



Designing a Model of Professional Development Courses for Faculty Members of Farhangian University with a Flipped Learning Approach: A Meta-Synthesis Study

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Abstract: The current study aimed to design a model appropriate for professional development courses of Farhangian University faculty members with a flipped learning approach. For this purpose, valid and accessible documents and resources in non-Iranian databases such as ERIC, Scopus, Google Scholar, Science Direct, Sage and Iranian databases include Civilica, Magiran and SID, have been reviewed from 2000 to 2020, and from 3152 documents, 60 appropriate documents were selected and examined based on the seven-step approach of Sandelowski and Barroso (2007). The open, axial and selective coding method was used for data analysis, and finally 971 concepts were identified. The identified concepts were categorized into 46 sub-categories and 10 main categories. In order to control the identified concepts, in addition to the validation based on Sandelowski and Barroso (2007) approach, the identified concepts was reviewed by an expert researcher, and the Kappa index calculated as 0.718 ($p < 0.001$) indicates that the codes extracted have an appropriate reliability. The main components identified include educational development, research development, service development, individual development, organizational development, institutional factors, management factors, social factors, pedagogy and learning designs.

Keywords: Professional development, flipped learning, faculty members, Farhangian University, meta-synthesis

Introduction

The subject of education and learning is as old as the originality of human creation. Human beings are naturally looking for perfection and based on this perfectionism, they have always sought to conquer the lands of knowledge in different periods of their lives. And this feature has also caused the growth and development of advanced science and technology. The rapid growth of technology has caused more and more changes and the emergence of new needs in organizations. In a way that forces today's organizations to develop training and improve human resources, because the growth and development of knowledge and various skills of employees can guarantee the life of organizations in this competitive and fast-paced era. Higher education systems, as the most obvious form of investment in human resources, play the main role in training and providing human resources. This system allocates a significant share of the budget of each country and plays a vital role in the economic, social, cultural and political situations of the society. Therefore, the desired quality of their performance in preventing the consumption of human and material capital and the ability to compete in the future world and the international community is an undeniable necessity (Zaresefat et al., 2018).

Faculty members in universities are excellent in training human resources. Since the academic faculty members contribute to the quality and scientific power of higher education, especially in the field of

education, research and training of elite and expert people, it is desirable that universities take steps in order to develop the competencies of academic faculty members. To provide the growth and improvement of the all-round competences of their faculty members in a planned manner, considering the importance and position of academic staff members in advancing the missions of the higher education system on the one hand and the formation of rapid changes in technologies and challenges, there is always a need for continuous development and improvement and promotion of competence. Measures should be taken to improve the scientific capabilities and professional skills of the faculty members. For this purpose, during the past decades, significant efforts have been made to improve and maintain the quality of education and higher education institutions around the world.

Undoubtedly, the key to improving the quality of higher education is the professional development of its faculty members, and it indicates that not only academic skills and knowledge, but also all aspects of academic work, including beliefs, motivations, and self-regulation, should be taken into consideration ([Fabrizz et al., 2021](#)). Professional development courses are one of the appropriate solutions that are recommended to improve the ability of faculty members in teaching and counseling and other skills ([Sithole et al., 2017](#)).

Researches have shown that improving the knowledge, skills, attitudes and personality traits of university faculty members, which is referred to as competence, can have a significant effect on improving their performance and, as a result, better learning. Based on this, since higher education institutions are considered as formal education centers that prepare people to enter the labor market, and the nature of their work in terms of influencing the behavior and students' personal, social and professional life skills are very sensitive, they need to have up-to-date knowledge in the fields of teaching behavior and personal, social and professional life skills to students; Therefore, it is necessary for university faculty members to improve themselves through the acquisition, exchange and application of knowledge, abilities and skills in order to train the next generation to enter life in the complex world ahead of them.

