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The need for academic writing: An online in-service training for academicians

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Abstract

The purpose of this study is to develop and evaluate an in-service training on academic writing for research assistants at a private university in İstanbul, Turkey. Based on the steps of curriculum development, and online 9-hour in-service academic writing training was designed. Twelve research assistants participated in the training. The embedded mixed method design was applied to conduct the research. An academic-writing task was implemented as a pre-test and a post-test. The relation between the two tasks was analysed via the Wilcoxon signed-rank test. During the sessions, interview forms were used to gather data regarding the effectiveness of the program, and content analysis was used to analyse it. At the end of the training, the participants were asked to fill in the program-evaluation form. The data were analysed via descriptive analysis. As a result, it was seen that there was a significant difference between the pre- and post-writing tasks and the program was effective in teaching academic writing.

Keywords: academic writing; in-service training; online; research assistants.

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1. Introduction

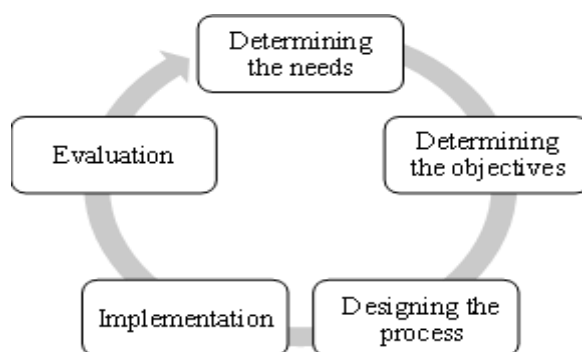
Every institution or an organisation has a basic purpose which is to produce goods, ideas, or services for people. The staff working in those institutions or organisations are the ones who are responsible for the maintenance, the quantity, and the quality of this production. According to Aydın (2014), the condition that the staff work efficiently and productively is highly related to the education they receive in the workplace and the update they do on their knowledge and performance. By receiving education, it is expected for the employees to perform the requirements of their job better and keep up with the change in their jobs. Educating the employees, therefore, is important and dates back to ancient times. Today, this concept is called in-service training which can be defined as developing and empowering the employees with the necessary skills and knowledge in a job-oriented frame (Lion, 2001). Smith (1984) also defines in-service training as a designed program to increase the performance in a job by offering necessary information to the employees or showing them the correct way how to perform a task.

In-service training programs follow a flow of curriculum from the starting point to the end. The common dimensions of developing in-service training programs consist of determining the objectives, content, process, and evaluation (Küçükahmet, 1992). Therefore, it is impossible to separate in-service training from the curriculum itself. Smith (1984) addresses this point by stating that implementing in-service training inevitably includes curriculum development, implementation, and evaluation. In line with this, educational programs offer a holistic point of view regarding the organisation of education based on the desired outcomes (Demeuse & Strauven, 2016). Hence, understanding the curriculum development and applying the right model are the key points for developing effective in-service training.

According to Demirel (2012), curriculum development consists of four basic elements which are the program's objective, content, process, and evaluation parts. The steps and the order of the steps to be followed during the curriculum development differ according to the curriculum development models. Acun (2011) points out that curriculum development models are shaped based on two main approaches which are the product approach and the process approach. The development of the in-service training program in this study is based on the Systems Approach Model, which is one of the curriculum development models in line with the process approach. The Systems Approach adopts the basic structure of a computer system which has the flow of the input, the process, and the outcome. As stated by Odabaşı (1997), the Systems Approach Model in curriculum development consists of five basic elements that are determining the needs, determining the objectives, designing the learning, and teaching process, implementing the program, and evaluating the program. Figure 1 below defines the steps in the Systems Approach Model in curriculum development.

