

The contribution of technology to language change amongst primary school learners in a developing country

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Abstract

Technology will assist teachers to enhance traditional teaching methods with the current technology-based teaching and learning tools and facilities. The purpose of this study was to examine how technology contributes to language change amongst primary school learners in a developing country. The study adopted an interpretive research paradigm where a qualitative research approach and a case study design were used. Open ended questionnaires were distributed to six teachers who are language teachers from two different schools, in the Manzini region of the Kingdom of Eswatini. Thematic analysis was used to analyse data collected from the research participants. The findings of the study revealed that technology has influenced learners' language to using, short hand and self-created spellings in writing English. The main conclusions of the study were that language is transforming and that the standard forms and grammatical rules of the languages are deteriorating because of the use of some technological tools and the new communication form that they promote. It was recommended that language teachers should use technology as a language tool and should engage students with a variety of technological tools to enhance language development and also encourage the use of proper language in class.

Key words: technology, language, change, learning tools, learners, school

Introduction

In the 21st century, technology has played a very important role in many areas including education. Technology and education have become connected since technology has become the knowledge transmission highway in most countries. Currently, technology has gone through inventions and transformations, in the process changing our societies as well as totally changing the way people communicate, live, think and work (Grabe, & Grabe 2007). English is the most widely used language for communication globally. Schools and other educational bodies worldwide are supposed to prepare students to live in the current 21st century, and they need to consider integrating technology in their curriculums, so as to fit well into today's society (Ghavifekr, Afshari & Salleh, 2012). The transformation of technology has also seen some transformations in the way English language is written for communication through use of technology.

Background of the study

Globally, technology has changed rapidly in the recent years. People have become more dependent on their phones and this completely changed the communication styles with each other in our everyday life, making it easier for human beings to interact with each other across the world with a single touch through social networking sites, such as Twitter, Facebook and YouTube (Reed, 2015). According to Zhao, (2013) gaining access to the global network, the internet, has clearly had some influence on the language used by most countries in the world, English, as well as the words people use to communicate. Recently we saw how some Internet words have made it to the Oxford dictionary this proves the impact it made, for example the word "Tweet" which means according to the dictionary: "a posting made on the social networking service Twitter". Some people see no problems in misusing grammar or word spelling on social networking sites (Zhao, 2013).

English is a global language as it is used for communication by most people in the world. Crystal (2006: 55) asserts, "A language achieves a genuinely global status when it develops a special role that is recognized in every country". The definition hinges on the special role which serves as the native language of the majority such as

English does in the United States or Australia, serving as the official language, or achieving the status of the priority foreign language for example, the foreign language of choice for children in schools. English or better said the concept of English language known as “International English” is the global view of the language or the international standard for the language. It can also be referred to as: Global English or World English, meaning it is globally acknowledged to be the most globally used language in most times. In academic contexts, Seidlhofer, (2011) estimated that more than 50% of the millions of academic papers published each year are written in English, and the percentage was growing year by year.

English is currently the undisputed language of science and technology, and scientist journals in many countries are now switching from the vernacular to English. In specific disciplines, English appears to be the universal language of communication. For example, 98% of German physicists now claim English as their defect working language (Harrow House (2019)). The pervasive view of the globalization of English is tempered by a few observations. In a study commissioned by the British Council, Lillis (2013) speaks about the apparently “unstoppable” trend toward global English usage. The Swaziland Education Sector and Training Policy, (2011) articulates the current language in education policy of Eswatini that SiSwati and English are both regarded as official languages in the Constitution of the Kingdom of Swaziland. The Policy directive is that the mother tongue SiSwati shall be used officially as a medium of instruction for the first four grades of school, after which English shall be the medium of instruction.

Language, as a social phenomenon, is in constant evolution. New words are added, disused ones are forgotten, and some others change their morphology and semantics to adapt to a dynamic World. Radical changes in a language mostly happen when a social group moves from its native location or separates from an original and bigger social group. A clear example is the English language, that in the last three centuries has evolved following the path of expansion of the British Empire, and giving birth to tenths of different dialects, including General American English, Australian English and Indian English (Crystal 2006). Language evolution is also caused by the social impact of new scientific and technological discoveries. New

words and new word meanings are the tools for better understanding and communicating with the world around us.

