Abstract
In teacher education programs, one of the required attainments of any ideal pre-service teacher program is to enable pre-service teachers to be aware of research literacy competencies and have practice to improve such competencies during their education. This study aims at equipping the participants with the necessary critical skills and research literacy competencies and tries to investigate whether these implementations create awareness about this issue. This study was conducted at Çukurova University with 55 second-year participants studying in the department of English Language Teaching in the 2018-2019 Academic Year Fall Semester. The data was collected through a questionnaire, semi-structured interviews, and self-reflective reports. The results of this study show that most of the students do not have much information about research literacy competencies while some of them are aware of it to some extent. This study sheds light on the importance of integrating critical awareness into research literacy competencies in the Teacher Education Programs. The results of this study also contributes to both the pre-service teachers’ professional development and the Teacher Education Programs regarding the importance of integrating critical awareness into research and their future classroom practices effectively.

Key words: Teacher education, ELT, research literacy competencies
Introduction

There have been some developments in the English language teaching programs, and especially in the field of research literacy. Nowadays, teacher research is really significant regarding professional development. Although teachers are invited to research, they are not supported in terms of developing research literacy competencies. Supporting pre-service teachers’ research literacy competencies is essential in promoting professional practice; however it remains an area in much need of development. The lack of sustained research opportunities in initial teacher education programs to enable pre-service teachers to link their understanding of research to their knowledge of teaching is the main argument of this study. In supporting prospective teachers’ research literacy as part of an initial teacher education program plays an important role in supporting the sustainability of research and in enabling teachers to connect their own practice with the research knowledge. Pre-service teachers’ ownership of research is crucial in developing and creating a research-integrated or research based learning environment. The integration of appropriate research to promote effective teaching and learning practices is a significant requirement for teaching professionals in twenty-first century learning environments (Waring and Evans, 2015).

Since language learning and teaching is a dynamic phenomenon, it is important to ensure that language teacher education programs should have a sufficient capacity to provide the pre-service teachers with research-informed and inquiry-rich education. Pre-service teachers need to be trained to become research-literate future teachers so that they are able to make sense of research based articles in the English Language Teaching (ELT) domain. When these pre-service teachers are equipped with such research literacy skills as part of their teacher education program, they will be able to enthusiastically follow and read research articles or studies more critically and reflectively (Liston et al, 2007; Grant and Gilette, 2006; Darling Hammond, 2000). This critical process would enable them to lead more effective teaching practices. Thus, these classroom practices will have a great impact on next generations enriching their critical thinking skills and strategies.

Bearing all these in mind, teacher candidates are in need of great support and guidance to raise their awareness in developing research literacy competencies. At this point, opportunities should be created to develop research literacy competencies at the very beginning of pre-service teachers’ careers.

The purposes of the study

In this study we aimed:

- To explore pre-service EFL teachers’ awareness about research literacy.
- To enable pre-service EFL teachers to be aware of research literacy competencies and have practice to improve such competencies during their education.
To equip the participants with the necessary critical skills and research literacy competencies and try to investigate whether some implementations create awareness about this issue.

To guide pre-service teachers in terms of understanding and analysing academic research articles about their profession and contributing to their personal and professional development.

In this study, it was aimed at drawing attention to developing research literacy competencies of prospective English Language Teachers. This study focused on guiding pre-service teachers in terms of understanding and analysing academic research articles about their profession and contributing to their personal and professional development. Lastly, this study would hopefully help the future teachers understand the relationship between the theory and practice based on research results.

**Background of the study**

It is vital to acknowledge that research literacy should be perceived as an essential component of what teachers do regularly and not perceived as something externally driven by an authority (Carter, 2015). Enhancing research literacy in initial teacher education program and professional development programmes should be considered carefully in collaboration with those responsible people for newly qualified teachers’ induction programmes and early career teachers (Fletcher and Luft, 2011).

Universities have a vital role in promoting both the research literacy of teachers within schools and in supporting school improvement (Mincu, 2013; Coe et al. 2015). Professionalism requires teachers to read research actively, analyse research evidence critically and to be able to creatively adapt research findings into to the requirements of a specific context in order to implement effective teaching strategies. So, research literate teachers become more able to evaluate the information on an informed practice, research knowledge and experience (Wilson et al. 2013). To be research literate means to be able to understand, analyse, interpret and evaluate research. Further, it is to be able to understand why it is important and what might be learnt from it, and to maintain a sense of critical approach and awareness. Teachers having a high level of research literacy means teachers being research literate and this means that teachers are familiar with a range of research methods, with the latest research findings and with the implications of this research for their daily classroom practices, and for education policy and practice more broadly.

Within the scope of this study, it is attempted to answer the following research questions:

1. To what extent are pre-service ELT teachers aware of research literacy competencies?

2. How can we help pre-service ELT teachers become research literate?

3. What are the possible effects of our implementations on the pre-service ELT teachers?
Conclusions

Main findings

Nowadays, everything is changing too fast and there is an on-going need to adapt these changes as educators and prospective teachers. Our main purpose to conduct this study was to be able to update our approaches based on the current research results and contemporary requirements of our context. Drawing on these, we planned to change our syllabuses according to the needs of 21 century skills and integrate research literacy competencies into our syllabuses in a way that could help our prospective teachers in the best way. We need to provide prospective teachers with all the necessary skills that they will need in their professional life. For that reason, this study would serve for this purpose through creating opportunities to develop research literacy competencies and consciousness into the issue at the very beginning of pre-service teachers’ careers.

Research Question 1:

To what extent are pre-service ELT teachers aware of research literacy competencies?

