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WORKING WITH JOURNAL ARTICLES IN THE UNDERGRADUATE EFL LINGUISTICS CLASSROOM

FOLYÓIRATCIKKEK ALKALMAZÁSA AZ ALAPKÉPZÉSBEN TARTOTT NYELVÉSZETI SZEMINÁRIUMOKON

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Abstract: The use of journal articles in undergraduate classrooms has been reported in several fields, notably in the life sciences. Primary literature is used not only to learn the information contained in them and to explore the structure and language of academic research papers, but also to strengthen more general skills (data analysis, critical thinking, etc.) and to develop a better understanding of how research works. The objectives of and obstacles to using journal articles are investigated, and various approaches and tasks in the literature are outlined. These studies act as a springboard for reflection on how journal articles can be more effectively applied in my own linguistics classes.

Keywords: *journal articles, primary literature, undergraduate teaching*

Absztrakt: A folyóiratcikkek egyetemi alapképzésben való alkalmazásáról számos szakterületen, különösen az élettudományok területén, számoltak be. Az elsődleges szakirodalmat nemcsak a bennük foglalt ismeretek elsajátítása, valamint a tudományos kutatási cikkek szerkezetének és nyelvezetének megismerése céljából használják, hanem általánosabb készségek (például az adatelemzés és a kritikai gondolkodás) fejlesztésére, illetve annak mélyebb megértésére is, hogy miként működik a tudományos kutatás. A tanulmány áttekinti a folyóiratcikkek oktatási célú felhasználásának célkitűzéseit és nehézségeit, valamint bemutatja a szakirodalomban tárgyalt különböző megközelítéseket és feladattípusokat. E vizsgálatok kiindulópontként szolgálnak annak átgondolásához, hogy a folyóiratcikkek miként alkalmazhatók hatékonyabban saját nyelvészeti kurzusaimon.

Kulcsszavak: *folyóiratcikkek, elsődleges szakirodalom, alapképzéses oktatás*

1. Introduction

Probably the majority of university-level classes are taught through secondary-literature textbooks, collecting information from many sources and presenting it to students in a systematic and understandable manner. And yet, in many educational systems, one of the requirements for obtaining an undergraduate degree is the

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completion of a thesis or major research paper, a task that usually demands working with primary literature, such as journal articles. In order to effectively research their topics and meet the expectations for presenting their research, students should be familiar with how an academic research paper works: its structure, language, and the conventions of academic writing. Many programs of study provide a course in academic writing as part of the curriculum to help prepare students for the challenges of doing research and writing a thesis. This is especially important in a culture where English is not generally used, i.e., in an English as a Foreign Language (EFL) environment, but where students are expected to research and write their theses in English. In Hungarian universities, students majoring in a foreign language are expected to produce a thesis in the language they are studying.

Naturally, students take an academic writing course as they begin working with their thesis topics. It explicitly deals with topics such as choosing a topic, finding literature on it, the structure of an article or thesis, features of academic language use, citation and referencing, and much more. The academic writing course could be even more effective if students were already somewhat familiar with journal articles, if they had previously encountered them and worked with information in them in disciplinary classes that concentrate on the topic rather than the form. Increasing their exposure to this genre can both provide a base for and reinforce knowledge gained in the academic writing class. Do other teachers join me in this practice – and have they published about it? If so, what reasons do they give for incorporating work with journal articles in undergraduate classrooms, and how do they implement it?

The objective of this paper is to provide a brief survey of papers about using journal articles in the disciplinary classroom within a variety of disciplinary and cultural contexts. The survey focuses on the contexts of such initiatives, as well as their objectives, the challenges encountered and reported outcomes. Furthermore, activities focusing on primary literature are categorized as activities used before, during, and after class. Through this, I explore ways in which journal articles can be incorporated into coursework for undergraduate linguistics classes.

