

ผลกระทบของระยะเวลาเรียนต่อการเอาใจใส่ในการเรียนในชั้นเรียนไวยากรณ์
ของนักเรียนไทยที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ¹
Impact of Class Length on Student Engagement
in Thai EFL Grammar Classes¹

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บทคัดย่อ

งานวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาผลกระทบของระยะเวลาเรียนต่อการวัดความเอาใจใส่ในการเรียนเชิงพฤติกรรม และอารมณ์และความไม่พอใจการเอาใจใส่ในการเรียนศึกษาจากการกระจายเวลาเรียนโดยแบ่งห้องเรียนเป็นสองห้อง คือ ห้องเรียนที่ใช้เวลาเรียน 35 นาที เรียนทุกวันกับห้องเรียนที่ใช้เวลาเรียน 3.5 ชั่วโมง เรียนสัปดาห์ละครั้ง ประชากรที่ใช้ในการศึกษา คือ นักเรียนชั้น ม.3 ในโรงเรียนแห่งหนึ่งทางภาคใต้ จำนวน 70 คน และครู 2 คน เครื่องมือที่ใช้ คือ แบบรายงานตนเอง และแบบรายงานของครู สถิติที่ใช้ในการวิเคราะห์ข้อมูล คือ ค่าเฉลี่ย ค่าเบี่ยงเบนมาตรฐาน และค่าสหสัมพันธ์ ผลการศึกษาพบว่า นักเรียนซึ่งเรียนในห้องเรียนที่มีระยะเวลาเรียนสั้นกว่า มีความเอาใจใส่ในการเรียนมากกว่านักเรียนอีกกลุ่มอย่างมีนัยสำคัญจากแบบรายงานของครูและแบบรายงานตนเองของนักเรียนในเรื่องการเอาใจใส่ในการเรียนพบว่า มีความคลาดเคลื่อนทำให้เกิดข้อสงสัยเรื่องความน่าเชื่อถือของแบบรายงานของครูในการวัดความเอาใจใส่เชิงอารมณ์นักเรียนในห้องเรียนที่มีระยะเวลา 3.5 ชั่วโมง สัปดาห์ละครั้ง แสดงอาการล่า และเบื่อหน่ายเมื่อเลิกเรียน นักเรียนซึ่งเรียนในห้องเรียนที่มีเวลาเรียนสั้นกว่าและเรียนทุกวัน แสดงความไม่พอใจน้อยมาก และรายงานว่าไม่มีสาเหตุของความไม่พอใจในขณะเรียน ประเด็นสำคัญที่นำไปประยุกต์ใช้ในการจัดตารางเรียน คือ ชั้นเรียนที่มีเวลาน้อยกว่าช่วยเพิ่มการเอาใจใส่ในการเรียน

คำสำคัญ: ความเอาใจใส่ในการเรียน ตารางเรียน ระยะเวลาของห้องเรียน

Abstract

The objective of this study is to investigate the impact of class length on measures of behavioral and emotional engagement and disaffection at a classroom level. Student engagement was measured in two varying distributions of 3.5 hours of weekly instructional time: short daily classes and longer classes held only once a week. The subjects of this study were 70 students and two teachers in one of the schools in the south of Thailand. The instruments were student self-reports and teacher reports. The statistics used to analyze the data were mean, standard deviation and correlation. Results indicated that students studying in shorter class periods were significantly more engaged according to teacher reports and slightly more engaged according to student self-reports. Discrepancies between student and teacher reports of engagement in this study cast doubts on the reliability of teacher reports particularly for measuring emotional engagement. Students in longer classes showed more frequent signs of tiredness and boredom toward the end of class. Students in shorter classes showed fewer indications of disaffection and frequently reported no awareness of causes for disaffection during class. An important implication for course scheduling is that shorter classes can serve to boost student engagement.

Keywords: Student Engagement, Course Scheduling, Class Length

Introduction

Successful academic outcomes are critically dependent on the level of students' engagement (involvement in and attraction to learning) in school [1]. Thus, it is essential that educators strive to engage students. Student engagement, a multidimensional construct involving both how students feel and behave [2], has enjoyed increased attention in recent years. This is due not only to how essential student engagement is for learning but also to how highly responsive it is to various kinds of intervention [3]. The effects of student engagement and disaffection (lack of engagement) are far-reaching. Previous studies show that engagement leads to higher grades [1], increased attendance [4] and well-satisfied teachers less prone to burn out [5].