Figure 1

Steps in Systems Approach Model (Odabaşı, 1997)



It is crucial to consider how the parts of the curriculum interrelate with each other to design a curriculum, which is defined as the curriculum design (Ornstein & Hunkins, 2009). Mitchell (2016) claims that curriculum design provides an opportunity to have a coherence between the key segments of the curriculum and the philosophy adopted. There are three basic curriculum design approaches for education programs which are subject-centred designs, learner-centred designs, and problem-centred designs (Alci, 2017). The curriculum design approach that is adopted while designing the in-service training program within this study is the learner-centred design. Learner-centred designs consider the learners as the centre of the education program. Child-centred design is one of the learner-centred designs, which points out that the learner should be active in learning and the design of the program should be shaped taking the learners' needs, interests, and lives into consideration (Ornstein & Hunkins, 2009). As it is seen clearly, developing an in-service training program cannot be considered separate from curriculum design and development. Therefore, determining the curriculum design and development model is the main step to arrange the other steps in order.

1.1. Related studies

Higher education institutions are the institutions where scientific research is maintained together with providing education. Erdem (2013) emphasizes the three main tasks of today's universities which are giving education, doing research, and providing public service. Completing these tasks, higher education institutions achieve their missions and become accredited, which highly depends on the studies of the academic staff. It can be inferred that providing the academic staff with necessary in-service training is a key to improving the performance and increasing the quality of the institutions. Writing a scientific article, writing a chapter in a book or a book itself, writing a conference paper, writing a review, and doing all these in an international frame can be listed among academic productivity.

When the academic staff is considered, there are several studies conducted on the needs of the academic staff in Turkish universities. Yalçın and Altun Yalçın (2017) reveal in their study that academicians are struggling while producing scientific articles in English. Karahan (2003) conducts similar research with academicians and concludes that the majority of the academic staff has foreign language-related problems in academic writing. Similarly, Özdemir (2006) points out the fact that academicians find it hard to write academic papers in English. All these studies indicate that there is a need for academic writing among academicians. So, academic writing can be considered as the foundation of being an academician (Karakuzu, Canlı & Canlı, 2020). In line with this, academicians should focus on their academic writing skills to be able to improve their performance in the academy (Murray & Moore, 2006).

1.2. Purpose of study

As a result of the literature review, it is observable that Turkish academicians have difficulties in academic writing in English. Additionally, in their study Karakuzu, Canlı, and Canlı (2020) reveal the fact that the COVID19 breakdown has also decreased the productivity of the academic staff in producing academic papers and scientific research. Based on this problem regarding the academicians' need for academic writing, this study aims to develop in-service training on academic writing in English for academicians and evaluate the program afterward. This study is significant in terms of suggesting a model for in-service training on academic writing for the academicians to maintain academic productivity and therefore to develop higher education institutions' quality.

2. Materials and Method

2.1. Research Design

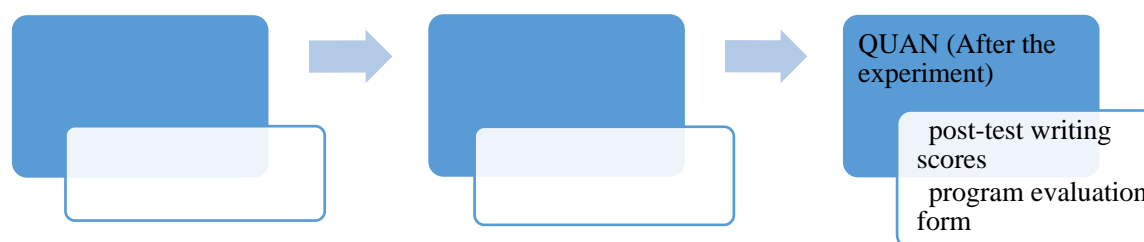
This research aims to develop in-service training for academicians and implement and evaluate the program at the end. The embedded mixed method design was adopted in this study to gather data since it allows the researchers to use both quantitative and qualitative data together or in a sequence within an experimental case (Creswell, 2012; Creswell & Plano Clark, 2014), which empowers the

nature of the study with rich data and provides an opportunity to evaluate the data in multiple ways. Considering this flow of data collection, the process in the embedded mixed method design can be symbolized as QUAN (qual) (Creswell, 2012). The diagram in Figure 2 below shows the flow of the research.

