

DEVELOPING HIGHER-ORDER THINKING SKILLS (HOTS) READING COMPREHENSION QUESTIONS FOR SENIOR HIGH SCHOOL STUDENTS

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ABSTRACT

This developmental research aims at developing Higher-Order Thinking Skills (HOTS) reading comprehension questions for senior high school students. This is in line with the national educational goal which is to increase the national competitiveness in the global era while manipulating Higher-Order Thinking Skills (HOTS) in the global communication. This research is supported by the theory that HOTS questions enable students to think critically. The ADDIE model of instructional design is applied in the process of creating the HOTS reading comprehension questions. Two authentic analytical exposition texts and two authentic explanation texts are used as the reading materials. Twenty five multiple-choice questions of the Analyzing, Evaluating, and Creating levels of the cognitive domain of the Revised Bloom's Taxonomy (RBT) are developed. A blue print is used as the basis for the questions development to ensure the content validity of the questions. Fifteen students did the test and their answers were scored by the writers. K-R21 was applied to examine the reliability coefficient resulted in $r=0.68$. This is considered as a high reliability. It is expected that this paper would give beneficial insights for teachers and reading material developers that providing HOTS questions are important for students as reading exercises or tests and that a multiple-choice type of questions can be used. Hence, it is also recommended that other studies be conducted in the use of other types of questions at the level of HOTS to provide more variations of reading programs for students.

Keywords: *reading comprehension questions, Higher-Order Thinking Skills (HOTS), Lower-Order Thinking Skills (LOTS)*

INTRODUCTION

English has become a means of the international communication in the fields of transportation, commerce, banking, tourism, technology, diplomacy, scientific research, and other fields (Brown, as cited in Asrini, 2011). Thus, being able to master English is one of the important skills required by people across cultures to survive in the new modern era. Paul (2003) and Lucantony (2001) assure that among the four language skills, reading is an important skill that should be mastered by a language learner in order to achieve good communication skills. Therefore, reading skill is crucial in language learning. Besides, reading can also enhance learners' vocabulary mastery and extend learners' knowledge of the world.

Richards (2006) proposes the concept of communication as the delivery of information by a speaker, which can be ideas, skills, or others, using media such as words, symbols, graphics, et cetera to strengthen information in order to be understood by a receiver. A successful speaker does not only need the four skills and three components but he/she should be able to manipulate good analytical thinking skills to convey the intended message. The expert stresses further that the goal of language learning is to develop fluency in language use. Fluency can be described as a natural language use when a speaker gets involved in a meaningful interaction and keeps comprehensible meaning for ongoing communication despite his limited communication ability. He adds that in the classroom setting "fluency is developed by creating classroom activities in which students must

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negotiate meaning, use communication strategies, correct misunderstandings, and work to avoid communication breakdowns.”

Based on the English syllabus of the senior high school in Indonesia in Curriculum 2013 or known as *K-13 (Kurikulum 2013)*, the aims of the English lesson is for the learners to be able to communicate in English; and as such, the syllabus is developed based on the Communicative Language Teaching. This can be seen from the presentation of the basic competences which focus more on fluency over accuracy. That language is the focus of learning which is affirmed in the following two basic competences in the English syllabus, namely (1) applying social functions, text structures, and linguistic elements of spoken and written interpersonal interaction discourse that involves the act of offering services, and responding to them, according to the context of their use, and (2) understanding captions for pictures/tables/graphs/charts taking into accounts the social functions, text structures, and the appropriate language features (<http://staff.uny.ac.id/sites/default/files/pendidikan/drs-sudarmaji-mpd/03-kompetensi-dasar-sma-2013.pdf>, retrieved: November 18th, 2021).

Richards (2006) stresses that in the communicative language learning, to develop fluency in communication, a learner must negotiate meaning, use communication strategies, correct misunderstandings, and work to avoid communication breakdowns. This means that a language learner should practice using his high-order thinking skills.

In relation to the above explanation, in order to measure students’ achievement in the reading comprehension, teachers should use questions which can measure students’ ability in using their high-order thinking skills. Commonly, teachers use questions provided in the textbooks to measure students’ comprehension of the passages in the English class. However, if the questions available are mostly Lower-Order Thinking Skills (LOTS) questions, students will not be able to practice their critical thinking, such as in negotiating meaning and avoiding communication breakdowns. This means that they do not practice manipulating their High-Order Thinking Skills (HOTS).

Studies have been conducted on reading comprehension questions available in several English textbooks used by senior high schools. The results of the studies show that most of the questions require learners’ use of more LOTS rather than HOTS. Such questions require students’ understanding of factual and literal comprehension of the texts rather than students’ skills in negotiating meaning as needed when they manipulate their high-order thinking skills.

The research findings by Dina (2021) show that the reading comprehension questions in the English textbooks she has analyzed are dominated by LOTS questions with percentage of 77%. Another study by Agustini (2016) shows that the reading comprehension questions in other English textbooks are dominated by LOTS questions with the percentage of the 59.62%. In order for the English teachers to be able to help their students to achieve the basic competences in the syllabus which focuses on the communicative competence like the one proposed by Jack C. Richards covering the use of the skills in negotiating meaning, using communication strategies, correcting misunderstandings, and working to avoid communication breakdowns, teachers should be able to create and give reading comprehension questions that focus on Higher-Order Thinking Skills.