The model of student engagement adhered to in this study was developed by Skinner, Furrer, Marchand, and Kindermann [6]. This conceptualization of student engagement proposes a bi-dimensional concept of engagement comprised of behavioral and emotional aspects. These two dimensions are further

broken down into the following four components; behavioral engagement, emotional engagement, behavioral disaffection, and emotional disaffection. Student engagement in this study is defined as a meta-construct that combines behavioral and emotional dimensions and refers to active, energized, persistent, focused, emotionally positive interactions with the teacher and classroom activities [6].

Indicators of behavioral engagement include effort, attention, persistence, and involvement (e.g. participating in class discussion). Indicators of emotional engagement include energized emotional states such as enthusiasm, enjoyment, satisfaction and interest (e.g. having fun in class). Disaffection can be rendered as a lack of engagement (lack of positive indicators) but goes beyond that to include negative actions and emotions. Thus, indicators of behavioral disaffection include passivity, giving up, and withdrawal (e.g. being easily distracted), whereas, emotional disaffection includes boredom, sadness, disinterest and anxiety (e.g. feeling frustrated when unable to answer a question) [6].

Facilitators of student engagement are factors that predict student engagement levels. In a very influential model of school learning, Carroll [7] proposed that the primary facilitator of student motivation and engagement was time. The implication was not to increase instructional time without regard to other factors, but rather to match the time allocated for learning to the amount of time the learner is willing to spend learning [8]. While that amount of time is undoubtedly highly dependent on the quality of instruction as found in a recent study on the relationship between instructional time and classroom quality [9], students do not have unlimited attention spans. Therefore, it is of value to ask what the optimal class length is for fostering high engagement levels.

Studies on the effects of block scheduling are generally a comparison between long instructional sessions (intensive programs or block schedules where students attend fewer but longer classes) and shorter instructional sessions found in traditional programs. Despite the purported benefits of block scheduling for greater academic gains, research fails to make a strong case for its superiority to traditional scheduling [10]. One reason for this may be that advantages in terms of less chaos and favorable perceptions by teachers [11] have failed to outweigh disadvantages inherent to longer classes such as concentration difficulty and boredom [12].

In a study measuring how long students can pay attention in class, Bunce, Flens and Neiles [13] found that during lectures student attention lapses begin as early as within the first 15 minutes and occur in ever-shortening cycles thereafter. While lecturing is known to be less engaging and there are plenty of pedagogical approaches that are more conducive to an engaging classroom environment, the problems of tiredness and decreasing attention have been reported in numerous studies on student perceptions of block scheduling [14-15]. The strongest disadvantage of block scheduling found by Kaya and Aksu [12] in their study on 1,100 middle and high school students was 'boredom at the end of the courses', indicated by 88% of the participants. They also reported that students in block schedules suffered from loss of concentration and were less attentive overall.

In a study by Reardon, Payan, Miller, and Alexander [16] student perceptions of three class formats (1 hour/three times a week, 1.5 hours/twice a week and 3 hours/one time a week) were investigated. They found that undergraduate students prefer the twice a week format. Students disliked the once a week format due to its lengthy instructional sessions. According to Henebry [17], meeting once a week for a lengthy class session tends to cause problems such as information overload and attention deficiency especially toward the end of classes.

Conversely, some scholars have argued that block scheduling (longer classes) does not negatively affect student engagement. Through interviews with teachers on their perceptions of block scheduling, Kilpatrick [11] found that teachers believed students in block schedules were no less engaged than they were in traditional schedules. In addition, intensive programs where students meet for longer periods of instructional time per day have been found to increase group cohesion [18], a facilitator of student engagement [2].

These previous studies are not in agreement as to whether or not long class periods negatively affect student engagement. Therefore, the impact of instructional time distribution (i.e. class length and frequency) on student engagement is still largely unknown. This is a glaring gap in light of the fact that scheduling is known to have significant effects on various aspects of teaching and learning [19].