Figure 2

The diagram of the research flow

2.2. Participants



The study group of the research consisted of 12 academicians working as research assistants in a private university in İstanbul. Criterion sampling method among the purposeful sampling methods was administrated to reach the participants. The criterion sampling method, which is a method to select participants on a set of criteria that they all need for a phenomenon, provides detailed and generable information regarding the research (Palinkas, et al., 2015). The criteria determined for this study included being a research assistant, working at the same university, and having at least a B1 level of English proficiency. The participants were determined via the needs analysis questionnaire applied before developing the training. Table 1 below summarizes the demographic information about the participants.

Table 1

Demographic information of participants

Demographics	Number of Participants
Gender	
Female	9
Male	3
Job experience at the university	
2-5 years	8
6+ years	4
The faculty	
Faculty of Law	5
Faculty of Literature	4
Faculty of Engineering	3
English Proficiency Level	
B1	3
B1+	5
B2	3
B2+	1

2.3. Data Collection Tools

The experiment in this case is the implementation of the training program. The quantitative data were collected via a pre-test and a post-test applied at the beginning and end of the training. The participants' views regarding the program and observation notes of the researcher were collected during the training, which comprises the qualitative part of the research. Finally, a program evaluation form was administrated after the training as the second quantitative part of the research. The data collection tools used in this study are as follows: a needs analysis survey to design the in-service

training program, a writing task implemented as the pre-test and post-test, an interview form, and a program evaluation form.

2.3.1. Needs Analysis Survey

The needs analysis survey was developed by the researchers and an educational sciences expert was consulted on the content of the survey. The finalized survey was sent to all research assistants who work at the same university to obtain data regarding their needs in terms of academic writing. The survey consisted of two parts and was applied online on Google Forms. The first part collected the assistants' demographic information such as gender, job experience, the affiliated faculty, and English proficiency level. The second part of the survey included questions regarding the content and the process of the academic writing training to be planned. The participants selected the topics they were struggling in and stated their preferences in the medium of instruction and the date of the training.

2.3.2. A Writing Task as Pre-Test and Post-Test

A writing task was designed on writing an abstract of an academic article to use as a pre and post-test before and after the intervention. The designed task was sent to an English Language instructor to obtain feedback on the language and the content. When the participants were determined, they were sent the finalized task before the training. They were asked to complete the task and submit it on Google Drive. The writing task included some prompts regarding a research article such as purpose, sampling, method, analysis, and conclusion. The participants were asked to write an abstract based on the given prompts.

The pre and post-test writing tasks received were evaluated out of 20 points by 2 English Language instructors using an academic writing rubric. The interclass correlation coefficient was calculated to determine the correlation coefficient among the grades provided by 2 raters and it was found to be .95 for the pre-test writing task and .88 for the post-test writing task. As the result is over .70, it meant that the evaluation was reliable (Şencan, 2005; Kutlu, Doğan & Karakaya, 2008). During the data analysis, the means of each student's scores obtained from 2 raters were used in all calculations.

2.3.3. Interview Form

A semi-structured interview form was developed by the researchers to gather what the participants were thinking about the process and the training that they were participating in. The form consisted of 3 questions regarding the participants' motivation in attending the training, their feelings during the sessions, and the benefits of the training. The form was administrated online when the sessions were continuing to receive qualitative data regarding the process of the training and the participants' thoughts on their experience.

2.3.4. Program Evaluation Form

A program evaluation form was developed by the researchers for the participants to evaluate the training. 9 statements based on the objectives and the content of the program were included in the form and the participants were asked to choose Yes or No for each statement.

2.4. Data Analysis

The writing scores for both pre and post-writing tasks graded by 2 raters were calculated and the mean scores were obtained for each student. The change between the pre and post-scores was calculated with the Wilcoxon Signed-Rank Test on the SPSS program. The qualitative data obtained from the interview forms were analysed with the content analysis and themes and codes were created as a result of the content analysis. Finally, the data gathered with the program evaluation form were analysed through descriptive analysis.