Bloom’s Taxonomy represents six cognitive levels of human thinking skills covering the low-order thinking skills and high-order thinking skills. The revised Bloom’s Taxonomy is divided into 6 (six) levels namely: Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating (Anderson and Krathwohl, 2001). Remembering, Understanding, and Applying are categorized as LOTS. And for Analyzing, Evaluating, and Creating are categorized as HOTS. Anderson and Krathwohl (2001) propose action verbs that can be used by teachers to make questions for reading comprehension. However, generally most teachers only use questions available in the English textbooks.

As mentioned previously, the results of several studies show that there are more reading questions in the textbooks focusing on LOTS rather than HOTS. This fact does not support the national goal of Indonesian education which stresses on increasing the national competitiveness in the global era in manipulating Higher-Order Thinking Skills in the global communication. This paper is a report of the research done to develop Higher-Order Thinking Skills reading comprehension questions in the multiple-choice type for Senior High School students.

Reading Comprehension Questions

Reading plays a vital role for academic achievement and necessary role a competent adult should perform in nowadays society (Sari, 2015). According to Angosto et al. (2013), reading is a matter of decoding a series of written symbols into their equivalents of aural in the quest of making sense of the text. Reading comprehension is some ways to understand, to gain meaning and to interpret the text depending on a variety of reader-related, text-related, and situational factors (Brassel, as cited in Sari, 2015). Reading comprehension is a flexible and ongoing cognitive and constructive process. Hoover & Gough (1990) assure that reading comprehension can be conceived as the process to recognize words and transform them into a certain idea either written or spoken. Reading comprehension is divided into three levels, namely literal comprehension, interpretative comprehension, and critical comprehension. The literal comprehension is the basic level which learners are able to gather the meaning of certain words. The interpretative comprehension concerns with the readers' capability to comprehend ideas or thoughts that are not explicitly written in the text. The highest level is the critical comprehension which requires readers to be able to personally react and then give their evaluation about the information that is given in the text. In this level, meaningful communication takes place.

Reading comprehension questions are basically questions to test the readers' understanding based on the reading text given. There are several reading comprehension question types to measure the extent of comprehension readers have achieved.

Heaton (1991) states that, based on the forms, questions are divided into two main types, namely subjective and objective questions. The objective test questions consist of multiple-choice, true or false, completion, and matching items. The multiple-choice type is the most popular question type emerging in the audio-lingual approach and up to now when the communicative approach is considered as paramount importance. A multiple-choice (m-c) question consists of a stem, several distractors, and one correct answer. As an objective question, m-c question is considered reliable; and moreover, a lot of items can be included in one set of exercise and test. As such, this type of question has been widely used in most high-stake tests which cover a large scope of materials to be measured in one test battery.

Experts in education have proposed guidelines for constructing multiple-choice questions. Sixteen rules for developing multiple choice questions are presented below:

1. Each item should be designed to measure an important learning outcome.
2. A single clearly formulated problem should be presented in the stem of the item.
3. The stem should be stated in simple and clear language.
4. The stem should contain the wording as much as possible to avoid any repetition.
5. Wherever possible, the stem of an item should be stated in positive form.
6. Whenever negative wording is used in the stem of an item, it should be emphasized.
7. The intended answer should be correct or clearly best.
8. All the alternatives should be grammatically consistent with the stem of the item.
9. Verbal clues that might enable students to select the correct answer or to eliminate an incorrect alternative should be avoided.

10. The distractor should be made plausible and attractive to the uninformed.
11. The relative length of the correct answer should be varied to eliminate length as a clue.
12. The alternative “all of the above”, and “none of the above” should be used with extreme caution.
13. The position of the correct answer should be varied in a random manner
14. The difficulty level of the item should be controlled either by varying the problem in the stem or by changing the alternatives.
15. Each question should be independent of other items.
16. Question format should be made as efficient as possible.

(adapted from <https://testing.byu.edu/handbooks/14%20Rules%20for%20Writing%20Multiple-Choice%20Questions.pdf>, retrieved: November 1st, 2021)

In this research, the writers developed multiple-choice questions to be used in the instructional setting. Each question consists of the stem and three options containing one correct answer and two distractors. The decision to provide three options in each question is based on the result of some researches which reveal three is the optimal number of options in a multiple-choice question that can be suggested (<https://elearningindustry.com/how-many-options-should-a-multiple-choice-question-have>, retrieved: December 12th, 2021).

Assessment of the 21st Century

The focus of assessment in the 21st century is to apply the basic literature to the students into their daily activity which consists of the evaluation on knowledge, skills, and attitude. According to Safari (2019), there are three aspects of evaluation such as: (1) the basic literature which consists of reading, numeric, Information Communication and Technology, financial, culture, and nation, (2) the ability to solve the complex problems such as, critical thinking, creativity, collaboration, and communication, and (3) the quality of students in adapting in a new dynamic environment, such as, being curious, initiative, and persistent. Those three aspects are able to influence the students to think critically and easily to adapt in a new environment. Safari (2019) states that there are several types of questions that can stimulate the students’ thinking. They are a combination of multiple choice, essay, short answer, matching, and True or False questions. Certainly, those types of questions should be adjusted to the cognitive levels of HOTS.

