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The Presence of Food in English as an Additional Language Textbooks

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Abstract

This article reports research on the occurrence of terms related to food in textbooks written for students of English as an Additional Language. Ten such textbooks were examined. Of the 3767 total activities in the textbooks, 641 activities (17%) contained at least one reference to food, and seven of the books contained an entire unit focused on food. The number of instances of food terms found in the textbooks totalled 2311, of which 1254 were categorized as general food terms, e.g., restaurant, and 1057 were categorized as specific foods, e.g., chocolate. Of the specific foods, 399 were categorized as being of plant origin, 252 as containing ingredients of animal origin, 339 as either plant or animal origin, but likely to contain ingredients of animal origin, 61 as being somewhat evenly divided as to how often they were exclusively of plant origin, and 6 as usually containing only ingredients of plant origin. The specific food terms were also classified as either regular foods used in main meals (529), or as at fun foods, eaten in casual contexts (528). These results are discussed for their classroom implications, and suggestions are made for future research. [192 words]

While most basically, food is essential for sustaining life, food also plays other roles, including cultural, economic, social, and psychological roles. In fact, According to a United States Department of Agriculture (USDA) study (Hamrick, 2011), in the U.S., people 15 years old and above eat and drank as their main activity for an average of 67 minutes per day, while eating and drinking were a secondary activity for an additional 86.5 minutes daily. Additionally, Fobes found that people in the U.S. spend about 11% of their income on food (Fobes, 2017).

Thus, unsurprisingly, food features in a wide variety of educational materials. The present study reports an investigation as to the presence of food in second language education materials, in particular, textbooks for students learning English as an Additional Language (EAL).

Various aspects of education materials can be investigated, including the materials' content (e.g., Jacobs & Goatly, 2000; Juan, 2010; Weninger & Kiss, 2014) and teaching methodology (e.g., Jacobs & Ball, 1996). Furthermore, the values and lifestyles on display in the materials can be analysed, e.g., Crookes (2013) maintained EAL materials teach not only language but also attitudes and values. For example, Stibbe (2004) found that the EAL textbooks he studied emphasized technological fixes for human induced environmental damage rather than promoting approaches that sought to change human values to become more consistent with environmentally friendly behaviours. Sexism constitutes another theme not strictly related to the learning of traditional areas of language, e.g., reading, writing, listening, speaking, grammar, and pronunciation, that researchers have addressed in analyses of learning materials (e.g., Ansary & Babaii, 2003).

Research on the depiction of food in learning materials may be timely, as food has drawn increased attention for its roles in many aspects of today's world, including health,

environmental protection, and relations between humans and other animals. In particular, calls have been heard for reduction or replacement of foods from nonhuman animals (Milman & Leavenworth, 2016). However, despite these calls, consumption of meat and other animal based foods, e.g., dairy and eggs, has increased (Worldwatch Institute, 2016). Undoubtedly, food choices can be controversial. As one blogger put it, “food choices have become freighted with so much judgmentalism, self-righteousness, and guilt-tripping that what to have for lunch can feel less like a culinary dilemma than an ethical one” (Simons, 2010, paragraph 4).

In terms of health, lifestyle diseases, such as heart disease, obesity, and diabetes, are on the rise, particularly in the developed world, and a significant share of the blame for this rise has been placed on increased consumption of animal based foods, such as meat, eggs, and dairy, and of processed foods, such as white bread, sweetened drinks, and fast foods (Greger & Stone, 2016). Processed foods are on one end of a continuum with “whole” foods (Campbell & Jacobson, 2016) at the other end. For instance, baked potatoes or brown rice are less processed, whereas potato crisps and white rice are more processed. Similarly, olives are whole, less processed foods in comparison with olive oil.