2. Contexts of teaching

Different types of studies are potentially relevant to this topic, with an important one being the English for Academic Purposes (EAP) perspective, whether aimed at native speakers or learners of English. Brandt (2010) is an example of an EAP approach, with the class being taught by an instructor of academic English, choosing journal articles within the students' area of study (petroleum engineering) as examples, for the objective of helping them gain academic skills (reading and writing). In another approach, Brooke (2021) looks at an EAP class in Singapore in which students of various majors read twelve journal articles in the area of the sociology of sport and write their own research paper in that area. The corpus of articles is used to focus on aspects such as attribution in the literature review. Such studies are important and valuable, and can inform any teacher working with journal articles, but in this study, the focus is on journal articles used within the disciplinary

classroom, rather than in a language-focused classroom. Here, papers are excluded that deal with teaching situations in which only abstracts are used (e.g., Arber 2022; Wyatt–Pasamar Márquez 2016), where primary literature is used in an adapted form (Falk et al. 2008), or the focus is on graduate students (e.g., Hill 2006).

There is a growing body of literature on integrating the use of primary literature (mainly journal articles) in the classroom at the undergraduate level; however, the vast majority of these studies are in STEM fields and are intended for students whose mother tongue is English. *Table 1* introduces a sample of articles from different disciplines and language backgrounds, noting papers on courses taught in countries where English is the dominant language versus EFL contexts, with a brief description of the role of the journal articles in the class.

Table 1. *Sample articles on primary literature use in disciplinary classrooms*

Study	Discipline	EFL	Other information
Carkenord (1994)	psychology	no	USA; second-year students; articles optional task for extra credit and assistance in exam
Hoque (2002)	accounting	no	Australia; third-year students; seminar; journal articles were the primary instructional material
Hoskins et al. (2011)	life sciences	no	USA; mixed years; followed experimental studies from one research laboratory; using parts of articles to demonstrate research processes (CREATE method)
Gottesman and Hoskins (2013)	life sciences	no	USA; first-year students; progressing from science articles for the general public to journal articles; focus on understanding how science works and who does it (adaptation of CREATE method)
Carmichael and Allison (2019)	life sciences	no	USA; first-year students; focus on understanding experiments in journal article; group tasks
Van Lacum et al. (2014)	life sciences	yes	The Netherlands; first-year students; compulsory course on Biomedical Research; focus on rhetorical moves, especially argumentation; cognitive apprenticeship approach
Kumar and Guthi (2022)	medicine	yes	India; second-year students; articles in epidemiology and biostatistics; problem-based learning approach

In regard to language, there is no indication in either of the EFL contexts that student proficiency is a barrier to using journal articles in English. Student proficiency in English was not considered an issue at all in the Netherlands: "Our students were nonnative speakers of English. We have no reason to suspect that this had a noticeable influence on our results, because Dutch students are generally well versed in the English language. All the students' textbooks are in English, so they have ample experience in reading English science texts" (Van Lacum et al. 2014: 262). From their description, Dutch was the main language of instruction in the classroom, and the language of the worksheets was not specified. Kumar and Guthi (2022) do not mention the English proficiency of their Indian students at all (note: in the Indian higher education system, medicine is an undergraduate course of studies). India is a nation in the outer circle of English use in the categorization of Kachru (1985), and students are likely to have used English extensively in their education.

Finally, there are several types of papers that do not deal directly with journal articles being used in a classroom situation but that are relevant to the present topic. These include surveys of classroom practices, teacher use of journal articles outside the classroom, and investigations of the process of reading a journal article. For instance, Gaylo et al. (2020) reported on both student interviews and a focus group with teachers in a pre-service teacher education program in the Philippines, asking about whether and how journal articles were utilized in the program, while Poudel (2017) interviewed teachers in pre-service teacher education in Nepal about their practices. Lastrapes and Mooney (2021) investigate whether and how teachers use articles in practitioner journals to inform their own teaching and add to their professional knowledge, though the teachers do not use the articles with students. In their survey, they attempt to identify features of articles that can make them more attractive and useful to potential readers. Turning to the processing of journal articles by readers, Shearer et al. (1997) used a think-aloud procedure to identify strategies and activities (evaluating, connecting, questioning, etc.) of biology professors when reading a journal article. Nelms and Segura-Totten (2019) also conducted a think-aloud study comparing faculty and student responses when reading a journal article on a biology experiment.

