Abstract—Developing countries are beginning to spur themselves to advance education according to 21st century skills need. The needs of 21st century skills change the paradigm of thinking from high-order thinking skill cannot be taught become the importance of teaching higher-order thinking skills early on elementary students. The newest teaching models emerge and trying to improve the quality of 21st century education needs that focus on developing students’ high-order thinking skills. The purpose of this study is to describe: (1) how to implement Course Review Horay model; (2) the importance of applying Course Review Horay model to develop analytical thinking skills. This paper will present research on the implications of Course Review Horay model on thinking skills and learning activities in elementary students in Indonesia. The results of existing research have been enough reason to support Course Review Horay can be introduced outside Indonesia. Hopefully, Course Review Horay can be disseminated and applied to educators around the world to support 21st century education.

Keywords—course review horay, high-order thinking, analytical thinking, 21st century skill

I. INTRODUCTION

Education in the 21st century requires a very fundamental intellectual capital for students. These skills are needed to equip students to compete for the global era. The statement is in line with the opinion of Tilaar in [1] stated that in this century the learning process requires an educated human quality. Even Obama in the National Education Association [2] also suggested that the skills needed in the 21st century are critical thinking skills, problem-solving, entrepreneurship and creativity. Supporting the statement, the National Education Association [2] states that critical thinking skills are closely related to education. The ability to think critically not only contributes to the success of a person's career but also his success in education at a higher level. Furthermore explains that habits of thinking such as analysing, interpreting, accuracy and accuracy, ability to solve problems is a more important ability than material content to achieve success in learning. This suggests that the ability to analyse is part of critical thinking skills or often known as high-order thinking skills. Furthermore, the ability to analyse is known as analytical thinking. Analytical thinking is important to be developed early in order to support the demands of 21st century education for future generations to have high competitiveness in the global era.

Unfortunately, analytical thinking ability has not been developed optimally during the learning process of primary school. This is in line with the statement of Palenmari in [2] stated that high-order thinking skills have not been maximally empowered during the learning process at all levels of education. The current learning process, students are less encouraged to develop thinking skills, but students tend to learn by memorizing information, and students are "forced" to remember and hoard information without understanding the information so as to be less able to connect with everyday life Sanjaya in [4]. Whereas teachers should be educators should provide relevant activities and context that is very meaningful for learners so that students' high-order thinking can be optimal [5]

Analytical thinking is part of high-order thinking [6]. The ability of analytical thinking is interpreted as a thinking activity in which students can know the characteristics and characteristics of a phenomenon and can understand the relationship of each other part of the phenomenon [7]. Therefore, the ability of analytical thinking involves complex thought processes. In order to develop optimally need to be trained in every learning activity. The process can be pursued by applying an interesting learning model for students. One of the interesting and proven learning models that can develop students' high-order thinking skills is the Course Review [8]. This is because the Course Review Horay learning model encourages students to be active in learning, building and shaping their own knowledge with teacher guidance.

Course Review Horay model was born in Indonesia and became popularly applied to elementary school students. There have been many studies showing that the Course Review Horay model is effectively used in learning and affects students' thinking abilities. The hope, the development of the latest learning models can increase knowledge and references for teachers in carrying out their duties in teaching.

This paper aims to introduce the Course Review Horay model outside Indonesia in the hope that the Course Review Horay model is increasingly recognized and can add references to teachers and researchers around the world. In addition, the more familiar model of Course Review Horay it will be more developed also research on the model outside Indonesia. The implications of education worldwide can be advanced and meet the demands of 21st century skills need.

The rest of this paper is organized as follow: Section II describes proposed research method. Section III presents the obtained results and following by discussion in section IV. Finally, Section V concludes this work.
II. PROPOSED METHOD

This article is a literature review study. This type of research covers a series of activities ranging from reviewing library collections both online and offline. The research method used six stages, that is (a) prepare the article by collecting research articles google scholar indexed, (b) identify relevant articles relating to the use of Course Review Horay model in schools, especially at the elementary school, (c) structure a review based on (i) the use of the Course Review Horay model in schools; (ii) problems of use are differentiated based on problems of infrastructure and teacher readiness, use process, advantages and disadvantages on students, (d) Then the results of the structure are discussed for recommendations, (e) theoretical evaluation materials, and (f) discussions and inferences [8].

III. RESULTS

A. What is Course Review Horay?

Course Review Horay model is part of active learning. Active learning implies that students are engaged in their own learning. Active teaching strategies have students do something other than taking notes or following directions. They participate in activities to construct new knowledge and build new scientific skills [9]. Furthermore Freeman et al in [10] said that active learning to engage students in the process of learning through activities and /or discussion in class, as opposed to passive listening to an expert. It emphasizes higher-order thinking and often involves in a group work. Based on the opinions of the experts on, It is clear that the Course Course Horay model is a part of active learning, because in Course Review Horay instruction the students engage their learning, they are doing something other than taking notes or following direction. They also participate actively in learning both in a group work or independent study.