Studies on managerial strategies for promoting student engagement are not abundant; consequently, there have been calls for more research into such practices [2]. In regard to the study of student engagement facilitators, Corno and Mandinach [20] argue for the importance of focusing on situated, classroom contexts to discover the degree to which they can enhance or reduce engagement. The current study measured student engagement in authentic classrooms to shed light on how student engagement is affected by class length. Unlike previous studies, the variables of course content and instructional style were closely controlled with class length remaining the only variable between experimental groups.

The amount of total weekly instructional time allotted for English instruction in traditional non-intensive language programs in Thai secondary schools is approximately 3.5 hours. This instructional time is commonly divided between 2 or 3 sessions throughout the week. However, it is also common to organize special tutoring particularly for Grade 9 students in preparation for high stakes exams (e.g. national standardized tests and entrance exams for upper secondary school admission) where students meet for longer instructional sessions lasting 3-4 hours. Previous studies give reason to question the effectiveness of such long instructional sessions especially in regard to their potentially negative impact on student engagement levels. The purpose of the current study is to shed light on the optimal length of class time for maintaining a healthy level of engagement in the Thai secondary school context.

Objectives

The current study focuses on the impact of class length on student engagement in order to inform instructors and course designers regarding best practices for enhancing student engagement. Engagement is assessed using student self-report and teacher report questionnaires in two variations of instructional time distribution (35-minute classes on six days a week versus 3.5 hour classes once a week). A comparative analysis of the results of student self-reports and teacher reports sheds light on the correlation of the research instruments employed in this study. This study also investigates the causes of student engagement based on qualitative data collected with open-ended questions.

The current study sought to answer the following research questions:

1. What are the differences in students' engagement in long versus short instructional sessions?
2. What are the differences between the results of student self-reports and teacher reports of engagement?
3. What are the primary causes of student engagement and disaffection as reported by students and teachers?

Methods

1. Participants and instruction

The participants in this study were 70 Grade 9 students aged 14 or 15 years old. They were enrolled at a private secondary Islamic school in deep southern Thailand, a region where English is not widely used. All of them had been learning English in traditional non-intensive school language programs for at least 8 years.

Prior to the commencement of their grammar instruction all participants took a grammar test designed for A2 level of CEFR. This test included 5 error recognition/correction (ER/C) items and 5 multiple choice (MC) items for each target grammar point that was used in the subsequent treatment (See Table 1.) The total amount of points on the exam was 120. An overall mean score of 29.82 indicated that the students were at a low proficiency level. Furthermore, an independent samples t-test indicated that both groups were at an equal proficiency level in regard to target grammar topics ($p = .081$).

Notices about a special grammar course held outside of normal school hours were posted in four different Grade 9 classrooms to recruit participants. Students voluntarily signed up for the classes and also chose their preferred study schedule which determined the experimental group they were in.

37 of the participants (6 males and 31 females) signed up for a class that met once a week on Friday, the only day off for students at this school where they study regular classes 6 days a week. The duration of instructional sessions for this group was 3.5 hours not including a 15-minute break. This group is referred to in this study as Group A. 33 students (3 males and 30 females) signed up for a class that met 6 days a week after school. The duration of instructional sessions for this group was 35 minutes each day for 6 days a week. This group is referred to in this study as Group B. Both experimental groups studied a total of 3.5 hours per week. The researcher was the teacher for both groups in this course which lasted for 8 weeks with a total of 28 hours of instructional time. Both groups were taught using identical content and teaching style.

Table 1 Exam details and target grammar points

Topic	Exam Type	
	Error recognition/correction	Multiple choice
1. Past continuous versus past simple tense	5	5
2. Comparative and superlative adjectives	5	5
3. If / unless + first conditional	5	5
4. Question tags	5	5
5. Active voice versus passive voice	5	5
6. Present perfect simple tense	5	5
7. Direct speech versus indirect speech	5	5
8. Gerunds and infinitives	5	5
Total	40	40

Eight grammar topics known to be challenging for Thai secondary students were chosen as the content for the treatment period. (See Table 1.) In order to boost a sense of relevance, the participants were told that knowledge of these topics is important for several high stakes exams that they would take at the end of the current academic year. Each week a new grammar topic was presented along with a review of topics already covered in previous weeks. The content was taught using communicative, focus-on-form

activities in order to create a stimulating yet objective learning experience in the classroom [21]. The instruction for each week was divided into 6 stages. Group A received all 6 stages in succession on a single day. Group B received one stage per day on 6 days throughout the week. (See Table 2.)

