

# How Complex are Indonesia's Senior High School Textbooks? A View for College Readiness

P Suryadi<sup>1,\*</sup>, I Rifai<sup>1</sup>

<sup>1</sup>English Department, Bina Nusantara University,  
Jl. Kemanggisan Ilir III No.45, RT.12/RW.6, Kemanggisan, Kec. Palmerah, Kota Jakarta Barat, Daerah Khusus  
Ibukota Jakarta 11480

\*corresponding author email: [phillip.suryadi@binus.ac.id](mailto:phillip.suryadi@binus.ac.id)

**Abstract.** In some Indonesia's higher education, English language has been used as elective language of instruction. The textbooks read at this level of education are mainly written in English too. Thus, the skills to speak and read in English fluently are two very important skills at this level. With the focus on content's density, it is reasonable if textbooks at university level are more challenging than textbooks at high school level. To get students ready for a more challenging college reading, it is important for high school students to be introduced to texts of various complexity. This paper reports the analysis of English textbooks for grades ten to twelve to find a range of complexities that would support students' readiness for college. The textual analysis was mostly done qualitatively by using qualitative measure of text complexity that include analysis of texts purpose, reader background knowledge, text structure, and many more. This research found that there was only small incremental complexity throughout the texts and textbooks by grade progression. We found that the reading texts were lack in challenges and were insufficient to help students prepare for college level reading.

**Keywords:** Senior High School, Textbooks, readiness

## 1. INTRODUCTION

At university level, students are expected to read many textbooks, research paper, and articles corresponded to their affiliated major while juggling with other mundane college tasks. In an ideal world, these students would easily pass high school and adapt college life without any difficulties[1]. As a matter of fact, some students struggle at this level often end up dropping out. In USA they put importance in student to be college ready as they have a Common Core State Standards for English Language Arts which believe that students must be able to use their language effectively to be college ready. It aimed for students to read literatures as well as complex texts to acquire skills such as critical thinking, problem solving, and analytical skills that were deem beneficial to be college ready. One study argued that one of the literacy marker to help identify students as college ready is from their reading fluency [2].

Reading fluency is understood as the combination of word recognition accuracy, automaticity, and expressive or prosodic reading[2]. Word recognition accuracy is about readers' ability to pronounce words from texts correctly while automaticity measures how quick readers remember what they read from their memory. The studies found that the better someone is at that ability, that person capability to understand what he or she read

should be better than other who lack such ability[2]. Prosodic or expressive reading is the ability to read out loud with expression even pitch that correspondence or enhance the meaning of the words within the texts. The researchers said that many studies has shown those who have good level of prosodic reading are better readers which circle again to what they believe which the better that new graduates students are at reading the more college ready they are [2]. Thus, better reading equal readiness for college. The two indicators could be used to detect students' problems in reading.

In Indonesia, the Ministry of education decided the kind of educational system or curriculum that is implanted in schools. The current curriculum in use, during the creation of this paper is called the 2013 Curriculum. The learning outcome was principally to make students have big creative minds, innovative, and quick thinking as well as courage to face challenges in the future. Compared to USA system, the Indonesia ministry of education did not put college ready attributes as necessary for students who went into college after graduation from high school. Even to this day, schools in Indonesia are still using this curriculum. This brings into questions of whether high schools and even the educational curriculum have truly considered students college readiness as a factor in designing a curriculum.

One way to evaluate whether schools truly have prepared their students to be ready for college at their reading competence is by examining the textbooks they used. The texts inside the textbooks should have proper level of complexity to test and improve students' capability. Using proper level of text complexity, the idea and knowledge within the text would be grasped perfectly by the students, leading to stimulation of their growth in learning both subject and the language [3]. In addition, some studies found that reading skills is an important skills to judge how ready students are for college and decided to list 4 reading skills that teachers can implement at schools, i.e., reading complex texts strategically and independently, close reading, synthesizing ideas across multiple texts and reading stamina/wide reading [1].

The first skill, reading complex texts strategically and independently means that when student read the text, they would try their best reading it through until the end to understand the words, topic, and the text author message by themselves by relying on their own strategize or tools without teachers helping them. The second skill, close reading is the capability of the students to understand the text beyond the surface level, the students are more willing to take more time to analyze the text deeper by applying questions such as what, where, who, why, when, and how to dig the author intention and the topic of the text itself. The third skill, synthesizing ideas across multiple texts is about finding ideas, similarities, difference and even conclusion from multiple text. The fourth and the last skill, reading stamina or wide reading is how long students or readers can read for extended period and how many different topic or genre that they can read.

