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# Investigating the relationship between the English instruction time decrease and English learning achievements 

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#### Abstract

This study examines the link between an English instructional time decrease and English learning achievements by reviewing the students' trends of English learning achievement scores from 2011 to 2017 and conducting a survey concerning the decline in instructional time. A mixed-method approach was used to meet the objective of the research. For quantitative data, the Likert-scale questionnaire was collected from 474 senior high school English teachers all over Indonesia, and the achievement data consisted of 211,086 summative scores of senior high school students from semesters 1 to 5 . For qualitative data, the respondents filled in open-ended questions, unveiling their viewpoints on instructional time decrease. The result between the correlation analysis and the teacher's open-ended question seems inconsistent. Even though the statistical analysis does not indicate any direct relationship between instructional time decrease and students' achievement where both summative and proficiency scores keep increasing during the period observed, from the teachers' perspective, questionnaire data reported a significant tendency for the reduction in instructional time on learning achievement. Further analysis shows that in terms of students' learning achievement and proficiency, instructional time decrease cannot be stated as a factor that directly influences students' learning. However, from the teachers' perspective, the reduction is believed to influence their students' achievement and classroom management.


Keywords: Achievement; curriculum; instructional time; learning; proficiency

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## INTRODUCTION

In the Indonesian context, English is the first and most important foreign language. English as a subject to be learned at school has been in the curriculum since the colonial era (Alfarisy, 2021). In the last curriculum, the School-based Curriculum, the instruction time for English was different for every education level. For example, English was a local content in elementary school with two credit hours, but it was (Kaltsum, 2016). The competencybased curriculum in 2004 (Pusat Kurikulum Balitbang, 2003) can be regarded as a milestone in that it challenged teachers to focus on improving their students' competencies in response to society's
need for proficient and skillful human resources in the workplace (Pusat Kurikulum Balitbang, 2003, p. 5). The following curriculum introduced was the school-based curriculum launched in 2006 but gradually implemented in 2007/2008 (Badan Standar Nasional Pendidikan, BSNP, 2006). This curriculum gave more freedom to schools to design their local content curriculum. However, despite these schools' autonomy, all curricula had to refer to the content standards and the standard graduate competencies established by the Indonesian Ministry of Education. The Competency-based and School-based Curricula gave teachers plenty of room and flexibility to develop their creativity in the

[^0]class due to increased instructional time. The current curriculum, the 2013 Curriculum (Kementrian Pendidikan dan Kebudayaan, 2012), halved the previous instructional time for English of 4 hours. In the Indonesian context, a teaching hour is 45 minutes. Thus, while in the prior curriculum, English had $4 \times 45$ minutes a week in two sessions, following the introduction of the 2013 curriculum, English now has $2 \times 45$ minutes per session in a week. This decrease in instructional time might have been attributed to a different curricular focus that shifted from skills to character and values education. While in the previous curriculum, national education was considered a venue to develop the students' competencies and skills, in the 2013 curriculum, national education is assumed to be the primary vehicle in national and character development. It appeared that such a dramatic decrease in instructional time caused much confusion for Indonesian English teachers because they had to make sudden adjustments to their teaching. It is also probable that this instructional time decrease impacted the students' learning achievement. However, in the Indonesian context, studies exploring this area are scarce. Hence, the present study examines the impacts of instructional time decrease on English learning achievement.

Instructional time is seen as a fundamental notion of learning outcomes. However, converting all instructional time into academic learning time is impossible because it is difficult to consider all variables. Analyzing data from the stronger half of observed teachers, Smith (2000) revealed the fact that approximately $20 \%$ to $25 \%$ of the school day is mandatory to be reserved to accommodate noninstructional activities. Checkoway et al. (2011), Orkin (2013), and Farbman (2015) prove that reasonable time to teach has a positive impact on teacher performance and students' achievement. On the teachers' side, more time allows them to explain materials more comprehensively, discuss topics intensely, complete, reinforce, extend lessons, and discuss and reflect on topics. For students, it creates equality between economically deprived students and richer ones. Indeed, there are polarized views about instructional time and learning achievement. Some scholars believe that more instructional time will mean higher learning achievement, while others believe the other way around.