Environment and concern for other animals are two more areas in which attention might be paid to the foods included in education materials. In terms of the environment, according to some researchers, the production of animal based foods plays a major role in climate change, accounting for a greater share of human produced greenhouse gases than do all forms of transportation combined (Food and Agricultural Organisation, 2006). This high production of greenhouse gases, such as methane, nitrous oxide, and carbon dioxide, occurs

because, among other reasons, production of animal based foods increases deforestation and wastes resources, such as water and energy.

As to relations between humans and other animals, awareness has grown of the harm done to the animals used for food (Compassion in World Farming, 2018). For instance, these animals, such as chickens, pigs, and cows, are deprived of almost all opportunities to live a natural life, and the life they do live is greatly shortened. Furthermore, appreciation has increased of these animals' cognitive and affective capacities (de Waal, 2016). This appreciation extends even to marine animals, whom scientists have, in some cases, found to be capable of experiencing pain, consciousness, and even joy (Balcombe, 2016).

Methodology

The current study set out to collect preliminary data on the place of food in one form of education materials: EAL textbooks. These books are used by students, often at university level, who need to take courses in English in preparation for their university studies. The researchers examined a convenience sample of 10 EAL textbooks selected randomly from the collections available to teachers at James Cook University, Singapore and the Southeast Asia Ministers of Education's Regional Language Centre, Singapore. These were four skills – speaking, listening, reading, writing – textbooks, rather than focusing on one language skill, and were general English, rather than focusing on English for a specific area, such as English for Business. These books were intended for students in many countries, rather than focusing on only one country. Only the student books, not the teachers books or the workbooks, were investigated, nor did the researchers examine the contents of any audio or video materials. The copyright dates of the books ranged from 2000 to 2016, and the books were prepared for students of a variety of English proficiency levels.

Research questions were:

- (1a) What percentage of activities in the textbooks made reference to food;
- (1b) How many of the textbooks had a unit focused on food;
- (2a) How many instances were there in the textbooks of terms related to food?
- (2b) Among those instances of terms, how many referred to food generally, such as “meal,” and how many referred to specific foods, such as “pizza?”
- (2c) Of the instances of terms for specific foods, which foods came from plants, which from animals, or which might, in 2018 (when the research report was written), have been from either plants or animals.
- (2d) Of the instances of terms for specific foods, which could be seen as foods for regular meals, and which might have been associated with eating for fun?

Collecting Data on Research Questions 1a and 1b

The authors of the present study are aware of only one textbook for second language learners devoted exclusively to the topic of food (To determine the percentage of activities in the ten EAL textbooks that made reference to food, first, the researchers counted the number of activities in the textbooks. This was done using the division employed by textbook authors. Only the textbooks’ main sections were used, not introductory, review, or supplementary sections. For instance, Doff and Jones (2000) had either a *Focus on Form* or a *Study Pages* section at the end of each chapter. The decision not to count such sections was made as these supplementary sections tend to be more form based, rather than meaning based. Then, the activities that included mention of food were counted. Finally, the number of books with an entire unit devoted to food was counted. In addition to units explicitly about food, some textbooks had chapters related to food, e.g., Dignen, Flinders, & Sweeney (2004) has a unit

related to food “The coffee business.” These were not counted in answering Research Question 1b.

Collecting Data on Research Questions 2a, 2b, 2c, and 2d

In collecting data on Research Question 2a, the researchers recorded instances of terms related to food. A broad definition was applied. For instance, adjectives describing food, such as “delicious” or “spoiled,” were counted. Verbs related to food preparation, such as “cook” and “boil,” were counted, as were terms for places where food is prepared and/or served, such as “kitchen” and “restaurant.” Furthermore, terms for people who work in the food industry, such as “waitress” and “chef,” were included. Drinks, including “water” and “orange juice” were also included among the food terms.

While many terms were included, other possible terms related to food were not counted. Senses such as taste and smell were only counted if they related to food for humans. Potential foods, e.g., the words “cow” or “rice field,” were not counted. Also, products, such as chewing gum, that are not swallowed were not counted. Neither were names including food, e.g., the screen name “butterpopcorn,” nor were metaphorical references to food, e.g., “couch potato.” Only foods eaten by humans were counted, e.g., cat food was not counted, nor was grass eaten by cows or other ruminant animals.