This paper reports the analysis that the textbooks used in grades 10 to grade 12 to determine whether they have adequate difficulty or challenges that would prepare them for more complex reading at the university level. The texts within the textbooks therefore were analyzed to evaluate their complexity level and progression on each text as students went up from one grade to the next. It is expected that the study to improve the quality of the textbooks, use for senior high school student in the future in the context of reading fluency for hope of increasing future post graduate students to be more ready to face college level of studies. This research was conducted to help and provide insight of positive and negative of the textbooks that were used in the 2013 curriculum in hope that this research could help improve the

current curriculum or help create a better curriculum for the future.

## **2. TEXTBOOKS, ENGLISH LANGUAGE TEACHING, AND COLLEGE READINESS**

The 2013 Curriculum dictate on standards of what the teachers should teach, and students should learn in the subjects it deemed necessary for education. English language was a one of many subjects that was consider important for Indonesia children to learn at schools. The 2013 English Curriculum is the latest product of language policy and development of the subject. In this curriculum system, the English textbooks put prominence on local cultures to be parts of the learning process[4]. The textbooks analyzed for this paper were English textbooks for high school students from grade 10 to grade 12 as recommended by the Indonesia Ministry of education on their Curriculum 2013. It has been used for almost 6 to 7 years which mean the textbooks use during that time most likely had updates and revision. The content of the textbooks in particular the underline level complexity of the texts for each grade remains the same throughout the year.

The reasons behind choosing to research predominantly at English subject was because of prevalent use of English textbooks within college for classes and even for reference during the making of thesis. English language was already categorized as an important and widely use second language in Indonesia, it was included as one of the important subjects for students to learn in the 2013 curriculum. In the data provided by Indonesia *Kementerian Riset, Teknologi dan Pendidikan Tinggi* (ministry of research, technology, and higher education) in the year of 2018[5]. It shows the ratio of total number of students and students who drop out from college or universities on each academic fields. From the data, academic fields of Humanities where English major is located was put at the top 4 of academic field where students drop out with Engineering field at number 1, Economics at number 2, and Arts as number 3. Both number 1 and number 2 have big English language influenced for many of its textbooks and even research articles. Therefore, the better the students are in English language with improve reading proficiency the lesser the chance that large majority of student would drop out from college. Note that the textbooks soft file that was used for this research was introduced around 2013 and varied in revision edition but the textbooks were

gained from the official ministry of education website on the year this paper was created.

Interestingly, there was already a research that discussed on text complexity of English textbooks use in Indonesia Curriculum 2013 [3], but it did not correlate its topic with grading students as college ready. Its primary aimed was to evaluate the texts and the 3 textbooks overall in term of complexity progression. Moreover, there were few and almost no research at all regarding college ready in term of reading proficient in Indonesia that analyze their school textbooks. Analyzing the texts with quantitative method is fine and all, but quantitative data do not directly provide evidence on what made the text complex. It requires closer inspection of the texts by human evaluation on text difficulty in qualitative term to determine which traits promotes its complexity [6]. Hence, this research paper would present the analysis of using both perspectives to evaluate the texts and textbooks complexity for the purpose of priming students to be college ready.

### **3. METHOD**

In this research, the 3 textbooks from English subject textbooks for Indonesia high school education are from grade 10 [7], grade 11[8], and grade 12[9]. The reading texts within it was analyze with text analysis in quantitative and qualitative perspective.

In quantitative analysis, Voyant Tools was used to gained numerical data from each reading text on every textbook that were used. Voyant Tools is a web-based text reading and analysis that is designed to help reading and interpretive practices in digital format for students, scholars, as well as for the public. It can be used for learning how computer-assisted analysis words, study text that found from the internet or from own, add interactive evidence on essays and many more. It is an open-source scholarly project, and the code is available through GitHub. The project was leads by Stéfán Sinclair of McGill University and Geoffrey Rockwell of University of Alberta.

It was used to help found quantifiable data such as with the total words in the texts, the unique words in the texts, ratio between unique and total words, words that frequently show up and its number of appearances, and lastly from the average words per sentence. The texts were uploaded into it and information was shown then the data was rewritten in table form for easier read and used for analysis. The data gained was used to analyze each text within the textbooks and the 3 textbooks themselves as whole to find the complexity of each texts and its

progression as students went up from one grade to the next.