Revised Bloom’s Taxonomy

The cognitive domain of Bloom’s Taxonomy consists of six levels of thinking. The current concept of thinking skills of the cognitive domain is based on the revised Bloom Taxonomy (RBT) with the six levels of cognitive domains, namely remembering, understanding, applying, analyzing, evaluating, and creating (Anderson & Krathwohl, 2001). In the cognitive domain of the old Bloom’s Taxonomy the lowest level of thinking is the ‘knowledge’ level and the highest is the ‘evaluation’ level. Meanwhile, in the new version of Bloom’s Taxonomy (the RBT) the lowest level is ‘remembering’ and the highest level is ‘creating’. The comparison of the two versions is presented in Figure 1.

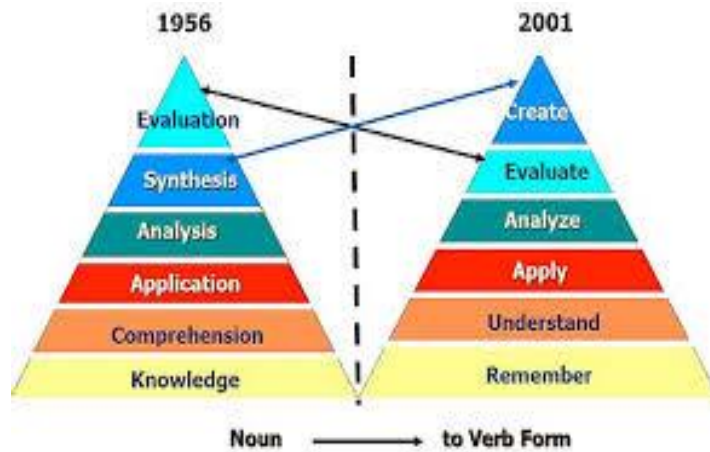


Figure 1. Original Bloom's taxonomy vs. Revised Bloom's Taxonomy

In the school setting, the cognitive domain of Bloom's Taxonomy is used to base the measurement of students' achievement. Teachers give questions and test to measure students' ability in remembering, understanding, applying, analyzing, evaluating, and creating in accordance with the objectives and the materials they have learned. However, it is widely understood that measuring students' achievement in the three low levels (LOTS) are easier than in the three higher levels of thinking (HOTS). In terms of the English lessons, the reading materials in most English textbooks contain more LOTS questions than HOTS questions. This fact has raised concern among the experts in education as the goal of learning should focus on training the students to be able to apply their critical thinking skills; thus, to apply their high-order thinking skills.

In line with the objective of this research, the writers developed HOTS reading comprehension questions for the senior high school students. Thus, the questions measure the levels of analyzing, evaluating, and creating of the revised Bloom's Taxonomy of the cognitive domain. The descriptions of the three HOTS levels can be seen in Table 1.

Table 1. The descriptions of three HOTS levels

The HOTS levels	Descriptions
Analyzing	Examine and break information into parts by identifying motives causes. Make inferences and find evidence to support generalizations.
Evaluating	Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria.
Creating	Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.

ADDIE Model

The ADDIE model is implemented in the development of the reading comprehension questions. The ADDIE model is a framework that lists generic processes that instructional designers and training developers use. It is assumed that this is the most common model used for creating instructional materials. Not only for creating instructional materials, but also can be applied in any other aspects. The ADDIE model is one of the common models used in instructional design to produce an effective design (Aldoobie, 2015). ADDIE model could be used in any environment as online or face to face. There are five original phases: Analyze, Design, Develop, Implement, and Evaluate, the completion of each phase was expected before movement to the next phase of development.

English Syllabus of the Senior High School

The English syllabus of the senior high school which puts the priority on the communicative competence covers the core competences and followed by the basic competences of the English language (Wachidah, 2013). This syllabus is developed based on the genre approach of language teaching; and as such, the reading materials provide texts from various text genres. As included in the basic competences, the text genres in the syllabus of the senior high school are descriptive text, recount text, narrative text, analytical exposition texts, explanation texts, and procedure texts. In this research, the writers decided to use the analytical exposition and the explanation texts.

Analytical Exposition Text

An analytical exposition text is a text that elaborates the writers's idea about the surrounding phenomenon. The social function of the text is to persuade the readers that the matter is important to discuss and to analyze. The opinion developed by the writers is supported by sound arguments. The generic structure of analytical exposition consists of thesis, argument, and reiteration

Explanation Text

An explanation text is one of the text genres that tells the processes of the forming of natural, social, scientific, and cultural phenomena. The social function of this text is to explain the steps and the reason why the phenomenon happens. The generic structure of explanation text consists of general statement and sequenced of explanation (<http://britishcourse.com/analytical-exposition-text-definition-purposes-generic-structures-language-features.php>, retrieved: November 18th, 2021).

