

Using Nudges to Boost Big Reading

DOUGLAS FORSTER AND JOSEPH POULSHOCK Senshu University and Japan Women's University

Nudges encourage behaviors without mandating them. Using nudge theory, teachers can create a "choice architecture" to encourage students to read more and more honestly. This paper compares nudges versus mandates in extensive reading. We give numerous examples of ER nudges and suggest ways to research nudge theory to promote extensive reading.

Problem: Getting Students to Read More

As practitioners of extensive reading, we look for effective ways to challenge and nurture our students to read big to not only improve all four skills in English and grow their vocabulary, but also to help them discover the joy of reading and become lifelong readers. But how can we do that? Critics might say, "ER is great, but students don't (or won't) do it unless we make them", whether it be through required word counts and/or quizzes that represent a certain percentage of their final grade. However, by doing so, we are creating reading mandates: Read or fail! Since one of the main tenets of ER is that it should be enjoyable, do such mandates promote pleasurable reading? We believe that ER is like play. Do we mandate play? Perhaps a tired parent might order their child to "Go outside and play!" However, we would rather see learners self-motivated to read on their own accord.

Solution: Nudges

One possible way to move towards selfmotivated reading is to utilize "nudges" instead of mandates. Nudge theory is

Forster, D and Poulshock, J. (2020). Using Nudges to Boost Big Reading. *Extensive Reading World Congress Proceedings*, *5*, 173-181.

based on Richard H. Thaler (winner of the 2017 Nobel Prize in Economics) and Cass R. Sunstein's book, *Nudge: Improving Decisions* About Health, Wealth, and Happiness. Central to human behavior is our ability to make decisions based on the choices available to us, and nudge theory focuses on the how choices are designed and their influence on the decision-making process. It posits that because the way people actually think is instinctive and often irrational, it is better to offer choices that are not authoritative in nature but ones that steer people to making positive and helpful decisions. For example, instead of a school banning junk food in the cafeteria, healthy foods can be placed at eye-level and the junk food items can be placed in higher, harder-to-reach locations, thus encouraging students to choose the healthy foods (Ly, Mazar, Zhao, & Soman, 2013). In essence, with nudges, we try to decrease confrontation and avoid forceful powerplays for influencing behavior.

Educators can use nudge theory to positively influence student behavior, and there are a variety of nudges that range in strength and scale. However, as Wesley (2018, para. 1) points out, there are ethical factors to consider: "Ethical nudges should be designed with the intention of benefitting those being nudged, and they should never be misleading, coercive, or restrictive." This concept is illustrated in Sarah Lazarovic's (2018) cartoon of "The Nudge Continuum" we see the weakest nudge as a "feather of statistical insignificance," followed by the mid-range gentle finger "tap of good sense," and the strongest nudge, a "bat of paternalistic overreach."

Wesley (2018, para. 2) outlines the following suggestions for educators to "strike the right balance on the nudging scale": First, "Use data to inform the solution," which means that as teachers, we must clearly understand the behavior we want to change in our students and the reasons and or underlying causes for this behavior. Thus, if our students are not reading enough to reach a certain word count, we must understand why they are not reading before we attempt to nudge them to read more. Important here is that the data "should be used to ensure the desired behavior being encouraged by a nudge is rooted in evidence." For example, we can show our students the results of research that indicates that ER helps raise TOEIC test scores.

Second, we should "utilize auto opt-in but allow for easy opt-out." However, this becomes tricky with ER because if we require our students to read a certain amount of words, they really do not have the choice to "opt-out" of the ER portion of the class, but one way to avoid failing students for not reaching the target word count is to use a "pillow grading scale" developed by Poulshock (See Figure 1).

Using a Pillow Grading Scale, Poulshock's students can still pass the course even if they do not read the "mandated" word count, which gives them more control over their final grade.

Third, we must "be transparent." In other words, "the purpose of the nudge should be communicated early on to students" to foster "feelings of trust" that "may lead them to think more positively about the desired change." Here, we can remind students of the benefits of extensive reading and explain that we will encourage them to read more each week using, for example, gentle email reminders. This is important because as Wesley warns: "A covert

	Big Reading Scrum Questions: (1) How many words did you TRACK (T) last week? (2) What is your reading GOAL (G) for this week? (3) What stories or books do you recommend for your group? (Remember good language learners get big data.)																
	Write (G) for your word count goal for next week. Write (T) for the work count you actually did.																
Words/Week	4/22	5/6	5/13	5/20	5/27	6/3	6/10	6/17	6/24	7/1	7/8	7/15	7/22	7/29	8/5	Words	Total Score
10,000																150,000	30
9,000																135,000	28
8,000																120,000	25
7,000																105,000	23
6,000																90,000	22
5,000																75,000	21
4,000																60,000	20
3,000																45,000	19
2,000																30,000	18

Figure 1. Pillow grading scale

nudging strategy that isn't communicated to students may unintentionally backfire and lead to active resistance to the intervention goal" (Wesley, 2018, para. 6).