Qualitative analysis of each texts was made by analyzing them with the 4 main points from USA Common Core State Standards English Language in Arts & Literacy that were deemed vital to evaluate texts complexity in preparing students to be college ready which are levels of meaning and purpose, structure, language conventionality and clarity, and knowledge demands. The standards determine the guidelines for English language arts (ELA) as well as for literacy in social studies, science, and technical subjects. Every student would learn to use language effectively in diverse areas on actions such as reading, writing, speaking, and listening. It encourages literacy skills and concepts necessary for college and career readiness in multiple fields.

For the research, each individual text was evaluated by the 4 main points from USA Common Core standards English with authors own expanded criteria adapted from a research[6] table of qualitative measurement of text complexity to suit the analysis. The texts would be individually evaluated on how complex they were and compared from one another, between textbook to textbook and its overall challenge as well as its quality on preparing students to be college ready. Afterwards, the results of both analyses were discussed and followed by suggestions on how well the texts helped teachers to teach the 4 important reading skills.

## **4. DISCUSSION AND ANALYSIS**

### **4.1. Quantitative Analysis**

A website base tool named Voyant Tools was use in the process of this research to find data regarding words in the texts such as total number and vocabulary words density ratio. Vocabulary words density ratio mean ratio between total unique words to total words. Unique words were described by Voyant tools as total of words that show up but not counting their number of appearances except once throughout the text. An example of unique words, the word "I" and "you" was use multiple times throughout the text, but each only counted as one. By knowing the ratio, it will help in deducing the complexity of the text, the bigger the number of unique words means there more variety of words that are use and we can compare that variety to the number of words where the bigger the ratio the more varied which led to be more complex. Using the website, the reading texts from all the English textbooks from grade 10 to 12 was put into them and got the following result on table 1 to 3.

**TABLE 1.** Grade 10 Voyant Tools data

Chapters	The text title (page)	total words / unique words	Vocabulary words density ratio	average words per sentence
1	email from hannah (4)	235 / 147	0.626	9.4
	letter from Saidah (5)	235 / 156	0.664	11.2
2	Dialog: alif friends gave congratulations for his promotion (23)	223 / 127	0.57	7.2
	Dialog: cita won the competition, ditto congratulate her (24)	108 / 60	0.556	6.8
3	read and perform the dialog (40)	320 / 127	0.397	6.8
4	Tanjung Putting National Park (53)	413 / 213	0.516	17.2
	Taj Mahal (58)	267 / 155	0.581	14.8
5	Niagara Falls (72)	484 / 240	0.496	15.6
6	Concerts cancellation announcement (83)	194 / 106	0.546	24.3
	Advertisement: announcement of special school class promotion (84)	188 / 105	0.559	31.3
7	script interview wright brothers (97)	321 / 175	0.545	10.4
8	Meeting my favorite idol, Afgan (110)	367 / 187	0.51	13.6
	Battle of Surabaya (123)	320 / 180	0.563	17.8
10	BJ Habibie (134)	504 / 283	0.562	14.4
11	Cut Nyak Dien (145)	592 / 269	0.454	16
12	Issumboshi (1570)	670 / 295	0.44	9.4
13	Malin Kundang (172)	408 / 179	0.439	14.1
	total	4728 / 2387		

From the result of the vocabulary words density ratio, most of them almost reach 0.5 points with only 2 pass it. With it, we can imply that those texts were indeed deserved to be called complex with almost half of the words inside them were unique words which mean many varied vocabulary words were used on the texts. From the average words per sentence segment, the data showed that the words per sentence were long, with the biggest number at 31.3, which mean many uses of compound words, connected words and conjunction within the texts, however, the text that have the biggest point was an advertisement text. Superficially, this gave impression that all the texts were sufficiently complex, this was grade 10 textbooks for student who just enter senior high school, but something was not sitting well.