Table 2 Weekly study timetable

Day	Stage	Group A	Group B
Wednesday	1	-	35 min.
Thursday	2	-	35 min.
Friday	1-6	3.5 hr.	-
Saturday	3	-	35 min.
Sunday	4	-	35 min.
Monday	5	-	35 min.
Tuesday	6	-	35 min.
Total		3.5 hr. (210 min.)	3.5 hr. (210 min.)

2. Instruments

In order to identify suitable data collection instruments a recent review of instruments used to measure student engagement was consulted [22]. A set of questionnaires developed by Skinner, Kindermann, and Furrer [23] to measure student engagement at the classroom level and established as a reliable tool to measure the construct was found to be most suitable for the context of this study. According to this model, the student engagement scale is a composite of four subscales: behavioral engagement, behavioral disaffection, emotional engagement, and emotional disaffection. The assumption of Skinner et al. [23] is that students are competent reporters of their own engagement but also that a teacher report is a healthy compliment to reach maximal reliability. Hence, two questionnaires are used to measure the engagement construct, a student self-report and a teacher report, each including the four subscales.

Measures of student engagement should be evaluated carefully and adapted if necessary to fit each unique context [22]. Due to the participants' low English proficiency, the student self-report questionnaire was translated into Thai to avoid linguistic difficulties. A 5-point Likert-type rating scale was used to collect quantitative data on both questionnaires. Four open-ended questions were added at the end of each questionnaire to provide qualitative data that could complement and expand on the quantitative data. The original questionnaires each had a total of 20 Likert-scale items. Both questionnaires were piloted in order to detect any shortcomings.

Reliability analyses found that data from the student self-report pilot questionnaire was internally consistent at a high level ($\alpha=0.88$). 4 items that were irrelevant, ambiguous, or unnecessarily redundant were eliminated to create more compact instruments. The final version of the student self-report questionnaire used in this study consisted of 16 Likert-scale items with four items under each subscale of student engagement. A few open-ended questions were reworded to enhance their clarity and potential to elicit interesting information related to the engagement construct. These questions were designed to allow students to express their attitudes about class length and the causes of their engagement or disaffection.

Reliability analyses found that the data from the teacher report questionnaire was internally consistent at a high level ($\alpha=0.99$). During the pilot phase, the 2 teacher raters reported difficulties in assessing some indicators of emotional engagement and disaffection (e.g. for this student, learning seems to be fun). This affirmed previous researchers who reported the difficulty of assessing internal states directly [1, 22]. Therefore, 4 items were eliminated. The final version of the teacher report questionnaire used in this study

consisted of five items each under behavioral engagement and behavioral disaffection subscales but only three items each under emotional engagement and emotional disaffection. Four open-ended questions were included to allow the raters to elaborate on and clarify their observations regarding the causes of engagement and disaffection as well as what the clearest indicators were of those phenomena. Results from the pilot teacher report questionnaire analysis showed a very high level of inter-rater correlation (Pearson's $r = .91, p < .01$).

3. Procedure

Participants from both groups independently completed the student self-report questionnaires twice during the 8-week course, once at the end of the second week and once at the end of the seventh week. Questionnaires were completed at the end of class to reflect engagement levels at the end of short and long instructional sessions. The use of two measurement points provides a better picture of engagement over the duration of a language course than a one-time assessment [6].

The teacher reports were completed by two raters neither of which was the teacher for the course. The first rater had 3 years of teaching experience while the second rater had seven years of teaching experience. Employing external raters provided highly objective results. Moreover, they were able to give undivided attention to observing and recording indicators of engagement and disaffection during real class time. Collecting data from two raters eliminated one-rater bias. Prior to piloting the questionnaires, the raters were given a short training by the researcher to ensure their understanding of the engagement construct and their competence in its assessment.

