the use of technology. Unlike traditional classrooms, the online instructors are committed to ensure that presentation materials are effective for self-learning. The inherent difficulty of self-learning has been considered by the online instructors as shown in their commitment to respond to students' e-mails immediately. The urgency of responding to e-mails was considered an important strategy in sustaining the interest of students in learning the required online tasks. In many cases, instructors respond to students outside typical face-to-face class schedules to clarify learning points that are difficult to understand in the online environment (Beer et al., 2005; Bocchi et al., 2004; Gaytan & McEwen, 2007; Oliver, 2004).

The challenges noted in the empirical research, such as work-related demands, necessary work adjustments, methods in managing online discussion boards, students' behavior, inactive discussions, proper netiquette in classroom, ensuring quality participation, and their responsibilities as instructors have been confirmed in this research (Betts, 2008; Claybon, 2008; Dolan, 2011); however, these challenges are not the factors that provide stress and job burnout, which can subsequently be the reasons for faculty resignation (Claybon, 2008; Perry, 2008; Wiesenmayer et al., 2008). The elements that contribute to job burnout and stress among online faculty who have been teaching for several years are their inability to handle the behavior of students who take for granted their online course requirements, the demands of students for higher grades without making extra efforts, administrators who take the side of students who complain unjustly, and administrators who compromise quality education to attract and retain students. These stressors are particularly experienced by online faculty from private for-profit academic institutions, who avoid arbitration due to fear of losing their jobs (Beam et al., 2003; Rubino et al., 2009).

In the attempt to manage an active online discussion while avoiding conflict with students, online instructors ensure that grading rubrics are set, clarified, and agreed by the students enrolled in the course. Based on this agreement, the instructors evaluate the students' performance based on the agreed rubrics. All 12 participants interviewed in this study discussed how rubrics also serve as the instructors' monitoring and evaluation tool concerning the achievement of the learning course objectives (Beer et al., 2005; Bocchi et al., 2004; Gaytan & McEwen, 2007; Oliver, 2004).

In this study, four general factors motivated online faculty in their decisions to teach in an online learning environment. The factors were (a) the ability to cope with the challenges in an online learning environment, (b) being able to balance familial roles and professional practice without getting physical stress, (c) online teaching provides professional and personal satisfaction, and (d) perceptions that the online environment offers a new perspective in teaching students. This information further implies that these intrinsic motivations were not evident among faculty in traditional learning environments. In the light of the results of the present study, the researcher affirmed the findings of the earlier studies that concluded that there was job burnout and stress among online instructors (*Beam* et al., 2003; Betts, 2008; Claybon, 2008**;** Dolan, 2011; *Iiacqua et al.,* 1995; McLean, 2005; Oliver, 2004; Perry, 2008; Pines & Aronson, 1989). However, unlike the factors that contribute to job burnout and stress as identified in past research (e.g., Bruner, 2007; McLean, 2006) the present study posits that the nature of online teaching and the job responsibilities of online instructors do not significantly affect their commitment to work. The participants of the study have claimed that the perceived attitude of students concerning online instruction as "diploma mill course work" and the tolerance of the online administrators to this

perception in exchange for student retention and enrollment are factors that affect the online instructors' motivation and job commitment.

Implication of the results for practice

The results of the present study provided empirical information on the job burnout and stress of online instructors in the master's education program in American universities. Literature has been scarce in this area since online distance education was introduced in higher education. Specifically, the results provided the perspectives of online instructors who have teaching experience in non-traditional, for-profit universities that most often serviced adult, non-traditional, and at-risk learners. New faculty may benefit from this study because participants revealed various job actions, habits, expectations, traits, daily routines, job stressors, and burnout challenges that are specific to online instruction. This study also revealed various differences regarding teaching for public, private, for-profit, and research 1 institutions that compare and contrast how faculty are expected to manage student issues, challenges to authority, and negative student behaviors. Furthermore, many online institutions enroll at-risk, non-traditional, adult learners who may have learning difficulties and present challenges to instruction that require specific facilitation methods. Not all faculty may be willing or equipped to handle teaching online or the demands required in for-profit institutions. In addition, this study revealed the technological demands, individualized teaching, and feedback on student requirements in addition to the inherent challenges of online instruction that faculty are required to address and manage effectively. Finally, faculty expectations for grading deadlines and a 24-hour turnaround response to all student questions and inquiries may be challenging to faculty who are accustomed to the traditional, campus-based environment.

The most relevant research findings of the present study to educational practices was on the selection of online instructors with personal attributes that are aligned with the online teaching environment. The university administrators who intend to improve the delivery of quality education through online education must emphasize the development of these attributes to their hired online instructors. Other than providing training on the use of software and other related technology, administrators of online instructors may also consider the development of value-based training and development specifically in honing their patience and diligence in mentoring students with learning difficulties.

Regular monitoring of faculty during the interview stage where faculty are required to complete a mock online training class, the first class assignment, and annual peer-mentoring and monitoring evaluations would be effective. In addition, faculty supports such as faculty chat rooms, on-going training and mentoring in areas such as technology, software, classroom facilitation techniques, and research support in all areas of online instruction would be beneficial. Faculty could benefit from peer-mentoring and administration support where questions, problems, and solutions can be addressed effectively and without fear of dismissal. Experienced online faculty can provide additional support to new faculty in all areas of instruction and student management via e-mail, faculty chat rooms, peer-mentoring, and sharing of research and effective facilitation strategies. Administrators could create peer-mentoring groups where an experienced faculty member manages a group of less experienced faculty so that a regular contact for guidance is established with open communication channels.

Taking into account themes that have been identified in this study, online coordinators and higher education leadership have a framework and a basis of knowledge and information to aid in their hiring practices and support of online faculty. The participants in this study can offer insight into hiring practices and support of online faculty as they each (a) had vast teaching experiences, (b) had deep knowledge and expertise in teaching, (c) were skillful in the management of individual learning difficulties, and (d) were skillful in teaching at-risk learners. Identifying and supporting

faculty who can specifically work with individual learning difficulties and at-risk learners is a major factor discussed by the participants. Having patience, diligence, and exposure to various traditional and progressive teaching methods and strategies was also common with these participants. In addition, working with diverse adult and minor learners extensively before teaching online was common. Based upon these factors, online coordinators and higher education leadership should understand the importance of hiring and supporting online faculty who have these traits, abilities, skills, and experiences.

Furthermore, faculty who can effectively manage challenging student behaviors, individualized feedback, the inherent challenges of online teaching, and time management seem to do best in an online environment. Hiring, training, and supporting new faculty in these areas is essential and may relieve stress, job burnout, attrition of faculty, and attrition of students.

Recommendations for further research

While the results of the present study are compelling regarding job burnout and stress among instructors in relation to their teaching careers in an online learning environment, the researcher recommends further research on the lived experiences of newly hired online instructors who have a maximum of at least two years teaching experience either in traditional and online learning environment. The contribution of this recommended research is that it will further explore the challenges and coping mechanisms of these newly hired online instructors with regards to the identified issues of the expert online instructors. With this research, attrition of newly hired online instructors can be resolved.

With regards to integration of technology and mentoring of its use to online instructors, past research has shown the value of teachers' attitudes toward technology in general and the use of this technology in effective online instruction (Bahr et al., 2004; Helton & Helton, 2005). This conclusion has been reiterated in the present study; however, the process of technology integration to instructors' systems of work has not been explored. The perspective emerging from the interview data was that online instructors are already knowledgeable, if not experts, on information technology, including the use of software for the improvement of online instruction materials. In this regard, further research can be done concerning online instructors' processes of acquiring knowledge and skills of information technology. This future research can further provide effective strategies in molding a pool of instructors who are receptive and eager to integrate technology into their curriculum more than required by school administrators (Grove et al., 2004; Tallent-Runnels et al., 2006).

Furthermore, regardless of age, online instructors have similar views concerning the relationship of use of technology and ease of teaching (Bruner, 2007). However, younger instructors are more adept in the use of technology when compared to instructors who may have longer teaching careers (Beam et al., 2003; Iiacqua et al., 1995; Terpstra & Honoree, 2004). In this case, a study comparing the strengths and weaknesses of younger and older age cohorts may need to be done to understand the behavior, stress, and job burnout of online instructors in relation to use of technology and effective instruction better.

Conclusion

This study is particularly important among universities who envision hiring, supporting, and training online faculty who are best equipped to manage the rigors of the online environment and adult, at-risk learners who may have challenging behaviors and learning difficulties. The thematic categories used in understanding effective online classroom instruction as well as the constraints in the achievement of quality online education can guide administrators in the development of professional training exercises for their regular and newly hired online instructors to learn and

adopt effective strategies in reaching these at-risk students. Not all faculty may have the attributes and innate skills necessary to be effective, successful, and satisfied teaching in an online environment. Online coordinators and higher education administrators have a specific challenge in identifying faculty who are best suited for this type of employment. Furthermore, once faculty are identified, supporting and training the newly hired present additional challenges. The strengths that experienced online faculty bring to this form of learning have been identified as major themes discussed by all 12 participants in the areas where one 100% consensus was present quite often.

Based upon the overwhelming common themes reported by all participants, it is evident that online coordinators and higher education administrators can find specific areas of importance in relationship to hiring practices, support, and training for new and currently employed online faculty support, and training for new and currently employed online faculty.

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APPENDIX A

Interview questions

Research Question #1

1. Why do faculty choose to facilitate an online course(s)?

Interview Questions #1

a. What work-related practices do you use as you teach online that may be different from what you are used to doing in a regular brick and mortar classroom?
b. What adjustments have you made, if any, to be successful as an instructor in the online classroom?
c. What methods do you use to manage your online discussion boards?
d. How do you manage a dominating, rude, or disrespectful student?
e. How do you manage a discussion that has become inactive?
f. What ideas do you have for maintaining proper netiquette in the classroom?
g. What strategies do you use in the online classroom to encourage and ensure quality participation in threaded discussions?
h. What is your interpretation of your responsibility as an online instructor?

Research Question #2

2. How do faculty prepare for this assignment?

Interview Questions #2

a. What personal attributes do you have that you believe are necessary for teaching online?
b. How do you handle possible procrastination issues?
c. How do you handle possible job burnout issues?
d. *How does your teaching style and/or philosophy fit in with the requirements and demands of online instruction?*
e. *How do you feel about the notion of the "student as customer" philosophy that has been adopted by many online institutions in higher education?*
f. *How do you handle students who challenge your facilitation style, methods, and strategies?*

Research Question #3

3. What do faculty find are the major differences between lecture/discussion face to face instruction and online learning?

Interview Questions #3

a. What are your administrative and clerical skills that you believe are necessary for teaching online?
b. What methods do you use for time management?
c. How do you use these methods to successfully facilitate online classes?

Research Question #4

4. In what ways has facilitating an online course been both rewarding and challenging?

d. How well do you use the software required for online teaching?

Research Question #5

5. What have faculty found to be the most challenging aspects of facilitating an online course?

Interview Questions #5

e. How satisfied are you with online teaching?
f. What are your motivators to teach online?
g. How do you feel about your personal accomplishments as an online educator?

About the author

Dr. Lisa Marie Portugal holds a PhD in Leadership for Higher Education, a Master of Arts in Education with a concentration in Secondary Education, and a Bachelor of Fine Arts in Media Arts with a minor in Fine Arts. She is a Personal and Professional Life Coach, a published, peer-reviewed author, an online university professor for various institutions, a PhD dissertation chair, and a Faculty Supervisor-Mentor to graduate and undergraduate teacher-candidates. She currently teaches coursework at the undergraduate, graduate, EdD, and PhD levels in the College of Education.

Dr. Portugal has taught online and ground campus 6th through 12th grades in various disciplines and she was a librarian. Throughout her career as an educator and mentor, she has been a faculty member for 12 universities and 7 charter/public schools. She is currently a faculty member at Grand Canyon University, American Public University, University of Advancing Technology, University of Phoenix, Ottawa University, Walden University, Jones International University, and American College of Education. She was previously a faculty member at Ashford University, Argosy University, Saint Xavier University, and Drake University.