Let us look at the total number of words per chapters and try to see it. There were texts that have big total number of words but the number of texts with smaller total number of words was greater. If we take 400 total words and above as texts that is

lengthy and complex, we have big total number of words that means there are only 6 out of 13 total texts which almost half but for the other half, 7 texts, it went with 108 total words as their smallest and highest at 367 total words. This numbers could barely be called a challenge to senior high school students who in current generation already exposed to English language culture almost daily. The average words per sentence despite bring good value and impression of complexity, the text that have the biggest value in that area was an advertisement text. Advertisement text are always created to be easy to read for reaching the maximum wide of audience who could read words and they have long words per sentence for the purpose of keeping the reader attention, not challenge them to understand what the texts is all about. Chapter 12 text called *Issumboshi*, a folk tale from Japan, have the biggest total number of words in the textbook, but their average words per sentence belong in the lower spectrum being the third from lowest to highest.

**TABLE 2.** Grade 11 Voyant Tools data

Chapters	Text title (Page)	total words / unique words	Vocabulary words density ratio:	average words per sentence
1	conversation 1 (2)	77 / 49	0.636	4.5
	conversation 2 (3)	62 / 47	0.758	4.8
2	conversational text (19)	150 / 97	0.647	10
3	read the excerpt of the play (33)	94 / 53	0.564	11.8
4	global warming (46)	268 / 153	0.571	17.9
5	read the letter (62)	213 / 129	0.606	10.7
6	conversational text (75)	107 / 75	0.701	7.1
7	No reading texts			
8	earthquakes (100)	193 / 124	0.642	16.1
<b>Enrichment</b>				
1	The Enchanted Fish (115)	1022 / 315	0.308	13.3
2	Stop Bullying (122)	760 / 358	0.471	17.3
3	Parts Presiden Soekarno Speech (128)	487 / 232	0.476	14.3
4	Vanity and Pride (134)	958 / 372	0.388	8.7
5	Letter to God (144)	1145 / 398	0.348	12.9
6	The Last Leaf (152)	1021 / 423	0.414	10.5
7	Ki Hajar Dewantara (159)	667 / 328	0.492	19.6
	<b>Total</b>	<b>7224/3153</b>		

Compared to grade 10, grade have special section called enrichment that focused on reading activity. This special section has texts that are longer than the normal chapters with their shortest being 487 total words while the biggest in the normal chapters was 268 total words.

If we evaluate it based on the normal chapters, grade 11 have the lower difficulties from the previous grade textbooks. It has 4 conversational texts, 1 excerpt of a play, 1 letter, and 2 informational texts, all of which is easy to read and understand with just one time reading. The normal chapters went through similar predicament with grade 10 on their vocabulary words density ratio where short texts have bigger ratio number and when compared with enrichment reading texts that have lower ratio number. It once again showed that shorter texts have more varied words, but this was to be expected as the shorter the total words the easier for the ratio to be closer to 1 for the unique words were fewer even or even totaled the same as the total words. The average words per sentence have varied and big range to one another with the lowest being 4.5 and the largest at 17.9 showing big jump in using compound and connecting words, this probably due to the type of texts it has and inconsistencies in

providing gradual difficulties as students move on to the next chapters.

Compared to enrichment section that focused on reading, many of its texts also had larger total number of words bigger than 500 words with only one exception for the chapter 3. It has 3 story texts, 1 play or drama script, 1 informational text, and 2 historical texts. The number of unique words within have also increased which mean more varied words within the texts itself. The ratio of vocabulary words density become more interesting as none of them ever reach 0.5 value ratio like in grade 10 texts. This implied that the varied words were smaller, but this within expectation since the total number of words are much higher that resulted in many same words being use. This brought an interesting discovery from the previous grade 10 table as its texts have more ratio that closer to 1 than texts in grade 11 that are meant to be specialize in reading activity.

The average words per sentence section showed that the texts overall had better range with one another with biggest at 19.6 and smallest at 8.7 points. This differs with grade 10 where the range varied greatly with the biggest at 31.3 and smallest at 6.8 points. Interestingly, the texts that have large were texts that was not a story texts but the

information and historical texts. It was unsatisfactory that the last texts that have the biggest number was a historical text that is easy to read by the students despite the prevalent usage of compound, connected, and conjunction words.

The grade 11 textbook showed that even the ministry of education approved special reading focus section within the textbook to challenge students to be better at reading.