Thus far, although instructional time has been the focus of educational research for decades, empirical studies have not clearly described the complexity of instruction time, with both positive and negative outcomes occurring. Carroll (1963) provided a learning model with certain variables, namely aptitude, an opportunity to learn, perseverance, quality of instruction, and ability to understand instruction, highlighting the increased learning time parallel to increased students' ability to understand the subject contents. In addition to
this, UNESCO-IBE (1995-2020) specifically categorizes allocated time as school time, classroom time, and instructional time, engaged time or time-on-task as the portion of time during which students pay attention to learning tasks and attempt to learn, and academic learning time (ALT), which is the amount of time for students to engage in learning and to cover subject content in productive manners as a preparation for an examination (Fisher \& Berliner, 1985; Fisher et al., 1979, Gettinger, 1995; Squires et al., 1983; Wilson 1987). In an ideal context, allocated time, equal to available time and combined with students' engagement, will produce a higher success rate (Joyce et al., 2003).

Additionally, studies conducted by Fisher et al. (1979) and Toner (2014) reported that students who receive more instructional time had higher scores in the spring, better understanding over the summer, and better positive attitudes compared to the average students. Orkin (2013), Lavy (2015), and Meroni and Abbiati (2016) also discovered that a more extended school day improved writing, mathematics, science, and reading. Increased instructional time will also raise some other things, such as attendance and completion (Benavot \& Gad, 2004). Moreover, Andersen et al. (2015) show that increasing instruction time increases student learning. They discovered that an average increase of $25 \%$ in instruction time led to an increase of 0.12 in mathematics exam scores for both females and males. In English subjects, improvement in student outcomes by increasing time can be identified from fluency, word analysis, and passage-level reading.

In a different context, Cattaneo et al. (2016), Dagli (2018), and Hincapie (2016) indicate that the effectiveness of instructional time varies substantially between different school (ability) tracks and that additional instruction time significantly increases within school variance of subject-specific test scores. Brave (2010) suggests that spending time on courses, self-study, and other study-related activities are substitutes and contribute to learning achievement. A statistically significant and positive relationship was also reported between the number of instructional minutes in an academic year and school-site standardized test scores (Jez \& Wassmer, 2013). Fifteen more minutes of school a day at a school site (or about an additional week of classes over an academic year) relates to an average overall academic achievement of about $1 \%$ and about a $1.5 \%$ increase in average achievement for disadvantaged students (p. 284). Redd et al. (2012) reported key findings that the programs were positively related to improved student outcomes for elementary and secondary school extended school day (ESD) program models. Another variable to ponder is the quality of teachers and classroom environment, including the types of instructions they use with varying degrees of influence. Kidron and Lindsay (2014) suggest that increased learning time
programs improved literacy and math achievement when certified teachers led instruction, though the relative effects (based on varied instructions) were small. In addition, classroom environment has also been found to modify the relation between instructional time and learning outcome. Rivkin and Schiman (2015) showed that schools with lowquality classroom environments have a much smaller benefit from additional instruction time.

In addition to studies that reported a positive relationship between instructional time and learning achievement, many studies report no relation between instructional time and learning achievement. The focus is not on how much time we have but on how time is used. Stallings (1980), Kember and Jamiseon (1995), and Waldow (2004) found that mere lengths of the school day or the length of a class period in secondary schools were not related to student academic achievements. Clearly, student learning achievement depends on how the available time is used, not just the amount of time available. Time spent on an individual seems to have a weak relation to both short and long-term memory retention. Van Den Hurk et al. (1998) found that time spent on the individual study did not correlate significantly with scores on the test measuring short-term knowledge. It is strongly stated that increased instructional time also does not affect the interest or motivation of students in science and math (Marshall, 2016). In a similar vein, Ayodale (2014) and Telischak (2016) found that teacher instructional time, student-engaged time, and numerical ability, when taken together, accounted for $63.9 \%$ of the total variance ( $\mathrm{r}=0.639$, $\mathrm{p}<0.05$ ). It showed that it is not the length of instructional time that results in learning but rather the time the students themselves are engaged in learning activities. Welcome (2017) discovered that total instructional time was not a statistically significant predictor of student achievement in the student's grades. The International Association for the Evaluation of Educational Achievement (IEA) (2019) showed a weak relation between teacher instructional alignment, time on mathematics, and mathematics achievement. Haahr et al. (2005) explained that PISA, TIMSS, and PIRLS data point to a weak statistical relation between time devoted to learning and average achievement scores. Pennington (2006) proposes that extended learning time is not enough to change educational outcomes because it must be accompanied by other practices, many of which are complex to implement. NEA Policy Analysis (2008) shows that extending the school day or school year has little effect on student learning. It is more important to make use of effective teaching strategies and curricula designed to engage students. A weak relation is also indicated by Joyner and Molina (2012) stating that the impact of class time lengths on student achievement has no definitive answers. However, the studies mentioned
above imply that increased instructional time affects learning outcomes only when it works together with other variables. Additionally, Woods (2015) and Gromada and Shewbridge (2016) confirm that what matters the most is the way in which allocated time is used.