Fourth, Wesley (2018, para. 6) suggests that we "learn from the nudging community" about different nudging strategies that have worked with students. For example, "Nudging: A Very Short Guide," (Sunstein, 2014), offers a general introduction about nudging and a list of the ten most important nudges. In addition, Ly et al. (2013) have written a comprehensive A Practitioner's Guide to Nudging that includes an organizing framework, case studies, and process guidelines for nudging. For a list of nudging interventions used in behavioral economics, see Mark Egan's Nudge Database (n.d.). In addition, O'Hara (2019) publishes a blog, "Nudging Ahead," in Psychology *Today* in which he explains how to leverage psychology for college student success. Finally, Behavioral Scientist (behavioralscientist.org/?s=Nudge) publishes online articles and original columns from leading behavioral scientists, and further examples of education nudges can be found at <u>nudge4.</u> ideas42.org.

Applying Nudge Theory to ER

We have tried the following "nudges" to get our students to read more and foster a positive attitude toward extensive reading.

Word Target Nudge

One effective way to get students to read more is to implement weekly word targets, such as 2,500 words. McLean and Poulshock (2018) found that by using weekly word targets, "participants generally doubled their reading amount compared to when they were required to read one book per week" (p.88). Of course, setting required word target goals is a mandate and not a nudge. However, McLean and Poulshock's study found that "weekly word targets may help our students read more extensively and efficaciously even after the reading targets are later removed" (2018, p. 77). Over the last 10 years of implementing ER in a required English course for first year students, one of the authors has observed that over 90 percent of students reach the minimum 300,000 words necessary to receive a full 25% for the extensive reading portion of their final grade.

The Five-Minute Drill

#	Date	Time	Goal: I'll read minutes per day!
1	Start Date		Name:
2			1
-			The Five Minute Drill
3			Read for at least 5 minutes per day.
4			See if this makes you feel more like reading.
4			See if this helps you read more. The teacher will tell you the start and due dates.
5			
			1. Write your name.
6			2. Read for at least 5 minutes daily.
-			3. Write your total for each day.
7			4. Write "0" for no time.
			Write "5" for 5 minutes. Write "33" for 33 minutes.
8			6. In the totals boxes, (a) write the total of 5 minute (or
	-		more) days; (b) write the total minutes. Sign it!
9			Answer the questions on the due date. Not before.
10			
11			
11			Points
12			14-15 Days = 5 points
			12-13 Days = 4 points
13			10-11 Days = 3 points 8-9 Days = 2 points
			7 Days = 2 points
14			
15			
Totals			Due Date / /
	1 Write Total 1	1 Write Total 1	Sign your name
8	Days Read	Minutes	here →
		Answer these q	uestions on the due date. Not before. ↓
I	his activity made	me feel more li	ike reading. 🛛 Disagree 🗅 Don't Know 🗅 Agre
	This activity	helped me read	more. Disagree Don't Know Agre

Figure 2. The five-minute drill

One of the biggest challenges we face as extensive reading practitioners is finding ways to get our students to read more. Poulshock (2013, p. 106) asserts, "One solution is to have students commit to at least 3-5 minutes daily," and the "'five-minute drill' can act as a catalyst for students to read for more than 3-5 minutes daily" (p. 101). Poulshock's students earned extra credit for reading 3-5 minutes per day, and his correlational results showed that this "kick start" drill increases reading amounts (See Figure 2). In some cases, Poulshock saw a 12 percent increase in reading amounts for students who did the drill.

SCRUM for ER

Based on Jeff Sutherland's book, Scrum: The Art of Doing Twice the Work in Half the Time (2014), in which teams manage and break big projects into steps, students work in teams and set weekly ER goals, thus creating social nudges to read more. The use of group work is a long-established practice in EFL instruction. As Long and Porter (1985) pointed out over 30 years ago: "Provided careful attention is paid to the structure of tasks students work on together, the negotiation work possible in group activity makes it an attractive alternative to the teacherled, 'lockstep' mode" (p. 207) of instruction. In addition, group work can be used for "motivating learning and increasing the idea of pleasure through learning" (Taqi & Nowreyah, 2014, p. 52). Furthermore, after implementing cooperative learning with groups of Thai EFL learners, Wichadee (2005) observed increased achievement and more positive relationships among students. In fact, students "are more satisfied

with their learning experiences in group work than individual work" (Kondo 2010, para.2). This method is effective because students can see each other's reading goals and support each other. Using SCRUM as a social nudge, Forster & Poulshock (2016) saw a 63.65 percent increase in word counts (See Table 1). Therefore, there is evidence to suggest that SCRUM group work can serve as an effective ER nudge.