**TABLE 3.** Grade 12 Voyant Tools data

Chapters	Title (page)	total words / unique words	Vocabulary words density ratio	average words per sentence
1	dialog 1 (12)	122 / 74	0.607	7.6
	dialog 2 (13)	151 / 92	0.609	7.5
	dialog 3 (13)	64 / 46	0.719	6.4
	dialog 4 (14)	81 / 61	0.753	6.8
2	Visit Seattle (25)	443 / 260	0.587	16.4
3	No reading text			
4	A CV example (58)	193 / 134	0.694	17.5
5	Humber Bridge (72)	103 / 70	0.68	14.7
	News: construction at Jakarta Metropolitan area's (73)	98 / 65	0.663	19.6
6	News: Parents upset, disappointed with online school registration (92)	519 / 218	0.42	23.6
7	News: Indonesia Opens Regional Recycling Conference (107)	225 / 143	0.636	18.8
8	how to make chocolate dipped strawberries (119)	98 / 72	0.735	16.3
	how to breed leopard gecko (130)	586 / 257	0.439	14
9	Tips on dog bathing (133)	661 / 279	0.422	19.4
	how to operate photoshop (148)	565 / 229	0.405	17.7
11	No reading text			
	total	3909 / 2000		

Upon reading the data from the table, grade 12 texts overall could be described as down grade from grade 11. Many of its texts have total number of words below 400 words and its biggest text was around 600 words. There were only 5 texts from a total of 14 texts that had more 400 total words and 3 of the texts was instructional texts which mean they were not texts that can be considered as challenges for the students. Intriguingly, there were 2 chapters that did not have any reading texts as tasks to do. Through all of it, it can be said that it was too similar case with grade 10 textbooks on almost everything that the data table shown such as same case of big ratio value, repeated words that were simple, except for average words per sentence where longer texts have the highest value, but the shorter texts value was not too far behind. One words could be used to describe grade 12 textbook for being last class to teach and prepared students for college and that is a disappointment.

The 3 English textbooks from grade 10 to grade 12 of high school look like it had some complex texts but the quality, seen from the table, was very varied and lackluster to say the least. Grade 11 was a very special textbook as it had special section that consist of 7 chapters with primary focus to teach and challenge the students reading skills. It was the only textbooks to have texts that have total number words reach at least 1000 words with the other textbooks texts inside never reach beyond 700 total words. Grade 10 and grade 12 were almost like a mirror of themselves with grade 12 being the weaker one as its last chapters did not even have a reading text. The reading challenge spiked with grade 11 textbook with grade 12 being the declining line which is inconsistent and disappointing as grade 12 is meant to the final grade and lesson that truly challenge the students with all their studies in high school before going to college or university. Grade 12 is the last grade for students to improve their reading skills so

that they will be ready for college level reading. At college level reading texts are not just limited to one or two textbooks, specialty textbooks, internet articles, and journal articles.

The data gained showed that the 3 textbooks recommended by the government to all schools in Indonesia was lacking in challenges to improve students reading skills and abilities. At one point with the grade 11 textbook, they realized that reading was an important skill to considered even to the point of creating special section within the textbook that was separate from the main chapters to focus entirely on that. On grade 12, however, they did a 180-degree movement and choose to opt out the implementation of reading sections separate from the main chapters. The research by Putra & Lukmana [3] claimed that there was complexity progression from grade 10 to 12. However, based on the data analysis provided with the help of Voyant tools we can see that complexity progression was insignificant at best with grade 12 being lower compared to grade 11. This difference could be caused by the different updated version or revision of the textbooks used for their and this research.

#### **4.2. Qualitative analysis**

Continuing the research, this paper added another perspective in the form of a qualitative format to judge the textbooks with the same term of teaching students to be college ready through their reading skills by evaluating the texts complexities. The goal of introducing English subjects to students around

the world of Indonesia was to make them speak and write English language to be able to not only communicate using the widely accepted language around the world but also to be able to compete at internationally level be it competition or jobs application. In the USA, they have a The Common Core State Standards for English Language in Arts & Literacy whose main purpose was to “prepare all students for success in college, career, and life by the time they graduate high school” and they did it by asking the students to read more complex texts in varying form with the hope for gaining important skills that supplied them for success.

The Common Core State Standards of English Language in Arts & Literacy listed 4 points that help promote text complexity in qualitative form which were: levels of meaning and purpose, structure, language conventionality and clarity, and knowledge demands (Fisher & Frey, 2014). Those 4 points would be use in analyzing the complexity of texts throughout each textbook individually first and then as a whole per textbooks. Research by Fisher and Frey expand the 4 points turning it into Qualitative Measurement of Text Complexity table and uses them as evaluation criteria for teachers on the textbooks they use to teach their students regarding reading and comprehend texts. Using the same 4 points with expanded categories adapted from Fisher & Frey Qualitative Measurement of Text Complexity table for each of the point, every texts individually would be evaluated with it to uncover the quality of its complexity.