Organizations such as the Académie Française in France and the Accademia della Crusca in Italy, have the goal of institutionalising and regulating the evolution of languages, by formally adding and removing words as they appear and they disappear from common usage (Berns, 2012). The American industrial worker of the 19th century and the English manufactures of his machineries had to share a common basic dictionary, in order to keep industry alive and functional. Producers of train carriages had to correctly and precisely understand the names and the measures of standard track components in the different target countries. Workers in nuclear power plants need to correctly understand words in technical manuals. To deal with these technical problems, terminology has been introduced as an important area of language studies to support and complement the work of dictionary producers (Lillis, 2013).

Empirical Studies

A lot of research has been done in countries all over the world on the contribution of technology to language change amongst primary school learners.

Kapla and Haenlein, (2010) point out that an increasing proportion of informal communication is conducted in written form, mediated by technology such as smartphones and social media platforms. Electronic communication technology has revolutionized the composing process and participation in writing activities. Communication technology is composed of many forms of electronic communication (Alassiri, 2014). Those associated with the internet, now accessible through both computers and mobile phones; include e-mail, instant messaging services, chat rooms, forums, social networking sites, interactive online gaming networks, and Web-logs. In addition, mobile phones enable their users to make telephone calls and send text messages. Information technology is having a profound effect on young people and the educational system today (Thurlow, 2014). A recent study shows that more than four in ten teens (45%) personally have both a computer and a cell phone. Computers are increasingly being used in the learning process but the communicative

functions of the internet and cell phones are the main reason why teens use these technologies.

Access to the technology is higher than ever before and is still increasing due to the fact that it provides a non-threatening atmosphere for business and social interactions and an arena for students to present their work beyond classroom boundaries (Farina & Liddy 2011). Almost all American adolescents use the internet, and those who go online tend to do so multiple times throughout the day.

Proponents of these technologies argue that widely reported concerns regarding the effects of communication technology are very broad and are based on anecdotal evidence. They state that early research on the social impact of inventions like the telephone and later the television were often heavily affected by general myths and pessimism with regard to implication on individuals (Farina & Liddy, 2011). They also argue that in contrast evidence from both the United States and the United Kingdom highlight that in places where access to technology is improved, young people from these households derived the greatest benefit in terms of improved educational achievement.

Considering the diverging opinions with regard to technology and language development and the prevalence of this technology in today's society, investigation on the topic is timely and crucial. The implications of modern technologies to writing practices especially among teens is examined in this study and solutions proposed in order to ensure effective writing and literacy development. It is important to note that technologies help individuals to access internet and in most cases there is language that is used for internet purposes.

The Internet language

Before analyzing how the Internet affects a language and vice versa, one has to get acquainted with the base term in their relation. The base term, of course, being the Internet language, which itself is the sum all the other terms needed to help study this relation. According to Crystal, (2011) Internet language is the online language constructed and formed through the use of the Internet and for the use on it. It has been slowly evolving since the Internet's commercialization in the early 1990's and the first online conversations. At first being an Internet user was a privilege, but

today it represents a commodity available to almost everyone. In addition to this, the Internet today provides us with unlimited and quick access to every part of the world thus broadening our communication range and possibilities. This is one of the main reasons why Netspeak was created. Having so many connected individual users of different mother languages, a universal language had to be created in order to make communication between the users easier or in some cases even possible.

Although the Internet is an English-based network and most of the communication on it takes place in English, still almost everyday people encounter problems online because of cross-cultural differences. Such misunderstandings are today easier to solve because of Netspeak. It helps the users understand one another, even if it is on a basic level. This is possible because of the universal linguistic tools that Netspeak offers us and which vary from graphic tools to globally known abbreviations, acronyms and initialisms, which represent one of the special features of Netspeak. Each of the emoticons and other graphic aids with which Netspeak provides us, as well as most abbreviations, phrases and initialisms have a universal meaning recognizable to anyone who regularly has interactions over the Internet. For those users who are new to using these tools, online dictionaries have been set up so that they could navigate more easily through the Internet, learn what each of them means and learn faster how to use them (Crystal, 2011).

Internet slang or Internet jargon

When discussing jargon and slang in a language, it is important to note that these two terms are understood in two different ways. In a language slang usually means the use of informal words and expressions, not considered to be standardized, in everyday social interaction, while jargon is the terminology which is attributed to a specific activity, group, profession or event. In the Internet language, these two terms are used as synonyms. Crystal, (2001) says Internet slang represents a whole variety of different language styles which are used amongst various Internet communities on the Internet. Some of the slang examples are abbreviations and acronyms expressed with letter homophones such as BTW ('by the way') or CYA (meaning see you). Others include onomatopoeic or stylized spelling such as

‘hahahaha’ which of course is used to express laughter. Another form of Internet slang is the so called ‘Leetspeak’ which is characterised by its alternative alphabet in English word spelling. An example of ‘Leetspeak’ would look like this I33t5p34k (in English ‘Leetspeak’). In addition to these three examples, there are countless more varieties of slang that can be found on the Internet.