The "As if Principle"

The "As if Principle" is based on William James' 1884 theory that our actions guide our emotions. In short: "If you want a quality, act as if you already have it" (Wiseman 2013, iv). Wiseman claims that by applying the as if principle, we can overcome procrastination, gain persistence in completing tasks and achieving desired results, and boosting our will power. All of these seem useful in motivating students to participate in ER with more enjoyment and success. In addition, they seem to follow H. D. Brown's (1980, p.69) cognitive principle of language learning: the "anticipation of rewards." That is, learners are driven to act by the anticipation of rewards, tangible or intangible, as well as the affective principles of "language ego." Learning a new language involves developing a new mode of thinking, and "self-confidence": success in learning something can be equated to

Advanced: N = 9 Intermediate: N = 18	Book Word Count Av- erage Per Student	Stories Word Count Average Per Student	Stories & Books Word Count Average All Students	All Word Counts All Students	Percent In- crease
All students before scrum (N = 27)	25,105	3,655	28,670	888,779	63.65%
All students dur- ing scrum (N = 27)	42,227	4,642	46,919	1,454,490	

Table 1. Scrum as a social nudge (adapted from Forster & Poulshock, 2016)

the belief in learners that they can learn it. Therefore, below we can see two more nudge activities that use the as if principle to motivate students to do extensive reading: (1) A Picture of Reading, (2) Reading Posters.

In the "A Picture of Reading" activity, students take a photo of themselves reading a book and write a caption that promotes reading. They are instructed to think of interesting, fashionable, or eye-catching situations. For example: reading on the bus or train, in line waiting for lunch, in a tree, in a field of tall grass, sitting with animals, or wearing fashionable clothes. They should take several photos and choose the best one, being careful not to read in dangerous or inappropriate places. After choosing their best picture, they create a "sticky" text or caption for their picture. The text should be short, catchy, and memorable. The goal is to inspire themselves and others to read.

When completed, the students email their picture to their instructor. The instructor then creates a PowerPoint slideshow of the students' pictures to be shown in class. The students are instructed to bring a book, preferably a graded reader, to read to the next class session. Prior to showing the slideshow in class, students are asked to read silently for ten minutes and then are given a five-point—(1) strongly disagree; (2) I disagree; (3) I don't know; (4) I agree; (5) I strongly agree-questionnaire that measures their attitude toward reading: (1) I like books; (2) I enjoy reading; (3) I always want to carry a book with me; (4) Reading a lot can improve my English; and, (5) Reading makes me smarter. Next, the instructor shows the slideshow to the students who watch and score each picture using the following five-point scale: 1 = Very Low; 2 = Low; 3 = Average; 4 = Good; 5 = Excellent.

The students are then asked to read silently again for ten minutes and complete the same questionnaire. The instructor collects the questionnaires and compares the total of the first questionnaire with the second. If the second questionnaire score is higher than the first, the students had a more positive attitude about reading after seeing each other's photos. In 2014, this activity was performed in first-year English beginner course at a Japanese university in Tokyo. The result was a four percent increase in positive responses. While this may not seem like a successful result, we believe that any increase in positive responses makes this a worthwhile nudge activity.

The "Reading Poster Project" is similar to the "Picture of Reading" project. However, in this activity, students prepare paper or PowerPoint posters that promote reading and share their posters with the class. Here again, students complete a questionnaire about reading before and after viewing and scoring their classmates' posters.

Poulshock (2013) carried out this activity in a first-year English oral communication class with advanced students, which produced a six percent increase in positive responses to the reading questionnaire. This suggests that the "Reading Poster Project" may be a better as if principle nudge to promote extensive reading than the "Picture of Reading" activity. Perhaps this is because the posters do not contain photos of the students, take less time to prepare, and can be better evaluated as anonymous examples.

E-mail Reminders

In July 2019, Poulshock and Forster tested nudge theory on a total of 287 first-year university students. Using an automated mailing system, students were sent daily email reminders for two weeks to read

N = 287	Total Word Count	Average Word Count	*Average Median Words
Pre-Nudge	2,834,550	8,847	3,752
Post-Nudge	3,297,572	10,486	5,035
Word Count Increase	463,022	1,639	1,283
Percent Increase:			34%

Table 2. Pre- & post-nudge word counts

stories at ReadOasis.com and use the library for graded readers. This was followed by two weeks of no email reminders. The results showed a 34 percent increase in word count during the two-week "nudge" period compared to the two-week nonnudge period (See Table 2).