Studies on the relation between instructional time and learning outcomes in the Indonesian context also fall into two parts. In the positive pole, for example, a study of factors related to ninth-grade mathematics achievement in Indonesia found that the time spent on classroom assignments was the most significant predictor of achievement for poor rural students, the second most significant predictor for poor, urban students, but only the eighth most important predictor for middle-class, urban students (Suryadi et al., 1981). Then, in another study involving 104 senior high schools at a different school in Yogyakarta, Septriani (2009) reported a significant relationship between learning time allocation and accounting learning achievement. On the contrary, Kurniawan (2011) and Hidayat (2016) reported that, based on research conducted in Yogyakarta, there is no relation between the students' learning time allocation in studying accounting and physical education and their learning achievement. Suhendar (2006) found that increased learning time only contributed $31 \%$ to learning achievement, which is a modest contribution. It appears that studies examining the relationship between instructional time and learning outcomes in language studies in the Indonesian context have, so far, not been found. Since the instructional time of English at senior secondary schools in Indonesia changed from 4 to 2 teaching hours a week when the 2013 Curriculum was implemented, there was an urgent need to investigate whether an instructional time decrease has affected learning outcomes in a positive or negative way. The present study attempts to examine whether there was a significant increase or decrease in English learning outcomes before and after the 2013 Curriculum was implemented.

## METHODS

The present study attempts to establish whether a decrease in English instructional time in Indonesian senior high schools from $4 \times 45$ minutes to $2 \times 45$ minutes a week has affected the students' English learning achievement. A mixed-method approach was employed to analyze how the decrease in instructional time impacted the students learning achievements. The correlational study was used to see whether there was a correlation between students' achievements before and after the reduction of instructional time, and an open-ended questionnaire of the teachers' viewpoints was collected through Google Forms.

It was undertaken by analyzing the trends of the English achievement scores based on the
students' summative tests of semesters 1 to 5 from 2011 to 2017. For this purpose, a number of 211.086 scores were taken from a university admission database. To triangulate and validate the data, the researchers gathered the students' English learning proficiency scores, which were also taken from 50.299 Proficiency Test of English to Speakers of Other Languages (PTESOL) scores administered by a university's language center in Bandung at the same time. PTESOL tests the students' listening, structure, and reading comprehension performances. Then, a comparison was made between both PTESOL and summative scores before and after the curriculum was adopted. The average English PTESOL and summative standardized scores of 2011, 2012, and 2013 were compared with those of 2014, 2015, 2016, and 2017. The year 2013 was used as the cut-off point because, in that year, the 2013 curriculum was only adopted by some pilot schools, while the majority still used the 2006 School-based Curriculum. A forecasting analysis was conducted, but only PTESOL scores from 2008 to 2019 were used to predict the students' PTESOL scores in the future. English summative scores of senior high school students were not used for future prediction because the coverage of the year was limited.

The impact of instructional time decrease was also examined using a Likert-like questionnaire self-developed by the researchers. It consisted of 16 questions, eight of which indicate the existence of a time decrease impact on learning achievement, while the other eight questions indicate a reverse situation. This action allows the questionnaire to be split into two parts, and each means can be compared. The first part of the questionnaire asks
about the availability of additional instructions outside the class, time and content coverage, the comparison of students' achievements between now and 5 years ago, national exam scores after 2013, the time decrease as the cause of low achievement, classroom as an important place for exposure, more time in class as the trigger of exposure and the reduction of the student grammar skills. The second part mainly asks about the practice of speaking and writing at school time, the implementation of all assessment domains, outside classroom exposure to substitute limited classroom exposure, learner autonomy, learning resources outside the classroom, optimal use of outside classroom learning resources, the timely reduction of instructional time, and learning achievement of the present students. This questionnaire was conveniently distributed online through Google form to English senior high schools all over Indonesia, and 474 participants responded. The data were analyzed quantitatively using descriptive statistics. To triangulate the perspective of the English secondary teachers on the impact of instructional time decrease on learning achievement, teachers filled out an open-ended question, which was analyzed qualitatively.