One of the most important and strategic areas in the higher education system of any country is the teacher training system. Teacher training plays a vital role in reforming and strengthening the development foundations of different countries in the world. It is obvious that the significant part of students' learning and the influence of teaching and training of student-teachers should be sought in their teaching and learning environment. Since the faculty members of Farhangian University are one of the most important factors in increasing the quality of students' learning, their professional development is of great importance. The development of the quality of education and teaching in teacher training programs leads to the progress of students and the satisfaction of increasing the quality and learning. Today, many countries in the world have implemented comprehensive programs to train teachers and increase the quality of their teaching and training. Therefore, improving and enlightening the knowledge and skills of the professors of this university as the axis of transformation in the country's education system is one of the necessities; For this purpose, the continuous improvement of the quality of the teacher training system, the scientific, ethical, professional and educational

competences and capabilities of Farhangian University professors, and the updating of their scientific and moral foundations in order to align with the upper documents of the transformation system is a fundamental work in this university. The continuous professional development of the professors of Farhangian University is facing many problems due to the climatic dispersion of the campuses and centers, while its courses are still held with traditional methods, while the increasing development of information and communication has created a new environment for learning and education in societies, which is different from the traditional atmosphere of the past. In the past, learning was managed by lecture-based teaching methods, but now the old learning methods have found less effectiveness. Internet and its development has been the most amazing technology product in recent years; So that its effectiveness in different levels of human life, especially in the field of education and learning, is quite evident. The development of the World Wide Web has created a suitable platform for new learning methods such as e-learning. But mere electronic learning also faces its own limitations and cannot be completely replaced.

Internet and its development has been the most amazing technology product in recent years; So that its effectiveness in different levels of human life, especially in the field of education and learning, is quite evident. The development of the World Wide Web has created a suitable platform for new learning methods such as e-learning. But mere electronic learning also faces its own limitations and cannot completely replace traditional (face-to-face) educational classes.

Today, online learning has become an essential part of the educational landscape, and how to support faculty to develop approaches to online teaching is a fundamental aspect of the learning experience. One such approach is flipped blended learning ([Capone et al., 2017](#)), which has broad and complex interpretations, but usually involves a combination or mixture of face-to-face, real-time learning and the use of online digital resources . The most difficult challenge related to learning in a new way is related to the professional development of university professors because achieving quality in blended learning is more than "technical" education because it requires new teaching approaches and effective learning design. In the dynamics of educational change and innovation, technology alone cannot bring educational transformation, while tools and platforms play an enabling and accelerating role, better educational methods and more inclusive education models are critical solutions.

Continuous support of faculty members regarding the introduced technology with appropriate support and hands-on modeling is essential for professional curriculum development ([Philipsen, 2019](#)). Faculty members with previous experience at any educational level must be aware of the growth of knowledge in different areas and, therefore, must continuously improve their qualifications ([Evans et al., 2020](#)). Previously, several models and frameworks of professional development have been developed, which have greatly contributed to the current knowledge about the professional development of teachers and professors. The first conceptual framework presented for the professional development of professors is the Desimone's framework ([Kang et al., 2013](#)), which claims that the investigation of professional development has two main components, the key features of an effective professional development and an operational theory on how to conduct professional development of professors. Five key

characteristics are presented for the first component that defines effective professional development. These features include content focus, active learning, coherence, course length, and group participation. If professional development is to be effective, faculty must experience these five key characteristics of professional development. In his framework, professional development itself increases knowledge and skills and affects a person's attitude and belief, and then the course participant improves his education or educational approach by using these, and as a result, and as the last step, increases inclusive learning. According to [De Simone \(2014\)](#), the context acts as an important mediator and moderator in this process. [Katz et al. \(2016\)](#) identified the components of professional development with a flipped learning approach, including the main characteristics of teachers' professional development, changes in the professionalism or qualifications of teachers, changes in the teacher's behavior and education, and finally, they know the overall response to the change in the teacher's behavior and teaching method. This approach adds three main features to Desimone's model (2009). An appreciative approach that is ability-oriented rather than deficit-oriented, a school-oriented approach that integrates with the daily tasks of the individual, and an ownership approach that responds to self-identified needs and interests and clearly makes the environment in which teachers' professional development takes place an element. An important question that arises is what is the difference between the professional development of teachers for online-blended learning and the professional development of teachers in a conventional way. At first glance, it may seem that all the discussed features are the same in both models. However, the possible difference is more emphasis on the change in the role of professors and their identity. Some approaches to professional development address teachers' professional identity and self-understanding, but this approach seems to be clearly identified and supported in research on professional development for online and blended learning, especially flipped learning ([Philipsen et al., 2019](#)). [Baran et al. \(2011\)](#) claim that when teachers move from face-to-face teaching to online education, their transformational learning processes should include three dimensions: (a) empowering teachers, (b) enhancing critical thinking, and (c) integrating technology. Recently, [Philipsen et al. \(2019\)](#) have also emphasized that teachers' reflection on their identity in professional development programs in a new way can have benefits. "When teachers move from traditional classrooms to flipped classrooms, they face constant challenges to recognize their identity as teachers. [Tschida et al. \(2016\)](#) also claim that teachers change their roles as teachers and play the role of the facilitator is considered to be the biggest change in the movement from the traditional classroom to the flipped classroom and teaching.