**TABLE 4.** qualitative complexity evaluation on texts

	Texts that required help or guidance from other people	Texts that required advanced reading and comprehension	Texts that required minimum effort to read and comprehend
<b>Level of Meaning and Purpose</b>			
Main Idea or Purpose	Main idea or purpose is abstract and could be interpreted in many ways	Main idea or purpose is not clear but can be deduced from the contents of the texts	Main idea or purpose is easily identifiable by the reader
Use of Figurative Language	More advanced Figurative language is use, play key role in understanding the texts purpose	Figurative language application is harder and grows in number but the text itself provide enough information for reader to understand the words	none or below 3 uses of figurative language
<b>Structure</b>			
Organization	Organization is distorted in purpose to make it harder for the reader to	Organization is mostly one path but diverge at some	Organization is clear to see, structural, chronological and reader

	follow and require intense reread of past sentences or paragraph before continuing to the next	point before going back to the main path	is easy to be follow through the text
Narration	Narration is distorted and jumping from one point or perspective in purpose to disrupt reader focus and force reader to take mental note and find clues within the text	Narration stick to conventional but limited information is provided and sometime like to jump from one character to another	Narration is easy to follow and stick to conventional method of perspective, either first or third person point of point.
<b>Language Conventionality and Clarity</b>			
Standard English and variation	The texts have higher level of English language, many varied and unfamiliar English language words	Difference exist between reader level of English language and what the texts uses, such as the appearance of accent or words that is not found in English language (different language words)	The English language use is the same level as what the reader capable of
<b>Knowledge Demands</b>			
Background Knowledge	The text demand extensive knowledge before reading the text and provide no back up information to make it easier for inexperienced reader	Background knowledge is needed but the text provides enough information for reader to understand	No background knowledge of the topic needed to understand the texts
Cultural Knowledge	Extensive cultural knowledge is needed and is far from familiar to where the reader is used to	Cultural knowledge is needed but is not far from cultures that reader is close or familiar with	No cultural knowledge is needed
Vocabulary Knowledge	The texts expect the reader to have wide knowledge of vocabulary words and provide no help	New and unique vocabulary words are introduced but reader can deduce the meaning from the information within the texts	Vocabulary words is known and not far from what the reader have learned

For grade 10, most of the texts were put on left side of the table where it considered to be easy and not challenging enough. If we categorize the kind of texts it have, we got: 2 mails, 3 dialog text, 3 explanatory text on real world places, 2 announcement, 1 interview script, 1 diary like text, 4 history text, and finally a folk tale. Many of its texts were the type of texts that designed to be very easy to read as they did not demand great effort to be understand as their purpose were easily identifiable. The 2 mail were just short mails about trying to be friend with the receiver, like a pen mail friendship.

The 3 Dialog texts were short daily life conversational acts, and the 2 announcements was about a concert being cancelled while the other is advertising of a special school class. The 3 history texts required give out variety of vocabulary words, but all of it can be ignored and even found out what it meant by reading through and understanding the texts.

The idea of history texts is by all mean telling the historical event or person therefore student just need to read as everything was laid bare for them to understand the significant of the event or the



important figures. The only kind of texts that is better than the other was the folk tale texts which are known to have indirect good message for the reader to found out. One of the folk tales originated from Japan translated into English where the translation still shown the Japanese writing style that is differ from western like storytelling. The other folk tale was named *Malin Kundang* a popular folktale among Indonesians children especially those that can read books, therefore the moment students read the title they most likely already know the content of the text. The entire texts within the textbook use few or even no figurative language, the organization and narration were simple to follow, and the English language used were all easily read.