## FINDINGS AND DISCUSSION

Impact of instructional time decrease on learning achievement based on PTESOL and summative scores
To determine the impact of instructional time decrease on learning achievement, the present study compares PTESOL and summative scores. Table 1 shows descriptive data on the variables.

Table 1
Comparison between PTESOL and Summative Scores from 2011-2017

| Variables | Years |  |  |  |  | 2016 | 2013 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |  |
| English Proficiency Scores <br> (T-Scores) <br> (N=50.299) | 44.43 | 43.62 | 50.25 | 53 | 54.4 | 55.33 | 54.05 |
| Summative Score Average <br> (N=221.086) | 75.87 | 76.36 | 77.55 | 79 | 80.85 | 81.82 | 82.55 |

When the table is described in Figure 1, it is clear that there is a constant increase in scores in both senior high school PTESOL and summative scores. Senior high school summative scores used a scale of 10-100 and were not converted to T-Scores because the number of data was 221.086 scores and was considered huge data. Its average score in 2011 was 75.87 and had increased to 82.55 in 2017, increasing by 6.68 points. The PTESOL scores were average for the Listening, Structure, and Reading Comprehension subtests. To be able to compare the scores across years, the PTESOL data were standardized into T-Scores. This PTESOL score average in 2011 was 44.43 , while in 2017, it was
54.05, increasing by 9.62 points. The score increase in both data can be seen in Figure 1.

Figure 1 shows that both the student summative test and their English proficiency kept increasing from 2011 to 2017. It seems that there is no change of trend in scores before and after the instructional time was decreased from 4 to two hours. To validate the conclusion, students' PTESOL scores from 2008 to 2019 were used to predict the trend of student scores in the future, as seen in Table 2. The predicted scores can be obtained by considering the regression equation $\mathrm{Y}=$ $49.468+0.804 \mathrm{X}$.

Figure 1
Comparison between PTESOL and Summative Scores from 2011-2017


Table 2
Predicted PTESOL Scores in the Next 20 Year

| Year | Observe value | $\mathbf{X}$ | Predicted Value |
| :--- | :--- | :--- | :--- |
| 2008 | 46.16 | -6 |  |
| 2009 | 44.66 | -5 |  |
| 2010 | 45.60 | -4 |  |
| 2011 | 45.14 | -3 |  |
| 2012 | 43.62 | -2 |  |
| 2013 | 50.25 | -1 |  |
| 2014 | 53.00 | 1 |  |
| 2015 | 54.40 | 2 |  |
| 2016 | 55.33 | 3 |  |
| 2017 | 54.00 | 4 |  |
| 2018 | 50.60 | 5 |  |
| 2019 | 50.86 | 6 |  |
| $\mathbf{2 0 2 0}$ |  | $\mathbf{7}$ | $\mathbf{5 5 . 1 0}$ |
| $\mathbf{2 0 2 1}$ |  | $\mathbf{8}$ | $\mathbf{5 5 . 9 0}$ |
| $\mathbf{2 0 2 2}$ |  | $\mathbf{9}$ | $\mathbf{5 6 . 7 0}$ |
| $\mathbf{2 0 2 3}$ |  | $\mathbf{1 0}$ | $\mathbf{5 7 . 5 1}$ |
| $\mathbf{2 0 2 4}$ |  | $\mathbf{1 1}$ | $\mathbf{5 8 . 3 1}$ |
| $\mathbf{2 0 2 5}$ |  | $\mathbf{1 2}$ | $\mathbf{5 9 . 1 2}$ |
| $\mathbf{2 0 2 6}$ |  | $\mathbf{1 3}$ | $\mathbf{5 9 . 9 2}$ |
| $\mathbf{2 0 2 7}$ |  | $\mathbf{1 4}$ | $\mathbf{6 0 . 7 2}$ |
| $\mathbf{2 0 2 8}$ |  | $\mathbf{1 5}$ | $\mathbf{6 1 . 5 3}$ |
| $\mathbf{2 0 2 9}$ |  | $\mathbf{1 6}$ | $\mathbf{6 2 . 3 3}$ |
| $\mathbf{2 0 3 0}$ |  | $\mathbf{1 7}$ | $\mathbf{6 3 . 1 4}$ |
| $\mathbf{2 0 3 1}$ |  | $\mathbf{1 8}$ | $\mathbf{6 3 . 9 4}$ |
| $\mathbf{2 0 3 2}$ |  | $\mathbf{1 9}$ | $\mathbf{6 4 . 7 4}$ |
| $\mathbf{2 0 3 3}$ |  | $\mathbf{2 0}$ | $\mathbf{6 5 . 5 5}$ |
| $\mathbf{2 0 3 4}$ |  | $\mathbf{2 1}$ | $\mathbf{6 6 . 3 5}$ |
| $\mathbf{2 0 3 5}$ |  | $\mathbf{2 2}$ | $\mathbf{6 7 . 1 6}$ |
| $\mathbf{2 0 3 6}$ |  | $\mathbf{2 3}$ | $\mathbf{6 7 . 9 6}$ |
| $\mathbf{2 0 3 7}$ |  | $\mathbf{2 4}$ | $\mathbf{6 8 . 7 6}$ |
| $\mathbf{2 0 3 8}$ |  | $\mathbf{2 5}$ | $\mathbf{6 9 . 5 7}$ |
| $\mathbf{2 0 3 9}$ |  | $\mathbf{2 6}$ | $\mathbf{7 0 . 3 7}$ |

