# The Evaluation of Tynker-Based English Teaching Material Development in Improving the Vocabulary of Fourth Grade Elementary Students

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**Abstract.** In non-English-speaking nations such as Indonesia, students learning English as an International Language without an authentic learning environment, resulting in low English-learning performance. The use of Tynker-based material to promote conditional classroom learning and conduct teaching experiments for fun and joyful learning is essential to increase the English-learning effectiveness of EFL students. The purpose of this study is to see if materials developed for young learners may be improved by employing Tynker-based material in a situational context. The ARCS (Attention, Relevance, Confidence, and Satisfaction) Model is used as a metric in evaluating the materials. The findings indicate that Tynker-based learning materials have extremely good validity.

Keywords: Tynker, Vocabulary, Elementary Students, ARCS Model.

## **1** Introduction

There are several skills that must be mastered in learning English, one of which is mastery of glossary. Knowing the meaning of many words is essential because having many adequate vocabulary or glossary is the first process for someone to be able to understand and use English for communication. At present, English learning has been implemented in elementary schools although it is still categorized into local content subject. This does not dampen the motivation to learn English for elementary school students. Vocabulary is one of the basic elements that must be mastered by students in elementary school. In order for students to be proficient in using English, they must have a large vocabulary of English.

Regarding 21st century learning, students are required to be able to use technology as a learning resource. The challenges of 21st century learning also include learning English in elementary schools. Tynker-based learning materials that have been developed by researchers contribute to variations in the use of English learning technology for elementary school students. Tynker is a programming platform aimed at teaching children to create games and programs. Tynker uses a system of visual code blocks that are easy to assemble into a game [14]. With the use of this program, learning will become contextual learning which will lead to a learning process that involves student activity. Furthermore, the use of this program fulfills contextual learning and the use of technology through programming languages (coding). By using Tynker-

based teaching materials, students are expected to be interested in learning English while implicitly inviting students to try to be creative with the Tynker program.

Materials evaluation is defined as a process of assessing the value of a set of learning materials. An evaluation focuses on the needs of the materials' users and provides subjective assessments of their effectiveness [12]. Pre-use, in-use, and post-use evaluations are all possible. Pre-use material evaluation's major purpose is to estimate the potential of what teachers and students can do with them. Meanwhile, assessing learning materials both during and after use is crucial to establishing their success [3].

An evaluation is performed to decide which materials to use and how to use them most effectively. [7] distinguishes two forms of material evaluation: predictive and retrospective evaluations. A retrospective evaluation considers what has already been used, whereas a predictive evaluation considers what might be used in the future. To date, practically all of the literature on materials evaluation has been devoted to predictive evaluation. [8] calls for a greater emphasis on in-use and post-use evaluation. Teachers could use retrospective evaluation to determine the curriculum's strengths and faults. It is also used to evaluate the precision of prediction judgments.

To improve the quality of the results of the development of teaching materials, the English learning materials for elementary school students need to be evaluated by experts and field trials are carried out. The results of the evaluation are also used as a guide to determine whether a teaching material is appropriate or not to be used by elementary students. The contribution of learning materials evaluation also encourages the researchers to revise the mistakes in Tynker- based materials.

#### 2 Research method

This is a research evaluation that attempts to determine the quality, practicality, and drawbacks of content and presentation, as well as to make recommendations on whether the Tynker-based materials media deserve to be explored and implemented in other schools. The ARCS model was utilized as a parameter to investigate the material quality. The ARCS model contains of four parameters which involves Attention, Relevance, Confidence, and Satisfaction.<sup>1</sup>

#### **3** Findings and Discussion

Keller proposed the ARCS model, which incorporates motivation theory and other learning-related ideas, in order to motivate students' learning motivation [7]. Keller reasoned that if the learning materials could hold a student's attention, their learning achievement would improve. As a result, the ARCS model was developed to organize strategies for teaching program design in order to elicit student-learning motivation and improve learning effectiveness and performance. The ARCS motivation model assists educators in confirming students' motivational demands and understanding the best lesson planning design technique which impacts on student learning performance may be successfully improved. Thus, ARCS is an

<sup>&</sup>lt;sup>1</sup> Rita Orji, Derek Reilly, Kiemute Oyibo & Fidelia A. Orji (2019) Deconstructing persuasiveness of strategies in behaviour change systems using the ARCS model of motivation, Behaviour & Information Technology, 38:4, 319-335, DOI: <u>10.1080/0144929X.2018.1520302</u>

examination model that can help in the creation of instructional materials and the efficacy of learning. Teaching materials and content can be used as variables to motivate students to learn using the ARCS approach.

