# Needs Analysis of Developing Syntax Teaching Materials Based on Contextual Teaching Learning (CTL) Supported by Flip PDF Profesional

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**Abstract.** The aim of this study is to analyze the needs for developing syntax teaching materials based on Contextual Teaching Learning (CTL) supported by Flip PDF Profesional. The subjects of this research are all the college student of the Indonesian Language and Literature Education Study Program, Universitas Negeri Medan who took the syntax lesson. The methodology of this study is descriptive qualitative. The data accumulation is conducted through questionnaires and observation. The data analysis is conducted through data classification, data presentation, and drawing conclusions. The results of the study showed that books and journals are most widely used in teaching materials. The results of the questionnaire analysis showed that the college student preferred teaching materials that related to the context of their lives (cultural, social, and economic). This study shows that the students of the Indonesian Language and Literature Education Study Program need syntax teaching materials based on Contextual Teaching Learning (CTL) supported by Flip PDF Professional to increase their learning motivation and outcomes.

Keywords: Syntax, CTL, Flip PDF Professional.

## 1 Introduction

Learning materials are all aspects used in teaching and teaching to achieve learning objectives (F. Barus et al., 2024). Learning materials can be in printed form or digital. The availability and suitability of learning materials in the teaching are important factors in learning success (Purwanto & Risdianto, 2022). If these two things are not fulfilled, it will affect the students' abilities. So far, Tthe use of teaching materials has not been maximized. This is because of the minimal use of teaching materials, not informative, and not close to the student's environment (Trinaldi et al., 2022). Therefore, all courses must ensure that the teaching materials used are available and in accordance with the abilities as the students expected.

Syntax is one of the college lessons in the Indonesian Language and Literature Education Study Program, Universitas Negeri Medan. This syntax is taken by all fourth semester students and has two credits. The purpose of this college lesson is that the students are able to apply syntactic theory in studying Indonesian language by applying syntactic science to solve Indonesian language problems scientifically, to have an understanding of the general concepts of syntax, the history of syntactic studies, the scope of syntax, morphosyntax, and the benefits of syntactic studies. So far, the teaching materials used in syntax lesson have not been varied. The teaching materials used are limited to only journals and books. This is supported by previous research (Akhyaruddin & Yusra, 2021) which states that the syntax teaching materials used in the teaching process are no longer appropriate because they are still oriented to the old curriculum. Moreover, from the material aspect, it can be seen that the material presented in the teaching materials is still limited to analysis and does not support the students to think critically. A research conducted by (Rohmah, 2020) revealed that students are not interested in taking syntax lectures because teh teachers do not use a learning model that directs them to be active in the teaching and syntax teaching materials are not contextual.

One thing to be considered in compiling teaching materials is contextual. Contextual teaching materials can be in any type of Contextual Teaching and Learning (CTL) approach. CTL is a combination of learning materials related to the environment so that learning will be more interesting because it is close to real life. A research (Reksamunandar, 2020) proved that teaching materials with the developed CTL approach for the students of the Elementary Madrasah Teacher Education Study Program met the requirements and were suitable used as textbooks. Furthermore, a research conducted by (Budijanto et al., 2022) showed that contextual morphology teaching materials need to be developed to support the teaching. Then, (Wulandari et al., 2021) revealed that e-module teaching materials based on CTL on the set material whic was developed by using ADDIE model met the criteria of being conducted, very effective, and very valid, so that the e-module is considered to be good and suitable to be used in learning. The resulting e-module is expected to improve the students' conceptual understanding and be an attraction for teh students to learn mathematics, especially the set material.

One of the developments of teaching materials that can be conducted is by using the Flip PDF Professional application. A research on Flip PDF Professional in the teaching showed a improvement in student abilities. Among them is a research conducted by (Wulandari et al., 2021) by producing an android-based e-module using Flip PDF Professional in the Elementary Education Curriculum Analysis course with an assessment stage by media and material experts which had a value of 92.98% validity of the material aspect, and 75.57% validity value of the media aspect. The assessment from the practicality aspect, the android-based learning module that was developed is related to the criteria of practicality which means very practical. Then, a research conducted by (Sari et al.,2023) stated that the Flip PDF professional supported by e-module in the lesson of developing fine motor skills in early childhood showed a number of significant advantages in the learning context. First, interactive features allow the integration of dynamic elements such as videos, images, and animations, increasing the appeal and understanding of the material for the students. This study is a preliminary study to analyze the need analysis of syntax teaching materials based on CTL supported by Flip PDF Professional.