2.5. Procedure

Within the scope of the curriculum development steps, the needs of the participants were detected first with a questionnaire. Depending on the data, the researchers determined the time and the

objectives of the training program intended. Once the objectives of the program were set, the content, learning, and teaching processes were designed accordingly.

The participants were informed about the time and venue of the training. The meetings were held online, and it took 9 hours that include online lessons and assignments to complete the training. The participants were asked to write a pre and post-writing task before and after the training to see the effectiveness of the program. Participants were also asked to fill in an interview form while the training was ongoing, and a program evaluation form right after the training was completed.

2.6. Ethical Issues

An official permit was obtained from the university management regarding the implementation together with the ethical approval report. During the qualitative data analysis, instead of the participants' real names, participants were coded as P1, P2, and P3 to keep the information confidential.

3. Results

3.1. Pre-Test and Post-Test Results

3 out of 12 participants did not complete the post-writing task. Therefore, they were excluded from the analysis. The relation between the pre-test writing scores and the post-test writing scores of 9 participants was analysed using the Wilcoxon Signed-Rank Test as the data did not show a normal distribution. Table 2 below presents the increase between the pre and post-task grades.

Table 2
Wilcoxon Signed-Rank Test Results

	N	Mean Score	Minimum Score	Maximum Score	Wilcoxon Test
Pre-Test	9	12,86	10,25	17,50	
Post-Test	9	16,30	12,25	20	,008

*p < .01

Table 2 shows that the mean scores, minimum and maximum scores of the post-test results are higher than that of the pre-test results. Also, according to the Wilcoxon Signed-Rank Test, there is a significant difference in the increase between the pre and post-test results.

3.2. Interview Form

Within the interview forms, 3 questions were asked to the participants while the training was continuing to receive instant feedback on the program. The data obtained from the interview forms during the intervention were transcribed and content analysis was conducted on the data. As a result of the analysis, themes and codes were created. Table 3 shows the themes and codes determined based on the qualitative data collected.

Table 3
Content Analysis Results

Themes	Codes	Definitions
Motivation	Writing Competence	The motivation is to increase their competence in writing skills.
	Writing Academic Papers	The motivation is to be able to write and publish academic papers in international journals.
Usefulness	Content	The content the program covers is based on the needs and to the point.
	Lesson Flow	The teaching style of the training is fine.
Rooms for Improvement	Participants	The fact that participants come from various departments is seen as a point for the content.

Regarding the motivation behind participating in the training, P1 states the following lines: “I think I have gone worse in my general English writing skill for so long, which leads me to avoid writing anything in English”. The participants think they want to increase their competence in general writing skills. Another reason for the motivation is to be able to produce high-quality academic papers. P9 emphasizes writing academic and scientific papers and says: “I believe both the quality and the quantity of the scientific papers I would write is going to increase when this training is over. I have been waiting for such a training for a long time”.

As to the usefulness of the program, the participants’ answers were gathered under two codes which are the content and the lesson flow. P5 expresses the following: “The content covered is what we need. The topics are presented through sample articles. Here, using good and bad samples is a useful idea to cover the topics”. As can be seen with these lines, participants find the content of the program to the point and based on their needs. The lesson flow is another useful side of the program. On this topic, P3 states the following lines: “I liked the way the instructor explains the details, the teaching style, and the fact that the training is interactive”.

Participants were also asked about the sides that are open to improvement and two codes were interpreted from the qualitative data, which are participants and time. Regarding the participants, the participants think the fact that there were research assistants from various departments affected the content as academic papers vary in accordance with the scientific field. P5 utters the following sentences: “When there are people from different departments, it is difficult to appeal to every single need since there are technical differences among the articles written in social sciences, engineering, and law. I think separate trainings can be organized for common departments”.