The raters attended the class during the fifth stage of instruction each week throughout the course to evaluate students. Indicators of engagement and disaffection can easily be overlooked when evaluating an entire class of more than 30 students simultaneously. Therefore, each week only 9-11 students from each group were evaluated. These students were randomly selected each week before class from among the students which had not yet been evaluated up to that point. They were asked to sit in the front row but were not told that they were being evaluated. Both raters were seated at the front of the classroom facing the students, one on either side of the classroom. This gave them a clear, unobstructed view of the students they were evaluating. Both raters completed a set of the Likert-scale items in relation to each individual student under evaluation and they completed one set of open-ended questions in relation to the entire group of students being evaluated on that day. Each student had a turn to be evaluated by teacher raters twice throughout the course, once during the first half of the course and once during the second half of the course.

4. Analysis

The goal of the analysis was to find the difference in student engagement between Group A and Group B. In order to analyze the quantitative data from the questionnaires, items under behavioral and emotional disaffection were reverse coded so that a higher score indicated a higher level of engagement. The scores on items across both points of measurement were averaged to arrive at a score between 1 and 5 indicating student engagement for that item. Mean scores of 1.00 – 1.49 indicated the lowest level of engagement, 1.50 – 2.49 indicated low engagement, 2.50 – 3.49 indicated medium engagement, 3.50 – 4.49 indicated high engagement, and 4.49 – 5.00 indicated the highest level of engagement. On teacher reports the final mean score included an average of scores given by both raters at both points of measurement. Then the scores across all four subscales were averaged to find an overall value of student engagement for each group on student self-reports and teacher reports. Skinner et al., [6] report that the four subscales in their assessment instruments are correlated highly enough so that their combined value can be used to form a single internally consistent measure of engagement. Finally, independent samples t-tests were conducted to find the differences between scores on each item as well as the difference between overall total scores between the two groups as measured by students and teachers.

In order to answer the second research question, the quantitative data from student self-reports and teacher reports analyzed in each of the four subscales. Independent samples t-tests were conducted

using the average score for each subscale on the student self-reports and the average score for each subscale on teacher reports to find whether or not the differences between them were statistically significant.

Qualitative data from the open-ended questions were considered using descriptive and thematic analysis. The answers on student self-reports were translated into English. All responses were grouped according to key words and carefully evaluated to identify recurrent themes. Finally, responses from both groups were compared to identify outstanding and interesting differences especially in regard to the effects of class length on student engagement.

Results

Reliability coefficients were calculated for both questionnaires used for data collection. The student self-report and the teacher report questionnaires both had a very high level of internal consistency ($\alpha = 0.92$ and $\alpha = 0.98$ respectively). Inter-rater correlation was also high between the two teacher raters employed in this study (Pearson's $r = 0.58$, $p < .01$).

Table 3 Results of student self-reports on engagement

Student self-report questionnaire items	Group A (n=37)		Group B (n=33)		P
	M	SD	M	SD	
A. Behavioral engagement	4.06	0.52	4.06	0.54	.996
1. I try hard to do well in class.	4.16	0.69	4.29	0.59	.416
2. I participate in class discussions.	3.69	0.82	3.53	0.67	.382
3. I listen very carefully to everything the teacher says.	4.32	0.64	4.35	0.73	.883
4. I take notes during class.	4.05	0.79	4.06	0.88	.974
B. Behavioral disaffection	4.42	0.50	4.36	0.58	.673
5. I don't always pay attention when the teacher is talking.	4.49	0.59	4.39	0.74	.563
6. I don't try very hard in this class.	4.43	0.60	4.48	0.68	.733
7. I do just enough to get by.	4.50	0.60	4.45	0.67	.765
8. When I'm in class, I am easily distracted.	4.26	0.71	4.12	0.74	.438
C. Emotional engagement	4.16	0.65	4.24	0.47	.560
9. When we work on something in class, I feel interested.	4.18	0.66	4.29	0.61	.465
10. I don't give up when it's difficult to understand.	3.85	0.72	3.65	0.69	.240
11. I enjoy the class activities.	4.46	0.69	4.74	0.42	.040*
12. I enjoy when I meet a challenge in the classroom.	4.15	0.86	4.27	0.71	.517
D. Emotional disaffection	4.26	0.46	4.30	0.43	.342
13. I am bored in class.	4.16	0.72	4.33	0.70	.318
14. I don't really enjoy class.	4.55	0.60	4.70	0.47	.273
15. I don't care if I miss class.	4.64	0.63	4.53	0.75	.527
16. I can't wait until it's time for class to finish.	4.26	0.73	4.52	0.52	.092
Total	4.26	0.46	4.30	0.43	.742

Note. M = Mean, SD = Standard deviation * $p < .05$

The results in regard the first research question concerning the differences between student engagement levels in short versus long classes can be seen in the quantitative data shown in Tables 3 and 4.