#### 2 Method

This research is a qualitative descriptive study in which the data collection technique is by conducting observation and giving questionnaires to the students. Observations were conducted to see the learning activities in the class. A questionnaire in the form of a google form was given to the students to find out the teaching materials used and what kind of teaching materials were needed by the students in the process of Syntax learning. This research was conducted from March - May 2024. The subjects in this study were all the students of the Indonesian Language and Literature Education Study Program, Universitas Negeri Medan who took the syntax lesson. Data classification, data presentation, and conclusions were drawn after conducting observation and questionnaires.

#### 3 Result and Discussion

This table is the result of the observations made in the learning process of the syntax lesson.

Table 1. Observation Results of Syntax Learning.

No	Observation Results		
1	The learning process is in consent with the Semester Learning Plan (RPS)		
2	The material provided is in consent with the Graduate Learning Outcomes (CPL)		
3	The material presented is systematic.		
4	Learning resources (books, and journals) are provided.		
5	Some students are not active in the teaching		
6	The learning procsess is mostly in one-way		

The table above shows of the observations, it can be show that the syntax material is in consent with the RPS and CPL. The suitability of the material with the RPS and CPL is an absolute thing to achieve the students abilities in the syntax course. The preparation of the RPS was conducted together with the Syntax course teacher's team. In terms of material, it can be seen that the teacher has made good preparations. In the observation, it was found that the teacher had delivered the material systematically so that the students' understanding on the material given could be achieved. The systematic of the material presented will certainly also has an impact on the students motivation in taking part the learning process in syntax lesson.

The learning resources used in this lesson are books, and journals, prepared by the teacher. This certainly also affects the students' motivation in the learning process because the teaching materials used are not yet varied. Moreover, the teaching materials that are not varied are also one of the failure causes to achieve the lesson's achievements (F. L. Barus et al., 2024). Based on the observations, the available learning resources have not accommodated all the needs of the students learning styles.

When the learning process takes place, the students were still inactive. Some seemed unfocused and unable to interact with what was conveyed by the teacher or their friends. Thus, it appears that the learning tends to be one-way, because there is no critical discussion between the lecturer and the students or classmates. A learning process that does not show any good interaction will certainly be boring for students. This of course ultimately has an impact on the failure to attain the syntax learning achievements. The following is the results of a questionnaire given to the

students of the Indonesian Language and Literature Education Study Program in the syntax lesson.

Table 2. The Questionnaire Results of the Needs Analysis of Syntax Teaching Materials Development

No	Questions	Results
1	Does the use of teaching materials in the syntax lesson affect	Influenced 98.75%,
	your enthusiasm in taking this learning?	Not influenced 1.25%
2	What teaching materials are most widely used in the Syntax	Books 65%
	lesson	Journals 30%
		Ebook 5%
		Videos 0%
3	What type of teaching materials do you need in this lesson?	Videos 57 %
		Ebooks 43%
4	Are teaching materials containing explanatory videos needed	Needed 97,3%
	in this lesson?	Not Needed 2,7%
5	Do you need teaching materials that are adapted to the	Needed 93,25%
	environment (close to your life)?	Not Needed 6,75%
6	Do you know Flip PDF Professional application?	Recognized 20.25%
		Unrecognized 80,75%
7	According to your understanding, will Syntax learning be	Interesting 84%
	more interesting by using syntax teaching materials based on	Uninteresting 16%
	Contextual Teaching Learning (close to your life) Supported	
	by Flip PDF Professional?	

