
Early writing of a bilingual child: A content analysis of his YouTube video comments

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Abstract

Language and literacy development has come to be influenced by digital technology in the current information age. Comments posted on a video streaming site by a developing bilingual seven-year-old child speaking an autochthonous Philippine language and English were analyzed as to their mean length, syntactic form and pragmatic uses. Results revealed a language development in early English writing comparable to native speaker oral norms extant in the literature. Implications for further language and literacy development of the participant especially in the use of internet and digital technology in learning as well as for language policy in education are also discussed.

Keywords: mean length of utterance, multilingual education, child language, YouTube, digital literacy

1 Introduction

Contemporary society has placed an outsized role for language and literacy skills of learners. Early childhood programs have been touted to help in this regard. As evidence, the full development of young children focusing on early childhood programs has attracted the attention of scholars and development agencies worldwide (Engle, et al., 2007). Naturally, parents of children in the emergent literacy stage also place a premium on the latter's development of literacy skills.

The current situation in homes with both parents working leaves young children with their home child minders and increasingly with internet sites like YouTube. Early literate children who interact through online gaming, social media and video sites may offer a glimpse into their language and literacy development. Thus, discourse is no

longer limited to in-person interactions but also technology-mediated platforms (Waring, 2018, p. 7).

Children developing their language skills must not just master the systems of sounds, meanings, and word order but must learn communicative competence, too (Bryant, 2009). Communicative competence, also known as pragmatic skills, are needed for effective interactions with other people such as peers, families, and teachers. It is also predictive of later academic achievement (Reeder, Shapiro, Watson, and Goelman, 1996). e pages.

1.1 Theoretical framework

Sociocultural theory (SCT): This theory posits that human psychology comes as a result of “a trichotomy of *social practice* (behavior), *consciousness* (cognition and affect), and *material culture* (artifacts, such as language)” (van Compernelle, 2022, citing Blunden, 2011). In this theorization, the three components mediate one another. For instance, communicative speech or writing like commenting on a viewed YouTube video is mediated by participation in a social practice like watching a gamer stream himself playing a game, both of which are also mediated by the mental and emotional processes of cognition and affect. Sociocultural theory is often linked with Vygotsky's (1978) work on the zone of proximal development (ZPD) to take advantage of extraneous resources in helping a learner learn a target language.

According to Snyder and Tour (2017), the sociocultural conception of literacy became more mainstream in the 1980s, necessitating the use of more ethnographic approaches and thus, in the area of computer-mediated communication, varied viewpoints were employed, aside from studying quantitatively the impact of computers on writing, for instance. Later, in the 1990s, qualitative methods became the preferred mode

for exploring the intersection among literacy, learning, and technology, still with computer use at the forefront of the research contexts. Eventually, the internet became a frequent site for research, with the sociocultural perspective becoming a focal lens for comprehending literacy (p. 520).

Significant literature exemplified the attempts to untangle the complex relationship of literacy, learning, and technology (Turkle, 1995; Burbules and Callister, 2000; Takayoshi et al., 1999; Kress and van Leeuwen, 2001; Lankshear and Knobel, 2011; Lankshear, et al., 2000; Warschauer, 2006). Gee (2003), meanwhile, has recognized “nonschool literacies” from computer and video games and their study as something of value for education. The studies of Marsh (2011) and Livingstone (2002, 2012) provide evidence for the role and value of digital technology in learning among children and young people.

Bilingualism and internet media: In the early period of media studies in education, practices at home received little consideration as having legitimate value in learning contexts (de Saint-Georges, 2017). Nevertheless, media became a tool of education within the classroom or for independent learning in the decades from the 1970s to the 1990s and continues to the present. Media became the first steps into literacy for many learners (p. 115). There is, thus, a recognition of an autonomous form of learning in which researchers have advocated for the use of media in language learning (Barton and Lee, 2013). In turn, bilingual and multilingual learners benefited from this democratization of second and foreign language learning.

A certain trend of research emerged which looked at the practices of the users of the media (Kelly-Holmes and Milani, 2013). de Saint-Georges (2017) advocated for the study of the practices of media consumers and producers in addition to the focus on the text and language in communication media (p. 119). At this juncture, sociolinguistic approaches to bilingualism become relevant in which the bilingual or multilingual person is seen as a social actor (Wei, 2017, p.221). In the context of video and computer gaming which has become prevalent as of late, viewers who watch players-cum-video streamers connect with the gaming community in a negotiation of identity. The phenomenon has happened cross-culturally, with mostly native American or Canadian English-speakers producing the videos for an international audience via YouTube and other social media sites.

1.2 Background of the study

The global pandemic resulted in early elementary pupils being unable to attend in-person classes regularly. Parents had to act as teachers at home and impart instruction to their own children. Starting in 2020, my own youngest child, who was five years old then, had to answer printed modules for his kindergarten studies. A year later, as a first grader, it was more of the same. As his parents, my wife, who is also an elementary grades teacher, and I endeavored to at least give him beginning reading instruction. Around the middle of 2021, we were successful in making him read one- to three-syllable English words, both through sight word reading and phonological recoding. In other words, he was able to read through the dual routes (Coltheart, 2005).