Based on our observations we can say that our students did not read academic research articles in their daily routines or studies. They read research articles only when they were assigned by the lecturers. After that, we gave an open-ended questionnaire to the students and we realized that most of the students were not familiar with the concept of research literacy and those related competences. Although most of them could define what research is, they could not develop an argument in terms of research literacy. Some of them had difficulty to answer the questions in the questionnaire.

The open-ended questionnaire was given to 51 participants and the results show that

- Most of the students are not aware of the concept of ‘Research literacy’ and they have no idea about it. (27/51)
- Some students have an idea about the concept of ‘Research literacy’. (20/51)
- Some of the students have some false beliefs about the concept. (10/51)

Some excerpts from the participants:

S1: In my respect, it consists of some main components such as being familiar with scientific or academic terminology, getting the better of given topic.

S24: I do not have any idea about it. I assume that it means a study which is written on a paper, but I am not sure.

S27: I don’t know but I think it is something about criticizing the research and its results.
S29: I think it is about the words that we use in research which should be scientific and appropriate for the context.

S33: It is being aware of true and wrong information because when you search sth., you will face lots of information and you should be able to see the reliable ones.

S50: For me, it is some experienced observation or some statistical information which makes sth. clear in our mind. And it is full of data from different sources.

As it is clear from the excerpts, students are seriously in need of guidance and support to develop research literacy competencies. Unfortunately most of the pre-service teachers need strict instructions and practices in terms of developing research literacy competencies and becoming professional teachers who can read and understand research articles in their future careers.

When we asked them how often they read academic research articles, the results were not satisfactory. And the results are presented in the table below.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never/Hardly ever</td>
<td>5/51</td>
</tr>
<tr>
<td>Sometimes/Rarely</td>
<td>35/51</td>
</tr>
<tr>
<td>Often</td>
<td>11/51</td>
</tr>
</tbody>
</table>

As can be understood from the table, most of the students do not read academic research articles very often. Only a few of them read articles often. Therefore, we understand that most of them are not really aware of the benefits of reading academic research articles. They are not aware of the fact that they need to be teachers who are searching and exploring new ways of teaching as they are expected to answer the expectations and needs of 21 century. At this point, we wanted to create awareness into the issue.

**Research Question 2:**

*How can we help pre-service ELT teachers become research literate?*

With the aforementioned purposes in mind, we wanted to prepare an awareness program with 2 phases in order to raise pre-service teachers’ research literacy competencies in the first phase-theoretical followed by a practical phase that requires pre-service teachers to read a research article and present it to their peers in the classroom.

We prepared an awareness program with 2 phases:

**Step 1:** In the first phase, a theoretical training was delivered by the first researcher on how to analyse and critically evaluate a research paper from a pragmatist perspective.

**Step 2:** In the second phase, a practical phase was conducted, which requires pre-service teachers to read a research article and present it to their peers in the classroom.

Fifty five second-year pre-service teachers in the English Language Teaching Department at Cukurova University participated in this study as part of their course in
which students were expected to make presentations. Participants were familiarized with the anatomy of a typical scientific article in the domain of ELT. Then each participant selected an article in the field which they would examine thoroughly. That was an article they received by the lecturer of the course. They were supposed to analyse and present the article in line with the training on ‘how to read and analyse an article’ delivered by the lecturer of the course. After presentation sessions are over, pre-service teachers were also asked to write reflections regarding their experiences during the process. We wanted to make the process easier so that we shared the academic research articles with the students.

Research Question 3:

What are the possible effects of our implementations on the pre-service ELT teachers?

Based on our observations and students’ reflections, we can say that most of them benefitted from these implementations and practices as prospective teachers. Although some of them find the process a bit challenging, they not only learned to read and evaluate an article but also they learned the relationships between the theories and practices from the articles. They also learned how to benefit from research articles and evaluate themselves from different aspects.

Students’ Reflections:

S12: There is lots of research about our field and I learned how to use them in my job.

S4: They will provide us to improve not only our educational background but also self-actualization day by day. It is beyond just becoming teachers. It is about understanding the main issues.

S5: I learned how to become an effective teacher and role model. I learned how to handle the problems professionally through reading articles.

S10: I improved critical thinking skills, analysing problems and finding out solutions and doing self-evaluation.

S16: I feel more self-confident about my profession.

S12: They will help me in understanding students’ psychology better, having an optimistic approach while facing a problem, being more knowledgeable.

S28: We can expand our knowledge about teaching.

S37: It is possible to go on learning in this way.

Students’ reflections clearly show that now they approach research articles from a more pragmatic perspective than before. If they are supported and guided at an earlier period about this issue, it will be easier for them to improve.
Implications and limitations

Recently, the necessity of research integration in initial teacher education program has gained much attention. However, most of the studies in the related literature were conducted with 4th year students. For this reason, this study was conducted with 2nd year pre-service teachers to provide them with essential research literacy competencies in their initial years in teacher education program. Even though teachers are expected to do research and benefit from it, they are not even supported enough to read and understand academic research articles in Teacher Education Programs. Therefore, there is a great need for developing research literacy competencies before asking them to conduct research at the beginning of their education. If they are guided about this issue, they will be able to meet the expectations of 21st century and they will be successful and satisfied teachers.

When it comes to the limitations, this research was conducted in only one state university. If it can be conducted in different universities, the results can be compared with the previous findings. This research also can be conducted with in-service ELT teachers and the results can be compared.

Acknowledgment

This study was supported by the Scientific Research Projects Department (BABSIS) of Cukurova University, with Project No: SBA-2019-11320-11320
References