Once the instances of terms considered food-related for the purposes of this study were listed, for Research Questions 2b, 2c, and 2d, the terms were divided into categories. The first categorization, for 2b, was into general food terms and specific food terms. General food terms were those such as “eat,” “café,” “waiter,” and “breakfast.” For example, people can “eat” many different foods, and “waiters” can serve many different foods. In contrast, examples of specific foods included “carrots,” “bread,” “milk,” and “chicken.”

The category of specific foods could have been divided into many different subcategories. For instance, drinks could have been a separate subcategory, and within drinks, alcoholic beverages could have formed their own subcategory. Another sub-category within specific foods could have been spices, such as sugar and ginger. However, as explained below, the researchers decided on two different subcategories for the specific foods.

The first subcategory within specific foods, for Research Question 2c, concerned the origin of the foods. This subcategory was of interest because, as discussed earlier, a trend exists, at least in economically more well-off countries to move towards foods of plant origin, and the researchers wanted to collect baseline data on this, as two of the researchers are active in promoting plant based diets, and consume no meat, dairy, eggs, or other animal based foods, whereas the second author could be considered as having dietary views and practices closer to the mainstream.

Mushrooms and other foods that are neither from plants nor animals were subsumed under plant foods, as this seems to be the general practice (Greger & Stone, 2016). However, it is usually impossible to know the exact ingredients of foods from their mention in textbooks, for instance, “coffee” could contain dairy milk, plant milk, or no milk at all. Furthermore, many ingredients can be added to foods for purposes such as changing the flavour and extending the shelf life (Yacoubou, 2018). Therefore, the researchers used their own knowledge of food ingredients, and applied a five-category classification system: A (Animal) for foods of animal origin; P (Plant) for foods of plant origin, plus foods in neither category such as “water” and “mushrooms”; EA (Either plant or animal, but probably animal) for foods, such as chocolate, which could be entirely of plant origin, but in the researchers’ experience most often contain ingredients of animal origin; E (Either) for foods that seem to be about equally distributed as to whether or not ingredients of animal origin are included,

such as tea; EP (Either, probably plants) for foods that often only contain ingredients of plant origin, such as cereal.

The second subcategory of specific foods, Research Question 2d, was whether the foods were often associated with fun and conversation, such as pizza, chocolate, and coffee, or foods more often part of what might be considered a proper main meal, such as rice, fish, and spinach. This admittedly subjective subcategory was of interest because, firstly, Richards (1995), a leading author of EAL textbooks, recounted that part of his preparation process for a new textbook series involved collecting data on students' likes and interests. Thus, such fun, socializing foods seemed likely to be prominent, as they would reflects student preferences. Secondly, the authors, in their experience with students who use these textbook, often saw them eating such foods. Thirdly, four-skills EAL textbooks contain many activities in which students chat with each other in groups of 2, 3, or 4, and the textbooks seek to prepare students to converse casually in their additional language with people beyond their education institution. The appearance of such foods in their textbooks might put students in the mood for such casual, small group discussions. Thus, the researchers expected to find a large percentage of terms for these "fun" foods.

Interrater agreement was 90% or above for the various categories of data in the study. The level of agreement was established by the first two authors discussing a category, coding some activities together, discussing some more, coding a new set of activities alone, and comparing their coding. The coding for Research Question 2d, was most problematic, given the subjective nature of whether a food could be considered fun. After interrater agreement had been established the first author did the bulk of the remaining coding.

Results

Research Question 1a asked about the percentage of activities in the textbooks that made reference to food. The ten EAL textbooks contained a total of 3767 activities, 641 of which had at least one reference to food, for a percentage of 17%. The percentage ranged from one book in which 11% of the activities had a reference to food to a book with 27% such activities. Research Question 1b asked how many of the ten books contained a chapter with a food theme, and the answer was 7.