1.3 Research questions

This study aimed to analyze the YouTube comments as utterances of a bilingual (Minasbate and English) child as to their syntactic type (simple or complex sentence) and pragmatic purposes. The following are the specific research questions: (a) What is the written language development level of the child measured as mean length of utterance of his YouTube video comments; (b) What types of sentences (simple or complex) did he generate; (c) What communicative purposes did he use; and (d) What are the implications for his further language and literacy development?

1.4 Definition of terms

Mean length of utterance – the number of morphemes in a single utterance (Brown, 1973). Normally, the mean length of utterance is used to measure oral discourse. However, for this study, utterance is taken to be written comments.

Utterance – a single utterance is a single written comment posted

Simple sentence – a sentence with one independent clause (Lust, Foley, and Dye, 2009)

Complex sentence – a sentence that is not a simple sentence (Lust, Foley, and Dye, 2009)

2 Methodology

This study made use of the content analysis technique “to study human behavior in an indirect way, through an analysis of their communications. It is just what its name implies: the analysis of the usually, but not necessarily, written contents of a

communication” (Fraenkel, Wallen, and Hyun, 2011, p. 478).

The participant is a seven-year-old first grader undergoing instruction through printed modules, although such modules are irregularly accomplished by him. He is the youngest child in a brood of three by the researcher and his wife. He is often left at home with his older brothers who are senior high school students and usually spends time on a cell phone watching YouTube videos of streamers playing games like Roblox and Minecraft, which he also plays from time to time. He also watches content related to vehicles like trains and cars, and some movie clips. His first language is Minasbate western dialect with a sprinkling of Tagalog words as his previous primary child minder spoke Tagalog. He knows all of the letters of the English alphabet since he was about three years old, learning them through YouTube videos and alphabet songs. For material his suitable to his age, he can also speak and comprehend oral English, and since about the middle of 2021, written English, but his actual level of competence is not known due to lack of testing.

Data were gathered through Google Takeout where YouTube data on videos watched and comments posted by the researcher’s account on videos are archived and can be downloaded on request from Google. The comments were posted under the researcher’s account since the participant himself has no Google account. Such comments were deemed to be his upon verification as he was the only one in the household watching the videos concerned. The first comment included is dated August 17, 2021 while the last is from May 31, 2022. There are 66 comments included in the analysis. A fellow scholar who has written about the Minasbate language and colleague of the researcher was asked to validate the data gathered.

3 Data Analysis and Discussion

3.1 Written language development level

The written language development level was measured using mean length of utterance morpheme (MLUM). The average MLUM for the participant was 8.41 as shown on Table 1. This is way above the 5.22 for his age based on Rice, et al. (2010). This result must be interpreted with caution as the MLUM was intended for oral speech and an equivalent measure for written discourse is not yet available. It may be that

written utterances are longer because of the different mode. It may also be because the participant did not use punctuation at all and his constructions sometimes consisted of what are termed as run-on sentences or those which lack the full stop punctuation to divide multiple thought units.

It must be noted that the participant had minimal input from home and school when it comes to the subject matter of the utterances indicated in the table, which were mostly about the gaming videos he was watching, since no one in the household or anyone in school he has interacted with had noted common interests in those games or the topics themselves. In the household, for example, his parents did not play the video games nor watched with him the subject videos. His older brothers who were at least 10 years older had different gaming interests having grown up in an earlier period. His family members, notably, also did not speak to him in English much frequently and instead used the mother tongue. His minder probably had less input to his vocabulary as she spoke Tagalog, had less proficiency in and seldom used English, being unable to graduate from high school herself and did not distinguish herself academically. In school or neighborhood, similar-aged children did not share his interests in the games or videos watched. Thus, he had minimal input from these sources. If at all, the participant likely got his vocabulary from the other videos he has watched like those about vehicles and other games. He also does not get significant input from traditional television as the household seldom subscribed to such media. It may be said YouTube acted as the babysitter for the participant most of the time he was with his minder, a phenomenon already noted in the literature (Beyens and Eggermont, 2014).

It should be noted that the participant only started posting comments when he was already a beginning reader. He, however, was not yet proficient or even had basic skills in using a pen to write on paper. This is noteworthy as the child first wrote digitally instead of traditionally using a pen and paper.

Utterance	MLUM	Type of sentence
Part 2 pls part 2 pls or else	8	N/A
Build a bunker not that hard	6	Simple

I realized something if u use code ghost u get billion steps	13	Complex
Ice scream 6 coming soon they waited for ice scream 6	13	Simple
Dumb centi he miss one marker in the rust room	10	Simple
He accidentally put b to say gift tag	10	Simple
His friend broke every block	5	Simple
How did bedrock break	4	Simple
Crash frontier is the best	5	Simple
My name in roblox is derpyatter	6	Simple
Rules donts touch lightsabers	6	Simple
This the sodor fallout song	5	Simple
Literally thats not cool u make that jump	10	Complex
Why did he add a image of krabby patty mobile	10	Simple
Dude someone deleted Minecraft on my phone	8	Simple
Pls make video of tanks in teardown war multiplayer	10	Simple
Ay no bad word	3	N/A
I like when eystream turned on shaders for no reason	12	Complex
When u see blood golem disconnect	7	Complex
Sonic hacked u i feel bad for jack	9	Complex
Blood golem is real it destroyed all the files	11	Complex
Bad fact i hate sebee he's bullying people	10	Complex
Yay this helped me alot I got all the markers	12	Complex
That tapwater cheats on bedwars	7	Simple