The observed model and fit model of the average English proficiency score (PTESOL) of 50.299 West Java secondary school students from

2008-2019 and the predicted scores from 2020-2040 can be observed in Figure 2. Data from Table 2 and Figure 2 have confirmed that, based on the available data, instructional time decrease does not affect student learning achievement. It appears that the results of the analysis confirm studies conducted by Van Den Hurk et al. (1998), Ayodale (2014), Telischak (2016), Kidron and Lindsay (2014), Rivkin and Schiman (2015), Welcome (2017), IEA (2019), Haahr, Nielsen, Hansen and Jakobsen (2005), Pennington (2006), NEA Policy analysis (2008), Joyner and Molina (2012), Redd, Boccanfuso, Walker, Knewstub and Moore (2012), Woods (2015) and Gromada and Shewbridge (2016), indicating that instructional time is not a determinant factor in learning achievement. In addition, the present study adds important information without considering such variables as learning instruction, students' interest and motivation, instructional time, engaged time, or time on task. The summative and proficiency scores will be increasing.

This quantitative analysis shows increases in test scores. However, we suggest that these increases are not directly related to decreased instructional time. There is a possibility that they were caused by other factors, such as the increasing availability of the internet in the students' homes, the increase in students' learning autonomy, or a matter of grade inflation. Zhong (2008) found that using the internet as an autonomous learning tool plays a more significant role in accelerating learning English in such a way that it challenges the traditional way of teaching and learning. From this perspective, it is possible to suggest that the classroom has a less dominant role in students'
learning of English nowadays. Teachers still have a key role in motivating and supporting students in
their learning, but students now have access to a rich array of resources and authentic materials through

Figure 2
Observed and Fit Model of West Java Senior High School English Proficiency Scores from 2008-2019 and its Predicted Scores from 2020-2040

the internet. Further analyses on this issue are provided in this article's qualitative section.

Impact of instructional time reduction on learning achievement as seen from quantitative questionnaire data
The present study also studies the impact of instructional time decrease on learning achievement from quantitative questionnaire data. Sixteen statements were measured in five parameters (completely agree, agree, neutral, disagree, and completely disagree). It was administered to 399 secondary school English teachers. The results can be seen in Table 3.

In Table 3, items to measure the presence of impacts of instructional time decrease and learning achievement are number $1,2,5,6,7,8,9$, and 16 , while those to measure the absence of instructional time impact on learning achievement are number 3, $4,10,11,12,13,14$, and 15 . From the percentage, we can see significant agreement on items measuring the presence and disagreement on items measuring the absence of instructional time decreased impact on learning achievement. When the items measuring both the presence and the absence of the impact of instructional time decrease on learning achievement were computed and
compared, the presence mean (3.6) is higher than the absence mean (2.53), significantly different at $(\mathrm{t}=20.405$, $\mathrm{df}=338, \mathrm{p}=0.000)$. This finding indicates a significant effect of instructional time decrease on student learning achievement from the teachers' perspectives, which is different from the conclusion drawn based on summative semester scores and PTESOL scores, as previously discussed.

Additionally, the findings corroborate prior studies (Brave, 2010; Humlum \& Nandrup, 2015; Toner, 2014) that can be interpreted in the sense that instructional time reduction influences learning achievement. Based on statements 1, 2, 5, 6, 7, 8, 9, and 16 (confirmed by statistical data), teachers believe that instructional time decrease will influence learning achievement. The responses are similar to studies conducted by Toner (2014) and Humlum and Nandrup (2015), showing that increasing instruction time increases students' scores. Based on teachers' responses, time spent attending class is positively related to achievement. Brave (2010) supported his conclusion using the facts from a social science class. Limited instructional time generates more complicated problems in class administration, fulfillment of lesson plans, and assessment.