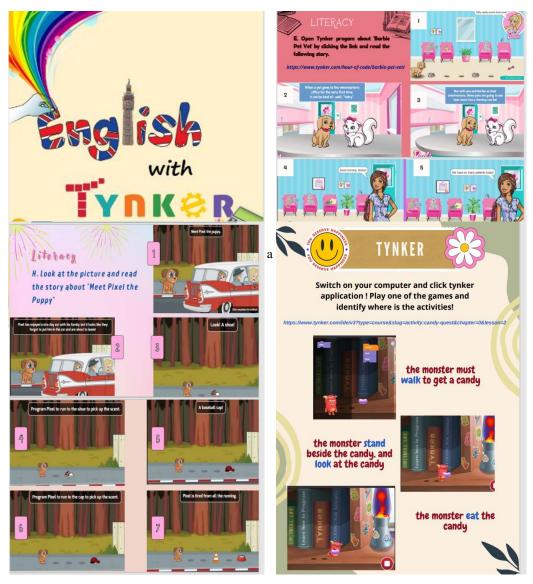


Fig. 1. The sample of Tynker- Based Material, source: English with Tynker (Haswani, Nuran; 2022)

Tynker-based materials and whether it is suitable for young learners, particularly children in the fourth grade of elementary school. Based on validators' observations of the Tynker-based materials, it was discussed that:

- (1) At the level of Attention, the contents can rouse students' interest, hold their attention, and spark their curiosity. Why is Tynker-Based Material so appealing to students? The explanation offered is that the content created with this Tynker includes examples that are relevant to students' daily life. It also employs particular, related examples with children's joyful learning, produces surprise, takes a creative approach, and uses humour when necessary.
- (2) The material designed at the Relevance level has a goal orientation to communicate the benefit of materials to students. The Tynker-Based Materials are created based on an examination of students' needs, ensuring that students' motivation to learn is aligned. Young learners enjoy playing with their pals, and they can interact with them through digital technology. Tynker-Based Materials meet this demand since learners are given the opportunity to play a Tynker game after the teachers explain the topic that was addressed before the learners engaged with Tynker game in a group. Tynker will be useful for pupils to obtain a fresh lexicon without having to memorize some words.
- (3) In terms of Confidence, Tynker-based Materials provide students with a relaxed environment that encourages students to be curious without being afraid of their weaknesses. The materials provided will be delivered successfully to students if the teacher additionally raises students' expectations of success and positive attitudes about themselves to aid in the development of their self-confidence. Giving students a sense of leadership and importance will increase their self-esteem and confidence. The material is designed to allow the student to finish his or her thought before gently explaining why a better option exists. Students collaboration activities occurred in the materials can stimulate students' engagement and best performance.
- (4) In terms of Satisfaction, Tynker-Based Material enables students to begin self-learning, achieve higher satisfaction and a sense of accomplishment, and generate long-term learning interest. Students' pleasure and sense of success with their learning experience and outcomes will improve their self-learning effectiveness.

| No | Elements  | Questions   | Score |   |   |   |
|----|-----------|---|-------|---|---|---|
|    |           | _   | 1     | 2 | 3 | 4 |
| 1  | Attention | Were students are bounded up in<br>Tynker- Based Materials to<br>facilitate English learning<br>Does the student establish on the<br>learning experience with Tynker-<br>Based Materials as the teaching<br>material? |       |   |   |   |
|    |           | Does teacher can monitor student<br>interest about the subject of<br>learning, use time, and increase in<br>focus when they are using Tynker-<br>Based Materials ?  |       |   |   |   |