The results from student self-reports on engagement are displayed in Table 3. The average scores across all 16 items for both groups were higher than 4.2 indicating that both groups were highly engaged. There was only one item (#11) where there was a statistically significant difference between Group A ($M = 4.46$, $SD = 0.69$) and Group B ($M = 4.74$, $SD = 0.42$). Group B had slightly higher student engagement overall, however, the overall difference between groups failed to reach statistical significance ($p = .742$).

Table 4 Results of teacher reports on engagement

Teacher report questionnaire items	Group A (n=37)		Group B (n=33)		p
	M	SD	M	SD	
A. Behavioral engagement This student.....	3.67	0.45	3.90	0.30	.014*
1. tries hard to do well in class.	3.84	0.49	4.05	0.38	.063
2. voluntarily participates in class discussions.	3.27	0.54	3.47	0.55	.133
3. listens carefully to everything the teacher says.	3.81	0.48	4.08	0.30	.006**
4. focuses his/her attention on the person speaking or on the assigned task.	3.68	0.46	3.98	0.31	.001**
5. shows positive facial expressions and body language (smiling, nodding etc.).	3.77	0.58	3.95	0.51	.182
B. Behavioral disaffection This student.....	3.83	0.43	4.11	0.31	.002**
6. doesn't try very hard in class.	3.94	0.45	4.22	0.37	.007**
7. does just enough to get by (only contributes when called on).	3.55	0.54	3.84	0.49	.023*
8. doesn't always pay attention when the teacher is talking.	3.78	0.47	4.16	0.38	.000**
9. is easily distracted.	3.95	0.48	4.20	0.38	.019*
10. makes little eye contact with teacher (or with classmates during group work).	3.93	0.50	4.14	0.40	.054
C. Emotional engagement This student.....	3.97	0.42	4.25	0.29	.024*
11. is enthusiastic when something new is started in class.	3.44	0.44	3.56	0.41	.235
12. seems interested when working on a task.	3.89	0.53	4.19	0.35	.007**
13. enjoys the class activities.	3.86	0.45	4.11	0.38	.015**
D. Emotional disaffection This student.....	3.79	0.42	4.04	0.29	.002**
14. doesn't really take an interest when new material is being explained.	3.72	0.46	4.01	0.39	.007**
15. is bored in class.	4.14	0.45	4.44	0.31	.002**
16. doesn't really enjoy class.	4.04	0.44	4.30	0.27	.004**
Total	3.79	0.42	4.04	0.29	.004**

* $p < .05$

** $p < .01$

Table 4 displays the results from teacher reports on engagement. Average scores across all 16 items for both groups were higher than 3.7 indicating that both groups had a high level of engagement. The engagement level of Group B was significantly higher than that of Group A on 11 out of 16 items. The overall engagement level of Group B ($M = 4.04$, $SD = 0.29$) was significantly higher ($p < .01$) than that of Group A ($M = 3.79$, $SD = 0.42$).

Some of the qualitative data obtained from the open-ended questions are also helpful in answering the first research question. In response to one question on the student self-report (if you cannot join the next class, how will you feel?), feelings of sadness, regret or disappointment were expressed by all students in Group B across both points of measurement. For example, a student wrote: “Not happy because I want to study.” Another student wrote: “I would feel sad because maybe I could not keep up with the course content.” The majority of students in Group A also expressed feelings of sadness or regret, however, feelings of indifference were mentioned four times and two students reported that they would feel happy.

In response to the question, ‘what are some of the clearest signs of disaffection that you noticed?’, teacher raters noticed students with their heads on the table 7 times in Group A whereas this sign of disaffection was not mentioned once in Group B. During 6 out of 16 observations teachers were unable to identify any signs of disaffection in Group B. In contrast, no signs of disaffection were noticed in Group A during only two of the observations.