Dr. Portugal is currently writing a book and several peer-reviewed articles. Her goal is to continue to mentor people how to reach their personal and professional goals, teach online coursework world-wide, research, write, and publish. She has published various research papers in peer reviewed academic journals such as Academic Leadership the Online Journal, Advancing Women in Leadership Online Journal, Distance Learning Administration (OJDLA), and Higher Education Perspectives. She is on the Review Board for the Journal of Instructional Research (JIR) published by Grand Canyon University. Her expertise and research interests include student engagement and success, Adult Learning Theory, adult, nontraditional, and at-risk learners, faculty retention, hiring practices, faculty burn-out, best practices in online learning, emerging technology in course design and instruction, online education, learning styles, Diversity Leadership, Transformational Leadership, and the Community of Inquiry Framework. She integrates theory into practice through conducting research in these areas.

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Editor's Note: Collaborative teams with global online learner projects may benefit from culturally diverse expertise. Such teams interact on a *personal* level within the team and *virtually* with globally distributed counterparts. Cross-cultural collaboration may involve social media.

Convergence and divergence: accommodating online cross-culture communication styles

Bradley E. Wiggins and Susan Simkowski
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Abstract

This paper explores Adaptive Structuration Theory through the cross-cultural collaboration of an online radio station. Students in separate locations used social media and online tools for the purposes of design, implementation, analysis, and evaluation of an online radio station while in a mediated environment. Specific expectations involve successful cross-cultural collaboration involving social media for the purposes of communication and the nexus of the application to Adaptive Structuration Theory.

Keywords: Adaptive Structuration Theory, online radio station, student projects

Introduction

The process of media selection (social media, audio, video, websites, etc.) for online learners engaged in collaborative projects, especially when time and distance may separate the individual from assigned counterparts, is complex in that it relates to geography, an individual's level of proficiency in computer-mediated communication including social media, theories on media traits, and the linguistic and cultural nuances involved in a collaborative team.

Before entering into the primary theoretical discussion on factors and concepts which may ameliorate potential troubles that online learners as well as educators may encounter, it is advisable to review current perspectives on learning across cultures. Specifically, the current contribution offers a critical perception of online education at the threshold of a globalized community which is still separated by real world barriers as well as metaphoric ones. This chapter will detail the best practices to consider when traversing online education cross-culturally, especially when one wishes to have successful communication within one's own face-to-face team as well as with virtual counterparts.

Cross-cultural learning

Learning styles, student strategies, and cognitive variations permeate the discourse on differences that exist between presumably dichotomous cultural structures (Wiggins, 2011). The literature on cultural dimensions such as individualist-collectivist, uncertainty avoidance, power distance, and as well masculinity touches on business, education, psychology, sociology, anthropology, and government. Common throughout the discourse is the reality of difference. While this difference between the various cultural dimensions exists, it does not suggest immutability.

Student learning strategies

Acknowledging the dynamism of culture, Drake (2004) characterizes the introduction of international baccalaureate programs into the non-Eurocentric world as a source of potential dissonance. This argument rests on the reality of complex cultural differences which exist among various nations around the world. Indeed, among the Eurocentric nations, differences exist; however, these are differences in terms of being more or less of a particular cultural dimension, such as individualism, power-distance, or uncertainty avoidance.

Studies of students from Western and non-Western cultures propose that while some learners rely more on rote memorization (surface strategy), other learners enact a deep learning strategy (Ballard & Clanchy, 1984; Samuelowicz, 1987; Volet, Renshaw, & Tietzel, 1994). Three learning strategies relate to this discussion: surface, achieving, and deep.

A student maintaining a surface strategy meets minimal requirements stated by institutional curricular objectives and utilizes rote memory (Biggs, 1987; Hunt, 2003; King 1996). Conversely, an achieving strategy envisions a situation in which a student strives to get high grades and is generally as good a student as possible, even if the subject is of no interest to the student. A deep learning strategy is one focused both on competence and the process of relating new knowledge to previous knowledge. Research that has defined Western and non-Western cultures in terms of Hofstede's cultural dimensions (Hofstede, 1980; 2001; Hofstede & Pedersen, 1999), i.e. defining Western as individualist and non-Western as collectivist, has provided consistent distinctions in "learning, motivation for learning, learning strategies and goals or purposes of learning" (Brown et al, 2007, p. 593; Gabb, 2006; Ho & Chiu, 1994; Hwang, Francesco, & Kessler, 2003; Marsella, DeVos, & Hsu, 1985; Triandis, Bontempo, Villareal, Asai, & Lucca, 1988; Weisz, Rothbaum, & Blackburn, 1984). Indeed, significant cultural variations may be related to cognitive variations. By extension, these variations may characterize the nature of differences implied by cultural changes such as Western-style schooling (Cole, Gay, Glick, & Sharp, 1971).

Cultural awareness training in the United States

As a feature of the cultural wealth of the United States, it is not surprising that its schools are becoming increasingly culturally and linguistically diverse. A testament to this trend is the increase in teacher preparation programs across the United States to train new and existing teachers in cultural awareness (Lim, Maxwell, Able-Boone, & Zimmer, 2008). What is lacking, however, is an understanding of effective social media design for e-learning content to be delivered to culturally and linguistically diverse audiences. According to the 2005-2009 American Community Survey, 12.4% of the US population, or 38,440,000 are foreign-born. Additionally, 19.6%, or 60,760,000 speak a language other than English at home (U.S. Census Bureau, 2009).

Resources. The United States spends approximately $631 billion for primary and secondary schools (Ruth, 2010). Despite this enormous expenditure, approximately 73% of high school students graduate as a nationwide average; in some regions the figure is around 50% or lower. According to the Sloan Consortium's report on K-12 online learning, primary school e-learning is still in its infancy (Allen & Seaman, 2009). However, the Sloan study noted that e-learning solutions are critical for poorer, rural school districts.

With some school districts seeing fewer qualified educators, online learning solutions may enable schools to draw on expertise located elsewhere and accessible online (Ruth, 2010). Patrick and Powell (2006) found that online course enrollments have increased in the United States by approximately 30% since 2003. This highlights the utilitarian aspect of online learning that is most beneficial to those students residing in rural areas or districts with educator shortages (Gibbs, Lane, & Lane, 2007). Picciano and Seaman (2009) reported enrollment in online courses had risen to over one million students. Watson, Gemin, Ryan, and Wicks (2009) also reported the growth of online learning in all but five states in the US. Similarly, Schaeffer and Konetes (2010) highlight the promise of online programs to provide opportunities for students to enroll in a wider range of courses not usually available at traditional schools.

Calls for more research in e-learning design. Rice (2009) surveyed distance education stakeholders to identify priorities in distance education for 2009-2014. The chief priority was 'evaluation of course design and delivery.' These influential online education stakeholders advocate research in effective course design and for online delivery and usage. Barbour and

Reeves (2009) and Barbour (2010) endorse online course design to follow the structure of research methodology. Their recommended strategy shares similarities with the ADDIE model of instructional design which incorporates analysis, design, development, implementation, and evaluation (Dean, 2002), but involves iterative procedures to test and refine the course. Clearly, in order to maintain a productive and nurturing online learning environment for K-12, higher education, private sector and government training, more research is needed in course design.

The presence of collaborative teams with Global Online Learner Projects (GOLP), signifies an organizational endeavor to benefit from culturally diverse expertise. Such teams interact on a personal level within its own team and virtually with its globally distributed counterparts. The following three sections review the collected literature in order to provide a clearer understanding of the communication media selection for GOLPs. This review discusses three aspects of a GOLP's media selection which are (a) composition, (b) theories on media selection, and (c) intercultural significance.

GOLP composition, location, and need for trust

The relationship between the composition and location of a GOLP determines much of the media selected for communication purposes. The combination of composition and location of a GOLP leads to a basic need to be able to trust both those within one's own GOLP and those located in another GOLP (Jarvenpaa & Leidner, 1998; Cho & Lee, 2008; Ulijn, O'Hair, Weggerman, Ledlow, & Hall, 2000). The following three subsections discuss this in greater detail. The subsections are as follows (a) heterogeneous GOLPs being more culturally aware than homogeneous GOLPs, (b) the location of the GOLP as a determinant in media selection given a need for trust, and (c) that the composition of a GOLP and its location generates a need for trust.

Global Online Learner Projects Composition. There is a greater chance for heterogeneous GOLP members to be more culturally aware than homogeneous GOLP members. In order to work effectively within culturally diverse teams, it is important to understand the nuances of the cultures with which one interacts (Timmerman & Scott, 2007; Jarvenpaa & Leidner, 1998; Shachaf, 2005; Uber Grosse, 2002; Hofstede, 1983; Hofstede, 2001; Beamer & Varner, 2008). Simply peruse the national presence for corporations with an international presence for a better understanding. For example, Starbucks takes a very different approach to its website in the United States than it does for Japan (starbucks.com). Information received by an individual is processed by a cultural frame which filters the message through an individual's cultural background (Maznevski & Chudoba, 2000; Matveev & Nelson, 2004). Given the challenges which heterogeneity poses members of a GOLP and given the GOLP's particular level of "virtualness," the team's composition is of much greater importance than where the individual members happen to be located geographically (Goodbody, 2005). With a solid understanding of intercultural communication issues and how best to resolve conflict (and/or how conflict is best avoided), the heterogeneous team tends to match or exceed the productivity of a homogeneous team (Maznevski & Chudoba, 2000). In part this is due to the cultural complexity of a heterogeneous team. Members of such a team often represent a breadth of linguistic and cultural diversity (Campbell, 2008; Shachaf, 2005). The next paragraph discusses the matter of GOLP location.

Global Online Learner Projects Location. The location of a GOLP often determines media preference given a need to formalize trust. Since GOLPs are dispersed all over the globe, separated from one and another GOLP by geography only, the increasing use of computer-mediated communication (CMC) and the Internet illustrates the ease by which technology can facilitate communication beyond national borders (Olaniran, 2004; Vallaster, 2005; de Vries, R., van den Hooff, B., & de Ridder, J. 2006). Asynchronous media tend to be the communication medium of choice especially among culturally diverse GOLPs (Timmerman & Scott, 2006). In written and spoken communication between GOLPs, the language is often English (Maznevski & Chudoba, 2000; Shachaf & Hara, 2005). Using email or social media such as Facebook or Twitter

allows non-native speakers of English the opportunity to spell-check their messages prior to sending to other team members (Uber Grosse, 2002). In addition, the leanness of the email medium diminishes the chance for cross-cultural miscommunication (Goodbody, 2005; Martins, Gilson, & Maynard, 2004). Since the medium does not allow for the transference of non-verbal communication such as gestures, facial expressions, eye contact, and body language, the potential for a team member to misunderstand another member's message due to intercultural issues is greatly decreased (Shachaf, 2005; Timmerman & Scott, 2006). Global Online Learner Projects dispersed over various time zones tend to prefer asynchronous media (Shachaf, 2005; Jarvenpaa & Leidner, 1998). However, in order to ensure a good sense of collaboration and cohesiveness, especially when GOLPs use asynchronous media, Global Online Learner Projects must develop a level of trust and respect to compensate for the online nature of their collaborative projects (Jarvenpaa & Leidner, 1998; Martins, Gilson, & Maynard, 2004). The next paragraph discusses the issue of trust in greater detail as it pertains to a successful GOLP.

Trust. Team composition and its location lead to a need for good collaboration and trust in order to perform successfully. Though trust within the GOLP is likely to be neither permanent nor strong, it is necessary to develop trust given the shared objective of task completion (Lucas, 2012; Olaniran, 2004; Jarvenpaa & Leidner, 1998). Olaniran indicates that CMC's perceived inherent lack of a capacity to support rapport-building among GOLPs. Jarvenpaa and Leidner posit that strong bonds develop especially within teams consisting of diverse membership. Identity development within GOLPs is synonymous with successful team operation and prevents feelings of detachment or deindividuation (Matveev & Nelson, 2004; Søderberg & Holden, 2002; Jarvenpaa & Leidner, 1998). The next point discusses how GOLPs select media and how theories correspond to their media selection given cultural diversity.

Media traits theories, media and GOLP structure, linguistic and cultural diversity

Some media traits theories do not illustrate a sense of rationale in determining a culturally diverse GOLP's media selection. These media traits theories consider individual media characteristics as determinants for selecting a given medium. The following subsections discuss (a) media traits theories, (b) the Adaptive Structuration Theory as it pertains to media selection for a GOLP, and (c) the aspect of linguistic and cultural diversity of GOLPs (DeSanctis & Poole, 1994; Shachaf & Hara, 2007; Cho & Lee, 2008; Timmerman & Scott, 2007; Søderberg & Holden, 2002).