Here tips to survive when you hear a screaming run away	13	Complex
When he sees a good drawing 1 star why its a good drawing	14	Complex
Unsub pls unsub from him because of trolling	9	Complex
Unsub from hes the worst youtuber	9	Complex
I like when he sees a guy with katana he thinks hes cheating	14	Complex
I feel so bad for unspeakable that is hes has no money	12	Complex
Don't look away stupid	4	Simple
That would be weird if flashlight says stop the fucking train	13	Complex
Glitch is dumb hes accidentdldy press the black arrow	11	Complex
Press the space button to activate the balloon but u jump off	11	Complex
I think hes hacking	6	Complex
Uhh pls owner of this game delete this roblox game	7	Simple
JISHA JAGADEESH how do get rid of that oof deathsound it still plays i would never play it	17	Complex
Dislike him i dontlike him	5	Complex
OH SHIT OH SHIT	2	N/A
What is point of this	5	Simple
Dont look away from that scp peanut	7	Simple
Beep beep beep beep	4	N/A
Uhh why did he make he this videos	7	Simple
Why didn't he show us fight the ender dragon	10	Simple
Wow he not talking	4	Simple
What u guys speak Korean	6	Simple
Bacon	1	N/A
Getting on top of the plane is scary thats a dumb idea	5	Complex

Wow someone really wants to win in fortnite	9	Simple
How did he didn't know how to play fnf	9	Simple
I HATE CENTIDENT	3	Simple
Why didn't he show me beat the ender dragon	10	Simple
Centi is dumb he didn't pick up the gold helmet	11	Complex
How do u get those skins	6	Simple
How did the train get going did a rock hit the lever to get the train get going?	13	Complex
wow this guy loves teardown	5	Simple
Yeah train cannot go on sharp curves	8	Simple
U got caught for speeding Why did he race	10	Complex
This a cool song ngl	5	Simple
How does spycakes dont know how get rid of curse all do u is drink milk how ther dumb	19	Complex
Why is he watching cry hes cry all night	10	Complex
Dont ride a helicopter kids it dangerous	10	Complex
This guy is a hacker	6	Simple
I like glitch keeps banging on his table	10	Complex
Why is there a panda fish there's fish	6	Complex
And why is the ball cleaning the teeth	9	Simple
Mean	8.41	

Table 1: Written utterances and their length and sentence type

3.2 Complexity of utterances generated

The complexity of the utterances was determined by individual inspection and categorized either as simple or complex, following the criteria that having one independent clause counts as a simple sentence and having more counts as a complex sentence (Lust, Foley, and Dye, 2009). There were 29 sentences classified as complex, 32 as

simple, and five which were phrases only. This means 47% of the utterances had complex syntax and higher than the 20% achieved typically by children with at least 5.00 MLU (Schuele and Dykes, 2005). It may also mean a sequential bilingual development in mother tongue and English, with the prospect of the child growing more proficient in his L2 rather than his L1.

It can be noted that the utterances were English-only, likely suggesting that for the domains of online gaming and video-watching, the participant preferred English, most probably because the content for these materials are also English-only, at least those he has watched.

Among the morpho-syntactic patterns observed include the developing use of the present, past, and progressive forms of the verb, use of the auxiliaries “do” and “did” in multi-word verbs, use of shortened constructions like “pls” and “u”, use of the imperative, declarative, and interrogative types of sentences, and non-use of the full stop, question mark punctuation for questions, and apostrophe.

3.3 Communicative purposes used

Communicative purpose was measured by inspecting and analyzing each of the utterances individually and categorizing the function used as judged by the researcher. The participant used a variety of communicative purposes – 12 different purposes of which giving verdict, asking question, and expressing disagreement were the most frequently used. Table 2 and Figure 1 together present a concerning picture of how the participant is deploying his linguistic resources. The vocabulary contains words that denote negativity and could reflect some of the disturbing behavior online and in gaming that give parents’ pause on utilizing technology and its influence in shaping children’s development. For example, parents generally view screen media as problematic and their use by young children as potentially dangerous (Mavoa, Gibbs, and Carter, 2017).

According to Austin’s theory (1975), there are three components in a speech act: “the locutionary act, or the act of saying a sentence that makes sense and refers to something; the illocutionary act, or the speaker’s purpose in saying that sentence; and the perlocutionary act, or the effect of that sentence on a listener.” For this study, inspecting the participant’s YouTube comments makes it clear the first two elements are present – his comments are clearly referred to some context

counting of usage of communicative purpose were used to shed light on the research questions. The rather fundamental analysis nevertheless revealed key insights which have practical implications at the familial level as well as for language policy. Parents and educators may gain some important understandings based on the results and analysis of this study.

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