Research Questions 2a, b, c, and d looked at the specific terms in the ten EAL textbooks which referred to food. In answer to Research Question 2a, a total of 2311 instances of food terms were found. The three most popular were, in descending order (with the number of instances in parentheses): coffee (91), chocolate (47), and pizza (31). Perhaps, one of the most unusual foods was “dinosaur soup,” found in an item on a quiz on “Amazing Food Facts” (Kerr, 2012, p. 61) which asked about the central ingredient in the oldest soup in the world.

Research Question 2b asked about whether the food terms referred to general or specific foods. Of the 2311 instances of terms for food, 1254 were classified as general foods, and 1057 were classified as specific foods. Research Question 2c asked about whether the specific foods named in the textbooks contained ingredients from animals. As to the ingredients of the 1057 instances of specific foods, 399 were classified as being of plant origin, 252 of animal origin, 339 as either plant or animal, but likely to contain ingredients of animal origin, 61 as being somewhat evenly divided as to how often they were exclusively of plant origin, and 6 as usually containing only ingredients of plant origin. Finally, 529 of the instances of food terms were classified as regular foods used in main meals, whereas 528 were classified as fun foods, eaten in casual contexts.

Discussion

The results of the present study suggest that food does indeed play a prominent role in 4-skills materials for EAL students, as for Research Question 1a, 17% of the activities involved at least a mention of food, and for Research Question 1b, 7 of the 10 textbooks had an entire unit devoted to food. Thus, materials developers, teachers, and students might want to consider the ways the topic of food is dealt with as part of the learning process. For example, as part of active learning (Felder & Henriques, 1995), students could read, write, and carry out recipes. Indeed, research suggests that when people prepare their own food, their diets become healthier (Wolfson & Bleich, 2015). Additionally, students and teachers could visit and compile data on local food stores and eateries.

As to Research Question 2c, which asked about whether the specific foods mentioned in the textbooks contained ingredients of animal origins, the relative prominence of foods that are sometimes prepared without ingredients of animal origins does provide more space for students and teachers who, for whatever reasons, wish to avoid or reduce their consumption of such foods. Furthermore, the quantity of plant based alternatives in the markets is growing (Business Wire, 2017). Discussion of this trend could be linked to discussion of topics related to consumption of animal based foods: such as increases in diabetes, the worsening situation with climate change, and concern for the welfare of nonhuman animals.

Data for Research Question 2d suggested that casual, fun foods (as defined by the researchers in this investigation) – are prominent, i.e., about 50% of the instances of specific foods. Perhaps, materials writers are attempting to connect with students' lifestyles and to encourage a relaxed feeling which would encourage peer interaction among students (Lee & Mak, 2018). Indeed, research does suggest that diet can reduce anxiety and lift depression (Agarwal, Mishra, Xu, Levin, Gonzales, & Barnard, 2015). The cooperative learning literature provides many other ideas for promoting a relaxed, yet purposeful classroom environment (Jacobs & Kimura, 2013).

Ideas for Future Research

The current study suggested that food has a fairly prominent place in at least one type of educational materials, textbook for EAL students. Following on from this study, many other research questions can be asked including the prominence of food in other types of educational materials. Additionally, the teaching methodology used with mentions of food could be explored. For instance, as suggested in the Discussion section of this paper, researchers could investigate whether textbooks encourage and facilitate students to prepare food for themselves and others. The present study only examined the words via which foods were presented, not the visuals, such as photos, drawings, and videos. Future researchers might wish to examine these. One of the research questions here looked at whether foods were plant based. Questions for related studies could involve the treatment of the topic of veganism in EAL textbooks, e.g., one of the textbooks (Dignen, Flinders, & Sweeney, 2004) defines the word “vegan” and devotes a page to discussing someone who is a vegan and works for the Vegan Society (p. 98).