Media traits theories. Research on media traits theories often disregards the potential impact of internal and external dimensions of culturally diverse GOLPs. Media traits theories on media selection focus on the function of media and communication task characteristics (Cho and Lee, 2008). Media Richness Theory (MRT) is a contingency theory which suggests that the richer the medium, the better it is to transfer ambiguous and/or complex messages (Russ, Daft and Lengel, 1990; Daft, Lengel, & Trevino, 1987; Shachaf & Hara, 2005). It was later revised to consider newer media (Martins, Gilson, & Maynard, 2004). Timmerman and Scott (2006) argue that communication over a wide range of media irrespective of richness is the end result because GOLPs span boundaries and cultures. Similarly, Maznevski and Chudoba (2000) found no connection between message traits and selected media. Media Accessibility Theory (MAT) proposes that media have accessibility traits which determine their use. Reliability, access speed, and availability all fall under this theory (Carlson & Davis, 1998). Maznevski and Chudoba found inconsistent similarities between media choice and message as explained by structural traits. Given the geographical distribution and cultural diversity of GOLPs, individual team members conduct themselves in numerous ways relative to their own social context. Shachaf and Hara (2007) developed the Behavioral Complexity Theory (BCT) to address aspects of global dispersion, cultural diversity, and preferred media characteristics of GOLPs. BCT focuses on media channel range and the flexibility of individuals. The next subsection details a GOLP's media selection in terms of its structure and the occurrence of successful communication.

Media selection and adapted structure. Given the available communication media, a GOLP adapts the selected medium/media to best suit its structure. Within the structure of communication media technology, successful communication occurs when interaction between GOLP members is well-planned and the selected media is well-adapted to the GOLP's structure. Managers of GOLPs often influence the selection of media in order to match the specific communication requirements of GOLPs (Martins, Gilson, & Maynard, 2004; Olaniran, 2004; Uber Grosse, 2002). Recalling Giddens's (1979) theory of structuration, the Adaptive Structuration Theory (AST) suggests that users of communication technology choose to adapt either a technology's role to the needs of the team, or, conversely, to adapt the team's structure to employ the technology in a amicable and conducive way (DeSanctis and Poole, 1994; Timmerman and Scott, 2006; Cho & Lee, 2008; Maznevski & Chudoba, 2000). For AST, in other words, individuals determine the outcome of technology efficacy (Timmerman and Scott, 2006; Cho and Lee, 2008). The next paragraph discusses the aspects of language and culture given the cultural diversity of GOLPs and how these impact the team's internal and external communication.

Language and culture. Linguistic and cultural diversity are features of GOLPs which form a subtext beyond theories of media traits. A GOLP's cultural and linguistic diversity is a benefit to the team in that the GOLP considers a task thoroughly instead of taking quick action due to its cultural composition. Regardless of the medium, communication tends to be smoother between peers and already acquainted individuals (Uber Grosse, 2002; Vallaster, 2005; Søderberg & Holden, 2002; Thomas, 2007; Ulijn, O'Hair, Weggerman, Ledlow, & Hall, 2000). Having access to a variety of communication channels is advantageous for GOLPs given the complexity of linguistic and cultural diversity (de Vries, van den Hooff, & de Ridder, 2006; Cho & Lee, 2008). The next section discusses the role of intercultural competency in GOLPs as it relates to successful communication given a wide range of media channels.

Success factors for GOLPs

The literature suggests that if a GOLP has intercultural competency and is proficient in computer-mediated communication, like social media, the GOLP will select the best media (or combination of media) for the task at hand (Olaniran, 2004; Cho & Lee, 2008; Uber Grosse, 2002). It appears that intercultural competence and skilled handling of SM OR CMC correlate with a given GOLP's wide range of available media channels. The following subsections detail (a) intercultural competence as a success factor for GOLPs and (b) the opportunity for GOLPs to have access to wide range of communication media.

SM OR CMC and intercultural competence. Intercultural communication competence is a success factor for GOLPs when a wide range of communication media channels is available. An individual's culture impacts social interaction (Vallaster, 2005; Hofstede, 1983; Hofstede, 2001; Uber Grosse, 2002). A group's intercultural competence links with expressing messages clearly which yields a high level of team productivity (Matveev & Nelson, 2004; Hofstede, 2001; Hofstede, 1983; Timmerman & Scott, 2007). With a wide range of media channels available, GOLP members dispersed over a span of locations appropriate both rich and lean media for the given task at hand, but do not choose the media *because* they are rich, or *because* they are lean (Shachaf & Hara, 2007; Maznevski & Chudoba, 2004). A GOLP's selection of a specific computer-mediated form of communication results from the team's own cultural diversity and a desire to communicate effectively with other GOLPs (Campbell, 2008; Martins, Gilson, & Maynard, 2004). SM OR CMC technologies do not erode cultural boundaries due inherent media traits (Cho & Lee, 2008; Goodbody, 2005; Olaniran, 2004). Rather, GOLP team members who are knowledgeable of SM OR CMC technology and have intercultural competency reduce internal and external miscommunication (Ulijn et al., 2000; Olaniran, 2004). Successfully understanding the intended message for GOLPs denotes a sense of SM OR CMC technological

skill coupled with cross cultural competency. In teams where individuals do not possess cross cultural competency, the intended communication suffers due to the complexities of intercultural communication (Uber Grosse, 2002; Shachaf & Hara, 2007; Shachaf, 2005). The next paragraph discusses the importance of media channel availability in terms of a GOLP's selection of a particular communication medium.

Range of media channels. Having access to a wide range of communication media is important for a GOLP when it selects a medium for a particular task. The medium is only as important as the message sent by a GOLP member (Timmerman & Scott, 2006; Maznevski & Chudoba, 2000). In culturally diverse GOLPs it is important for members to consider that the intended message has been understood (Goodbody, 2005). Adjusting one's own perspective to allow for successful communication across cultural boundaries is enhanced by the availability of multiple media channels (Reinsch and Turner, 2006). Access to multiple channels for communication furnishes the GOLP's communication efforts with a "heightened visibility" (Reinsch & Turner, 2006, p.350). In "multicommunicating" individuals within a GOLP increasingly use multiple media technologies in order to facilitate communication with other culturally diverse teams distributed around the world (Thomas, 2007; Campbell, 2008).

Critique of the literature

While some of the research studies drew conclusions based on actual global virtual teams, and the media they chose, other studies used virtual teams composed of students located in different countries (Timmerman & Scott, 2007). It seems that the educational impact of learning more about GOLP media selection, given the aspects discussed in this review, would increase by using data from real global virtual teams.

The premise and application

What builds a sense of community better than local media? Print and, later, broadcast technologies, have been the source for local information for centuries (McLuhan, 1964). Generally speaking, radio stations have the mission of aligning itself to the community in which it serves (Simkowski, 2003). When radio broadcasting came about, news and information of interest could travel faster to those with a radio. Soon families made a habit of sitting in front of the radio listening to their favorite shows. Radio stations have built a sense of local community since the implementation of FCC in the guise as the FRC was to regulate radio to serve the public interest. This section addresses the implementation of radio, first in the form of broadcast radio, and, then, online radio as well as the application of a Global Online Learner Project in the guise of an online radio station.

Radio stations licensed by educational institutions (typically between 88.1 and 91.9 on the FM dial) can now be found to have a virtual presence in the form of a website (www.radio-locator.com). According to Hanley (2002), a National Public Radio board member, the most significant difference between commercial and non-commercial stations comes from the perspective of the FCC and the Internal Revenue Service. The legal prohibition to air commercials requires a very different business model. Commercial stations exist to deliver an audience to advertisers. Public stations exist either as subsidized activities, or they must create programming with enough audience to be sustained by grants and/or gifts from individuals. (Underwriting, while often compared to commercials, is legally a grant of support recognized on-the-air and possibly other ways). Self-supporting public radio stations, for example, are largely stations that deliver programming to a significant enough audience to garner financial gifts from that audience. Underwriting and grant support can be significant, but the largest source of public radio income is directly from listeners.

Thus, the balancing act for public radio station management is to present programming for a large enough audience, yet achieve public service for the medium. Serving a "small but loyal" audience usually means serving a small audience - and limits the amount of public service being done by a given station (Hanley, 2002). In managing a public radio station, one must do well enough to deliver an audience and also have that radio service perceived as a good enough public service to deserve contributions for what most listeners receive for free. Hanley further stated that even stations that rely on subsidies eventually need to be accountable in the amount and significance of public service that is being performed, especially taking into consideration the perceived and potential community need.

There are about 10,000 radio stations of all types in the country (Petrizzi & Wright, 1977). According to the Corporation for Public Broadcasting (CPB) (2002), there are fewer than 800 public radio stations. The majority of public radio stations are owned by universities (417), followed by nonprofit community organizations (262). Only about 48 stations are owned by municipal entities or public school systems. Additionally, there are some radio stations owned by individual schools.

Public broadcasting stations provide services in education, programming, and staffing and operating for the community, similarly so can online radio. The Public Broadcasting Act, (1962) allowed public broadcasting to take risks that may be considered as creative or served and underserved audiences, particularly children and minorities. Thus, services become available to all the citizens of the United States. The bill was enacted by the Federal Government to ensure that Americans have access to public telecommunications services through all appropriate available telecommunications distribution technologies. Through this act, the vision of public radio is to be commercial-free and instructional, educational, and cultural in content.

Radio or radio spectrum is operationally defined for this study through the description from the FCC. Stations are full-power radio transmitters licensed by the FCC. Licensees are community organizations, colleges or universities, local authorities or state governments, which hold the FCC licenses. The FCC (2002) defined radio spectrum as follows:

The radio spectrum is the part of the natural spectrum of electromagnetic radiation lying between the frequency limits of 9 kilohertz and 300 gigahertz. In the United States, regulatory responsibility for the radio spectrum is divided between the FCC and the National Telecommunications and Information Administration. (¶ 1)

To best put the definition in the vernacular, radio is designed to reach mass audiences with a signal that is transmitted from a central point and can be reached by persons around the standard radio receive equipment (Meyer, 1994). In turn, online radio can reach potentially a larger audience because it is not bound by terrestrial signal.

Unlike a licensed radio station, an online radio station can be set up and information disseminated rather inexpensively with no current regulations from the FCC. Similarly to broadcast radio, any individual with an internet connection can listen to an online radio station. In turn, individuals can rather easily start an internet or online radio "station." There are many services which charge little or nothing for one to upload audio content (spreaker.com, Live365.com, etc.). While many radio stations licensed to colleges have an online or internet presence, not all educational institutions have a licensed radio station. It was the desire of students within our university, which is does not have a traditional radio station, to have at least one online.

Students in two media communication courses (*Broadcasting in New Media* and *Survey of New Media*) were tasked with proposing an online radio station and creating its web presence. Additionally, students were required to get a "global perspective" and, in turn, a Global Online Learner Project was created. Students attained a global perspective by adding non-native English

speakers or international students to their teams. Groups of three or four American students from a small southern public university were teamed up with international students who had a connection to the university. While the majority resided in Asian countries (Japan, South Korea, Vietnam), other countries included England, Mexico, and Spain. The American student population was 39 and the international population was 49, because each group had at least two international students.

Collaboration was typically either in the design or final stages. For example, the American students would ask questions what the international students would like to see and then the Americans would build it. The results would then be critiqued by the international students. It appeared during this initial GOLP that there was no online development between the American and the International students. Instead, students used social media to discuss what they liked and what need to be further explained. As the literature review indicates, the areas of linguistics and time difference were the biggest problem areas for the project. The objective of the assignment was to create a website or concept paper that brings the media communication students nearer to the goal of creating an online radio station. The purpose of the global connection was for American students in a small southern town to understand the cultural nature of radio and the internet. Using social media to communicate, students were able to finesse the project, so that it met the needs of a global culture through the perspectives of these 49 international students.

Remaining research questions

Further research could delve deeper into analyzing media selection within the context of existing theoretical models and intercultural dimensions. When the authors included intercultural dimensions, they often chose the context dimension (high-context vs. low-context) and did not include other dimensions in their research (Hofstede, 1983; Beamer & Varner, 2008). Perhaps future research could test the validity (if any) of intercultural dimensions within a research framework probing the media selection of GOLPs. This data could illustrate the impact (if any) of the cultural aspect of GOLPs and their selection of media.

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Editor's Note: This is a study to determine the gap between classroom training and performing in real world environments. It calls for videos of model situations and interactive materials to prepare for and simulate on-the-job experiences and communications.