Previous Related Studies

To support this research, the writers have reviewed some research papers that are related to the topic. The research entitled "The development of a reading comprehension test" written by Ezky Centikaya Ozdemir and Hayati Ekyol (Ozdemir & Ekyol, 2019) aims to develop a valid and reliable reading comprehension test appropriate for fourth grade reading comprehension learning outcomes. The participants in the study were 245 fourth graders from three schools at low, middle and high socioeconomic levels in the central district of Kars. The writers used developmental research as a methodology. The result of this research shows that the KR-20 reliability coefficient was 0.83, indicating that this multiple choice reading comprehension test is valid and reliable. Both this research and the current research aim at developing reading comprehension questions; however, the research by Ozdemir and Ekyol used fourth graders as the participants, while the current research used the senior high school students as the participants.

Two other studies reviewed by the writers were conducted to examine the Lower-Order Thinking Skills (LOTS) and Higher-Order Thinking Skills (HOTS) measured by the reading comprehension questions. The study conducted by Dina (2021) shows that the reading comprehension questions in English textbooks are dominated by LOTS questions with the percentage of 77% and for the HOTS questions with the percentage of 23%. Another study by Agustini (2016) shows that the reading comprehension questions in other English textbooks are dominated by LOTS questions with the percentage of 59.62% and for the HOTS questions with the percentage of 40.35%. Both studies have come to the suggestion that English teachers should not depend only on the questions available in the textbooks; hence, teachers should provide more questions of the HOTS levels. This is the reason why the writers are interested to conduct this research in developing HOTS reading comprehension questions.

METHOD

Research Design

The design of this research is the developmental research. According to Sugiyono (2013), this method is used to produce a certain product, and tests the effectiveness of the product. Furthermore, according to Klein & Richey (2005), the developmental research is a kind of systematic study to design, develop, and evaluate instructional programs, processes, and products that should meet with the several criteria of the internal consistency and effectiveness. In this research, the writers applied the ADDIE model through the five phases, namely: Analyzing, Designing, Developing, Implementing, and Evaluating to ensure the internal consistency and effectiveness of the product of the research which is a set of HOTS reading comprehension questions.

Instrument

The main instrument of this developmental research is the writers who have developed the reading exercises consisting of reading texts followed by the HOTS reading comprehension questions.

Participants

In order to conduct the implementation and the evaluation phases of the ADDIE, the writers assigned a group of semester one students of the English Department to answer the questions. The writers decided to assign these students under consideration that they just graduated from senior high school. Fifteen students did the exercises; and therefore, there were fifteen scores that could be used to analyze the reliability of the questions.

The Reading Exercise Development

As stated in the design of the research, the writers applied the ADDIE model of instructional design consisting of 5 phases: Analyzing, Designing, Developing, Implementing, and Evaluating. The stages the writers have conducted are explained as follows:

The analyzing phase

The English syllabus of grades X, XI, and XII have been analyzed to find out what text genres are included in the syllabus. There are 6 (six) text genres included in the syllabus of the three grades: descriptive text, recount text, narrative text, analytical exposition text, explanation text, and procedure text.

The designing phase

In this research only two text genres are chosen for the reading materials, namely: the analytical exposition and the explanation texts. Four authentic reading texts downloaded from the internet are used as the reading materials, in which the writers did some adaptations to suit the needs for developing the questions. A set of parameters was developed to ensure the levels of HOTS asked in each question developed.

The developing phase

In the developing stage, the reading texts that have been selected were analyzed before making necessary adjustments. Then the writers prepared a test blue print as the basis for developing the HOTS reading questions.

Table 1. Test Blue Print

HOTS levels	Codes	Number of Questions
Analyzing	An	Text 1
		Text 2
		Text 3
		Text 4
Evaluating	Ev	Text 1
		Text 2

		Text 3
		Text 4
Creating	Cr	Text 1
		Text 2
		Text 3
		Text 4
Number of questions		25
Question type		multiple-choice with three options each

Table 1. The Reading Texts

Text number	Text genre	Topic
Text 1	Analytical exposition	Procrastination
Text 2	Analytical exposition	Fast food
Text 3	Explanation text	The Eiffel tower
Text 4	Explanation text	Learning coding

In the beginning of the developing stage, questions that were later used as the stems of multiple-choice questions were developed as the subjective (essay) question type. This process resulted in 28 essay questions equipped with the answer keys. From the 28 questions, there are 24 questions that belong to HOTS levels measuring the Analyzing, Evaluating, and Creating levels. One question: *“The saying: ‘Procrastination is the thief of the time.’ Means”* was revised to become a question of Creating level: *The best title for the passage is*. In order to revise this question, the writers made adjustment of the passage by deleting the sentence containing the statement *“Procrastination is the thief of the time.”* As a result of this revision, there were then 25 essay questions that could be transformed into the multiple-choice questions.