3. Aims and outcomes in the literature

Papers published on the use of journal articles as primary literature in non-EAP classrooms state a range of aims, many of them sharing similar objectives. While many papers focus on aims and tasks, some studies have also evaluated outcomes. This section briefly reviews aims and outcomes, first for the life science studies listed in Table 1 and then for initiatives in other disciplines.

3.1. Initiatives in the life sciences

The papers in life sciences (mainly biology and medicine) share similar objectives, going beyond knowledge and skills to the nature of science itself, especially experimental science. Nelms and Segura-Totten suggest (2019: 10) that when

reading academic research papers in biology, "students' epistemological beliefs on the nature of scientific knowledge may lead them to view information in scientific articles as immutable facts". Students may not yet understand that knowledge is not certain and unchangeable or may be unaware that science is a creative and collaborative endeavor, which can interfere with their understanding and interpretation of journal articles.

Carmichael and Allison (2019) propose an activity that they use with first-year microbiology students as their first exposure to published research articles, in which students work together to identify and summarize key elements of the experiment using a format called a "research box". The objective is to encourage engagement with the primary literature "to better understand how science is conducted and communicated" (Carmichael–Allison 2019: 1). In the student survey, two-thirds of the respondents from two different universities agreed or strongly agreed that they had gained confidence in their ability to understand primary literature and increased their ability to interpret experimental results and understand the scientific method. While subjective, the results suggest that students would be less anxious about and better equipped to work with journal articles in their future classes and research.

Hoskins et al. (2011) use an innovative method where journal articles from a single biology laboratory are followed to give students an understanding of the process and development of life science research. The method was shown to have a positive effect on critical thinking and the ability to integrate content. In this method they do not use the entire article; instead, they ask students to work with the literature review, methods and results, especially tables and figures, to draw their own conclusions from data and to think beyond to further steps. They call this the CREATE method (Consider, Read, Elucidate hypotheses, Analyze and interpret data, Think of the next Experiment). Student surveys showed that this method "can shift not just students' analytical abilities and understanding of scientists as people, but can also positively affect students' confidence with analysis of primary literature, their insight into the processes of science, and their beliefs about learning" (Hoskins et al. 2011: 368).

The original CREATE method, which was applied in an upper-level class (third-year students and above), built on knowledge already gained in college courses (Hoskins et al. 2011). It has also been adapted for use with first-year science students intended to "demystify scientific thinking". Labeled CREATE Cornerstone, objectives are "to develop the science related reading and analytical skills of freshmen by using the CREATE strategy to critically evaluate a number of recent and ongoing research studies" (Gottesman–Hoskins 2013: 61), as well as the longer-term aims of increasing student involvement in undergraduate research opportunities and convincing them to pursue studies in biology and consider careers in research. Pre-course and post-course assessment showed the largest gains in evaluating and interpreting information, and increased scores were also found for questions involving problem solving, creative thinking, and/or effective communication.

Also emphasizing the nature of science, in a first-year undergraduate course for Dutch students called Biomedical Research, Van Lacum et al. (2014) focus on the

argumentation in journal articles, which they describe as persuasive texts, in order to understand and evaluate the claims of researchers. The teachers provide guidance on the lexical and organizational features to identify rhetorical moves. It is important for them that students be able to identify the motive, the objective, the main conclusion and how it is supported, and the implications of the findings, as well as the limitations of the study and any claims to generality. Over the semester, they found improvement in most of these areas, though it remained difficult for students to identify the main conclusions and all of the supporting evidence and limitations. Students' confidence in their ability to read and understand rose and they evaluated the course positively.