For grade 11, the textbooks fair better as it had special section categorize as enrichment that focus entirely on reading and comprehending the texts within. As we have seen from quantitative data with the help of Voyant Tool, its normal chapters were a letdown as it has texts that have lower total words than grade 10 texts and it suffer similar vocabulary words density ratio predicament where their total words and unique words have short differences. Their enrichment texts have big total words which mean students were asked to give out some of their time to fully read and understand the texts. In qualitative format, the text from the normal chapters suffered as it seems that they put more focus on the enrichment texts to be more complex. Those texts were all evaluated as very easy to read and provide no challenge at all. The enrichment texts consisted of 4 story texts, 1 calling to act text, 1 speech from historical event, and 1 historical text that form a total of 7 texts. The 4 story provide some challenge as their main idea as whole was not directly told but can still be deduced. The speech text by President Soekarno was not the full speech, only parts of it, but it did provide challenge in founding what was President Soekarno meant to speak of with his speech. The other 2 text were easy to figure out by nature of their text kind that provide information as much as possible for the reader to understand its purpose which was to stop bullying and learn about the historical figure Ki Hajar Dewantara. The rest of the points, figurative language, organization, narration, standard English and variation, background knowledge, cultural knowledge, and vocabulary knowledge all the texts went into the easy side of the spectrum. The textbooks with its enrichment texts landed better in their complexity than previous grade albeit miniscule and many of its parts were still deemed to only need minimum effort in the qualitative table.

For grade 12, the quality of texts within reduced and made it too easy almost to the level of grade 10 textbooks or even lower. Out of the 14 text within the textbook there were: 4 short dialog, 1 example of CV, 2 text about real word places, 3 texts that are from newspaper or article, and 4 “how to” text. All of them have their main ideas or purpose as a text in plain sight, the students would immediately know what they would learning from them which look like a good point but in term of improving their reading fluency this was failure. The narrative and organization were all easy to follow from beginning to end as the kind of texts in there was never meant to make the reader questions or reread multiple times of the words and sentences within the texts.

Any form of knowledge demand was almost non-existent as the text did not demand the reader to went out of their comfort zone with the reader slowly guided through with explanation. One newspaper was a very short news about construction which focus as an announcement that there were going to be construction. The other news was about parents upset at difficulties and hurdle in school registration for their children and last news was about announcing that there was an opening of a conference. The last 4 chapters that have reading texts were all an instructional or tips text whose purpose is to take the readers step by step on achieving the desired results according to the topic of the texts.

#### *4.3. Discussion on quantitative and qualitative analysis*

The quantitative data show that out of the 3 textbooks, grade 11 have better position in term of complexity with grade 10 and 12 valued at about the same. Grade 11 have greater total number words as a textbook and even though ratio between total words and unique words of each texts mostly scored below grade 10 and 12, this happened because of their difference in text length. The grade 10 and 12 disturb their value with their short length texts that make the value of total words and unique words closer to the other. At first glance, it seems that there was complexity progression from one grade textbook to the next level grade as from the table we can see that each textbook specializes in different value that show how complex they were. Grade 10 have big numbers on average words per sentence while grade 11 have greater length texts, and grade 12 with better ratio value per texts as it had more ratio value that went reach or above 0.6 value. There was no consistent upgrade across the textbooks, but they were providing challenge to the students in their own way.

When taking a closer look at the quality of each text, it was found out that any complexity was almost entirely abandoned in favor of simple with miniscule difficulties for the students. The type of texts they had were mostly explanation texts and historian texts, both were purposely designed for easy reading. Few of the texts demand any challenge for the students like have enough knowledge regarding certain topic. In college level, where students are specialized in subjects of their choosing, the texts that students would read aimed at people who have at least small, advanced knowledge of that subjects. The texts did not demand more time for the reader to reread multiple times to fully understand them as it seems like the texts that are there want the students to easily read and past them to go through to the next lesson topic or chapters within then textbooks. In college, the texts challenge the students focus as they have longer texts, more varied and specialize vocabulary words, and many perspectives to take look at to understand the whole picture of what the texts want to tell.

#### *4.4. Impact on the 4 reading skills that teacher should teach their students*

As previously mentioned on the introduction, there are 4 reading skills that teachers should taught their students in accordance to reading fluency. Those 4 skills are reading complex texts strategically and independently, close reading, synthesizing ideas across multiple texts and reading stamina/wide reading. This connected with reading complexity within the textbooks as teachers would surely use the textbooks which they were provided as tools to teach those skills, therefore if the textbooks were not appropriately leveled, those 4 skills could not be gained by the students.