The data above shows that the use of teaching materials affects the motivation in the syntax learning process. Around 98.75% students who took syntax lesson stated that the use of teaching materials affects the students' learning motivation. This is also supported by a research conducted by (Winarni & Astuti, 2024) who stated that teaching materials are needed in learning interactions so that the students are motivated to take part in the teaching.

Books are the most widely used for teaching materials in syntax lesson which obtained 65%, then followed by journals 30% and ebooks 25%. Based on the questionnaire obtained, it can be seen that there is no variation in the teaching materials used. The teaching materials that are not varied will make the learning monotonous and uninteresting. Variations in teaching materials are needed to keep the students enthusiastic, diligent, and participating in the learning (Eliyarti et al., 2020). Nowadays, students need various teaching materials and the use of technology so that there is no boredom in the teaching.

The teaching materials expected by the students in the syntax lesson are videos in which there was 57% and ebooks at 43%. This shows that the students need digital teaching materials in syntax lesson. Digital teaching materials are an absolute must for lecturer to support the learning process because students generally prefer learning that use digital teaching materials. Moreover, teaching materials can increase the students' interactivity and involvement in learning so that the formation of their own knowledge will be created through exploration, elaboration, and two-way communication activities (Yuliana et al., 2021). Teaching materials using videos are needed by students in syntax lesson. The questionnaire results showed that 97.3% of the students needed videos as teaching materials. This is because this lesson requires repetition of the material because it requires in-depth analysis. So, after learning in the class, the students can repeat the material again at home. With the explanatory video, the students will be easier to understand the material presented and repeat the materials according to their needs. The use of videos in learning can

increase the students' motivation and improve their achievements (Nurwahidah, Dhien et al., 2021). The use of videos is expected to accommodate the learning style of each student.

The preparation of teaching materials should also pay attention to the students' environment. The environment in question can be in the form of social, economic, and cultural. The goal is that they are experiencing and getting to know the concepts being presented. The questionnaire results show that the students expect teaching materials that are close to their lives. Teaching materials that are developed with local wisdom, in addition to achieving the learning, can also add the students' knowledge of the surrounding culture (R & Susanti, 2019). So, teaching materials that are related to the student's environment will make it easier for students to understand the material presented by the teacher because they experience it themselves in their lives.

One way to prepare teaching materials that are close to the student's environment is based on Contextual Teaching Learning (CTL). CTL is the connection between material and the students' real life. The linkage of material can be done by providing illustrations or examples, learning resources, media and so on (Widya et al., 2020). The connection between teaching materials and the students' real life will make learning more interesting and the learning objectives will be achieved. It can be said that CTL will make the students easier to understand the learning material. Nowadays, there are many applications that can be used by teachers in developing teaching materials. The use of these applications is also easy and some are free. One application for developing teaching materials is Flip PDF Professional. This application can make modules more interesting (Lestari et al., 2022). Flip PDF Professional can combine materials in the form of PDF, images, videos, links and animations. So that the teaching materials developed will vary and be adjusted to the students' learning needs. The questionnaire results showed that only 20.25% of the students recognized the Flip PDF Professional application. This shows that there is a need for teaching materials using this application. Syntax material when compiled using the Flip PDF Professional application will be more interesting and can accommodate all the students' learning needs. The developed teaching materials are also more interesting because they contain images, links, videos, and animations based on CTL. The availability of CTL-based teaching materials supported by Flip PDF Professional is expected to enable the students to learn independently so as to improve the learning outcomes. The development of teaching materials was carried out by using the ADDIE methodology (Analyze, Design, Develop, Implement and Evaluate). The selection of this method is expected to produce syntax teaching materials that can support the students' success in learning process and can be used independently.

#### 4 Conclusion

This study proves that it is necessary to expand syntax teaching materials based on Contextual Teaching Learning (CTL) supported by Flip FDF Professional to contain the students' learning needs. The results of the observations and questionnaires show that the students have difficulty in understanding the syntax material because this learning requires high concentration so that teaching materials using videos and ebooks are needed. The teaching materials that are developed later are expected to be able to assist the students realize syntax material because the teaching materials are adjusted to the student's environment (social, economic, and cultural).

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