English for Specific Purposes learners' needs-related learning for the workplace: a pragmatic study

Hussain Ahmed Liton
Saudi Arabia

Abstract

Typically, ESP course is designed to develop students' communication skills not solely for the office, but also for useful in a specific workplace. But, unfortunately ESP for School of Business at some South-East Asian universities, is not being very effective in promoting students' performance in the workplace. Behind this backdrop, this paper explores learners' pragmatic workplace learning practices that impact their profession, and that has immediate applicability to their professional responsibilities. This article, in other words, addresses the gaps between what students learn in ESP class and what they need in real workplace. The data were collected through questionnaires from 30 ESP teachers. *The data were analyzed both qualitatively and quantitatively.* The research results revealed that the current ESP in use fails to capture the learners' needs and skills in workplace communication. It, therefore, suggests that the ESP textbook has to be augmented with materials related to practical workplace needs as well as extra materials that respond to the teachers' constant '*needs analysis'*.

Keywords: pragmatic, needs analysis, Business Studies, workplace, effective intercultural communication, ICT skills & application

Introduction and backdrop

It is commonly a difficult task to find the right and the most comprehensive range of English for Business School and ESP course materials to suit a range of students' needs in the workplace. Whether students are in work or still studying, this paper talks concerning the language, skills, and additional resources they need to progress in their future career. Since the workplace is evolving globally now more than ever due to economic globalization, students and professionals need appropriate and relevant English to communicate effectively in a variety of business situations. Here lies the question of *needs analysis* to furnish students for the journey towards their future career. To this end, ESP courses should provide with communication skills not solely for the office, but also for useful in a specific workplace, such as factory, hotel, laboratory or corporate organization. Actually, specificity in teaching ESP is to fulfil specific needs and sustainable competency of the students. *English for Specific Purposes* (ESP) has its driving and defining characteristic stance leading to focus on the learners' specific objectives, or needs to learn English for pragmatic use in a specific context. Consequently, ESP course is to be designed to meet the specific learning needs of a specific learner or group of learners within a specific time frame for which instruction in traditional General English (GE) will not suffice. This course instruction, in general, involves in orientation to specific spoken and written English skills development to carry out specific academic or workplace tasks and purposes. Linguist experts and researchers opine that "…all learning activities are filtered through students' motivation" (Liton, 2012). But unfortunately in the South-East Asian countries like Bangladesh, Pakistan, Malaysia, Saudi Arabia, Kuwait, UAE, Qatar, and Yemen, existing ESP course is not being

effective in developing Business students' (Bachelor Level) competence and performance in the art of business communication in the workplace. Behind this backdrop, the present paper discusses *learners' needs related learning for the workplace* with a view to developing an effective and practical teaching-learning ESP for the students of Business School at some universities of South-East Asia.

In other words, this study investigates learners' needs, specifying to meet those needs in actual teaching and learning situations, catering their better performance in the real workplace situation. Learners' needs will have to be addressed if the course is to be effective and successful. Business Studies students have specific English needs. This reality has developed a variety of ESP course designs. In such a context teachers' role is a vital factor as Schleppegrell defines "Their (Teachers) task is to analyze students' needs, outline objectives, select and adapt teaching materials, design lessons, create an adult-oriented learning environment, and assess students' progress" (Schleppegrell, 1991, pp. 18-22). It underlines the issue of *needs analysis*.

ESP for School of Business & 'Needs' related teaching-learning

TESP determines to teach English in context related to students' skills need for their job in real work situations. ESP has always been with needs analysis and preparing learners to communicate effectively in the tasks prescribed by their field of study or work situation. The theory of ESP could be outlined based on specific nature of the texts that learners need knowledge of or need-related nature of teaching. In this regard, it is important to cite according to Hutchinson and Waters (1987) *"ESP as an approach to language teaching in which all decisions as to content and method are based on the learner's reason for learning"* (p.19). Strevens (1988) described it (ESP) as *English language teaching which is designed to meet specified needs of the learner* (as cited in Tsao, 2011). In reality, the research and the assessment of ESP course effectiveness showed that ESP is more effective to develop learners' calibre in English. Pertaining to this, Chen (1993) points out, *"...ESP is more effective in increasing students' learning motivation because it relates to their fields of study and caters to their needs"* (as cited inTsao, 2011). So, ESP should properly be seen not as any particular language product but as an approach to language teaching-learning which is directed by specific reasons for learning.

Researchers and linguists found ESP is more useful for teaching professionals because it enables them "...to cater for their learners' specific needs and save a lot of time and energy (as *cited in* Rajabi & Azarpour, 2011). So, ESP practitioners have lots to do to make ESP classroom effective ground for learning. It is significant to mention here that "…the ESP instructor has as many as five key roles to perform: *teacher, course designer and material provider, collaborator, researcher, and evaluator*...." (Dudley-Evans & St. John, 1998). This fact underlines ESP teachers' constant involvement in learners' *needs analysis* for effective teaching-learning. In case of ESP for Business Studies, ESP practitioners should analyse how the learners can develop effective communication skills in business dealings, conferences, negotiations and **job interviews.** Nunan (1993) rightly claims, "*Needs analysis* is one of the elements that distinguishes traditional views of language learning and teaching from the communicative perspective towards the issues" (as *cited in* Rajabi & Azarpour, 2011). Practically, it is observed a mismatch between the content of ESP textbooks and actual workplace language demands. It is imperative to recognize and rectify the mismatch for effective teaching-learning through the correlation between what students learn in classroom and what needs of local/international employers. To enable the learners to perform the best and to make effective communication in the workplace, ESP for Business Studies needs to focus on the following issues directly to meet the students' pragmatic needs:

> Impression management (IM) leading to convey the best impression possible while interacting with other people

The art of successful Meetings and successful Presentations practice options

Facilitating students with audio-video series to watch and learn professional conversations, teleconferences, negotiations or job interviews

Model practices for cross-border communication with colleagues and clients

Better listening and speaking skill techniques for effective commercial meetings and teleconferences

Effective mode of written communication techniques

Students' immersion in audio-video led lessons relating to business conferences, conversations and negotiations

Commercial vocabulary for effective communications in real business situations, and

Effective intercultural communication skills by learning other peoples' cultures, behaviours and communication styles

Apparently, the diverse information reflects that ESP teaching-learning is directed by a kind of students' academic and professional needs related analysis. Needs analysis may be different types and purposes. Richards (1984) spells out that "Needs analysis may serve three basic purposes: It can be used as a means of getting wider input into the content, design, and implementation of a language programme; it can be implemented in defining goals, objectives, and content; and its data can be used to review and evaluate a current programme" (as cited in Nunan, 1988). Referring to this, Long (2005) cites four reasons for performing needs analyses:

> "*First, to determine the relevance of the material to the learners' situations; second, to justify the material in terms of relevance for all parties concerned (teacher, learner, administration, parents); third, to account for differences in learner needs and styles, fourth, to create a syllabus which will meet the needs of the learners as fully as possible within the context of the situation"* (Long, 2005).

Accordingly, Graves (1996) states that different students have different needs, and the information gathered through needs assessment can help a teacher choose what to teach and how to teach it (as *cited in* Rajabi & Azarpour, 2011). In doing needs analysis, teachers can explore a variety *"…of factual information about learners, their use of language in real life communicative situations as well as their current language proficiency and language difficulties*" *(*Brindley, 1989, p. 70).

Actually, it is undeniably the students of Business school need to be competent in English communication skills because business communication plays a very important role in business, industry or in any corporate sector. Cleland (1999, p.391) defines "Communication is the process by which information is exchanged between individuals through a common system of symbols, signs, or behaviour" (as cited in Saqlain, Qazi, & Simon, 2012). In today's globalised business contexts, people communicate through speaking English. That's why; this research has laid emphasis more on students' speaking and participation, not teacher lecture as in traditional English classes. Students, in Business English classes, need to expose near to global business matters pertaining to relevant topics such as- *presentations, meetings, business-affairs across cultures, advertising, marketing and many others.* So, considering employers and employees' need, ESP *for Business Studies is necessary to* develop students' Business communication skills that can enhance professional performance and create new career opportunities.

Review of the literature

In South-East Asian context, available research in the field of workplace needs related practical ESP for Business School is very rare. Globally, in the vicinity of ESP teaching-learning development, researchers have attempted to contribute available insight into the matter. This paper looks into the relevant available research information on this issue across the globe.

Needs analysis is very important to ensure suitable and quality textbook for the ESP learners of any discipline at any context. Referring to this, Bouzidi in his research in Moroccan context spells out that *"Choosing an ESP textbook or determining the suitability of one already in use is accomplished by a needs analysis that documents the type of workplace"* (Bouzidi, 2009).

Learners' specific needs analysis is a matter of fact in order to design ESP curriculum and effective pedagogy. Regarding students' need related teaching and learning, Kaur & Khan in a research points out "English language is deemed significantly important in almost every area of discipline especially in this globalised era where communications among individuals all over the world are borderless and through a variety of channels. With the globalization of trade and economy and the continuing increase of international communication in various fields, the demand for English for Specific Purposes (ESP) is expanding, especially in countries where English is taught as a foreign language (Gao, 2007)…Dominant areas in ESP are now Business English and English for Academic Purposes (EAP) and course design issues need to take into account the target learning needs of ESP students" (Kaur & Khan, 2010, pp. 1-16).

Considerably, Payman Rajabi & Nazli Azarpour, in a study on the academic needs of the Business Administration students in the use of English for Specific Purposes (ESP), point out that "... reading and writing skills have great importance in classroom practice while speaking got high priority in success in future jobs of these students" (Rajabi & Azarpour, 2011).

Esteban and Marios reflect in their study that "…the ESP teacher's task is to define students' learning needs and assume the role of language consultant, while the content teacher is *the provider* of what Dudley-Evans & St John (1998) term *carrier content,* as well as of professional skills consultant in different situations" (Esteban & Marios, 2002, pp. 7-21).

Very often it is found that there is a gulf between the content of ESP textbooks and actual workplace needs and demands. Hassan Bouzidi, regarding this issue, rightly implicates that

> "Using the textbook as the sole instructional guide, from cover to cover, without any supplemental material, will not address the realities of individual learning situations. By getting to know the real needs of learners and their potential employers, ESP teachers can judge the distance between classroom material and the requirements of the workplace and be able to bridge that gap" (Bouzidi, 2009).

Leading linguists and experts in the field of Curriculum design opine that

> " ...authentic texts for a successful instruction should be designed to expose students to a variety of learning styles, linguistic and learners' intra socio-cultural contexts including issues or content areas with a focus on communication, with a view to developing cognitive skills and understanding cultural variations" (Liton, 2012).

It is undeniable the fact that authentic textbook is a highly significant factor to develop effective teaching-learning practices in the real life situation and to fulfil the employee's needs in the workplace. In this vein, Lee states that "*a careful and wise selection of materials focused on learners is a must if we want a positive response from them"* (Lee, 1995, pp. 323-328). Kaur & Khan suggest that "*The ESP course should include workplace-based oral presentations, specialized vocabulary activities and course materials and topics relevant to students' area of*

specializations" (Kaur & Khan, 2010). In addition, Rivas (1999) and Mishan (2005) argue that learners' interests and needs are the most essential factors in the choice of authentic texts.

Seemingly, this aspect of the related literature review underpins the significance and value of the current study.

Methodology

Research context and participants

The study was conducted among ESP instructors who were teaching English for Business Administration in different universities of South-East Asia. This paper aims to facilitate developing "in students a relatively high level of competence in reading, and an intermediate level of competence in listening, speaking, writing, and translating so that students can communicate in English" in real life situation (Team, 1999, p. 01).

The participants of this study were chosen on random basis. A total of 30 ESP teachers took part in this study. We took in our purview some universities like Universiti Sains Malaysia, Penang, Bangladesh Islami University (BIU), Dhaka, University of Panjab, Pakistan, Sana'a University, Yemen, Kuwait University, Kuwait and Jazan University, Saudi Arabia. Presumably, this survey will underscore a clearer view of the overall standard of ESP courses and reflect the learners' real needs for future employment.

Data collection & questionnaire

The methodology of this research maintains both quantitative and qualitative approach. The mechanism of data collection for this study encompasses one page written research questionnaire (See Appendix 1). The researcher sent questionnaire to 36 ESP teachers via *e-mail*, *Facebook* and *Skype* in between January and February of 2013. There were multiple choice questions as well as question asking for short suggestions, offering the respondents a free rein. The pedagogical goal of the survey was explained in the appendix, and asked the participants to answer the questions. They answered the questionnaire quite willingly, and most of them made some precious suggestions. The questionnaire for this research quests for teachers' evaluations and suggestions about ESP learners' needs related learning for their future workplace. Importantly, such research type is useful as

> "personal reflections are integral to the emerging analysis of a cultural group, because they provide the researcher with new vantage points and with opportunities to make the strange familiar and the familiar strange" (Marshall & Rossman, 2006, p. 100).