Table 5 Comparison between student self-report and teacher

Variables	Student self-report		Teacher report		p
	M	SD	M	SD	
Behavioral engagement					
Group A	4.06	0.52	3.67	0.45	.001**
Group B	4.06	0.54	3.90	0.30	.162
Behavioral disaffection					
Group A	4.42	0.50	3.83	0.43	.000**
Group B	4.36	0.58	4.11	0.31	.034*
Emotional engagement					
Group A	4.16	0.65	3.73	0.45	.001**
Group B	4.24	0.47	3.95	0.35	.006**
Emotional disaffection					
Group A	4.40	0.53	3.97	0.42	.000**
Group B	4.52	0.49	4.25	0.29	.009**
Overall					
Group A	4.26	0.46	3.79	0.42	.000**
Group B	4.43	0.43	4.04	0.29	.007**

* $p < .05$

** $p < .01$

As for the second research question, students reported that they were more engaged than teachers judged them to be in each one of the four dimensions. (See Table 5.) In fact, results of independent samples t-tests on the average of means in each dimension showed that student self-reports varied significantly in

comparison to teacher reports in both experimental groups in nearly every category. The only category where there the difference was not statistically significant was in behavioral engagement in Group B. Differences in student and teacher reports overall reached strong statistical significance ($p < .01$).

In order to answer the third research question and to bring deeper insights into the first research question, we turn to more of the qualitative data obtained through open-ended questions included in the questionnaires.

The main cause of engagement identified by students had to do with the teacher's style of teaching which included characteristics such as helping students understand, a variety of fun activities in class, and using an instructional flow that was easy to follow. Over 80% of participants from both groups considered teaching style to be the primary cause of engagement. Responses like "the teacher has a fun, interesting way of teaching" and "I can understand the lesson and follow the teacher. I am not confused" were common.

Observations by teacher raters were similar in relation to causes of engagement. The role of an animated, engaging teacher and the incorporation of a variety of class activities into the instruction were highlighted. Rater 1 reported "the teacher asks lots of questions and encourages the students to interact." Rater 2 noticed that the teacher was "engaging and enthusiastic." "Clear instructions" and "giving opportunities for students to speak" was also frequently mentioned. On teacher reports, short classes were mentioned twice as a cause for engagement in Group B. However, class length was not mentioned as a cause of engagement by students in either group on student self-reports.

In response to the question about causes for disaffection, class length was a more outstanding factor. "Classes are too long" was the second most frequently reported cause for disaffection in Group A following "difficult lesson content." In addition, "feeling tired during class" was mentioned more frequently by students in Group A than by students in Group B. This is especially significant when taking into consideration the fact that Group A studied in the morning while Group B studied after a long day of school.

Teacher reports on causes of disaffection complemented student reports. Tired students in Group A did not go unnoticed by the teachers. Tiredness was mentioned as the main cause for disaffection in Group A five times while it was only mentioned once of Group B. In relation to Group A, Rater 1 wrote: "It seems like the students have been sitting too long" while Rater 2 reported that "students appeared sleepier as time progressed." At times the raters found it impossible to notice any causes of disaffection. "No observable causes" was mentioned in 9 of the observations for Group B in contrast to it being mentioned only twice in regard to Group A.

Discussion

1. Engagement in long and short classes

In answer to the call for research into managerial practices for enhancing student engagement [2] the current study provides insights into the management of class scheduling to maintain a greater level of student engagement during grammar classes. Overall the findings of this study lend support to the premise that class length is a significant factor that affects student engagement. Students are more engaged during short rather than long instructional sessions. According to teacher reports, students in the short classes were significantly more engaged on measures of their behavior and displayed emotions. This brings empirical evidence to other research which has found that students tend to get bored and disengaged by the end of long classes [12, 15, 17]. The findings from this study challenge the findings of Kilpatrick [11] which indicate that students in longer classes (block scheduling) are no less engaged than students in traditional schedules (shorter classes).

Data from the open-ended questions yielded some interesting observations. Negative feelings toward long classes were easier to detect from the qualitative data. Long classes were mentioned as a significant cause of disaffection in Group A. A few students from this group reported that they would feel indifferent or even happy if they could not attend the next class which indicated some degree of disaffection. This attitude differs from that of students in Group B who only reported feelings of regret or sadness in relation to not being able to attend class. The qualitative data from student self-reports add strength to the evidence for the advantages of shorter classes seen on the teacher reports and affirms previous research which found that students dislike lengthy instructional sessions [16].