The quantitative analysis from summative and proficiency scores reveals that there is no direct relation between a decrease in instructional time and students' achievement. Instructional time is decreasing, but achievement and proficiency scores
are increasing. We can speculate that such rises are not necessarily related to instructional time. Such a stance is supported by the qualitative findings that will be elaborated on in the next part of this paper.

Table 3
Teachers' Responses on the Relation between Instructional Time Decrease and Learning Achievement

| No. | Statements | Completely Agree | Agree | Neutral | Disagree | Completely Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N = 399 (in percentage) |  |  |  |  |
| 1 | Because instructional time has decreased, I asked my students to practice reading and listening outside the class. | 9.7 | 18.0 | 13.9 | 37.5 | 20.9 |
| 2 | It was difficult to cover all the teaching materials assigned by the curriculum | 5.6 | 5.9 | 11.8 | 32.7 | 44.0 |
| 3 | I regularly asked the students to practice speaking and writing during school hours. | 6.5 | 20.1 | 23.9 | 35.7 | 13.9 |
| 4 | I could organize learning evaluations in all learning domains during school hours. | 11.8 | 25.1 | 24.2 | 30.7 | 8.3 |
| 5 | The English proficiency of my present students is the same as that of my students five years ago. | 23.6 | 39.5 | 18.6 | 12.7 | 5.6 |
| 6 | The scores of the National Examination of my students before the 2013 Curriculum were better than those after the curriculum was adopted. | 4.4 | 15.9 | 26.8 | 32.2 | 20.6 |
| 7 | There is a relationship between poor English student competency and decreased instructional time. | 6.2 | 7.7 | 11.2 | 27.4 | 47.5 |
| 8 | Classrooms are very important for the students to get exposure to English comprehensible input. | 3.5 | 5.0 | 13.0 | 39.2 | 39.2 |
| 9 | The more the students stay in the class, the more exposure they will get. | 4.1 | 8.6 | 15.0 | 37.5 | 34.8 |
| 10 | Although instructional time in the class is short, the students will get sufficient exposure outside the class. | 21.5 | 42.8 | 20.6 | 12.7 | 2.4 |
| 11 | Millennial students are more autonomous in learning, so the role of teachers and classrooms is decreasing. | 18.6 | 41.0 | 22.1 | 13.9 | 4.4 |
| 12 | Outside learning resources are as rich as those the students can find at schools. | 14.7 | 37.5 | 22.1 | 18.6 | 7.1 |
| 13 | The present students have already used available learning resources around them to learn English. | 15.3 | 41.6 | 21.2 | 17.4 | 4.4 |
| 14 | Because the students have enough exposure outside the classroom, the instructional time can be reduced. | 49.0 | 33.6 | 10.3 | 2.1 | 5.0 |
| 15 | The competence of my students in listening, speaking, reading, and writing is better after the 2013 Curriculum was implemented. | 25.7 | 42.8 | 17.1 | 10.9 | 3.5 |
| 16 | The grammar skills of my students were worse after the 2013 Curriculum was adopted. | 7.7 | 16.8 | 18.0 | 28.6 | 28.9 |

## The impact of instructional time decrease on learning achievement based on open-ended questions

To uncover more objective issues on the decrease in English instructional time in the 2013 Curriculum, the present study considers the responses of 399 English secondary school teachers on the question of whether the increase or decrease in instructional time will have something to do with their student learning achievement. Their responses can be
categorized into several main aspects, such as curriculum, method, assessment, schools, teachers, students, and classrooms. The responses are depicted in Figure 3.

The effect of the decrease in English instructional time in the 2013 Curriculum on learning achievement can be uncovered in a detailed structure. It is stated by [respondent 225] that "... with limited time, it is difficult for teachers to achieve objectives established in the 2013

Curriculum". The problem is related to the fact that the decrease in instructional time means the number of allocated time does not support the syllabus content that should be covered. The teachers are required to use the allotted time in a highly effective manner to ensure that learning objectives can be achieved.