3.3. Program Evaluation Form

The data collected after the in-service training was completed via the program evaluation form were analysed through descriptive analysis. Table 4 shows the descriptive analysis results for the evaluation items in the form.

Table 4
Descriptive Analysis of the Program Evaluation Form

Statements	YES		NO	
	Freq.	Per.	Freq.	Per.
1. I have learned new information about the dimensions of academic writing.	12	100%	0	0%
2. I have understood the importance of Textuality for academic writing.	12	100%	0	0%
3. I have learned the basis of academic writing (Topic sentences & Thesis Statement)	12	100%	0	0%
4. I have comprehended the effect of academic vocabulary use on academic writing.	12	100%	0	0%
5. I have learned the points to be considered while writing an academic paper in English.	12	100%	0	0%
6. I have learned the stages of effective paraphrasing.	12	100%	0	0%
7. Activities made during the training were effective.	12	100%	0	0%
8. It was beneficial for me to attend this training online.	11	92%	1	8%
9. After the training, I can write better academic papers in accordance with academic writing principles in English.	11	92%	1	8%

Table 4 shows that the participants agreed on the benefits of the training they have received and stated that they obtained new information on academic writing based on the objectives of the program.

4. Discussion

In this study, online in-service training on academic writing was designed, implemented, and evaluated for the research assistants working at a private university in İstanbul. To assess learning as an outcome

of the in-service training, it is essential to reveal the participants' level of learning before and after the training. The effect of the program on their learning and if the program is successful is determined in this way (Aydın, 2014). For this purpose, pre and post-test scores were compared to observe the change in between and it was concluded that the training program was successful since the participants' scores increased in the post-test, which proves that learning was achieved through the training program.

With the interview form applied during the training process, qualitative data were collected from the participants regarding their motivation and the effectiveness of the program developed. Three themes and six codes were created. According to the research assistants in the program, their motivation to join this training is based on their will to write better in English in general and write better scientific papers in English, which shows one more time that academicians have foreign language-related problems and would like to create better scientific papers. These findings are closely related to the previous studies (Odabaşı, 2007; Erişen, et. al., 2009). In their study on the academicians's needs, Koç, and others (2015) reveal that academicians need training in preparing, writing, and publishing scientific articles. As a result, the motivation behind attending the program is the research assistants' wish to improve themselves professionally and personally.

As for the usefulness theme, the participants stated that they are satisfied with the content covered during the training, the instructor, and the way the content is presented. The fact that the whole program was designed based on their needs before the training, and the content was presented with samples and interactive activities made the participants think that the program was useful. This finding also suggests that academicians prefer trainings offered through constructive teaching methods (Koç, et.al., 2015). Kabakçı and Odabaşı (2008) also claim that when a training program for a faculty is presented in small group activities, the program will be more effective. In addition, the training was planned to be offered in 2-3 hour-periods per week for a total of 3 weeks, which the participants were quite satisfied with. Similarly, research assistants were found to prefer to get trainings for 2 or 3 hours a week in another study with a similar study group (Kabakçı & Odabaşı, 2008).

5. Conclusion

In conclusion, the academic writing in-service training developed for the research assistants can be considered effective. This type of in-service trainings should be offered more often to the academicians as they are expected to produce better and more academic research papers in the international arena. However, it is better to consider designing these programs separately for each faculty as there may be differences in the expectations of the journals in terms of the structures of the papers.

The only suggestion coming from the participants was that the training program should have been offered to only one faculty as the academic structure used in the scientific papers may vary among the faculties. However, the program content was mainly designed based on the general needs in academic writing in English, which is thought to cover the requirements needed to present in all academic and scientific articles.

The program evaluation form filled out at the end of the training also indicates that the participants reached the goals and the objectives determined at the beginning of the program. They all agreed that they learned the basics and the dimensions of academic writing, paraphrasing, and the importance of using academic vocabulary. For future research, the research assistants' competencies in academic writing in English, the rates of getting linguistic revision on their academic papers sent to the journals, and the rates of producing academic papers in English can be investigated.

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