Kumar and Guthi (2022) used journal articles as texts in a problem-based learning initiative, where different aspects of a research study were identified and critiqued. Their aim was to enable students to understand and interpret scientific studies. While test scores were similar to a cohort using a traditional approach, students in sections using journal articles reported being more enthusiastic about the topic and its professional relevance to them.

In terms of issues related to journal-article-based assignments, a major point is the class time spent on working with the articles. Carmichael and Allison (2019) point out the amount of time needed both in and out of class in working with the CREATE method, especially when considering teacher time in selecting appropriate articles and creating appropriate tasks for them. This is why they created the Research Box, which can be easily adapted to any experimental research article. On the other hand, the CREATE articles (Hoskins et al. 2011; Gottesman–Hoskins 2013) specifically mention benefits to institutions, that is, for a science-based course, it is low-cost, with no need for extra personnel, special equipment, or expensive materials, and no laboratory space is required.

One review of particular interest is Sloane (2021), which reports on the outcomes from a variety of primary-literature-based classes or modules, i.e., gains in content knowledge, research and data analysis skills, critical-thinking skills, scientific and/or information literacy, understanding of the nature of science, and attitudes toward science and scientists. Notably, judging from the titles and journals in which such studies are published, these articles overwhelmingly represent the natural sciences, and particularly life sciences.

As for language studies or linguistics, one potentially relevant source (Wyatt–Pasamar Márquez 2016) focuses on language majors (French, German, and Spanish) in a British university doing a freshman language research project intended to introduce students at an early stage to the experience of doing linguistic research.

3.2. Other fields of study

Beyond life sciences, courses using journal articles have been reported in papers in education, accounting, and psychology. According to interviews with instructors and students in a teacher-training school in the Philippines, journal articles were used "for exposing learners to varied writings, enriching course content and learning,

exposing learners to process learning, preparing learners for classroom engagement, guiding learners to produce outputs" (Gaylo et al. 2020: 61). Another reported aim was following up-to-date topics and research. The researchers found that education faculty members identified problems with student capability, interest, motivation, and perception; many students had difficulty understanding the methods of research and using critical thinking to analyze the data and articles. The authors acknowledge that the lack of exposure to primary sources is one factor. Unfamiliar terminology was an important issue, and the structure and language of journal articles posed a problem. When students were asked to select articles on their own, the researchers reported that their choices were not always optimal. Recommended routes to overcome these obstacles included careful selection of model articles, explicit teaching of how journal articles are structured, more exposure, and pre-teaching vocabulary and concepts. One student comment was of particular interest: "Sometimes, I got confused. There are conflicting facts and claims. I find it hard which study to choose and believe" (Gaylo et al. 2020: 64). This demonstrates that an understanding of the nature of research is also needed for those in the humanities and social sciences and not only for students of natural sciences.

In Hoque's semester-long accounting course, no textbook was used and instead the teacher assigned three articles for reading each week (a mix of research and practitioner articles). The aims were to provide theoretical knowledge for analysis and critical evaluation, an understanding of the special area, i.e., accounting in the public sector and latest developments in it, and, more broadly, to "[d]evelop the ability to initiate and conduct research; and …[d]evelop skills to think creatively and act ethically" (Hoque 2002: 141). The native English speaker students reported initial difficulties with the unfamiliar genre, unknown terminology and concepts, and complex sentences. Both original research articles and articles from practitioner journals and trade publications were used in the class, with students preferring the practitioner articles, considering them more useful and easier to read. The author reports that "students who participated believed that academic articles were too long, too wordy, too heavy, too theoretical, etc." (Hoque 2002: 154). However, through working with articles, students learned how to understand them and extract the information they needed. Familiarity through repeated exposure helped them become accustomed to the complexity of research articles even if they continued to prefer the more accessible articles from trade journals.