Therefore, current research on teachers' professional development for flipped learning has clearly emphasized teachers' self-perception, role, and professional identity, and should be included in professional development. The professors with the flipped and virtual learning approach paid special attention to the possible psychological changes associated with the change and movement from face-to-face teaching to online teaching. From this approach, when trying to differentiate the professional development of the professors with the flipped learning approach from other professional development courses, it was also used.

Flipped learning has received much attention in academic settings in recent years ([Bhagat et al., 2016](#); [Fisher et al., 2017](#); [Lee & Wallace, 2018](#); [Wilson, 2020](#)) because it creates an environment which requires a deep and wide presentation of subject matter along with the development of higher level thinking skills and studies show that the performance of learners and their learning attitude has improved as a result of the use of reverse learning and has had positive effects on self-efficacy, interaction, motivation or satisfaction with the course ([Wilson, 2020](#)).

The main activities of this approach include peer learning, group learning, project-based learning, problem-solving-based learning, and case-based learning that work interactively and in communication with each other ([Wilson, 2020](#)). Professional development of academic staff has many applications. Because quality education in the context of today's technologies can properly improve the quality of the output of Farhangian University and cause the branding of Farhangian University and the choice of this university as a priority for distinguished candidates interested in the teaching profession, which as a result leads to the improvement of the educational and training of human resources level. In recent years, Farhangian University has provided a suitable platform for professional development courses for its employees and faculty members, but so far it has not been able to institutionalize professional development courses using new technologies and methods. On the other hand, with the start of the Corona pandemic, many challenges have been created for the implementation of professional development courses. By reviewing the literature and the background of the research, it was also found that although various researches have been conducted in the field of professional development and flipped learning, but so far in Iran, no identified model has been presented in this field, so the researcher is looking for the benefits of flipped learning in the implementation of courses, use professional development and provide a suitable model for the professional development courses of Farhangian University faculty members.

Material and Methods

In terms of nature, this research was applied research, and in terms of method, it was qualitative and meta-synthesis. The strength of meta-synthesis lies in its ability to identify common categories and create a conceptual framework from the background. According to [Zimmer \(2006\)](#), meta-synthesis is a type of qualitative study that examines the information and findings extracted from other qualitative studies with a related and similar topic. As a result, the target sample for meta-synthesis is selected from qualitative studies based on their relationship with the research question. In line with the methodology of the research, the seven-step method of [Sandelowski and Barroso \(2006\)](#) has been used, and the summary of these steps is shown in Figure (1). According to the purpose of the research, meta-synthesis methodology helps to identify the dimensions of professional development courses with a flipped learning approach. The method of collecting information in the current research was a library, and the analyzed data was taken from the researches (secondary data) published during the years 2000 to 2020 with the subject of professional development and flipped learning. In order to review this research, the most reliable databases and search engines have been referred to, which are

mentioned in figure 2. In these databases, the key words of professional development, professional growth, flipped learning and professors are used to find related articles. In this research, the total number of articles was 3152, and finally 60 articles were selected. Graphs 1 and 2 show the names of journals and the frequency of articles. In the following, the seven steps taken in the model of Sandelowski and Barroso (2007) are briefly described.