Out of 36, a total of 30 questionnaires were returned representing a response rate of 83%.

Results

Data analysis

The data of questionnaire are analyzed qualitatively and quantitatively in order, "to stress the unique strengths of the genre for research that is exploratory or descriptive" (Marshall & Rossman, 2006, p. 60). The collected data of questionnaire were sorted out, and the percentage of teachers offering the same answer was computed. The questionnaires were tabulated to record the responses from each participant for each option of the questions. Typically, throughout the data analysis processes, according to Creswell, the researchers "*seek to identify and describe patterns and themes from the perspective of the participant(s), then attempt to understand and explain these patterns and themes*" (Creswell, 2003, p. 203). Tables are drawn below to sum up the frequency of responses to almost all the questions (See Tables).

In the first question, the respondents were asked, "Does the textbook cover the situations learners are likely to encounter in their future professional environment?*"* 10% of the respondents answered "Yes" while 70% of them answered "No". 20% of the respondents chose, "Partially" option (See Table-1).

Table 1
Does the textbook cover the situations learners are likely to encounter in their future professional environment?

Choices	Answer	Percentage (%)
Yes	03	10
No	21	70
Partially	06	20

The majority of the teachers report that current ESP course in use does not address the situational lessons related to future professional environment. It is anticipated that irrespectively the participants are very much concern about effective teaching-learning game which sounds positive reaction. So, *while preparing the content for a course, the course designers must draw up an inventory of topics and situations that are relevant to students' needs and are likely to motivate learning. Consequently, they will be able to carry out the basic communicative tasks required in the Business and corporate organization*. For example, the contents of particular units: *Chairing a meeting*, and *Giving talks and presentations*, are more suitable for employees in managerial positions.

The 2nd question asked the teachers, "Do you think ESP course properly addresses the needs of the Business department's students who you are teaching?" In answer to this question 27% of the participants answered "Yes", while 43% of them replied "No" and 30% for "partially" option. (See Table-2)

Table 2
Do you think ESP course properly addresses the needs of Business School students whom you are teaching?

Choices	Answer	Percentage (%)
Yes	08	27
No	13	43
Partially	09	30

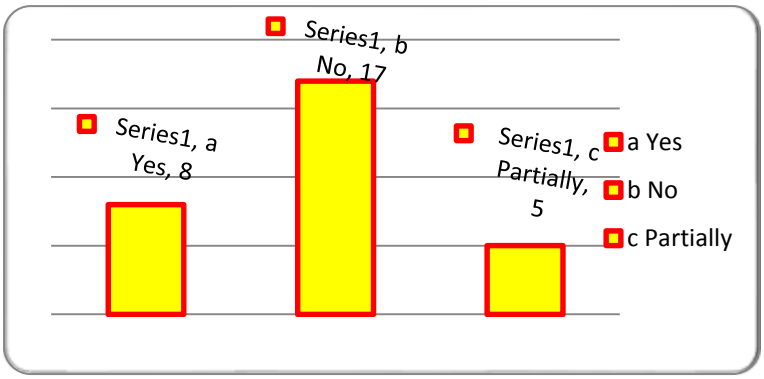

Figure 1

The response of a large portion (43%) of the teachers highlights more on unsuitability of the ESP course design. Nevertheless, the presence of positive (27%) impression on this course avows the appropriateness of course design in a miniature scale. However, the overall response suggests redesigning the ESP course in keeping with learners' future workplace needs.

The 3rd question seeks to know the range of suitability of the contents of existing ESP course for learner-centred practice oriented for better learning outcome. 10% of the participants selected "Yes, Completely" option while 63% of them made a choice "No" and 27% for "Partially" option (See Table-3).

Table 3
Does the text material lay emphasis more on learner centred than teacher centred approach for better learning outcome?

Choices	*Answer*	*Percentage (%)*
Yes, Completely	03	10
No	19	63
Partially	08	27

The response of a vast number of the respondents draws attention to the fact that the contents of *existing ESP text are not wholly learner-centred and task-based practice oriented*. On the other hand, the presence of positive response for the '*complete'* and '*partial'* suitability of the course curriculum underscores a subtle line that any curriculum design and policy needs to be adequately scrutinized to ensure students' real needs in the workplace.

In the 4th question, the respondents were asked, "Does the course develop your students' communication skill (e.g., speaking and writing skill)?" In terms of the three choices: 10% 0f the participants chose "Completely" option; 30% "Partially" option and 60% answered in the negative (See Table-4).

Table 4
Does the course develop your students' communication skill (e.g., speaking and writing skill)?

Choices	**Answer**	**Percentage (%)**
Completely	03	10
Partially	09	30
Not at all	18	60

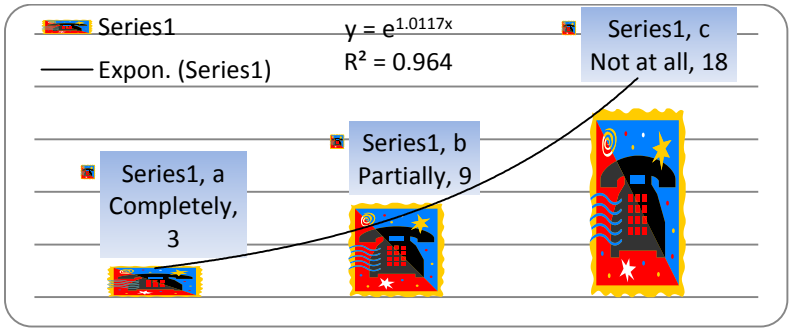

Figure 2 Does the course develop your students' communication skill?

The answers of this question find nuance of expressions, and perceptions about learners' progress in communicative skills like *Speaking and Writing.* It shows partial advancement of learners in communication skill, but a notable portion (60%) of them observes a sheer disappointment in the required field of competence. This impression underscores *the unsuitability of textual material which does not capture the learners' appropriate need and demand*. So, it subtly manifests that existing ESP textbook is not tailored appropriately according to the students' needs in the workplace.

The 5th question seeks to receive the teachers' opinion on the use of functional and technical terms related to Business as if learners can use in their future professional environment. 87% selected "Yes" while 13% selected "Partially" option. (See Table-5)

Table 5
Do you think the ESP text should cover functional language (terms related to Business) learners are likely to use in their future professional environment?

Choices	Answer	Percentage (%)
Yes	26	87
Not at all	00	00
Partially	04	13

The overwhelming responses of the participants show their awareness of ESP teaching-learning norms and forms. This course is designed to improve the learners' competence in particularly communicative skills as well as to determine their specific skills related to workplace demand. *Accordingly, it is suggested that ESP course should cover technical terms and terminologies related to Business Studies, for example, Balance sheet, Debit/ Credit, Profit & Loss account, Gross/ Net Profit, Schedule, Bill of Exchange, Balancing, and the like.*

Finally, the 6th question offered a free reign to the participants to give more suggestions or comments for formulating an effective and pragmatic ESP course. Majority of them offered suggestions but few did not have any. ESP practitioners' suggestions are reported into structured answers. 77% respondents suggested that ESP course curriculum should be redesigned in keeping with the learners' needs in the workplace and demand of the competitive job market. 83% participants laid emphasis more on *listening, speaking,* and *writing* skills respectively to secure *communicative competence* as if the learners can develop borderless communication which are the foremost demand of the global job market. 80% of the respondents pointed out that Information and Communication Technology (ICT) needs to be integrated into ESP teaching which marks as a step ahead of teaching effectiveness. Interestingly, 73% participants suggested a very ground-breaking and effective implication that the ESP learners should be exposed to the opportunity to video-led lessons related to a variety of business professions which are likely to motivate learning. (See Table-6)

Indeed, the varied suggestions from the majority of the participants recall that the promising ESP practitioners were concerned with the upshot of their students' needs in the real life situation. Predominantly, the teachers (83%) underlined that listening, speaking and writing skills should be given high importance to develop communicative competence which is the main concern of workplace.

Teachers' Table 6
ESP teachers' reflections from data analyses

Sl. No	Suggestions	Answer	Percentage (%)
1.	More practical ESP curriculum to be redesigned in keeping with the learners' needs in the workplace and demand of the corporate job market	23	77
2.	ICT Integration in ESP classroom – a step ahead of teaching effectiveness	24	80
3.	The learner should be exposed to video-led lessons related to variety of business professions	22	73
4.	More emphasis on listening, speaking, and writing skills	25	83
5.	Teaching students to communicate confidently across countries and cultures in a range of business situations	20	67

Source: data analysis of questionnaires

Discussion

This paper examined the diverse information on workplace *'needs'* related ESP teaching-learning issues for business studies based on statistical data analyses and revealed the following points of hypotheses:

Problem issues:

Unsuitability of course design:

(60-65) % teachers' responses underline the fact that the contents of existing ESP text are not wholly learner-centred and task-based practice oriented and it is not tailored appropriately according to the students' needs in the workplace (Table- 3 & 4).

Irrelevant course materials:

The current ESP course in use does not address the situational lessons related to future professional environment (70%, Table-01).

Interactive communication skill ignored:

The current textual material fails to capture the learners' essential skill like communication competence which is the appropriate need and demand of the workplace.

More teacher-centred than learner-centred approach:

ESP class is more teacher-centred than learner-centred because text materials are not learner-centred and task-based practice oriented.

Viable suggestions:

This paper divulges some viable suggestions for making a pragmatic ESP course to meet students' workplace needs.

Pragmatic course design:

While preparing the contents of an ESP course for School of Business, the course designers must lay emphasis on topics and situations that are relevant to students' needs to carry out the basic communicative tasks required in the Business and corporate organization. The overall research analyses underscore to redesign the ESP course in keeping with learners' future workplace needs with special emphasis on communication skills like speaking, writing and listening.

Steps to success:

The textbook should be facilitated with DVD series of effective phone calls, teleconference, or business negotiations to develop students' listening and speaking skills. It provides chances to the students to know how to successfully take part in a teleconference, a negotiation or a job interview. In this way, they build up the language and skills they need to communicate in the workplace and business situations.

Cross-border communication practices:

In the textbook, there should be some options for practices in the form of writing messages, ordering and queries, sending information from one farm/country to another farm/country, or some reading passages in such forms. So, it is important to expose students to communicate confidently across countries and cultures using international Standard English in a range of business situations.

Watch & learn:

Video-led lessons of successful Meetings and Presentations are to be conducted in highly technology facilitated classrooms. It allows students to watch and analyse the skills in action and progress.

Information and Communication Technology (ICT) integration:

ICT integration into ESP teaching-learning is a step ahead of teaching effectiveness.

Inclusion of business terminologies:

Additionally, ESP course should be facilitated with the opportunity to learn the technical terms and terminologies related to Business Studies (such as- Debit/ Credit, share issue, balance sheet, cost and liability etc.) as if students can use those in their future professional environment.

Variables:

Supplementing the textbook with extra materials:

Using the textbook as the sole instructional guide, from cover to cover without any supplemental material, will not address the realities of individual learning situations. By providing the real needs of learners and the requirements of the workplace, ESP practitioners can bridge the gap and produce the future potential professionals.

Conclusion

The current study divulges certain effective implications emerging from the survey results and analyses.

First, pragmatic ESP course should be redesigned in keeping with learners' future workplace needs with special emphasis on communication skills like listening speaking and writing.

Second, the textbook should be facilitated with DVD series of effective phone calls, teleconference, or business negotiations in order to build up students' communication skills in the workplace and business situations.

Third, the learner-centred task-based communicative approach should be adopted as a mode of teaching in the ESP classroom.

Fourth, for effective teaching, ICT (e.g., audio, video, internet or art movies) integration into ESP teaching-learning should be a paramount focus as a demand of the time.

Finally, it can be suggested to supplement the textbook with extra materials or activities through continuous practice of learners' *needs analysis* in order to expose them more near to workplace learning with a view to reducing the poor performance. After all these adaptations and conversions, it will kindle the tunnel of hope for an effective workplace needs related pragmatic ESP course for Business studies. It is indeed, the present paper will continue to provide very important information to the ESP professionals, course designers and students of Business studies for effective ESP teaching-learning in any TEFL situation.