For Carkenord (1994), the aim was to motivate native English speaker undergraduate students in psychology to read up to 10–12 articles during a semester in order to expose them to current topics of research. Carkenord came up with an extra-credit assignment of creating summary cards and a test advantage, whereby students could refer to the cards they had made during the test. The majority of students chose to participate by reading at least some articles, and students reported that the experience was beneficial as a learning experience and for gaining content knowledge, as well as for accumulating higher points and test scores.

4. Tasks connected with journal articles

This section presents some of the specific task types mentioned in the studies above. As the tasks are integrated with the methods and aims of each project, they are not all suitable for every context.

4.1. Pre-class tasks

As concepts and terminology are issues that all readers face, native speakers of English or not, the need to pre-teach the most important items was frequently mentioned and many teachers use the articles to synthesize information, rather than to introduce it (e.g., Kumar–Guthi 2022).

In most situations, students are asked to read the journal article out of class. Clearly, there are many practical reasons for this, namely, journal articles are usually fairly lengthy even in practitioner journals, and students' reading speed can differ greatly. It is difficult to justify class time being used for reading an entire paper. Many students including more experienced academic readers re-read the paper or at least parts of it in order to fully grasp it (Hoque 2002; Nelms–Segura-Totten 2019; Shearer et al. 1997). Some stop to look up terminology or background information. Clearly, the best way to accommodate the variety of strategies used is to allow readers to process the article before class.

In general, the purpose of reading seems to be preparing for class discussion. Often there was little specific mention in the literature of whether students were given any guidance in this (e.g., worksheets, checklists, etc.) or it was left up to the students to judge what adequate preparation consists of. Hoque (2002: 147) writes only that "students were advised to read and gain an understanding of all the set reading materials beforehand"; later, he mentions that summarizing is also expected. Also, in Carkenord (1994), students were asked to prepare for class discussions by reading the weekly article, but could gain extra credit by summarizing each psychology article on an 8 × 5-inch (approximately A5-size) card and adding critiques of the article/research.

Another strategy is to provide a worksheet with questions on the structure and content of the text. Such "guide questions" are recommended by teachers to help students focus on the targeted points (Gaylo et al. 2020). As an example, in the approach of Van Lacum et al. (2014) focusing on argumentation in biology articles, students had to identify rhetorical moves (motive, objective, etc.), at first relying on a handout introducing moves and building up more moves weekly, as well as other questions that varied by week. For the first week, titles, the structure of the article and the function of each section were the topics, allowing student attention to be called to things they would otherwise overlook. In the second assignment, there were questions about the article's references, the time between acceptance and publication, and the funding for the research, creating a lead-in to providing information on the publication system and processes, research funding, and other aspects of research that students are probably unfamiliar with. This is part of initiating students into the world of research and the discourse community of their discipline.

In the accounting class (Hoque 2022), in addition to the usual reading and summarizing to prepare for class discussions and tasks, students also had to present a review and analysis of a journal article twice during the semester. The review included key issues, the theoretical/methodological approach, a summary of findings, and identifying unresolved issues or further research possibilities. Furthermore, students prepared to lead the class discussion for these two articles, that is, "[a]rticle presenters were encouraged to generate discussion by asking questions and organizing debates or activities. A substantial component of the overall presentation mark was awarded for creating an active class discussion around the topics. Students were also encouraged to create a small case study, or series of questions or debate issues to inspire discussion" (Hoque 2022: 48).

4.2. In-class tasks

Class or small-group discussion of the article is the most widespread in-class task, though few specifics are given about this in the literature. Carkenord (1994) held 10–15-minute teacher-led discussions of the weekly article, and in tutorial sessions, besides checking answers to questions, tutors were provided with "discussion prompts concerning the methodology, the meaning of certain technical terms, the interpretation of results, and the connections with other articles" (Carkenord 1994: 256). In these tutorials, another task was practicing oral summaries for the final exam. In the Dutch biomedical research class, discussions of papers were held in tutorials lasting around two hours led by undergraduate teaching assistants (Van Lacum et al. 2014).