Conclusion

As Takase (2008) states, "The most critical element for ER to be effective is motivating students to read a great amount of English" (p. 21). In addition, Yamashita (2004) found that "the motivation factor for extensive reading...is a positive feeling towards reading" (p. 21). However, are these nudge activities effective in promoting and fostering a positive attitude about extensive reading and getting our students to read more? Both the "Picture of Reading" and the "Reading Poster Project" produced small gains in positive student responses about reading, and Poulshock's "Five-Minute Drill" contributed to gains in student word counts. But we must keep in mind that for students to truly see a difference in their English language competence, they need to read a tremendous amount of words. Sakai (2002), for example, claims that students need to read one million words before they can become independent readers who enjoy reading and no longer need help from their instructor. And, as Takase and Otsuki (2012) point out: "Reading one million words is a sharp contrast with the average number words in school textbooks which pupils are exposed to during their six years of English education at secondary schools" (p. 78), which is 30,000 to 50,000 words. Unfortunately, reading one million words can take several years, which in itself can be a demotivating factor for many students. Nishizawa, Yoshioka and Fukuda (2010, p. 632) recognize the benefits of reading one million words. In fact, they claim that reading three million words can actually benefit Japanese EFL students as much as living abroad for one year, and that reading six million words may actually be better than one year abroad. Moreover, the authors suggest that reading at least 300,000 words is the "threshold for [students] to feel at ease while reading English texts" (p. 632) From the authors' experience with using ER in Japanese university English courses, 300,000 words can be achieved by many students over the course of one academic year. Still, the key to their students' success remains keeping them motivated and "nudged" to read more.

Despite the profound benefits that EFL students can gain by doing extensive reading, many challenges remain. We must find ways to help students sustain ER over a long period of time. Therefore, much research and larger case studies need to be conducted in applying nudge theory to extensive reading in order to produce more accurate data for analysis. Still, we believe that experimenting with these activities is a worthwhile and enjoyable endeavor to decrease student frustration and increase motivation to read. At the very least, these activities provide valuable tools for nurturing and motivating students to read more (Komiyama 2009) and getting students to think more about reading. Furthermore, they may help improve teacher motivation to use ER in the classroom, for as Uozumi and Takase (2012) point out: "Despite the gaining popularity of ER as an effective teaching methodology, it is often the case that some start an ER program and then fail, and thus conclude that ER is not an effective enough strategy for English language learning" (p. 62). Whether or not these nudge activities can truly promote and create a positive attitude towards extensive reading remains to be seen. For as Grabe (2009) emphasizes: "Extensive reading, to be reasonably successful, generally requires a significant effort to motivate students" (p. 326).

Still, based on the success of the above pilot experiment and activities, it seems that we can use nudges to help our students read more, but we may need to adjust the nudges to match learner differences and preferences. However, we need more empirical research for ER and nudges and more ER practitioners to research the effectiveness of nudges. The following are some suggestions given by audience members at the Fifth Extensive Reading World Congress during our presentation: Creating an "ER Cloud," a place where students can review, evaluate and recommend books and provide information on levels and word counts; Using recommendation cards on which students draw pictures; "Book Whispering," which is word-of-mouth book recommendations among students; Encouraging students to read based on Cialdini's (1984, 2016) concept of "Framing," in which the instructor can show positive examples such as "10 students read 8,000 words this week," or "Reaching X amount of words only takes Y minutes per day." The authors welcome other ideas for using nudges to encourage our students to read extensively and develop a life-long love for reading.

References

- Brown, H. D. (1980). *Principles of language learning and teaching*. New Jersey: Prentice Hall.
- Cialdini, R. (1984). *Influence: The psychology* of persuasion. New York: William Morrow and Company, Inc.
- Cialdini, R. (2016). *Pre-Suasian: A revolutionary way to influence and persuade*. New York: Simon & Schuster.
- Eagan, M. (n.d.). *Nudge database*. University of Stirling. <u>https://www.stir.ac.uk/media/</u> <u>stirling/services/faculties/social-sciences/</u> <u>research/documents/Nudge-Database-</u> <u>1.2.pdf</u>
- Forster, D., & Poulshock, J. (2016, October 1). Applying scrum principles to ER instruction. A paper given at the 9th Annual Extensive Reading Seminar held at Nanzan University, Nagoya, Japan.
- Grabe, W. (2009). *Reading in a second language: Moving from theory to practice.* New York, NY: Cambridge University Press.
- Komiyama, R. (2009). CAR: A means for motivating students to read. *English Teaching Forum*, 47(3), 32-37.
- Kondo, A. (2010). Students' perception of group work in EFL class. Nara National College of Technology. <u>https://www.</u>