Course Review Horay model makes students feel happy in learning. The statement is in accordance with the alteration of [11]. CRH can make the class more lively and fun because the students will have interaction with their friends in group and accept the learning content from the teacher. Course Review Horay has advantages on how to answer questions in groups in an interesting way. The statement is in line with the statement that the Course Review Horay is a fun lesson, because students are invited to play while learning to answer the questions presented in an interesting way from the teacher. Course Review Horay is a learning model that can create a festive and fun classroom atmosphere because every student who can answer correctly is required to shout ‘hurray !!’ or any other preferred yellows. This method tries to test the students’ understanding in answering the question, where the answer to the matter is written on the card or box that has been equipped with the number. The student or group who gave the correct answer should immediately shout ‘hurray !!’ or sing the group’s yell [12]; [13]; [14]. Supporting opinions above Anggraeni in [15] states that Course Review Horay motivated the students to be more active in learning. This lesson was emphasizing the understanding of matter by solving problems in an interesting way. So, we can conclude that the Course Review Horay model is learning by grouping students into small groups where each group writes answers to the questions the teacher reads to a box that has been randomly numbered by the students. Groups that give correct answers and form vertical, horizontal, or diagonal patterns should immediately shout ‘hurray !!’ or sing the group’s yells. Below is presented a syntax of the Course Review Horay model.

B. Advantages and Disadvantages of Course Review Horay

Knowing the advantages and disadvantages of a learning model is very important in order to maximize its advantages and accommodate its shortcomings. Course Review Horay model has several advantages: 1) students are more active and eager in learning; 2) learning is fun; 3) train student cooperation attitude. While the shortcomings are: 1) the value of active and passive students equated; 2) the opportunity to cheat; 3) at risk of disrupting other classes [14]; [13]. Disadvantages of the Course Review Horay can be minimized by monitoring and motivating students towards the course of the discussion so that all students can be active. Then to overcome the second deficiency, the answer sheet and stationery came from the teacher, so the students could not easily replace the numbers on the answer sheets. The third deficiency can also be overcome with additional supervision and regulation. Groups are noisy and too loud in shouting Horay, it will be given sanctions in the form of a reduction in the value of the group. However, the advantages of the Horay Course Review model outweigh the shortcomings. The shortcomings can also be attempted to overcome. If the shortcomings can be suppressed, the advantages of the Course Review Horay model can be maximized so as to provide great benefits of students and teachers (see Table I).

<table>
<thead>
<tr>
<th>No</th>
<th>Details</th>
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<tr>
<td>Step 1</td>
<td>The teacher gives an explanation of the lesson to be performed today and divides the students into groups. Each group of 5-6 students is divided heterogeneously. Students discuss in their group completing the task given by the teacher. Like a lab or problem solving.</td>
</tr>
<tr>
<td>Step 2</td>
<td>Each group received 1 CRH sheet containing 9 boxes and their stationery. Students fill out CRH sheets with random numbers 1-9 to write down answers to questions the teacher reads.</td>
</tr>
<tr>
<td>Step 3</td>
<td>Each group is entitled to submit a number of questions on teachers to read. If the answer is correct then marked (√) and wrongly filled in a cross (x). Group that are marked (√) horizontally / vertically / diagonally should shout horay or other specified yells. The student’s score is calculated from the number of “horay” earned.</td>
</tr>
<tr>
<td>Step 4</td>
<td>The teacher rewards the group of the highest score or the most frequent horay. The teacher gives reward</td>
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</table>

C. The Role of the Teacher

Active learning makes the teacher a facilitator in learning. Teachers play a role in since planning the learning until the realization of the implementation of learning. The role of teachers in active learning is: (1) to make plans carefully in accordance with the objectives achieved, (2) provide opportunities for students to learn actively and apply learning in accordance with the real life context of students, (3) actively manage the environment learning to create a comfortable atmosphere, focusing on learning, maximizing time and can generate ideas and (4) assessing students with authentic judgment [15].
Supporting the above opinion, Silverman in [16] suggests that the role of teachers in making active students is: (1) team building; (2) a holistic assessment; (3) involving students learning directly. Therefore, the role of teachers in active learning began since the planning of learning. Furthermore, the implementation of teachers needs to maximize students to actively learn by involving students learn directly, learn independently and in groups and perform authentic assessment. Figure 1 above depicts a simple chart of the teacher's role in active learning.