Regarding content coverage, decreasing instructional time requires some practical
adjustments in curriculum implementation. As explained by [respondent 220], "the 2013 Curriculum does not cover grammar sufficiently in the syllabus, while in fact, university admission test demands complex grammar test". It may be inferred that there is an academic discrepancy because what is learned at the secondary level does not prepare skills needed at a higher level of education. In secondary schools, grammar is not the main purpose

## Figure3

Responses of Secondary School English Teachers on the Decrease of English Instructional Time

of English topics. Therefore, students' comprehension of complex English grammar is not really achieved. The limited time also creates dilemmatic problems for teachers. The teachers must focus on time allocation to go deeper into teaching materials. It is quite hard to do both in this situation. As stated by [respondent 435], "Limited time has forced the teachers to finish the lesson without looking whether the students have understood the lesson or not'. In a class context, teachers have no time to train the students in the class, cover basic competencies, teach vocabulary, and explore texts. The teachers should use their limited time to focus on covering materials stipulated by the curriculum but pay insufficient attention to students' basic skills improvement. The curriculum stipulated that students be equipped with higher-order thinking skills (HOTS), a new focus in this current educational context. However, students with low English fundamental skills will probably struggle to understand HOTS. On this issue, [respondent 11] believes that "with more complex subjects to learn at schools as HOTS and the four language skills with mostly big size classes, less time will reduce students' attention to English." As stated before, the teachers have no time to go into detail about the teaching materials. The low-ability students theoretically need more time to study.

On the contrary, limited time is a good reason to generalize students' understanding. Therefore, It is relevant to consider the response of [respondent 95], stating that "low-ability students need more time. It is impossible to develop higher-order thinking for the students with this time limit. In relation to the limited time and teaching method, project-based learning cannot always be convenient in all class settings. A response from [respondent 177] stated, "method adopted by the Curriculum such as project-based learning needs enough time to give instruction and direct the discussion." Limited time burdens the teachers as creative techniques and discussions need to be skipped. Using the allocated time in the activities is too risky, but the course content cannot be delivered.

The decrease in instructional time also affects assessment aspects. The general problem that can be identified is, as stated by [respondent 2930, "students do not effectively comprehend the lesson, while the teachers do not have time to evaluate the student's learning outcomes." It is difficult for teachers to deal with more assessment rubrics and, at the same time, check the four language skills of a huge number of students. The decrease in instructional time has forced the teachers to focus on reading texts to prepare the students for the national exam but have no time for speaking activities. There
is a cause-effect response on this issue, as stated by [respondent 459] that "allocated time decrease has caused the students to be not well prepared in facing national examination." As a consequence, the response [respondent 457] states that "the students cannot answer national exam items, and their learning achievement has decreased to $50 \%$ ". It, of course, needs to be confirmed by more detailed research. To be specific, in the assessment context, there is a shift from the evaluation of skills to exam preparation.

From the teachers' roles, giving feedback is not effective in this allocated time. With a huge number of students, a response from [respondent 5] describes that "teachers have no time to correct students' errors in comprehension and pronunciation." It is related to teachers' reinforcement of concepts and practices. Without teachers' direct guidance as the main role of a teacher, it is difficult for students to avoid misunderstanding from outside resources. Therefore, teachers seem only to fulfill their job as teachers because they focus on delivering teaching materials and pay little attention to specific evaluations. In general, as stated by respondent [305], teachers believe that face-to-face interaction is much better than other types of interaction. It strengthens teachers' role to facilitate direct discussion and problem-solving. However, as the focus of the 2013 Curriculum is character development, the decrease in English instructional time may generate a double-edged sword. English teachers are responsible for delivering many teaching materials in a limited time. The accuracy of delivery is still questionable, and it is also similar to the objective of character development in English classes.

The implementation of the 2013 Curriculum also affects learning resources. The access to learning resources is different in each area. It is not relevant to consider that students in cities have similar access to students in the suburbs to learning resources. The environment is also a significant resource for improving English skills. However, as stated by [respondent 41], "the environment where the students live does not support English language learning." We see the contradiction that the 2013 Curriculum does not recommend any homework, so the students only learn English at school. However, the instructional time is decreased, and there is no guarantee that all students have similar access to learning resources.

The decreased instructional time somehow creates a wider gap between low and high economic classes. Respondent [363], for example, states that "with five days a week school time, students cannot take courses after school hours." For those who cannot take courses but have an established economic status, the digital door is easy to knock, and all digital learning materials can be accessed.