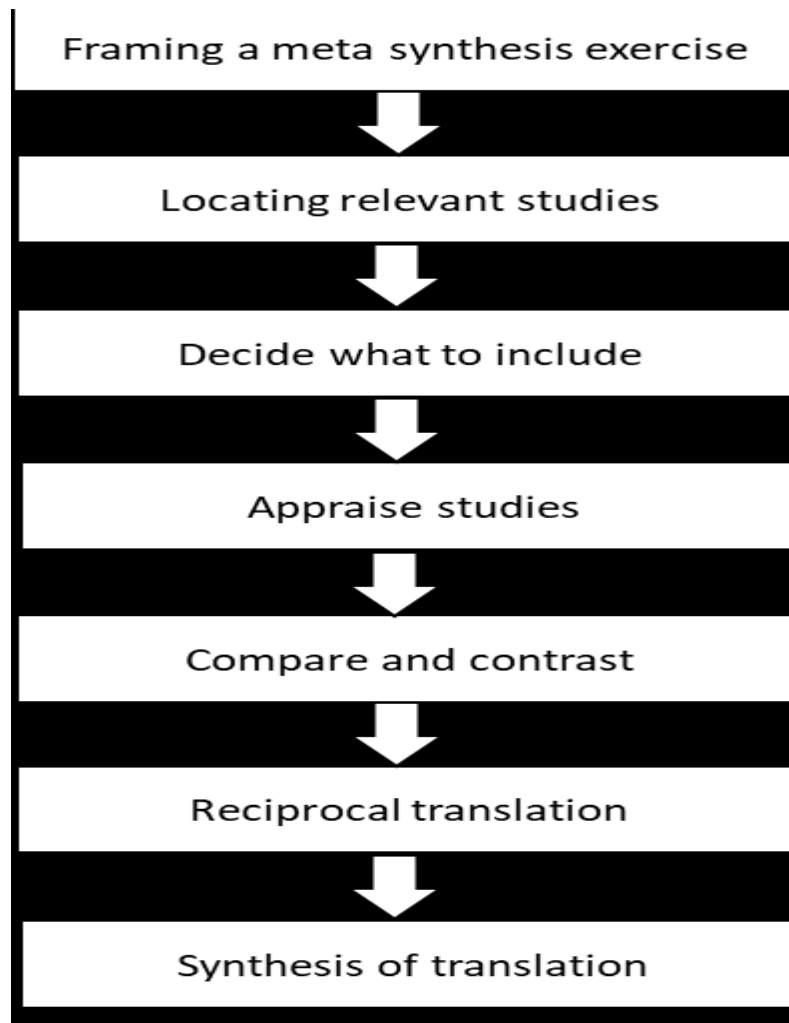


Figure 1. Seven-step method of Sandelowski and Barroso (2007)

First step: Setting the research question: The first step of setting the research question is to focus on the "what" of the study. The purpose of this research is to present the model of professional development courses of Farhangian University with a flipped learning approach which is obtained by answering the following questions (table 1).

Table 1. Setting the research question

| Parameters | Setting the research question |
|------------|---|
| What | The model of professional development courses of Farhangian University professors with a flipped learning approach |
| Who | In this research, several databases and different search engines were examined. Checked databases: Noormags, Ensani, Civilica, Sid, Magiran, ERIC, Scopus, Google Scholar, Sage, Science Direct |
| When | The articles studied in this research are from 2000 onwards. |
| How | In this research, the method of documentary analysis, that is, the analysis of secondary data has been used. |

Second step: systematic review of papers: In this research, the non-Iranian database ERIC, Scopus, Google Scholar, Science Direct, Sage and three Iranian databases Civilica, Magiran, SID were reviewed in order to identify and collect different studies, and as a result of this search and by inclusion criteria 3152 studies were found for review. The keywords searched in this study are shown in Table 2.