D. High Order Thinking – Analytical Thinking

The ability to think demanded in 21st century education is a high-level thinking ability. Higher Order Thinking Skills (HOTS) is a thinking process, which is composed of a variety of skills, problems [17]. This statement is in line with a statement from NS University (2014) in [18] high-level thinking skills involve complex thinking skills and has distinctive features that appear in the way students respond to learning. In accordance with the above statement, analytical thinking ability is part of high-order thinking [16]; [17]; [18]; [3]. High order thinking is not an arising ability without learning and training. Higher order thinking skills is teachable and learnable. All students have the right to learn and apply the skills, just like the other disciplines of knowledge [19]. The implication is that high order thinking needs to be taught in primary school through the learning process. The proper learning process of developing analytical thinking is by encouraging students to analyse, critique, judge, compare and contrast, evaluate, and assess [20]. In addition, [21] said that analyse is breaking material into its constituent parts and detecting how the parts relate to one another and to an overall structure or purpose. Part of analyse is differentiating, organizing, and attributing. So, basically analytical thinking is a complex thinking skill in which students must be able to differentiate, organize, compare and understand relationships between parts of one another. This statement is reinforced analytical thinking is the skill that provides the ability to visualize, articulate, and solve both complexes and uncomplicated problems and concepts [22]. The statement complements the strong opinion above, that analytical thinking is also related to the way students understands the problem to determine the solution to the problem. Therefore, analytical thinking is a part of high order thinking skills involving complex thought processes.

E. How to Evaluate Analytical Thinking?

The characteristics of high-level thinking have different characteristics with low-level thinking skills. The statement is in line with the opinion of [23] which suggests that the students with HOTS are able to create new knowledge and make appropriate and logical decisions. The characteristics of students with HOTS are open-mindedness for risk-taking, curiosity, keen on fact discovery, planning and indicating the most suitable method, have a systems thinking process, think carefully, use evidence to think rationally and frequent self-monitoring. Analytical thinking is part of high order thinking and it is very important for teachers to know whether the students' high-level thinking ability has evolved by evaluating students' analytical thinking skills. Analytical thinking is a thinking skill associated with the conscious direction of mental processes to find a thoughtful solution to a problem. Analytical intelligence involves skills used to analyse, evaluate, judge, or compare and contrast. It is typically used when processing abstract judgments [24] Therefore it can be concluded that teachers can evaluate students’ analytical thinking ability by observing how a student's response in dealing with a problem. The analytical thinking ability of the student has developed when he can explain the problem, summarize the problem, identify the cause and effect of the problem and can determine the solution of the problem. The following Table II presents the indicators of analytical thinking ability.

<table>
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<th>Table II. The Analytical Thinking Ability Indicators</th>
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<tbody>
<tr>
<td>Analytical Thinking Ability</td>
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<td>----------------------------</td>
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<tr>
<td>1. Explain the problem</td>
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<td>2. Summing up the problem</td>
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<td>3. Identify the risk/effect</td>
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<td>4. Identify the cause</td>
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<td>5. Determine alternative options on problem solving</td>
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IV. DISCUSSION

Existing studies showed that the Course Review Horay model has a positive impact on student learning outcomes and quality of learning. Based on the results of the research, the Course Review Horay model effectively improves students' learning outcomes in elementary schools [25]. This is because the Course Review Horay model provides students with a stimulus of thought in a fun learning environment and involves students actively in learning [9]. In addition, the study also shows that the Course Review Horay model effectively improves the quality of primary school students' learning [13]. The results are in line with the statement of Bransford in [21] which states that the learning model derived from constructivism emphasizes that individuals learn through their own knowledge building, connecting new ideas and experiences to existing knowledge and experiences to form new or enhanced understanding. This makes learning more emphasis on specific structures designed to influence patterns of student interaction with a goal to improve mastery of
academic content. Student learning activity is also very important to support the quality of learning. The findings are supported the greatest impact that learning from the teacher to the student. As previously described, the Course Horay model was born of Constructivism. Learning that focuses on students makes students more active in learning so that students easily master the concepts and learning materials. The positive impact of the Course Review Horay model on learning outcomes and the quality of learning is a good capital for conducting further comprehensive research. The research [22] concludes that the Course Review Horay learning model proved to be effective in improving critical thinking skills of elementary school students. This is consistent with the claim that the Course Review Horay model which is an active learning model provides an opportunity for students to actively learn and apply learning according to the students' real-life context [15]. The ability to think critically belongs to a high level of thinking ability. High-level thinking skills need to be trained in elementary school students early on to support educational needs in the 21st century.

V. CONCLUSION

Based on the above discussions, the Course Review Horay Model can be an alternative to teachers to develop students' higher-order thinking skills. The absence of specific research at every level of high-level thinking skills, making the existence of such research is important to do. Analytical thinking as the first level of the level of high-order thinking skills needs to be studied and studied earlier to determine students' ability to think. If the students' analytical thinking ability is good, then the research can continue to develop thinking ability at the next level. Based on the study and research results described above, Course Horay Model needs to be studied and used further to improve students' analytical thinking skills.

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