ACKNOWLEDGEMENT

This is a substantially revised version of a paper presented at the 5th International Language Learning Conference 2013 (5th ILLC 2013) dated from 11November to 13 November 2013 in Universiti Sains Malaysia, Penang, Malaysia. The author of this study expresses his thanks to Jazan University, Jazan, Saudi Arabia for financial support to join the Conference.

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Appendix 1

Dear ESP Practitioners, I have undertaken a research under the caption *"ESP Learners' Needs Related Learning for the Workplace: A Pragmatic Study for School of Business"*. Teachers' perceptions, reflections and suggestions are highly important to make teaching materials more practical to students' needs and professional practices. Survey data will only be used for research purpose. Therefore, you are requested to answer all the questions below carefully. I appreciate your cooperation with thanks.

Hussain Ahmed Liton, *Lecturer, English Language Centre, Jazan University*

Teachers' Questionnaire

1. Does the textbook cover the situations learners are likely to encounter in their future professional environment?

a) Yes *b) No* *c) Partially*

2. Do you think ESP course properly addresses the needs of the DBA students who you are teaching?

a /Yes *b) No* *c) Partially*

3. Does the text material lay emphasis more on learner centred than teacher centred approach for better learning outcome?

a/Yes, completely *b) No* *c) Partially*

4. Does the course develop your students' communication skill (e.g., speaking and writing skill)?

a) Completely *b) Partially* *c) Not at all*

5. Do you think the ESP text should cover the functional language (terms related to Business) learners are likely to use in their future professional environment?

a/Yes *b) Not at all* *c) Partially*

6. Do you have any suggestions that may fulfil ESP learners' needs? If so, please mention here:

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Editor's Note: The digital Millennium Communications Act (DMCA) added restrictions to the use of copyrighted materials for educational purposes. The natural response was the open source movement. It is notable that IBM abandoned its development of server software because open source Linux, perfected by hundreds of thousands of expert users, was better than the IBM product. It is also notable that the Wikipedia, despite badmouthing by publishers and academics, has gone beyond what was possible with traditional method of book publishing. Without the government and FBI support of publishers and media producers, the classroom would have much richer resources and the economic value of a better and cheaper education could have been realized. It also complicates the use of open source materials as this paper clearly shows. The editors assisted the United States Distance Learning Association in opposing, or trying to modify, the DMCA.

Case Study:
Using open education resources to design a competency-based course

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USA

Abstract

Open source content, also known as open educational resources (OER), includes free, accessible, openly licensed (public domain) documents, media, lab activities, pedagogical materials, games, simulations, etc. used for educational purposes (Kauppinen, 2013). Facing mounting pressure to reduce the costs of a college degree, many colleges and universities are replacing high cost textbooks with free or low cost open resources. This case study examines the course development process for a competency-based course in organizational behavior that was built using open educational resources. The paper includes an overview of the step-by-step process used for course development and discusses the implications for the institution and faculty of relying on open educational resources instead of textbooks.

Keywords: Open source content, open educational resources, curriculum design, course development, OER, instructional design, course design, competency-based education, competency-based course design, undergraduate course design, faculty workload

Introduction

Pressures to reduce the costs of a college education are increasing. In August 2013, President Obama announced ambitious plans to increase affordability of college by introducing ranking of colleges based on access and affordability (Lewin, 2013). Articles about whether college is worth the cost have sprung up not only in U.S. newspapers and magazines, but also in international publications. In December 2012, the Economist published an article titled, *Higher Education: Not What it Used to Be*, in which the authors discuss how rising fees, increasing student debt, with shrinking financial and educational returns, are creating the perception that a university degree is not a good investment. These pressures are rooted in the fact that in the past 30 years, the cost of a college degree has increased over 1000% (Jamrisko & Kolet, 2012). Public pressures over escalating tuition rates are forcing colleges and universities to look closely at ways of reducing student costs. One way to reduce costs is to reduce or eliminate the need for students to purchase expensive textbooks.

Textbook costs are estimated to be $1,200 per academic year (Senack, 2014). The textbook industry is a $10 billion dollar industry (Rosenweig, 2013). College textbook costs have increased 82% over the past decade, four times the rate of inflation (Scholarly Resources and Academic Coalition, 2014). For students already struggling to pay college tuition and fees, textbook costs can crush their goal of earning a college degree. In a survey of 2,000 students, an overwhelming majority (82%) indicated that free online access to a textbook would help them to perform better

in a course (Grasgreen, 2014). See Figure 1 for a graphical representation of the increase in textbook prices.

College administrators and faculty with little control over the tuition rate have power to lower costs for students by reducing or eliminating the need to purchase expensive textbooks. Faculty design courses using textbooks created by publishers, who are often accused of changing editions to keep textbook prices high (Grasgreen, 2014). Faculty can decide to forego textbooks or to select books that are less costly for students. A growing movement among college and universities, like University of Maryland University College, is to build programs using open educational resources (OER). OER offers opportunities to colleges to increase access to college and to save students and institutions significant amount of money (Bliss, et al, 2013; Hilton & Wiley, 2011).

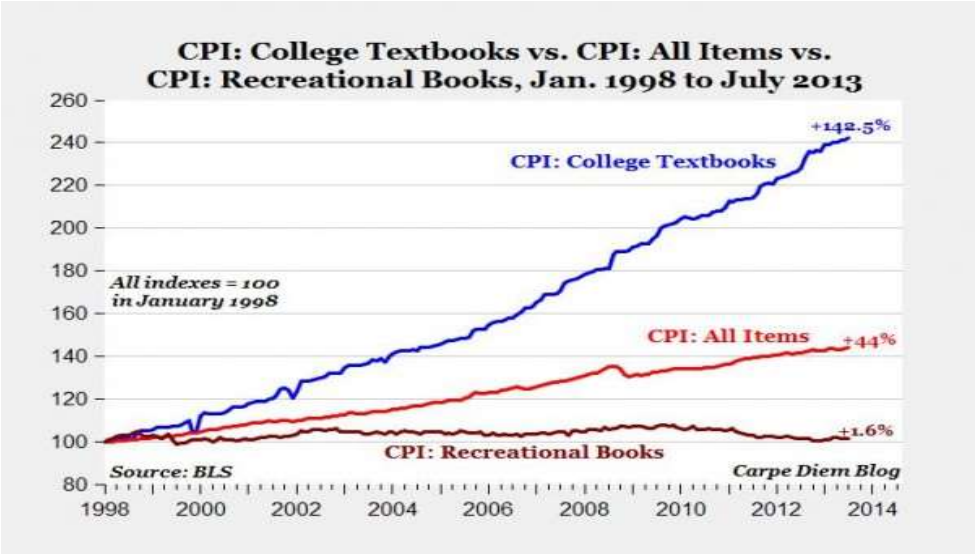

Figure 1: CPI for College Textbooks vs. Consumer Price Index for All Goods (http://www.aei-ideas.org/2013/09/chart-of-the-day-the-college-textbook-bubble/)

Open educational resources can include full courses, degree programs, course materials, modules, syllabi, teaching notes, textbooks, research articles, podcasts, videos, assessments, simulations, databases, software applications, and various other types of educational materials. Open educational resources (OER) are defined as "teaching, learning and research materials in any medium that resides in the public domain and have been released under an open license that permits access, use, repurposing, reuse and redistribution by others with no or limited restrictions" (Atkins, Brown & Hammond, 2007, p. 7).

Nearly two-thirds of all chief academic officers agree that open education resources have the potential to reduce costs at their institutions (Allen & Seaman, 2012). OER is also expected to increase access to higher education for millions of students worldwide. OER has the potential to lower the direct cost per institution of developing high quality learning materials, provide unique opportunities for institutions to offer low enrollment courses/programs in a cost effective way, and to radically reduce textbook costs (Anderson & Elloumi, 2004). The marginal costs for replicating and sharing digital resources is near zero.

To better understand how open educational resources can be used, this paper provides an overview of OER and examines the experiences of academic administrators in adopting open educational resources for an undergraduate course in business; Introduction to Business.

Open Educational Resources

A variety of types of OER are available for use in courses. The most popular option among open educational resources is e-books; however, there are a variety of open resources available including full courses, degree programs, simulations, articles, podcasts, videos, learning objects, and software applications (MIT Open Courseware, 2014). The term OER refers to openly available materials and does not indicate that the materials are available online or in digital format (UNESCO/COL, 2011). Resources may be free for use, but they could be in formats that have to be printed rather than downloaded from the internet.

For learning content to be considered open, it should be available free over the internet and offer few, if any, barriers to the use of the resource. *Open* in this regards means an ability to reuse (unaltered, as is), revise (adapt and modify the content, such as a translation), remix (combine the original content or revisions, creating something novel), and redistribute (share copies of the original, revised or remixed content). Faculty, institutions, and learners can download OER and use them for learning activities either inside a formal course or as an informal resource.

Institutional advantages of using OER are many including enhancing the reputation of the university, extending reach to new users and communities, improving recruitment of students, supporting access and wider participation, offering opportunities for innovation and experimentation with new materials and technologies, and supporting collaboration and partnerships (Hodgkinson-Williams, 2010). Lowering costs for delivering a course also improve the institution's ability to deliver an educational program at a lower cost to students.

Open education for all citizens was first introduced with the creation of The Open University, founded in the United Kingdom in 1969 (Coulon, 1998). The early focus was on providing open educational resources for non-commercial purposes. One of the most well-known OER initiatives is The OpenCourseWare (OCW) project at Massachusetts Institute of Technology (MIT) launched in 2002 (MIT, 2014). Other efforts around open resources include the Open Learning Initiative from Canegie Mellon, Connextions from Rice University, the University of Leicester's OTTER Project, and Harvard Extension School's Open Learning Initiative. An integral support for the open education initiatives has been the Creative Commons organization developed in 2002. The Creative Commons organization was created to develop copyright licenses for open materials as well as to identify and lower barriers to research, data and materials (Creative commons, 2014).

Significant barriers exist for the adoption of OER. For open educational resources to reshape higher education, barriers including technical barriers, price barriers, permission barriers, and limitations to the ability to adapt or build upon a resource will need to be addressed (Open knowledge, 2014)). Garnering administrative support for the integration of open resources and motivating faculty to change curriculum design processes can be challenging. Restrictive intellectual property policies, lack of time for educators to develop and remix OER, reward systems that fail to reward open educational activities, and a lack of strategic goals and leadership can impede the development and adoption of OER within an institution (Bissell & Boyle, 2007).

Online University project

After being purchased by an investment group in 2011, an Online University (who will be referred to as OU) was facing a number of challenges with re-inventing itself as a low cost university. Key to the reinvention of the university was transforming current programs into competency-based courses developed using open or low cost educational resources. To achieve the university's mission of providing programs priced low enough for students to self-pay foregoing federal financial aid, keeping course development and material costs minimized was critical. Also, the university had a commitment to provide open access to university courses online.

In early 2012, college administrators embarked on a major challenge with the re-creation of the 120 credit Bachelor of Business program. The first step in the process was to develop a single course using free or low cost open educational resources. Support for the redevelopment of the course was the dean of business, the vice president for academics, two faculty members, and an instructional designer.

The course design process

Members of the course design work group had several years of experience in course design including both traditional course design and competency-based program design. As the *Organizational Behavior* course was the first course in the re-design process, one goal of the process was to develop a set of steps to be used with the re-design of the other courses in the Bachelor of Science in Business Administration. See Figure 1 below for the steps the work group took in developing the Organizational Behavior Course.