The process of constructing multiple-choice questions was conducted based on the rules of constructing multiple-choice questions (adapted from <https://testing.byu.edu/handbooks/14%20Rules%20for%20Writing%20MultipleChoice%20Questions.pdf>, retrieved: November 1st, 2021). Multiple-choice test developers commonly make use of two alternatives of constructing distractors; the first one is by administering the essay questions to the learners and making use of the learners’ mistakes as distractors, and the second alternative is by relying on the test developer’s comprehension of the reading materials. As the writers are not English teachers of senior high school, the first alternative is not chosen. Hence, the distractors for each question were constructed based on the writers’s comprehension of the reading materials.

The result of the questions construction shows that the number of HOTS questions for each text cannot be determined in the process of developing the test blue-print. The process of constructing questions has also proven that not all levels of HOTS can be measured for all reading texts. This depends on the topic and content of the reading texts. Question developers may need to make necessary adjustment of the reading texts to give more chances to develop more HOTS questions. In this research, no question of the evaluation level can be developed for text no 4 as the content of the text does not make it possible for this. The process of the development of each question is presented in Appendix. The Reading exercise content as the result of the development can be seen in Table 4.

Table 4. The Reading Exercise Content

HOTS levels	Codes	Number of Questions
Analyzing	An	Text 1 = 4
		Text 2 = 3
		Text 3 = 3
		Text 4 = 4
Evaluating	Ev	Text 1 = 1
		Text 2 = 1
		Text 3 = 2
		Text 4 = 0
Creating	Cr	Text 1 = 2
		Text 2 = 2
		Text 3 = 1
		Text 4 = 2
Number of questions		25
Question type		multiple-choice with three options each

The Implementing Phase

A group of semester one students of the English Department was assigned to answer the questions. The writers decided to assign these students under consideration that they were just graduated from senior high school. Fifteen students did the exercises; and therefore, there were fifteen scores that could be used to analyse the reliability of the questions.

The questions were given in form of digital exercise and the writers provided a Google Drive link for the students to upload the questions. The link of the Google Drive is https://drive.google.com/drive/folders/1ucM_mhpdPVqafD3mduaVldj7_8E5bCZ?usp=sharing. After fifteen students completed the exercises, the writers did the scoring based on the answer keys, and put the scores on the table of the excel sheet.

The Evaluating Phase

In the evaluation stage, the content validity and reliability of the questions were examined. The content validity was analyzed by conducting a triangulation to check the levels of questions that had been developed by the writers based on the parameters and the test blue print. As explained in the developing stage, an expert judgement was applied to ensure the content validity of the questions. Three questions were discarded and one question which originally belong to the Understanding level was revised to become a question belonging to the Creating level. Based on these reasons, it can be said that the reading exercise has a high content validity and that the questions measure HOTS level of thinking. This is in line with the objective of this research.

To analyze the reliability of the questions, the writers applied K-R21 by the help of the excel microsoft office. The reading exercise developed has a high content validity and high reliability coefficient of 0.68.

CONCLUSION AND SUGGESTIONS

This research aims to develop Higher-Order Thinking Skills reading comprehension questions for senior high school students. Two text genres are used in this research, they are analytical exposition and explanation texts. Two authentic texts are selected for each genre. Multiple-choice question each with three options is used to develop the reading exercises. A set of parameters and test blue print are used as the basis for the questions development. In developing HOTS reading comprehension questions, the writers applied the ADDIE model of instructional design consisting of five stages, namely: Analyzing, Designing, Developing, Implementing, and

Evaluating. The result of the development is the reading exercise consisting of four reading texts and twenty five multiple-choice questions. The reading exercise developed has a high content validity as the questions are developed based on the blue print and the parameters of HOTS levels. The result of the test administration with 15 participants shows a reliability coefficient of 0.68. This is considered as a high reliability.

The developmental research on constructing HOTS multiple-choice questions for reading comprehension materials has resulted in the educational implication that (1) multiple-choice questions (an objective type of questions) can be used to measure students' comprehension in manipulating their Higher-Order Thinking Skills, (2) adjustment of the reading passages may be needed to enable the development of certain questions, especially for the Creating level of HOTS, (3) not all levels of HOTS can be constructed for all reading texts, and (4) when there is no chance to construct distractors by making use of learners' answers in answering essay questions, developers should be able to use their comprehension of the reading texts.

Based on the results of this developmental research, the writers would like to suggest: (1) the use of objective questions - as shown in the questions development done in this research, the multiple-choice questions - as alternative questions to measure HOTS levels, and (2) teachers should train themselves to construct multiple-choice questions of HOTS levels and use them for their students, so that students could practice manipulating their Higher-Order Thinking Skills.

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APPENDIX

The process of development of each question

The test blue print includes three HOTS levels in the cognitive domain of the RBT, namely: the analyzing, evaluating, and creating levels. Twenty multiple-choice questions are developed for two analytical expositions and two explanation texts. In the initial process of the questions development, 28 questions were developed – three questions of which were then discarded.

The development process of the questions for the analytical exposition entitled ‘Procrastination’ and the explanation text entitled ‘Learning Coding’ is presented as follows:

Text 1:

Procrastination is the act of putting off doing something important till a later date. Most of us procrastinate now and then. We may make big plans such as cleaning the house or starting on a diet but never carry them out. We may feel reluctant to take risks or try something new. Some of us blame others or situations for our unhappiness or to avoid doing something. While it's only an occasional problem for most, procrastination can be a chronic stumbling block for some.