In Carmichael and Allison (2019), first-year microbiology students work in groups of three to summarize key components of an empirical study in a one-page format, labeled a "research box". It follows a template that requires them to identify the research question for one experiment in the paper, the hypothesis and null hypothesis, the experimental setup, predicted results, actual results (usually as graph, table, or microscopic image), and conclusion. This takes place within one classroom session, and the authors suggest a group discussion after completion, especially if different groups focus on different experiments. A rubric for evaluation is also provided to students and teachers.

In the CREATE classroom, tasks may be either prepared ahead of class and then compared in small groups in the classroom or be created collaboratively during class (Hoskins et al. 2011; Gottesman–Hoskins 2013). These include making concept maps, drawing cartoon descriptions of the study design and experiments, filling in a data analysis template, transforming data from tables into graphs, rewriting table captions, designing follow-up experiments, and formulating questions for researchers (see *Table 1* in Pugh-Bernard–Kenyon 2021: 13). Note that in this case, students are not working with the full article, but with the literature review, methods, and results in table or figure form in order to gain a better understanding of the research process and develop their analytical skills. Many of these tasks were also used in the CREATE Cornerstone adaptation for first-year students, including

concept mapping and cartooning, both with primary literature and popular science articles (Gottesman–Hoskins 2013).

4.3. Post-class activities

Few follow-up tasks are explicitly described in the classroom articles, though in many of these projects the articles and assignments build upon each other, meaning that connections between them would naturally be topics of discussion or analysis. Van Lacum et al. (2014) note that in addition to the feedback given during the tutorial group meeting, tutors provide individual written feedback on students' answers. Carmichael and Allison (2019) suggest peer-review of the experiment summaries by other groups that worked with the same paper. In the CREATE framework, a collection of student questions on research life are sent out to authors of articles and often receive responses (Hoskins et al. 2011).

5. My classroom practices

I have been using journal articles for various assignments in different linguistics and applied linguistics subjects over several years, gradually adding more subjects at earlier stages of study. While sometimes we work just with an abstract or a set of abstracts on related topics, I have also used full journal articles in at least four subjects. The focus changes with the subject, objectives, and content knowledge of the students. Here I discuss two situations.

For second-year students in a three-year undergraduate course, my primary objective is to work with concepts and information using various types of materials, including videos, blogs, excerpts from textbooks, popular science articles, lectures and journal articles. Exposure to linguistics articles, after much of the background has already been covered in other formats, is expected to make this text type less intimidating. Increased exposure and experience are intended to help students become accustomed to searching for information in articles, which may benefit them in the academic writing class and writing their own theses. It also seems to be an important step in initiation into the discipline. However, because academic articles are often new to some or all students, attention needs to be paid to exploring the structure and move functions, which means scheduling time for this in the syllabus. In some situations, a full article may be too much (too long, too difficult) to deal with. I have also found, as reported above, that a practitioner approach is preferable; in some cases, conference papers are more approachable than journal articles.

In my Pragmatics class, I work mainly with third-year students in their final semester who are already well along in the process of researching and writing their own BA theses. Therefore, it can be assumed that they have a certain amount of familiarity with academic articles. In this case, my main objective is to work on extracting information from the article, while reinforcing information on the structure and rhetorical cues of a linguistics article. Typically, two articles are used for the entire class, assigned with a worksheet as homework. Where possible, the topic is introduced through related materials (a video by the author, for instance).

The first article is from a journal that does not expect much specialized linguistic knowledge (such as *English Today*), while the second is a scholarly article from a publication such as the *Journal of Pragmatics*. In both cases, students are provided with a worksheet that points out information to be sought, i.e., the research gap, aims, methods, major findings, and limitations, among others.