The purpose of Internet slang is to make communication online easier and faster, or to make communication seem innovative and different (Crystal, 2011). The biggest part of the vocabulary of Internet slang is made out of acronyms, abbreviations, initialisms and even smiley faces or smileys. Most of them are not only found on the Internet but also in short message texting or SMS texting. Frequently some of the abbreviations have infiltrated even the spoken language making Internet slang a part of even our everyday spoken language. The most recent case of such infiltration is the addition of acronyms OMG (‘oh my God’) and LOL (‘laugh out loud’) to the Oxford dictionary. Of course the vocabulary of Internet slang does not consist only of these. It includes a whole variety of newly coined phrases and words which have been created by Internet users themselves mostly young people such as gamers. According to Reed, (2015) people using this newly coined terminology have allowed themselves to express their emotions in a minimal number of key-strokes and to communicate in a faster way understandable to all of them.

The different categories of internet slangs

Types of internet slang	Description	Example
Letter homophones (Abbreviation and Acronym)	Shortening of words or set of alphabets formed by the initial component of several words.	cya (see you) LOL (laugh out loud), BTW (by the way)
Punctuation and Capitalizations	Punctuation and capitals are normally used to express emotions or emphasize on something.	“.....”, “!!!!!!”
Onomatopoeic and stylized Spellings	Onomatopoeic is a type of extraordinary spelling and had been widely used recently on the internet. Onomatopoeic spellings are very language dependent.	Hahaha which is looks like typing error but it is not.
Keyboard-generated emoticons and smileys	Emoticons are usually used to express emotion through symbols and can be found throughout the internet.	^.^ (smiling face) , T.T (crying face)
Leet	The replacement of some symbol to represent certain alphabet that looks similarly	10V3 (love) , 2EZ4JK (too easy for Jing Kai)

Challenges brought by technology to language

Language is culture, so, the changes in language are affected by the changes in the lives of the users of this language. As the language has expanded to cope with all the technology that has come into existence, people have become more creative in the development of names and words to describe processes- acronyms have become much important although they really stretch to fulfill their purpose at times, this is according to Borks (1985). As culture has become more sensitive to the variety of human conditions, people have become more aware of the connotation that certain words or phrases might carry and considering the language more thoughtfully as a result. As world cultures become more closely connected through technology, words from other languages are incorporated into everyone's daily usage, regardless of their actual knowledge of those other languages.

Altintas et al (2007) says that other effects caused by technology are that, its sentences and phrases have become much shorter. In our- fast- paced society, the almost- instant ability of social media to share thoughts with the words has also affected our behaviour in actual speech. Technology has transformed the words we use into abbreviations and acronyms. These types of abbreviations have been thought to “dump down” language and spelling skills. The physical spacing of words has also been shortened, reflecting the need to use a few characters as possible within social media updates. Meanwhile, some words have taken on a new meaning, all that done by modern technology.

Theoretical Framework

The research study focuses on Social Learning Theory which is introduced by Albert Bandura (1977). This theory demonstrated that people learn and imitate behaviors they have observed in other people. Bandura (1977) says “man's superior cognitive capacity is another factor that determines, not only how he will be affected by his experience, but the further direction his action may take”. In social learning system people acquire new pattern of behavior through direct experience or by observing the others behavior. According to Bandura (1977) people can represent external influences symbolically and later use such representation to guide their actions. This theory is used in

this study because learners exhibit language in writing through what they observed in the social media platforms which they then imitate.

According to Bandura (1977) in the social learning system, new pattern of behavior can be acquired through direct experience or by observing the behavior of others". He also says a person cannot learn much by observation if he does not attend to, or recognize the essential features of the model's behavior. Ginsburg et al (2006) argues that most participant learning experience on social media is associated with social learning and as a consequence, social learning outcomes constitute the majority of learning outcomes.