Although length of classes was found to be a factor in engagement levels, it was not the primary cause of engagement or disaffection as observed by students and teachers. Instructional methods and teacher style play a greater role than class length in determining students' engagement level. Therefore, adjusting class length to maximize student engagement is not as important as employing engaging instructional methods and teacher style. This confirms previous research that has found such factors to play a defining role in engagement [2, 8].

2. Differences between student and teacher reports of engagement

Significant differences between scores on student self-reports and teacher reports of engagement were found in this study. Teachers are less optimistic about students' engagement level than students are themselves. Researchers and educators should be aware that students and teachers may perceive their level of engagement and disaffection differently as it could lead to confusing outcomes in engagement assessment. This study found that teachers primarily look for body language as an indication of whether or not students are engaged. While this is likely a good indication of engagement level, it may not always be accurate. Some students are more expressive while others tend not to show their feelings by laughing, clapping or nodding. This may be a cause for some of the difference in student and teacher perceptions of engagement.

As pointed out in previous studies, it is difficult to measure internal states by direct observation [1, 8, 23]. The discrepancy between student and teacher reports particularly in relation to emotional engagement is of concern. For example, if a teacher reports that students are uninterested in the class but the same students report that they are interested we would need to take the latter as an accurate evaluation due to the fact that students are more accurately aware of how they feel. Measures of emotional engagement may best be left to students.

3. Implications for learning and teaching

There are a few clear implications from this study for teaching and learning grammar. Lengthy classes are less conducive to student engagement, in fact, we can expect students in long classes to be less engaged and therefore make less language gains per hour of study time. The result is wasted instructional time, a costly loss for academic institutions as well as for students. Shorter and more frequent classes can serve to boost students' engagement levels and lead to greater academic gains.

Tutoring for exam preparation in Thai secondary schools is particularly of concern. It is common for such classes to be arranged with intensive schedules which include lengthy instructional sessions. Rather than cramming many hours of study into the final weeks before high stakes exams, the findings of this study indicate that spreading the instructional time over a few months with shorter instructional sessions will result

in a higher level of student engagement during class thereby increasing their retention of grammar knowledge.

For many instructors rearranging class schedules may not be an option. In that case an attempt to incorporate features of shorter classes into a lengthy instructional sessions could be worthwhile. This could include things like breaking long instructional sessions into segments each with a distinct but related type of activity or language focus, frequent breaks, or occasional pauses in instruction for reviewing previously taught content. Thereby the weaknesses of lengthy classes may be minimized.

Limitations and recommendations for further research

A variable that may be confounding in this study was the time of day for instruction. Group A met in the morning while Group B met after school in the evening. The cause for disaffection most frequently mentioned by Group B was the fact that this grammar class was held at the end of a long day of school. It is possible that the higher levels of engagement in Group A would be even more outstanding had both groups been able to meet in the morning.

This study only took two possible distributions of instructional time into account. Many more variations of class scheduling exist. For example, it is possible that distributing 3.5 hours of study time over two days per week may provide a suitable middle ground where classes are neither too long nor too short. Other variations of weekly class scheduling should be taken into account in future studies.

Finally, the context taken into consideration in this study was relatively narrow. Instruction was focused only on grammar and all participants were in Grade 9. Future studies on the impact of class length on student engagement should include a wider language focus (e.g. speaking or writing) as well as a broader range of participants in terms of age and proficiency level. College level courses would be of particular interest since courses with 3-4 hours of daily instructional time are common in such settings.

Conclusion

Research on student engagement is incomplete by the lack of a clear consensus on reliable instruments for its measurement and the lack of empirical studies at the classroom level. The aim of the current study was to find the differences between student engagement in short and long instructional sessions. A two-month grammar course in a Thai secondary school was used as the context and two variations of class scheduling for 3.5 hours of instructional time were investigated. This study contributes to student engagement research by highlighting the differences between student self-report and teacher report measures of engagement. Teachers look to behavioral signs particularly body language to assess engagement and are more critical of engagement levels than students are. Teacher reports on emotional engagement can differ significantly from student self-reports reports and therefore needs to be taken with caution as students are more aware of their own feelings. In spite of these challenges, this study found evidence that short classes are more conducive to student engagement while lengthy classes are a threat to engagement levels needed for positive academic outcomes.

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