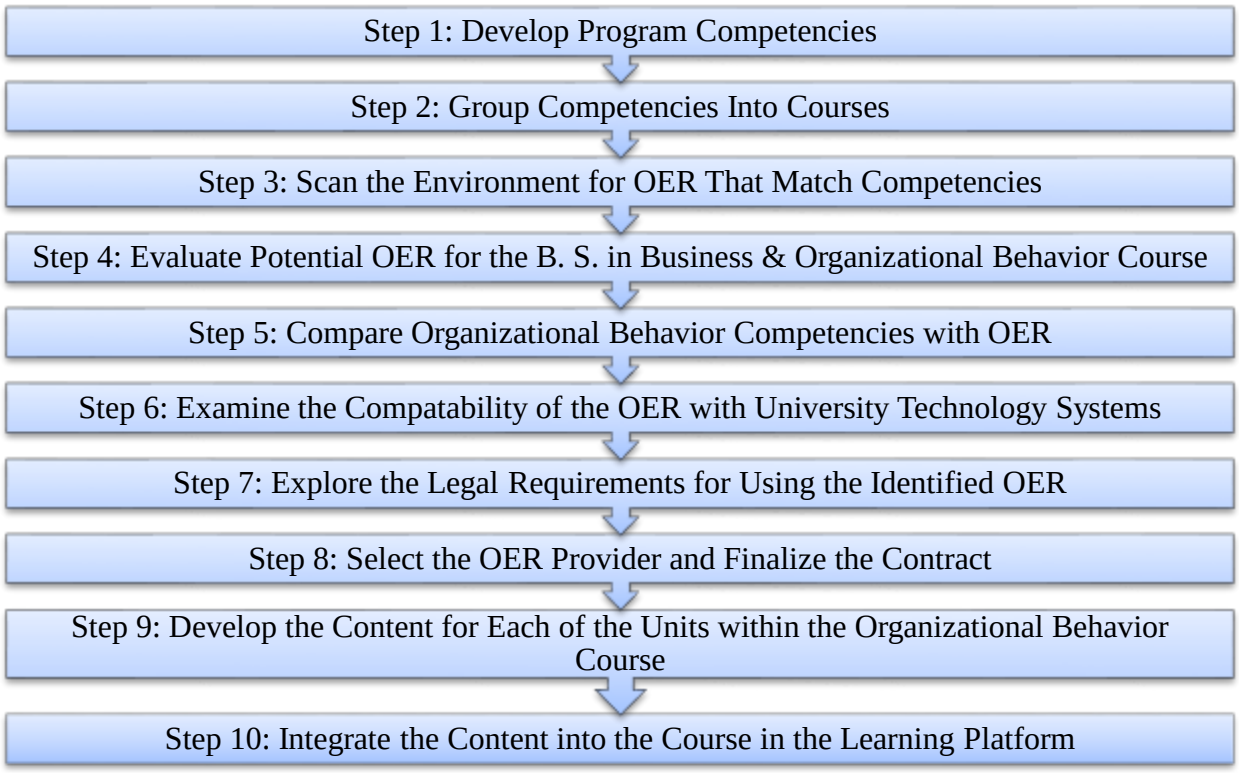

Figure 2 Steps in the Course Design Process

The first step undertaken in designing the course was to identify the competencies for the program. The university's goal was to convert all programs to a competency-based format beginning with the Bachelor of Science in Business. Defining what a student needs to know and be able to do upon graduations results in a set of competency statements. The vice president for academics met with the advisory board for the college of business to identify a list of knowledge and skills that new graduates needed to demonstrate upon graduation. Taking the information provided by the advisory board, the dean for business worked with the faculty to finalize the competencies for the Bachelor of Science in Business.

The second step in the course design process was to sort the competencies into courses. The university wanted to use existing course numbers to reduce the number of regulatory hurdles. The

dean of business and faculty members sorted the competencies into the existing course framework. Each competency was mapped to the course(s) where it was addressed and to the assessment where it would be measured.

Once the competencies were identified for the Organizational Behavior course, a scan of higher education publications and a series of online searches using keywords were conducted. This third step in the course design process included examining the proceedings from education conferences such as Sloan-C, Educause, UNESCO, etc. for the latest information on open educational resources. Administrators and faculty reached out to their professional networks for information on OER. In addition to reviewing the results of web searches, discussions were had with online library providers. The deliverable from the environmental scan was a list of potential partners who offered free or low cost OER. Open educational resources that the committee reviewed included:

- OEDb
- MIT Open Courseware
- OpenStax
- Merlot Online Courses
- FlatWorld Knowledge
- OER Commons
- Currki.com
- Ed.Ted.com

The fourth step in the process was to narrow the list of possible providers. The list of OER providers was evaluated using criteria like cost, technology compatibility, student experience, reputation, and ease of administration. Costs were a critical concern as the goal was to keep costs for students as low as possible. Compatibility with the university's learning management system was critical in order to meet aggressive timelines established for re-designing the courses within the Bachelor of Business program. Providing a quality educational experience for students was a high priority for the university and any learning resources adopted needed to provide a high quality learning experience for students. The university was in the process of building a reputation as a new entity; therefore, the reputation of the OER provider was important. As a small university with limited resources, ease of administration of the OER was critical to keeping costs low. A short list of three OER providers was identified.

Delving into the actual content of the resource and comparing it to the competencies for the B.S. in Business and the Organizational Behavior course was completed as the fifth step of the course design process. The OER needed to align with at least 75% of the course competencies. The content needed to include both text and graphics as the timeline for developing the course prohibited the development of graphics. Faculty members were asked to supplement the OER from the identified provider with faculty developed materials.

The sixth step in the course design process involved working with the vice president for information technology (IT) to ensure that the selected OER could be integrated into the university's learning management system. The university wanted to provide students with single sign on for all resources and the goal was to integrate all resources into the course itself rather than requiring students to visit sites outside of the system.

Examining the legal requirements for working with a selected provider was completed in seventh step of the course design process. The term open means different things in the context of OER. While one resource may be used and modified by individuals and all types of organizations, other licenses restrict use and the ability to modify and change a resource. A complicating factor from

a legal perspective was the fact that the university was a for- profit entity. Many open resources are open only for nonprofit entities and cannot be used by for profit universities. A review of providers' websites as well as conversations with the providers by the university's legal team was required to ensure that open resources were truly open.

Once the legal requirements were reviewed the selection of the OER provider(s) was made in the eighth step. A single or multiple OER providers may be selected. In this case, the faculty member met with the dean of business, vice president for academics, and the vice president for information technology to present the finding of the research and to select an OER provider. A single provider was selected for the Bachelor of Science in Business and the Organizational Behavior course. The provider offered e-books at a low price. The university paid a per student cost to the OER provider for each e-book used. The work group selected the provider based on the number of titles available and the willingness of the OER provider to allow textbook content to be loaded into the university's learning management systems.

The ninth step of the course design process was completed by a faculty member with support from the dean of business and an instructional designer. The e-text was reviewed and content that aligned with the individual units in the course was selected. Using the course competencies, the faculty member developed a list of learning objectives for each unit. Using the learning objectives, the faculty member tagged content by unit creating a spreadsheet mapping alignment of objectives to the various sections of the text.

The final step in the process was to load the content into the learning management system. This step required the support of the faculty member, instructional designer, and the IT staff. The faculty member selected the content in the ninth step of the process; but, the faculty member's work was not finished. The faculty member had to review the content ensuring that the correct content was loaded into the learning management system. Troubleshooting the layout of content and ease of navigation were also tasks the faculty member completed with the IT staff.

What we learned

The lack of a single library or warehouse with open resources results in time consuming searches for available resources. Even after spending many hours scanning for resources, the work group felt there were probably additional unknown resources that may have been a better match for the Organizational Behavior course and the Bachelor of Business program. Finding OER resources can be an expensive undertaking for faculty taking many hours of work curating the available resources. The course development process takes longer if the faculty member must find and qualify OERs before segmenting content, designing engaging learning activities, and building assessments.

The expectation should not be that available OER will align 100 percent with competencies or learning outcomes in a course. There will be gaps in the content when compared with competencies. Just as faculty in traditional courses supplements textbook materials, faculty in competency-based programs should expect to supplement OER with additional learning resources.

The amount of technical support required from the information technology team far exceeded original expectations. In addition to the work evaluating compatibility with the learning management system, the IT staff also spent many hours integrating the selected open education resources into the university's learning management system and working with the faculty member assigned to the course to troubleshoot the integration of the resource. Many meetings occurred between the technology team at the selected OER and the university's IT team.

A creative commons license does not mean that a resource is without restrictions. Some of the videos incorporated in the classes had to be removed to avoid any licensing problems. A similar issue arose with some of the clipart placed in the online courses. Many of these images were also removed and replaced with original photographs once again to avoid any potential licensing infringement that might occur down the road.

Currency of OER materials can be problematic. OER providers may or may not update their resources once the materials are posted online. The lack of standards with regards to updating open resources means that all materials have to be reviewed closely for currency. Faculty members selecting open educational resources may find it helpful to look at the date that a resource was originally created and last updated to determine whether a resource is appropriate for use in a new course. Scanning for all web links to ensure they are working is another task that needs to be undertaken to ensure the content is up-to-date.

Conclusion

Well-developed open education resources are readily available for faculty designing courses. Open educational resources have the potential to lower the cost of a college degree and improve access to higher education, worthy goals in today's higher education environment. For the potential of open educational resources to be realized, a searchable database or library of resources needs to be developed so that faculty designing courses can easily identify the resources for a course like Organizational Behavior and also easily understand what limitations, if any, exist with using an individual resource. Currently, using OER is challenging for the faculty member. Finding and curating open resources is a daunting task. Foregoing the supplemental materials available from textbook providers means that faculty members have an increased workload. Support from an instructional designer and information technology staff is critical in adopting and integrating OER into a course in a learning management system. Academic administrators considering adopting a policy where open education resources are used system wide need to balance the need to lower costs for students with the workload implications for faculty members who design courses around open educational resources.

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Editor's Note: Language learning is easier when built on familiar experiences and vocabulary. A needs assessment or historical data is important to optimize language learning programs for specific groups of learners.

The effect of prior knowledge questions on Iranian pre-intermediate EFL learners' performance in reading comprehension

Yasaman Rouhani and Mohammad Ali Kowsary
Iran

Abstract

This study was carried out to find the effect of prior knowledge questions on Iranian Pre-Intermediate English Language learners' performance in reading comprehension. Two English Institutes were used for the study. Sixty pre-intermediate learners in two thirty-learner groups were used for the study. A pre-test was administered on both groups of learners before the commencement of teaching. A post-test was administered after six weeks of teaching. Data was analyzed using mean, standard deviation and t-test. The findings revealed significant difference in the performance of learners taught reading comprehension using prior knowledge questions. Based on the findings, teachers are encouraged, among others, to use prior knowledge questions to motivate and stimulate learners to use their relevant background knowledge to interpret and understand new information in their reading comprehension texts. Curriculum planners and textbook writers are encouraged to include prior knowledge questions as part of the activities learners should be exposed to during reading comprehension lessons.

Keywords: Prior knowledge, performance, reading comprehension.

Introduction and background

Reading plays an important role in the life of the individual and the society. The main purpose of reading is for understanding, interaction and comprehension of the author's experiences represented in symbols. Reading becomes meaningful only if a reader identifies and evaluates symbols and ideas. For learners to achieve the above mentioned intellectual tasks, it is important to develop reading strategies as an aspect of the reading process.

In recent years, many studies have been carried out on EFL reading strategies and skills. Most researchers in their findings have attributed learners' poor performance to lack of appropriate methods of teaching reading. For instance, Oyetunde (2009) recognized the fact that the root cause of poor reading in the schools and institutes is the method of teaching reading.

Hence, in his words, "a comprehensive examination of the teaching of reading is required". The research is also motivated by the observation made, by this researcher during one of her visit to some institutes in Iran, to conduct a trial test of some instruments for assessing academic achievement. This researcher discovered with dismay that majority of the pre-intermediate English learners could not read the passages given to them let alone answer the questions. The situation was so bad that this researcher feet she should investigate the cause of this problem. By assessing the influence of prior knowledge questions on learners' reading comprehension perhaps this researcher will be able to advise teachers on possible ways of improving the teaching of reading comprehension in the foreign language context.

Experimental background has been shown to have extra tremendous influence on reader's ability to understand meaning as intended by the author in a written communication. Adams & Bruce (1982), Moon (1981), Smith (1978) have all, to varying degrees, stressed by importance of

experimental background to a reader's success. Smith (1973) and Stevens (1977) say a student's apparent reading problem is often a problem of insufficient background. Smith (1973) argued that comprehension and learning proceed by attaching the 'new' to the 'old'. In the word of Adams and Bruce (1982:37). Comprehension is the use of prior knowledge. Without prior knowledge, a complex object such as a text, is not just difficult to interpret, strictly speaking, it is meaningless.

The above has clearly shown that experiential background is indispensable in the comprehension of a text. It has also shown that researchers need prior knowledge to be able to comprehend a given text. It is against this background that this researcher seeks to find out the influence of prior knowledge questions on EFL pre-intermediate learners' performance in reading comprehension in Iran.