There are many reasons for procrastinating. The first is that we may **dread** taking on a difficult or boring job. The other reason is fear of failure. When a task is perceived as long or difficult, many will procrastinate simply because there is no immediate gratification. For example, we may put off dieting because it could take months to lose those ten pounds. Fear of failure often comes into play at school where performance is evaluated and can affect our future success. A student may put off studying for a test until the last minute. Lack of time spent studying is a more desirable explanation for failure than lacking intelligence to learn something.

However, that one extra day (and the cake) does make a difference. Procrastination causes stress, anxiety and a feeling of failure. Students who fear failure ultimately face failure when they do not prepare for tests or start projects on time. Employees who begin tasks at the last minute rarely perform as well as their non-procrastinating colleagues. Putting off a diet program ultimately adds to the number of pounds you need to lose to be healthy, thus making the job much harder to accomplish.

If you are a chronic procrastinator, you will not cure yourself in a day. In order to come out of the habit, you need to follow these steps. First, figure out why you are procrastinating. Write down all the reasons why putting off your project will bring you one step closer to failure. Next, break down the task into smaller jobs. If it is a thirty-page paper due in two weeks, write down a goal of finishing three pages a night. Remind yourself (write it down and put it on the fridge) of how good you will feel when your project is done or when you have lost those ten pounds.

Those of us who procrastinate on a day-to-day basis need a realistic 'to-do' list. Keep the list with you and stick to the order. Cross things off as they are accomplished. Plan a reward for the end of the day if you accomplish all your tasks.

Tell your friends and family about your goals. If you have someone asking you how your diet is coming along, it is more difficult to cheat. If you have a long school project to do, ask a friend to help keep you on the task by calling each day to see what you have accomplished.

In conclusion, procrastination can cause you to miss opportunities and **sabotage** your future. Therefore, you should stop procrastinating and reach your future success.

http://www.englishdaily626.com/reading_comprehension.php?149

1.An.1	The word “dread” in paragraph two is closest in meaning to	
	A	be afraid of.
	B	put off.
	C	lack of.

Answer key: A

Question 1.An.1 with the stem: ‘The word “dread” in paragraph two is closest in meaning to’ is used to measure students’ thinking skill of the Analyzing level in making inferences of word meaning by examining the surrounding context clues. In other words, to answer this question, students should be able to infer the meaning of the word using contextual clues (<https://www.myenglishpages.com/blog/guessing-meaning-from-context/>, 29th December 2021) as the phrase: ‘taking on a difficult or boring job’ gives a syntactic and semantic clue that the correct meaning should be ‘be afraid of’ (option A).

Distractor B is the synonym of ‘procrastinate’, and distractor C is to make the wrong meaning of the sentence. These two distractors are expected to attract the attention of those who are doubtful about the meaning of the word ‘dread’.

Based on the reasons above, this question measures the analyzing level of the cognitive domain of the RBT, and it belongs to the lowest level of HOTS.

1.An.2	According to the passage, there are several ways to keep away from procrastinating, <i>EXCEPT</i>	
	A	being realistic in preparing a day-to-day basis schedule of jobs.
	B	sub-dividing a task into some parts, and doing each part each time.
	C	doing a project by working under pressure the night before the due time.

Answer key: C

Question 1.An.2 with the stem “According to the passage, there are several ways to keep away from procrastinating, *EXCEPT*” is used to measure students’ thinking skill in the analyzing level by examining and breaking information into parts by identifying motives to keep a way from being procrastinator. The writers typed the word “EXCEPT” in capital letters in order to attract students’ attention of the meaning of the stem. This is based on the rule 12 in the 16 rules of constructing multiple-choice question as explained in Chapter II which says: “The alternative “all of the above”, and “none of the above” should be used with extreme caution.” In this question, the correct answer is C because “working under pressure” is not a way to keep a way from procrastinating. The distractors A and B are the steps to keep away from being procrastinator.

1.Ev.1	What do you think will happen when a person is a cronic procrastinator?	
	A	His/Her assignments will be regarded as a failure in the future.
	B	He/She will face stumbling blocks to achieve future success.
	C	He/She should cure his/her illness by doing exercises.

Answer key: B

Question 1.Ev.1 with the stem: What do you think will happen when a person is a chronic procrastinator? is developed to measure students’ thinking skill of the Evaluating level. Relevant to the parameter, this question requires students to make judgments about the condition ‘when a person is a chronic procrastinator’ by presenting their judgments about the validity of their ideas concerning the effect of being a chronic procrastinator which is mentioned in the correct answer: B. Distractor A is used to attract students’ attention concerning the failure to complete an assignment, while distractor C is provided for those who might think that ‘procrastination’ is a kind of illness.

1.An.3	The word “sabotage” in the last paragraph is closest in meaning to	
	A	reverse.
	B	hamper.
	C	cut.