Conclusion

The foods people consume impact themselves as consumers, and by the foods they choose to consume, people influence the world around them and those who live in that world. This influence that students and their teachers have as food consumers speaks to the theme of social responsibility in language education (Cates, 1997), because people need to be conscious consumers and, as explained previously, plant based foods tend to be better for the planet and its inhabitants: human and nonhuman. Furthermore, no discussion of food would be complete without reference to the hundreds of millions of humans – one in nine people on Earth - without enough food (World Food Programme, 2018). That said, any discussion of food would also be incomplete without highlighting what a celebration eating can be and

what joy food can bring, both the gustatory, olfactory, and tactile pleasure derived from the act of eating as well as the social element of partaking food with others. Thus, the researchers in the present study were happy to find a prominent role given to food in the 10 EAL textbooks, and urge that materials developers, teachers, and students relish their immersion in language about food and consider how food can enhance the lives of all, for the present and the future.

References

- Agarwal, U., Mishra, S., Xu, J., Levin, S., Gonzales, J., & Barnard, N. D. (2015). A multicenter randomized controlled trial of a nutrition intervention program in a multiethnic adult population in the corporate setting reduces depression and anxiety and improves quality of life: The GEICO study. *American Journal of Health Promotion*, 29(4), 245-254.
- Ansary, H., & Babaii, E. 2003. Subliminal sexism in current ESL/EFL textbooks. *Asian EFL Journal*, 5(1), 1-15.
- Balcombe, J. (2016). *What a fish knows: The inner lives of our underwater cousins*. New York, NY: Scientific American / Farrar, Straus and Giroux.
- Business Wire (2017, June 20). Global meat substitutes market 2017-2021: Product segmentation and forecasts by Technavio. Retrieved from <https://www.businesswire.com/news/home/20170620006278/en/Global-Meat-Substitutes-Market-2017-2021-Product-Segmentation>
- Campbell, T. C., & Jacobson, H. (2013). *Whole: Rethinking the science of nutrition*. Dallas, TX: BenBella Books.
- Cates, K. (1997). Frequently asked questions about global issues. *The Language Teacher*, 21(4), 33-35.
- Compassion in World Farming (2018). *Factory farming*. Retrieved from <https://www.ciwf.org.uk/factory-farming/>
- Crookes, G. V. (2013). *Critical ELT in action: Foundations, promises, praxis*. New York, NY: Routledge.

de Waal, F. (2016). *Are we smart enough to know how smart animals are?* New York, NY: W.W. Norton.

Felder, R. M., & Henriques, E. R. (1995). Learning and teaching styles in foreign and second language education. *Foreign Language Annals*, 28(1), 21-31.

Fobes, T. (2017, August 2). *How much should you spend on food?* Retrieved from <https://www.usatoday.com/story/money/personalfinance/2017/08/02/how-much-should-you-budget-groceries/529006001>

Food and Agricultural Organization. (2006). *Livestock's long shadow: Environmental issues and options*. Retrieved from <ftp://ftp.fao.org/docrep/fao/010/a0701e/a0701e.pdf>

Gomez-Bravo, A. M. (2017). *Comida y cultura en el mundo hispánico* [Food and culture in the Hispanic world]. Equinox: Sheffield, United Kingdom.

Greger, M., & Stone, G. (2016). *How not to die: Discover the foods scientifically proven to prevent and reverse disease*. New York, NY: Pan Macmillan.

Hamrick, K. (2011, November 22). *How much time do Americans spend eating?* Retrieved from <https://www.usda.gov/media/blog/2011/11/22/how-much-time-do-americans-spend-eating>

Jacobs, G. M., & Ball, J. (1996). An investigation of the structure of group activities in ELT coursebooks. *ELT Journal*, 50, 99-107.

Jacobs, G. M., & Goatly, A. (2000). Ecological issues in ELT coursebooks. *ELT Journal* 54:256-264.

Jacobs, G. M., & Kimura, H. (2013). *Cooperative learning and teaching*. In the series, *English language teacher development*. Alexandria, VA: TESOL (Teachers of English to Speakers of Other Languages).