**Table 1.** The following table shows the rubric used by validators to evaluate Tynker-based Materials

 Development:

| 2 | Relevance    | Doos Toopher use the learning         |
|---|--------------|---------------------------------------|
| Z | Relevance    | Does Teacher use the learning         |
|   |              | materials provided by Tynker-         |
|   |              | Based Material to stimulate student   |
|   |              | interest in learning.                 |
|   |              | How to make students feel that this   |
|   |              | course is worth studying and          |
|   |              | stimulate their interest in learning? |
| 3 | Confidence   | Students must use Tynker- Based       |
|   |              | Material in building up their spirit  |
|   |              | to show their performance in using    |
|   |              | English vocabulary in daily           |
|   |              | activities.                           |
|   |              | Student confidence and                |
|   |              |                                       |
|   |              | concentration can be enhanced by      |
|   |              | Tynker- Based teaching activities.    |
| 4 | Satisfaction | Use Tynker- based materials allow     |
|   |              | students to start self-learning, gain |
|   |              | greater satisfaction and sense of     |
|   |              | accomplishment, and produce           |
|   |              |                                       |
|   |              | lasting learning interest             |

# **4** Conclusion

Quality learning media development necessitates a well-thought-out plan, as well as proper resource support. Learning media can be developed systematically and according to the principles of instructional system design by going through the stages of design, production, and evaluation. The study's weakness is that it is still addressing the outcomes of the evaluation from the perspective of a material expert validator and the field experiment. An instructional design professional did not conduct the evaluation. As a result, more evaluation of the outcomes of generating this Tynker-based teaching material is required, particularly in terms of instructional design for young learners.

## References

[1] Batista, S. C. F., & Baptista, C. B. F. 2014. Learning object for linear systems: Tynker in

- [2] Brown, H. Douglas. 1994. Principle of English Language Learning and Teaching. New Jersey: Prentice Hall Regents.
- [3] Brown, Yule. 1983. Discourse Analysis. Cambridge University Press.
- [4] Bruner, J. S. (1961). The Act of Discovery. Harvard Educational Review, 31, 21-32.
- [5] Cooper, S. & Cunningham, S. 2010. Teaching computer science in context. Inroads 1, 1, 5-8
- [6] Daniel Muijs and David Reynolds. 2008. Effective Teaching: Teori dan Aplikasi, Yogyakarta: Penerbit Pustaka Belajar.
- [7] Ellis, R. (2003). Task-based language learning and teaching. Oxford university press.
- [8] Edelenbos, J., & Van Buuren, A. (2005). The learning evaluation: A theoretical and empirical exploration. Evaluation review, 29(6), 591-612.

[9] Haswani. F, Nuran. A. A. 2022. English Teaching Material Development in Based on Tynker Program in Improving Fourth- Grade Students' Vocabularies. Interdisciplinary Social Studies.

[10] Joel C. Adams and Andrew R. Webster. 2012. What do students learn about programming from game, music video, and storytelling projects? In Proceedings of the 43rd ACM technical symposium on Computer Science Education (SIGCSE '12). ACM, New York, NY, USA, 643-648

[11] Keller, J.M. Motivational design of instruction. In Instructional Design Theories and Models: An Overview of Their Current Status; Reigeluth, C.M., Ed.; Lawrence Erlbaum Associates: Hillsdale, NJ, USA, 1983; pp. 386–434.

[12] McDonough, J., Shaw, C., & Masuhara, H. (2013). Materials and methods in ELT: A teacher's guide (Vol. 2). John Wiley & Sons.

[13] Purwhadika. 2019. 4 Coding Platform untuk Anak-Anak. Diakses dari <u>https://medium.com/purwadhikaconnect/4-coding-platform-untuk-anak-anak</u>

35b07fd31e2b#:~:text=Tynker%20adalah%20sebuah%20platform%20pemrograman,menjadi%20seb uah%20permainan%20atau%20program. Pada 15 Maret 2021.

[14] Tomlinson, B. (2003). Developing principled frameworks for materials development. Developing materials for language teaching, 107-129.