Answer key: B

Question 1.An.3 with the stem: ‘The word “sabotage” in the last paragraph is closest in meaning to’ is used to measure students’ thinking skill of the Analyzing level in making inferences of word meaning by examining the surrounding context clues. In other words, to answer this question, students should be able to infer the meaning of the word using contextual clues (<https://www.myenglishpages.com/blog/guessing-meaning-from-context/>, retrieved: December 29th, 2021) as the phrase: ‘to miss the opportunities’ gives a syntactic and semantic clue that the correct meaning should be ‘hamper’ (option B). Thus, the correct answer is B.

Distractors A and C are provided to make the meaning of the sentence odd. These two distractors are expected to attract the attention of those who are doubtful about the meaning of the word ‘sabotage’.

Based on the reasons above, this question measures the analyzing level of the cognitive domain of the RBT, and it belongs to the lowest level of HOTS.

1.Cr.1	To avoid putting off finishing homework given by your teacher, it would be better if you	
	A	ask your parents to remind you about the homework.
	B	complete the whole homework to meet the deadline.
	C	plan and do a subdivision of it in a scheduled time.

Answer key: C

Question 1.Cr.1 with the stem ‘To avoid putting off finishing homework given by your teacher, it would be better if you’ is developed to measure students’ thinking skill in compiling information by combining

meanings in a new phrase, from ‘write down a goal of finishing three pages a night.’ into ‘plan and do a subdivision of it in a scheduled time.’ Therefore, the correct answer is C. In distractor B, the phrase ‘meeting the deadline’ is used to attract those who are less informed; while distractor B makes use of the sentence ‘If you have a long school project to do, ask a friend to help keep you on the task by calling each day to see what you have accomplished.’ which has a somewhat similar meaning in ‘reminding’ someone to do something.

1.Cr.2	The best title for this passage is	
	A	Why Do People Like to Procrastinate?
	B	Procrastination is the Cause of Failure.
	C	Procrastination is the Thief of the Time.

Answer key: C

Question 1.Cr.2 with the stem ‘The best title for this passage is

1.An.4	The following statements are true according to the passage <i>EXCEPT</i>	
	A	Putting off doing things without any reasons is a waste of time.
	B	Delaying doing assignments will cause stress, anxiety, and the feeling of failure.
	C	Non-procrastinating employees cause hatred among other employees.

Answer key: C

In question 1.An.4, with the stem ‘The following statements are true according to the passage *EXCEPT*

Text 4

Why should kids learn coding? From problem-solving skills, job opportunities, critical thinking, and creativity, there are so many reasons to learn programming. Let’s review why kids should learn to code.

Programming helps children learn to problem-solve. Understanding computers and learning the basics of coding helps children to develop an appreciation of how things work. It also teaches them how software engineers use math in order to solve problems in a logical and creative way. This is an important reason that coding should be taught in schools, so children learn these skills while they are young. The ability to solve problems is a **trait** that is useful in life in general. We all want our children to become excellent problem solvers so that they can overcome any adversity they face. Learning to code gives children the chance to learn this type of skill while they are young and it can help them along the way in life. This is one of the big reasons coding is important to learn.

Computer programming gives kids a challenge and helps them develop resilience. When children learn to code, they develop the ability to bounce back after failure. They learn that failure isn’t necessarily a bad thing, and in fact, it can often be something positive because it serves as a learning opportunity. This is one of the most important reasons why kids should code, as they will learn quickly that ‘debugging’ your code is half the fun. When you fail and try again you can learn from your mistakes. Coding gives children the ability to try and try again until they succeed and produce the result they are looking for.

Coding teaches children how to think. Learning to code teaches children how to think. Computer programming isn’t just about teaching how to type lines of code. It is more about teaching children how to think differently. Being able to code effectively, a programmer needs to use logical thinking. They need to be able to see a large problem and break it down into smaller pieces in order to solve it in an effective manner. This is called decomposition and is one of the key features of computational thinking. Children learning code will need to take a vague idea and use their

creativity to turn it something effective. If the first solution doesn't work, they try another one. If that one doesn't work, they try again until the problem is solved. Coding helps to develop this way of thinking and these types of thinking skills are highly sought after.

Coding helps children learn how to have fun with math. Coding is the language of maths. Imagine coding being taught in every school? Learning to program involves many skills including organizing and analyzing data. Children can grow their math skills while coding, without even realizing it. Using their logic and calculation skills while creating something of their own can make maths more engaging and fun. Another big reason coding should be taught in schools.

Coding is learning while having fun. If you want to give your child something enjoyable to do which will also be educational and help them to learn, learning to code is the perfect gift. You can read about the reasons why coding is important, but one of the main ones is to give them a challenge while having fun! Children will learn various skills and with practice, gain some important skills that can help them through all ways of life, and if they can do all of this while having fun, why not?

<https://teachyourkidscode.com/why-coding-is-important-to-learn/>

4.An.1	The word "trait" in paragraph two means	
	A	critical thinking skills.
	B	personal characteristics.
	C	children's habits.