Juan, W. U. (2010). A content analysis of the cultural content in the EFL textbooks. *Canadian Social Science*, 6(5), 137-144.

Kilickaya, F (2004) Guidelines to evaluate cultural content in textbooks. The Internet TESL Journal 10(12): Available at: <http://iteslj.org/Techniques/Kilickaya-CulturalContent/>

Lee, I., & Mak, P. (2018). Classroom atmosphere. In *The TESOL encyclopedia of English language teaching*. Retrieved from
<http://onlinelibrary.wiley.com/doi/10.1002/9781118784235.eelt0217/full>

Milman, O., & Leavenworth, S. (2016). China's plan to cut meat consumption by 50% cheered by climate campaigners. *The Guardian*. Retrieved from
<https://www.theguardian.com/world/2016/jun/20/chinas-meat-consumption-climate-change>

Richards, J. C. (1995). Easier said than done. In A. C. Hidalgo, D. Hall, & G. M. Jacobs (Eds.), *Getting started: Materials writers on materials writing* (pp. 95-135). Singapore: SEAMEO Regional Language Centre.

Simons, M. (2010, March 1). *Cooking is a great hobby, but it's just a hobby*. Retrieved from
http://www.slate.com/blogs/xx_factor/2010/03/01/why_michael_pollan_jonathan_safran_foer_and_morgan_spurlock_make_me_so_mad.html

Stibbe, A. (2015). *Ecolinguistics: Language, ecology, and the stories we live by*. Abingdon,

United Kingdom: Routledge.

Weninger, C., & Kiss, T. (2014) Analyzing culture in foreign/second language textbooks: Methodological and conceptual issues. In Curdt-Christiansen, X, & Weninger, C (Eds.) *Language, ideology and education: The politics of textbooks in language education* (pp. 1-24). London, United Kingdom: Routledge.

Wolfson, J. A., & Bleich, S. N. (2015). Is cooking at home associated with better diet quality or weight-loss intention? *Public Health Nutrition*, 18(8), 1397-1406.

World Food Programme (2018). *Zero hunger*. Retrieved from <http://www1.wfp.org/zero-hunger>

Worldwatch Institute. (2011). Global meat production and consumption continue to rise. Retrieved from <http://www.worldwatch.org/global-meat-production-and-consumption-continue-rise>

Yacoubou, J. (2018). *Vegetarian Journal's guide to food ingredients*. Retrieved from <http://www.vrg.org/ingredients>

Books Examined

Cameron, S., Iannuzzi, S., Maynard, M. A., Scarry, E. J. (2008). *Hemispheres (Level 3)*. New York, NY: McGraw-Hill.

Cunningham, S., & Moor, P. (2005). *New cutting edge – intermediate*. Harlow, United Kingdom: Pearson.

Dignen, B., Flinders, S., & Sweeney, S. (2004). *English 365: For work and life*. Cambridge, United Kingdom: Cambridge University Press.

Doff, A., & Jones, C. (2000). *Language in use: New edition*. (Pre-intermediate). Cambridge, United Kingdom: Cambridge University Press.

Foley, M, & Hall, D. (2005). *Total English (Elementary)*. Harlow, England: Pearson Education.

Hughes, J., Stephenson, H., & Dummett, P. (2014). *Life (Elementary)*. Andover, United Kingdom: Cengage Learning.

Kay, S., Jones, V., Maggs, P., & Smith, C. (2009). *New inside out (Intermediate)*. Oxford, United Kingdom: Macmillan.

Kerr, P. (2012). *Straightforward: Pre-intermediate* (2nd ed.). Oxford, United Kingdom: Macmillan.

Loveday, P., Koop, M., Trowbridge, S., & Scarry, E. (2012). *Takeaway English 4: English for success*. New York, NY: McGraw-Hill.

Richards, J. C., & Bohlke, D. (2011). *Four corners (Level 1)*. New York, NY: Cambridge University Press.