The first skill, reading complex texts strategically and independently the students did not need any help from teachers as the text was not hard to understand and most of the text directly inform the reader its purpose the moment, they could read the title or the first paragraph. No strategy was needed to such as reread or understanding words one by one to figure out the sentences and paragraph. The second skill, close reading, students did not need to give out large amount of time to figure out the texts purpose and did not required to analyzed further with the use of questions such as what, where, why, who, when and how because of the small level of comprehension needed to understand the texts. The third skill, synthesizing ideas across many texts there were activities that tasked the students to analyze two texts, but with how simple the texts was the

chance for students to keep improving the skill for college such as finding comparing textbooks or journal articles for making paper or thesis is small. The fourth skill, stamina reading or wide reading which most of the texts on grade 10 were few in total number of words and can easily be read in one sitting while grade 11 have better chance to implant the skill with its special section that focused on reading but grade 12 return to grade 10 level of complexity which render the skill on hold from improving.

## **5. RESULT AND IMPLICATION**

Through quantitative and qualitative analysis, it can be determined that 3 textbooks of English subject for high school offered little challenge and complexity for the students specially to make them ready for college levels of studies which they will most likely face after graduation. Since the textbooks was commissioned by the government as a guideline or standard of what to be teach to students, this was alarming as the ministry of education division easily approve such level of reading texts for students in their high school studies. An interesting revelation was with grade 11 where it has special section dedicated on improving students reading ability, but it was forsaken in the following grade 12 textbook. This kind of approach probably stems from the notion that English even though widely considered as beneficial language to learn was deemed to have small importance in grand scheme of Indonesia students and children education. Added on the fact that currently the curriculum has not taken reading fluency into consideration when approving the textbooks.

The simplicity permeating throughout the textbooks seemed to overlook students' capability to handle texts that were more complex and demanding. At a certain level, there seemed to be a flow of complexity that progressed from grade 10 to 11, but in grade 12 the complexity level just dropped. Considering the variety and complexity level of the reading texts at the university level, it is important that future authors of English textbooks consider varying and progressing the levels of difficulty in students' textbooks, especially to implement the necessary texts complexity and activities to teach students the 4 important reading skills that necessary for them to be ready for college and beyond. With more consideration on students reading fluency, the chances of students having trouble reading difficult texts on college could be reduce so they can focus more on making their tasks and finishing their thesis, therefore increasing the number of students that graduate college. English language by itself is an

important language as many more jobs and company that become more interactive with international people which English is use as the global language for interaction. The reading skills that they gained can also be use on other languages as the benefit from the skills is not language lock. The more knowledgeable and skilled students are, the wider and bigger their success prospects are.

## 6. CONCLUSION

The conclusion of this study found that there is little additional complexity across texts and textbooks based on grade increments. We found that reading texts were less challenging and insufficient to help students prepare for college-level reading.

## REFERENCES

- [1] Springer S E, Wilson T J and Dole J A 2014 Ready or not: Recognizing and preparing college-ready students *J. Adolesc. Adult Lit.* **58** 299–307
- [2] Rasinski T V., Chang S C, Edmondson E, Nageldinger J, Nigh J, Remark L, Kenney K S, Walsh-Moorman E, Yildirim K, Nichols W D, Paige D D and Rupley W H 2017 Reading Fluency and College Readiness *J. Adolesc. Adult Lit.* **60** 453–60
- [3] Putra D A and Lukmana I 2017 Text complexity in senior high school english textbooks: A systemic functional perspective *Indones. J. Appl. Linguist.* **7** 436–44
- [4] Parlindungan F, Rifai I and Safriani A 2018 The representation of Indonesian cultural diversity in middle school English textbooks *Indones. J. Appl. Linguist.* **8** 289–302
- [5] Dikti M 2018 *Indonesia Higher Education Statistical Year Book 2018* vol 15
- [6] Fisher D and Frey N 2014 Understanding and Teaching Complex Texts *Child. Educ.* **90** 306–13
- [7] Utami W, Zuliati R and Furaidah 2014 *Bahasa Inggris - Studi Pengajaran Kelas X* ed A Helena, E Emi and S Raden (Jakarta: Pusat Kurikulum dan Perbukuan, Balitbang, Kemendikbud)
- [8] Mahruk B 2014 *Bahasa Inggris - Studi dan Pengajaran kelas XI* ed E Emi and A Helena (Jakarta: Pusat Kurikulum dan Perbukuan, Balitbang, Kemendikbud)
- [9] Utami W, Zuliati R and Furaidah 2013 *Bahasa Inggris - Studi dan Pengajaran Kelas XII* ed A Rasti (Jakarta: Pusat Kurikulum dan Perbukuan, Balitbang, Kemendikbud)