nara-k.ac.jp/nnct-library/publication/ pdf/h22kiyo12.pdf

- Lazarovic, S. (2018, February 5). *The nudge continuum* [image]. <u>https://behavioralscientist.org/cartoons/the-nudge-continuum/</u>
- Long, M. H., & Porter A. P. (1985). Group work, interlanguage talk, second language acquisition. *TESOL Quarterly*, 19(2), 207-228. doi: 10.2307/3586827
- Ly, K., Mazar, N., Zhao, M., & Soman, D. (2013). A practitioner's guide to nudging. Rotman School of Management Working Paper, No. 2609347, 1-28. <u>http:// dx.doi.org./10.2139/ssrn.2609347</u>
- McLean, S., & Poulshock, J. (2018). Increasing reading self-efficacy and reading amount in EFL learners with word targets. *Reading in a Foreign Language*, 30(1), 76-91.
- Nishizawa, H., Yoshioka, T., & Fukada, M. (2010). The impact of a 4-year extensive reading program. In A. M. Stoke (Ed.), *JALT2009 Conference Proceedings* (pp. 632-640). Tokyo, Japan: Japan Association of Language Teachers.
- O'Hara, R. E. (2019). Nudging ahead. *Psychology Today*. <u>https://www.psychology-</u> <u>today.com/us/blog/nudging-ahead</u>
- Poulshock, J. (2013). The five-minute drill for big reading. In S. Miles & M. Brierley (Eds.), Second World Congress on Extensive Reading Proceedings (pp. 101-107). Seoul, Korea: The Extensive Reading Foundation. <u>https://erfoundation.org/</u> <u>ERWC2-Proceedings.pdf</u>
- Sakai, K. (2002). *Kaidoku hyakuman go* [Toward one million words and beyond]. Tokyo: Chikuma Shobo.

- Sunstein, C. R. (2014). Nudging: A very short guide. *Journal of Consumer policy*, 37(4), 583-588. <u>https://doi.org/10.1007/</u> s10603-014-9273-1
- Sutherland, J. (2014). *Scrum: The art of doing twice the work in half the time*. London: Random House.
- Takase, A. (2008). The two most critical tips for a successful extensive reading program. *Kinki University English Journal*, No. 1, 119-136. https://kindai.repo.nii.ac.jp/index. php?action=pages_view_main&active_ action=repository_action_common_download&item_id=5459&item_ no=1&attribute_id=40&file_no=1&page_ id=13&block_id=21
- Takase, A., & Otsuki, K. (2012). New challenges to motivate remedial EFL students to read extensively. *Apples – Journal of Applied Language Studies*, 6(2),75-94.
- Taqi, H. A., & Nowreyah, A. A. (2014). Effect of group work on EFL students' attitudes and learning in higher education. *Journal of Education and Learning*, 3(2), 52-65. <u>http://dx.doi.org/10.5539/jel.</u> <u>v3n2p52</u>
- Thaler, R. H., & Sunstein, C. R. (2008). Nudge: Improving decisions about health, wealth, and happiness. Newhaven, CT: Yale University Press.
- Uozumi, K., & Takase, A. (2012). Teachers' motivation to implement extensive reading in class. In M. Brierley, M. Grogan, P. Hourdequin, T. Robb, & A. Takase (Eds.), *First World Congress on Extensive Reading Proceedings* (pp. 62-64). Kyoto, Japan: The Extensive Reading Foundation. <u>https://erfoundation.org/proceed-ings/erwc1-Uozumi-Takase.pdf.</u>

Wesley, A. (2018, April 19). The well-balanced nudge: How to impact behavior without limiting choice [Blog post]. https://www.naspa.org/rpi/posts/thewell-balanced-nudge-how-to-impactbehavior-without-limiting-choice

- Wichadee, S. (2005). The effect of cooperative learning on English reading skills and attitudes of the first-year students at Bangkok University. BU Academic Review, 4(2), 22-31.
- Wiseman, R. (2013). *The as if principle: The radically new approach to changing your life*. New York: Simon and Schuster.
- Yamashita, J. (2004). Reading attitudes in L1 and L2 extensive reading. *Reading in a Foreign Language, 16*(1), 1-19.