The opportunity is not for those with a lower economic status. Therefore, learning hour is actually about creating equal opportunity. The problem is also extended by some non-academic disturbances. For example, "The one session a week English class sometimes was canceled because of holiday breaks or other school agendas," which is stated by [respondent 76]. When the class was canceled, it meant that the students would have another English lesson the week after, which would not be effective in developing English skills and understanding. The teachers were put into a dilemma whether to focus on delivering learning materials required by the curriculum and syllabus or put the emphasis on the mastery of each topic learned. It also seems impossible for teachers to teach all four language skills in one session. Students will have no time to interact with the teacher in English. The problem is stated by [respondent 412], "Teachers do not have enough time to teach the four language skills in one week." On the student's side, the decrease in instructional time greatly influenced the students' ability to understand the materials given. They needed to comprehend all topics in a limited time without considering the level of difficulties. It is quite challenging to lean on students' personal learning habits. Respondent [132] believes that "effective learning can only take place at schools when the teachers are there." It is undeniable that students who can learn independently are quite rare. Some students treat school as the only place to get exposed to English, as technology on smartphones is mostly for entertainment purposes, not to facilitate learning.

Therefore, learner autonomy should be discussed before discussing decreasing instructional time. It can be argued that a decrease in instructional time would be a less significant problem for students from better socioeconomic backgrounds because of their access to technology. There are plenty of resources that they can use for their learning. The situation is different for students from remote areas and from low-income families. Students from these types of families mostly cannot afford learning resources like enrichment books and Internet access, and therefore, they rely on learning resources available at schools. Without computers and an internet connection, their learning opportunities are closed (Rideout, 2016). Respondent [57] states that "limitation in technology makes it impossible for students to explore learning outside the class." Eventually, it may affect students' future. Foreign language skills are important in career development. Little exposure to English at schools and in the environment blocks students' opportunity to expand their skills. In a specific way, respondent [40] states, "... not enough time to understand literature needed for the future life of the students".

The discrepancy between the decrease in instructional time and test scores might have a socioeconomic explanation. PTESOL test-takers generally come from better economic backgrounds and from top schools in their respective regencies. They have no problem with learning resources, including internet access. Their learning achievement may not be influenced by instructional time decrease. However, for most senior high school students living in remote areas and those coming from low-income families, the PTESOL fee is relatively expensive. They might have never registered for or even heard of the PTESOL test, ITP TOEFL, or even IELTS. When some teachers teaching low-income family students and those living in remote areas happened to be the respondents of the present study, they saw that the instructional learning time decrease was a really big problem and responded negatively to the question. They saw that their students depended heavily on instructional time and learning resources at schools and that when it was decreased, both students and teachers were in big trouble. Teachers will have problems in delivering all the curriculum content, providing the necessary and helpful resources, and catering to students of different needs. The students themselves will have limited access to learning materials available outside schools and to selfregulate their own learning.

Students from the upper middle class have a far better chance to succeed at school because their parents can provide them with all the necessary resources and facilities. They also tend to have highly supportive parents keen that their children achieve academic success. Such family support is essential for young people. Our argument is in line with Islam and Khan (2017), who found that there is a positive correlation between socioeconomic status and academic achievement of Senior Secondary School students. Students from privileged economic backgrounds obviously have broader access to the internet and the various platforms, websites, and software for learning English. Conroy (2010) revealed that most students are eager and quite competent in using Internet-based tools. These tools are useful for independent language learning. This view is empirically supported by 18.6 percent of the respondents, who completely agreed that millennial students are more autonomous in learning, so the role of teachers and classrooms is decreasing. Thus, apart from autonomous student learning assisted by the internet, it is possible that classroom teaching and learning quality have also improved because of the use of the internet in classroom teaching and learning situations despite the decrease in instructional time.

## CONCLUSION

The present study tries to examine the impacts of instructional time decrease on the learning achievement of English subjects of senior high school students. Using quantitative data of the students' five-semester summative scores and senior high school students' English proficiency scores as measured by a test of English proficiency, a closedended Likert-scale questionnaire measuring the teachers' perspective on the impacts of instructional time decrease on learning achievement, and an open-ended question asking the same question but requiring a quantitative response, we can draw several conclusions. It is found that there is no direct relationship between instructional time decrease and the student's learning achievement. Despite the instructional time decrease, both summative and proficiency scores kept increasing during the period observed. However, from the teachers' perspective, survey data show a significant influence of instructional time decrease on learning achievement. Teachers believe that decreased instructional time has lowered their students' learning achievement. The open-ended question has revealed that the decrease in instructional time has resulted in a very difficult situation for teachers. For example, they did not have sufficient time to keep up with curricular objectives at a normal speed, check and evaluate their students' understanding, improve their student's proficiency in the four language skills, and help low-achieving students, usually from economically-deprived family backgrounds. Thus, for further research

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