Bandhura's theory (1977) has often been called a bridge between behaviorist and cognitive learning theories because it encompasses attention, memory, and motivation. However, the young generation feels motivated when others appreciate or like their activities like status, interesting posts) in the SNS. According to Bandhura (1977) some people in the social media are very active to command on others status or posts and it makes others motivated to be active and to explore new information and knowledge, and on the basis of this informative feedback, they develop thought or hypotheses about the type of behavior most likely to succeed. Technology has made a huge impact on people's lives. This impact has affected every aspect of society. It has also had an impact on the current student population. It has made our world increasingly complex which has changed the requirements for people entering into the work force. This change has made it necessary to create learning environments which support higher level thinking skill development. Technology integration has also been shown to help create more authentic learning environments where the students are more motivated to attend, have a greater chance of communication and collaboration and have more opportunities to use higher order thinking and problem solving skills connected to real world applications (Fouts, 2000).

Purpose of the study

The purpose of this study was to examine how technology contributes to language change amongst primary school learners in a developing country.

Objectives of the study

The objective of the study are to:

- Establish how technology has contributed to language change.
- Determine how technology has influenced the writing styles of learners

Research Methodology

The research paradigm and methodology used in this study were guided by the research objective and question which were set to determine how has technology contributed to language change amongst primary school learners in a developing country.

The study was located in the interpretivist research paradigm. Interpretivists' researchers use professional judgments and perspectives in the interpretation of data (Hamilton & Corbett-Whittier, 2013). Hesse-Biber and Leavy (2010) state that the interpretive perspective epistemologically believes that social meaning is created during interactions, implying that different social actors may, in fact, understand social reality differently, producing different meanings and analyses. The researcher in this study interacted with the teachers and learners to attain information on how has technology contributed to language change amongst primary school learners in a developing country.

Research Approach

The method that will be used to carry out the study is the qualitative method. Creswell (2008:2) defines qualitative research as “an enquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting. Merriam (2002), defines qualitative research as “an umbrella concept covering several forms of inquiry that help us understand and explain the meaning of social phenomena with as little disruption of the natural setting as possible.”

The study employed the case study design. According to Tellis (1997) a case study is an intensive description and analysis of a single individual or sometimes group. Yin (1984:23) defines the case study research method “as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the

boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used.” The reasons the researcher chose this design is because the examination of the data is most often conducted within the context of its use (Yin, 1984), that is, within the situation in which the activity takes place. It also allow for both quantitative and qualitative analyses of the data.

The population of this research was teachers from two schools in the Manzini Region. This region was of interest for the researcher because it is where the higher class population lives. Leedy (1993) points out that population is a group of elements, objects or individuals involved in a study. In research, population refers to a group of individuals, people or things that comprise of the same characteristics about which a researcher wants to obtain information. Sampling is the systematically and strategically identified group of people or events that meet a criterion of representation for particular study. The sample size was six teachers from two different schools. The researcher used simple random sampling. According to Wilking (1998), simple random sampling is a method used to cull a smaller sample size from a larger population and use it to research and make generalizations about the large group.

The data was collected through open ended questionnaires. According to Creswell and Plano Clark (2011), qualitative data are collected on open-ended questions based on predetermined response scales, or categories. The participants in this study answered the questionnaire given to them participants provide information based on questions that do not restrict the participants’ options for responding.

Data presentation and analysis

Thematic analysis was employed in this research. Thematic analysis allowed the researcher to determine precisely the relationships between concepts and compare them with the replicated data. This approach takes a more exploratory perspective, encouraging you to consider and code all your data, allowing for new impressions to shape your interpretation in different and unexpected directions (Attride-Stirling, 2001).

The analysis of data was based on the research question that the study intended to answer, and this was: how has technology

contributed to language change amongst primary school learners in a developing country. Participants were assigned numbers.

The importance of technology for learning

Teachers were also asked how technology can be useful for learners in which most of them revealed that, technology help learners when they want to research and be up to date especially with the use of Google.

Teacher number 1 pointed out that:

Technology could be useful to learners because it is an interesting way of learning; it combines most of the styles therefore benefiting all learners. It encourages learners to independent and responsible for their learning.

On top of researching things on the internet teacher number 2 revealed that:

Learners can also form groups to discuss and study through technological tools.

This corresponds to Reed, (2015) who found that technology tools like Facebook and Twitter enable students to share information like when a face book 'group page' is created for a class or course subject, to learn about their classmates, to communicate with their classmates and professors, and to post and discuss relevant class information.

In explanation of how the use of technology may assist in the teaching and learning, teacher number 2 stated that:

They can research most of the things that they learn about using the internet and also form groups where they can discuss and study as a group in social media like WhatsApp and Facebook.

In support, teacher number 3 stated that:

Learners send out update and other important information like sharing insight and tips.