Answer key: B

Question 4.An.1 with the stem 'The word "trait" in paragraph two means' is used to measure the students' thinking skills in Analyzing level. Relevant with the parameter, the students require to make inferences of word meaning by examining the surrounding context clues. In other words, to answer this question, students should be able to infer the meaning of the word using contextual clues (<https://www.myenglishpages.com/blog/guessing-meaning-from-context/>, 29th December 2021) as the phrase: 'ability to solve problems' gives a syntactic and semantic clue that the correct meaning should be 'personal characteristics' (option B).

Distractors A and C is to make the meaning of the sentence odd. These two distractors are expected to attract the attention of those who are doubtful about the meaning of the word 'trait'.

Based on the explanation above, this question measures the analyzing level of the cognitive domain of the RBT, and it belongs to the lowest level of HOTS.

4.An.2	In paragraph three, the word "resilience" means the ability	
	A	to develop preferences in computer programming.
	B	to learn math in a fun way using computers.
	C	to recover from or adjust easily to misfortune.

Answer key: C

Question 4.An.2 with the stem 'In paragraph three, the word "resilience" means the ability' is used to measure the students' thinking skills in Analyzing level. Relevant with the parameter, the students require to make inferences of word meaning by examining the surrounding context clues. In other words, to answer this question, students should be able to infer the meaning of the word using contextual clues (<https://www.myenglishpages.com/blog/guessing-meaning-from-context/>, 29th December 2021) as the phrase: '...gives kids a challenge' gives a syntactic and semantic clue that the correct meaning should be 'to recover from or adjust easily to misfortune' (option C). Thus, the correct answer is C.

Distractors A and B is to make the wrong meaning of the sentence. These two distractors are expected to attract the attention of those who are doubtful about the meaning of the word 'resilience'.

Based on the reasons above, this question measures the analyzing level of the cognitive domain of the RBT, and it belongs to the lowest level of HOTS.

4.Cr.1	Realizing the importance of learning coding for kids, what should be done?	
	A	Coding should be included in the school curriculum starting from the primary level.
	B	Kids should be provided with a lot of games requiring the application of coding.
	C	Students should learn how to manipulate their math knowledge to learn coding.

Answer key: A

Question 4.Cr.1 with the stem 'Realizing the importance of learning coding for kids, what should be done?' is developed to measure students' thinking skill in compiling information by combining meanings in a

new phrase, from ‘Programming helps children learn to problem-solve’ into ‘Coding is learning while having fun.’ Therefore, the correct answer is A. In distractor B and C are used to attract those who are less informed about learning coding. Based on the explanation, this question is considered as the Creating level.

4.An.3	“...to bounce back after failure...” in paragraph three means	
	A	to try again and again until achieving success.
	B	to learn quickly to succeed.
	C	to become problem solvers in doing assignments.

Answer key: A

Question 4.An.3 with the stem “... to bounce back after failure ...” in paragraph three means is used to measure the students’ thinking skills in the Analyzing level. Relevant with the parameter, the students are required to make inferences of word meaning by examining the surrounding context clues. To answer this question, the students should be able to infer the meaning of the word using contextual clues (<https://www.myenglishpages.com/blog/guessing-meaning-from-context/>, 29th December 2021) as the phrase: ‘... fail and try again you can learn from your mistakes’ gives a syntactic and semantic clue that the correct meaning should be ‘to try again and again until achieving success.’ (option A). thus, the correct answer is A.

Distractors B and C can make the meaning of the sentence odd. These two distractors are expected to attract the attention of those who are doubtful about the meaning of the word ‘..... to bounce back after failure.....’.

Based on the reasons above, this question measures the analyzing level of the cognitive domain of the RBT, and it belongs to the lowest level of HOTS.

4.An.4	In paragraph five, the writers implies that	
	A	gifts should be given to children after they learn coding.
	B	coding is a new science to analyze research data.
	C	children are expected to enjoy learning math while they learn coding.

Answer key: C

Question 4.An.4 with the stem ‘In paragraph five, the writers implies that’ is used to to measure the students’ thinking skills in the Analyzing level. Relevant with the parameter, the students are required to make inferences from paragraph five. To answer this question, students should be able to infer the meaning of the word using contextual clues (<https://www.myenglishpages.com/blog/guessing-meaning-from-context/>, retrieved December 29th 2021) the correct answer is C.

Distractor A and distractor B are not acceptable for paragraph five. These two distractors are expected to attract attention.

Based on the reasons above, this question measures the analyzing level of the cognitive domain of RBT, and it belongs to the lowest level of HOTS.

4.Cr.2	The best title for the passage would be	
	A	How to Learn Coding When You are Young
	B	Positive Impacts of Learning Coding for Kids
	C	Learning Coding can Build Kids’ Characters

Answer key: B

Question 4.Cr.2 with the stem ‘The best title for the passage would be’ is developed to measure the students’ thinking skills in the Creating level. In this question, the students should be able to compile information together in a different way by combining elements in a new pattern, especially creating a suitable title for this reading passage. Therefore, the correct answer is B. This answer supports several main ideas that say learning a coding is good for kids. While for distractors A and C just show a little thing of the positive impact of learning a coding for kids. Based on the explanation above, this question belongs to the Creating level.