This, however, is often not the case. Most Iranian pre-intermediate EFL learners, are deficient in a basic reading skills and there is ample evidence that a high proportion of learners are at a stage when they need further developmental reading instruction. Unfortunately, at this level there is no reading instruction, except for the 'comprehension lessons' in their English classes which is related to the ministry of education plan which as Oyentude (1987), and Umolu (1991, 1996) observe serve as a test of reading compression rather than instruction. Teachers at this basic foundation level unfortunately lack training in reading and reading instruction.

State of the problem

In general, many factors influence the comprehension of textbooks. These include socio-cultural factors such as home background or experience at home, peer influence such as the absence of reading by the society. There are also influences such as the absence of reading culture; linguistic factors such as the level of vocabulary and the syntactic and semantic difficulty of the textbooks; psychological factors such as motivation, interest and prior knowledge and pedagogical factors such as teacher training, methods used in teaching reading and instructional materials.

Studies in the first language (Devine, 1981, Carroll 1972) regarding the influence of different factors on reading achievement and comprehension have revealed that the situation is not same in the second or foreign language situation. Factors, which have been found to be significant in the first language situation, may not necessarily account for reading difficulties in a second or foreign language situation. For instance, many studies in the first language have emphasized the importance of home background, family size and parental concern for their children's progress in school (Douglass, 1964; and Thorndike, 1973). In a second or foreign language situation, there are additional factors such as cultural factors, which impede the learners' reading achievement. Unoh (1980) identifies the reading problems of secondary school students as slow, poor comprehension, poor recall, inadequate vocabulary, and inadequate reading interest.

The influence of some of the factor may be greater in real terms today, given the condition of educational institutions in today's Iran. These factors include, lack of qualified teachers, poor classroom condition, and lack of reason materials, large class size and little or no encouragement from parents, home, teacher and peer group. A factor which perhaps could contribute to this persistent reading problem and which has not received much attention is the method used in teaching reading and this is the focus of this study. Most studies in reading comprehension so far conducted in Iran and other countries have concentrated on examining reading difficulty of learners at the pre-intermediate and intermediate levels with focus on the texts being used. However, there are reasonable grounds to suspects that other non-text factors, such as pedagogical factors, affect reading comprehension as well. Literature search reveals that pedagogical factors have relieved little or no attention in Iran. The absence of such crucial information constitutes a problem. This has motivated the present study. The study is also based on the premise that the comprehension of a reading passage depends on the interaction of a

number of factors, which can be broadly categorized into four: socio-cultural, linguistic, psychological and pedagogical factors. The influence of these factors on the reader's comprehension especially in a second/foreign language situation is uncertain. There is, therefore, the need to ascertain the extent to which pedagogical factors influence reading comprehension. To this end, this study will focus on the influence of prior knowledge questions on Iranian pre-intermediate EFL learners' performance in reading comprehension.

Review of related literature

Research findings have shown that learning proceeds primarily from prior knowledge, and only secondarily from the presented materials. Prior knowledge can be at odds with presented material, and consequently, learners will distort presented material. Neglect of prior knowledge can result in the audience learning something opposed to the educator's intentions, no matter how ell those intentions are executed in an exhibit, book, or lecture.

To help people make the most of a new experience, educators need to understand how prior knowledge affects learning. To the child who does not yet understand heat and temperature, for instance no quick explanation can possibly resolve the contradiction between the hot desert and the warm wool; it takes weeks or years for this understanding to emerge (Lewis, 1991).

Prior knowledge forces a theoretical shift to viewing learning as "conceptual change." (Strike & Posner, 1985; West & Pines, 1985). Previously learning was considered a process of accumulating information of experience. Prior knowledge is the bane of transmission-absorption models of learning. More absorption cannot account for the revolutionary changes in thought that must occur. The child simply can't absorb knowledge about wool, because prior knowledge about heat renders incoming ideas nonsensical.

Prior knowledge exists not only at the level of "concepts," but also at the levels of perception, focus of attention, procedural skills, modes of reasoning, and beliefs about knowledge. Trowbridge and McDermott (1980) studied perception of motion. Learners perceive equal speed at the moment when two objects pass, whereas scientists observe a faster object passing a slower one. Anzai and Yokohama 91984), Larkin (1983), and Chi, Feltovich, and Glaser (1990) studied how students perceive physics problems and found they often notice superficial physical features, such as the presence of a rope, whereas scientists perceive theoretical-relevant features, such as the presence of a pivot point. Larkin, McDermott, Simon and Simon (1980) studied students' solutions to standard physics problems and found that students often reason backwards from the goal towards the known facts, whereas scientists often proceed forward from the given facts to the desired unknown. Similarly, Kuhn (Kuhn, Amsel, & O'Loughlin, 1988) studied children's reasoning at many ages and found that children only slowly develop the capability to coordinate evidence and theory in the way scientists do. Finally, Songer (1988) and Hammer (1991) studied students' beliefs about the nature of scientific knowledge. They found that student sometimes have beliefs that foster attitudes antagonist to science learning.

In summary, prior knowledge comes in divers' forms. It affects how students interpret instruction. While it may not prevent them from carrying out procedures correctly, it frequently leads to unconventional and unacceptable explanations. Prior knowledge is active at levels ranging from perception to conception to beliefs about learning itself. Moreover, its effects are widespread through lay and professional population, from young children through to adults, and from low to high ability students.

Implication of prior knowledge: learning as conceptual change

The overwhelming weight of the evidence of the importance of prior knowledge has formed informed educators to fundamentally change the way science is taught. Perhaps because learners are more likely to construct an interpretation that agrees with prior knowledge, and consequently

disagrees with the viewpoint of the teacher. Thus, the effects of prior knowledge require a change from the view that learning is absorption of transmitted knowledge, to the view that learning is conceptual change (Resnick, 1983; Champagne), Gunstone, & Klopfer, 1985). Over time, learners need to accomplish the rarest form of change, a paradigm shift in their basic assumptions about the natural world, and the accompanying ways they see, conceive, and talk about the world. Conceptual change is a process of transition from ordinary ways of perceiving, directing, attention, conceptualizing, reasoning, and justifying. Slowly learners transform prior knowledge to accommodate new scientific ideas (Posner, Strike, Hewson, & Gertzof, 1982).

Research objective

The objective of the study is to determine the effect of prior knowledge questions on Iranian pre-intermediate EFL learners' performance in reading comprehension.

Research question

To what extent does prior knowledge questions have influence on Iranian pre-intermediate EFL learners' performance in reading comprehension?

Hypothesis

Prior knowledge questions have no significant influence on Iranian pre-intermediate EFL learners' performance in reading comprehension.

Methodology

The subjects of the study were sixty (60) pre-intermediate EFL learners from two English institutes, i.e. 30 learners from Farhang English Language Institute and 30 learners from Safir English Language Institute. Farhang English Language Institute was used as the experimental group while Safir English Language Institute was used as the control group. The learners in both institutes were taught for eight (8) weeks. Three (3) reading comprehension tests were taken. The comprehension questions were designed by the researcher so as to include some literal, inferential and critical questions.

Research design

A quasi experimental non randomization control design was used. A pre-test was administered prior to the commencement of teaching in order to establish the homogeneity of the learners. A posttest was administered after eight (8) weeks of teaching to determine any probable changes in the experimental group. More questions were included in the post test since it was felt that by the end of the eight (8) weeks of teaching the learners would have been more familiar with the passage.

Instrumentation

The instruments used for the study were reading comprehension passages from which test items were drawn demanding learners use of prior knowledge experience. Six passages were carefully selected from *Active Skills for Reading, Book 1, 3rd Edition*. The passages were selected because the subject matter were of interest to both gender. The content of the passage was educative and informative and adequately provided some of the needed items for the tests.

Administration of instruments

A pre-test on three passages was administered to both control and experimental groups to establish the homogeneity of the learners. The experimental group was taught reading comprehension using prior knowledge questions for eight (8) weeks while the control group had their normal reading comprehension lessons taught by their teacher.

A post-test (on the same three passages) was administered on the two groups after eight weeks of teaching to determine the effect of prior knowledge questions on the performance of foreign language learners in reading comprehension. T-test was used to test for significant difference in the performance of learners from both groups.

Treatment

The teacher

i) Begins reading activities with what learners already know from home, community, and school.

ii) Facilitates the reading and understanding of the comprehension passage by introducing prior knowledge questions. Questions such as what does the title of the passage suggest? What does the title remind you of? Does it remind you of a similar experience?

iii) Designs instructional activities that are meaningful to learners in terms of local community norms and knowledge.

iv) Acquires knowledge of local norms and knowledge by talking to learners' parents or family members, community members, and by reading pertinent documents.

v) Assists learners to connect and apply their learning to home and community.

vi) Encourages learners to utilize their prior knowledge and skills as a foundation for new knowledge.

vii) Assists learners to make connections between what they already know and newly acquired knowledge in order to strengthen and increase learners' engagement with learning activities.

Table 1

Presentation of test scores for pre-test for experimental and control groups.

Test	N	DF	Mean	SD
Pre-test experimental Group	30	29	42.5	10.12
Pre-test control	30	29	41.3	9.91

A careful observation of table 1 above shows that the learners' initial point of entry before the commencement of treatment is at par. The difference in the standard deviation of learners' scores in the experimental and control group is very little. One can therefore say that learners in the two groups are of equivalent reading ability at the point of entry.

Table 2

Presentation of test scores for post-test for both experimental and control groups

Test	N	DF	Mean	SD
Post-test experimental	30	29	78.50	12.12
Pre-test control	30	29	51.50	7.80

Table 2 shows that the mean and standard deviation of the experimental group appears to be higher than that of the control group. This is probably because of the prior knowledge questions. The control group was not exposed to any of such activities. Therefore one could say that the schemata of the control group was not properly activated in the reading comprehension passages as it did for learners in the experimental group.

Table 3 shows that the calculated value (7.062) is greater than the critical value of (2.201) at degree of freedom 29 and at 0.05 level of significance. Hence the null hypothesis is rejected, meaning prior knowledge questions influence learners' performance in reading comprehension.

Table 3
Presentation of test scores for pre-test and post-test for experimental and control groups.

Test	N	DF	Mean	T-cal	T-crit	Decision
Experimental Group	30	29	42.5			
Experimental Group Post test	30	29	78.50	11.273	2.201	Hypothesis rejected
Control group pre-test	30	29	51.50	7.062	2.069	
Control group post-test	30	29	51.50	7.062	2.069	

Discussion of findings

There is a general increase in the level of involvement and participation of learners in the experimental group probably because of the activities learners were engaged in. learners and teachers were actively involved in the discussion of the passages before, during and after the passages were read. In the lessons that were observed, learners generally showed keen interest in the discussion. Each learner was eager to share his/her own experiences with the class. The learners that were taught in the control group were not exposed to any prior knowledge questions. Learners performance in the tests were generally low not because they lacked ability or because they are poor readers but probably because learners were not exposed to prior knowledge questions that could stimulate class discussions. They were passive most of the time.

It is also interesting to note that the learners in the experimental group performed very well in literal inferential and critical questions. Their scores were higher than those of the control group. This goes to confirm the studies of Odumuh (197), Oyetunde (2009), Smith et al (1993) Simon & Simon (1980) and Chi,feltorich and Glaser (1990) which all point to the fact that the use of prior knowledge questions helps learners to select important information from the text and also encourages them to make use of their natural abilities to make and confirm predictions as they read and perform reading tasks. Teachers should try as much as possible to design instructional activities that will require learners to make connections to strengthen newly acquired knowledge that will increase learners' engagement with learning activities. Learners stand to benefit a lot if they are actively engaged or involved in class discussions/ activities with their teachers.

Conclusion

Based on the findings of this research the learners taught reading comprehension using prior knowledge questions gained more than those taught without prior knowledge questions. As a matter of fact, learners were able to use their relevant background knowledge to interpret and understand new information in their reading comprehension texts.

Recommendations

The following recommendations were made based on the findings of the research.

I. Teachers should be encouraged to use prior knowledge questions before, during and after every reading comprehension passage.
II. Curriculum planners should be encouraged to include prior knowledge questions as part of the activities learners should be exposed to in every reading comprehension lesson.
III. Textbook writers should include prior knowledge questions as part of learners reading comprehension exercises. This will help learners to linke new information with what they already know.

IV. Teachers should encourage learners to participate actively in class discussions by responding positively to the prior knowledge questions in the course of reading the comprehension passages.

V. Teachers should always construct prior knowledge questions that will assist learners in making use of their relevant schemata to facilitate the understanding of the reading texts.

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