In agreement teacher number 1 articulated that:

If these platforms can be used positively it can help them because the learners are in interested in these social media platforms. A learner must have interest first in order to learn effectively.

Similarly, teacher number 1 revealed that:

Technology draws learners' attention and entices interest. There is no geographical barrier when using technological tools and the retention of information is very strong. It also

encourages learners to familiarize themselves with technology outside the learning environment.

This is similar to the study by Thurairaj and Roy (2012) who state that, besides keeping in mind that the teaching materials should help their students to master the language; teachers also have to make sure that the teaching materials are interesting. Thus activities through Facebook and Twitter will definitely be more interesting in nature to enhance positive language learning.

Negative effect of technology to language

It is undeniable that the boom of technology has caused a toothache in the English language. Participants were asked to explain how technology has influenced the way learners use language. Most teachers revealed that, technology has influenced learners badly because they are now used to writing short hand and wrong spellings which are commonly used in social media.

Teacher number 2 pointed out that:

Learners use language in an informal way and shorten words.

In contrast, teacher number 1 revealed that,

Technology does compel pupils to engage in a lot of English, therefore helping them improve here and there, however it also encourages informal usage of language.

This is in line with a study by Belal (2014) which states that digital technological tools motivate the tertiary level students to improve their English as the findings showed that the students are very conscious when they give any status because they want to present themselves as a perfectionist in the SNS. They try to write in proper grammar structure, correct spelling and appropriate sentence structure and therefore it motivates them to improve their English language as well.

Participants were further asked to describe the spelling or vocabulary mistakes they have noted in their marking that could be influenced by social media.

Teacher number 5 stated that:

Vocabulary mistakes I have noted in my marking are shortening of words like "bcoz" for because or "b4" for before and a lot of slang language (words) like "howzit" for means of greeting.

Similarly teacher number 3 cited that:

The mistakes including “coz” for because, “k” for okay, “frnd” for friend, “arnd” for around, “plz” for please, “gud” for good, “luv” for love, “u” for you and “c” for see.

Discussion of findings

Findings were discussed in accordance of the research objective which is to: establish how technology has contributed to language change amongst primary school learners in a developing country.

Findings from the field show that technology help learners when they want to research and be up to date especially with the use of google. The teachers agreed that technology is a very useful tools that help learners. The learners search for information that help them in language learning. Contrary the findings also revealed that technology has influenced learners badly because they are now used to writing short hand and wrong spellings which are commonly used in social media. We are living in the digital era and we are so much addicted to this rise. However, this is a real issue as far as English language is concerned. People utilize incorrect grammar and wrongly spelt words as they socialize in the social media platforms. This is so detrimental to the sustainability of the English language because the newer generation will view the language used in this platforms as the real language thus destroying the language.

This is similar to what the literature revealed whereby Reed, (2015) points out that the internets, radio, television, telephone, are some of the phenomenon that has changed the way we talk. They have also introduced new words and phrases into our lexicon over the last century. Language itself changes slowly, but the internet has sped up the process of these changes so quickly. Paulsen, (2011), added that people are getting used to the idea of rapidly developing technologies changing what we can do and how we do things. What most people have not considered is how technology affects our language and how these changes are affecting the way we speak and even the way we think. The simultaneous emergence of technology and social media, a complete collapse of language seems to be at our doorstep. Many people think that texting and chatting have simplified language to the point of no return. Technology is affecting the language. It limits the effect on punctuation vocabulary. It also slows down the natural evolutionary course of language.

Conclusions

With the rapid changes brought about by technological development, primary school teachers need to understand that they are entering the biggest language revolution era. Language is transforming, the standard forms and grammatical rules of the languages are deteriorating because of the use of some technological tools and the new communication form that they promotes.

Regardless of that, people still insist on using technological tools in their free time because they have become important parts of everyday activities. People prefer to use them because they are created to satisfy a kind of need that other ways of communication cannot give. It creates a virtual and friendly environment where even shy people can open up to the world and express themselves more easily. It popularizes the free formation of sentences and words. It accelerates the speed of information exchange and even contributes to the development of literacy skills such as reading skills, word spelling and decoding skills, phonological awareness of the sounds and huge amounts of creativity that are applied when using text messages.

Recommendations

Based on the study findings, the researcher recommends that language teachers should use technology as a language tool. Technology tools give language teachers good opportunities to share their experiences, tips and resources through the use of internet. It is also recommended that teachers should engage students with a variety of technological tools, such as creating a Facebook page, or blog for the class to access lesson plans, learning and teaching materials, quiz, samples of report.

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