I also teach Pragmatics for teacher-training students. After covering many of the basics, we agree on a topic such as responding to compliments. After working with one or two articles on this topic guided by worksheets, students individually or in pairs choose one journal article from a list of references that I have compiled. They have three assignments related to the article: (1) to fill in a report form on bibliographical information, table of contents, explanation of method, personal assessment of the paper/topic, and a summary in Hungarian and introduce their paper to the class orally; (2) to design a worksheet for use with the article; and (3) to complete at least one of their classmates' worksheets and give an assessment of the worksheet's level and tasks. Students are motivated by the idea that their work will be seen by other students and not just the teacher. In fact, I often use student-designed worksheets with some modification in following years.

After reading the articles cited here, I can see several points for improving and expanding my use of journal articles. I should be more careful about pre-teaching the linguistics terms and looking for potential other barriers to understanding. In addition, there should be more focus on class discussion of the articles. I have tended to downplay this, partly because typically more than a few students are behind on their reading. Perhaps this can be made into an advantage, with those who have read the article guiding those who have not. In class, I would like to try sketching out or making cartoons of the methods used, as was suggested in the CREATE articles. Several of the tasks listed in them would be worth trying out, either in class or as individual worksheet tasks. Another interesting approach would be to work with students to analyze the data in tables and figures or present data in different formats before going on to the results and discussion sections of the article. I am also considering designing follow-up tasks. Finally, besides practical techniques and tasks, this collection of articles has led me to consider how journal articles can be used to introduce and reinforce an understanding of the nature of linguistic research, how researchers work, and how they present their studies.

The long-term outcomes of incorporating journal articles into my linguistics class are unknown and in fact difficult to measure. If I were to carry out an assessment, I would hypothesize that greater familiarity with journal articles and how students present linguistic findings leads to better comprehension of such texts and perhaps more confidence in working with primary sources. It may even lead to a better understanding of the field of linguistics and how researchers do their work. However, I cannot see many realistic ways to test these hypotheses. The number of students I work with precludes any comparisons with a control group, for instance. It is also necessary to consider that students encounter primary literature in other courses or contexts.

6. Conclusions

In my search of the literature, I was unable to find studies directly addressing the use of journal articles in undergraduate linguistics classrooms, either in EFL or non-EFL contexts. The only examples I could find that were not related to the natural sciences were for psychology and accounting (native-English-speaking contexts), English for Academic Purposes, and pre-service teacher education (EFL).

Many of the objectives for using journal articles with undergraduates are related to developing skills in reading, analysis, problem solving, and critical thinking, as well as initiating novices into the academic and disciplinary world. Also mentioned were the synthesis of content and providing up-to-date information. In many cases, a very important goal was to "de-mystify" scientific processes, scientific thinking, and scientists themselves, especially in the hard sciences. In some institutions, such endeavors are introduced into the curriculum in the first year of undergraduate studies, even in language studies. Based on the literature, out-of-class preparation is typical: students read the article, often accompanied by a worksheet, and sometimes summarize it. In-class tasks include comparing worksheet answers, analyzing information, and holding discussions. Some approaches use small-group work for certain tasks. As for the application to my teaching situation in the undergraduate linguistics classroom, there are tasks and techniques that can and should be adopted, but perhaps the most important issue for me to consider in my future teaching is the explicit focus on academic processes and how "doing linguistics" can be presented. To take this investigation further, it would be useful to look at a wider range of studies on using primary literature in the classroom. While these are heavily focused on the natural sciences, there are certainly aspects that would also be relevant to the humanities and social sciences, and specifically to linguistics classrooms. In addition, though here I deliberately ignored the abundant materials available from an English for Academic Purposes perspective because the content-knowledge focus was my main interest, the EAP literature would surely contribute useful text-focused tasks and perspectives.

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