Table 2. Search keywords

| Persian | English |
|------------------------|------------------------------------|
| توسعه حرفه ای | Professional development |
| بالندگی حرفه ای | Professional growth |
| یادگیری معکوس | Flipped learning |
| معلمان | Teachers |
| بالندگی حرفه ای معلمان | Teacher`s Professional development |

Third step: searching and choosing suitable resources: In this stage, in order to evaluate and select suitable sources, the desired sources were examined based on four parameters (title, abstract, content and methodology) and the articles that meet the inclusion criteria were entered into the meta synthesis process and in four stages in terms of the research title, research abstract, research content and finally methodological quality are examined. The purpose of this step is to remove the articles that the researcher does not trust in the presented findings, or the sources that do not have the full text or valid reference, or the authors' specifications are unclear, were excluded from the scope of Meta synthesis. [Carlson and Perry \(2017\)](#) checklist was used to evaluate the extracted sources and based on this, the extracted sources were studied independently by at least two "reviewers" and the data was screened based on the criteria of sampling strategy, data collection method, analysis method and data analysis; The appropriateness of the research plan with the purpose of the research, the clear statement of the findings, the appropriate justification of the research result, the consistency between the guiding paradigms of the research project with the selected methods were examined, and the degree of

agreement between the two reviewers was measured using the Kappa test, which was equal to 0.71 indicating a high agreement between the two reviewers. The search for articles continued until saturation was reached and finally 60 articles were selected. Since the data of the present study was extracted from the text of previous studies, the manual coding method was used to analyze the data. Thus, each article was coded separately and then the concepts were categorized in the form of "subcategories" and subcategories were categorized in the form of "main category".

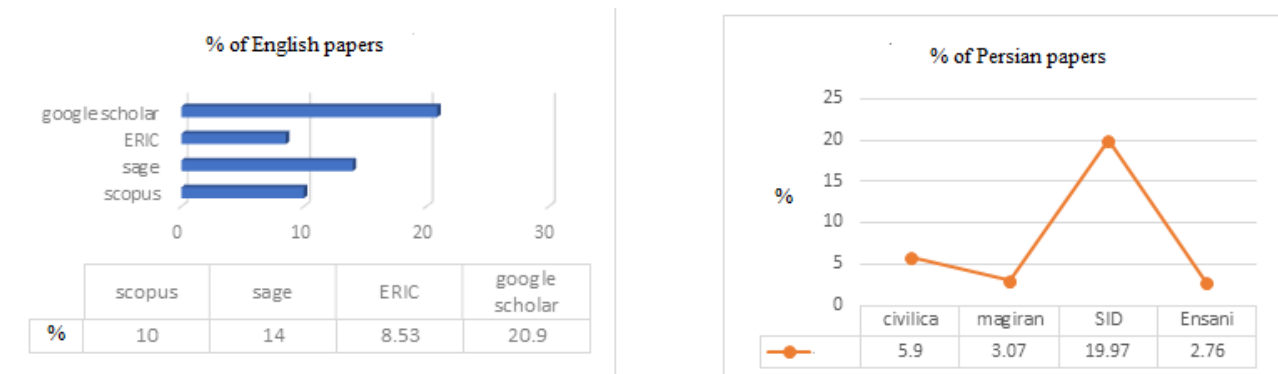


Figure 2. The Final selected English and Persian papers

Fourth step: extracting the results of sources: In the fourth stage, the information of the selected sources was classified based on the author's characteristics (name and surname, year of publication and source), components related to professional development and methodological characteristics (research method, research tools and research community) in a table was summarized (an example was presented in table 3).

Table 3. An example of primary data extracted from articles

| No | Author/year | Citation | Methodology | Research sample | Professional development components |
|----|----------------------|----------|--|---|---|
| 20 | Ghoroneh et al. 2014 | Article | Mixed method exploratory analysis type | 282 faculty members of the University of Tehran | Individual factors such as personality factors, faculty member's academic background, motivation to progress, professional commitment, responsibility; Organizational factors: university culture, career promotion system, growth opportunity, institutional (structural) factors, managerial support and livelihood factors |

Fifth step: analysis and synthesis of qualitative findings: At this stage, the researcher is looking for the codes emerging from the Meta synthesis process. Therefore, first, in order to analyze the findings of each study and discover the basic points, the open coding method proposed by [Glaser \(2001\)](#) was used. In this way, first all the key points and components were extracted from the documents and each one was considered as a code, then according to the meaning of each of the codes, they were compared with each other and considering their commonality from the researcher's point of view. They are grouped in a similar category. In the next step, after reviewing the studies several times and correctly identifying the concepts and the relationship between them in order to combine the results, the axial coding method is used to create the proposed final model in the next step of the analysis. In the current research, first, all the components related to the pattern of professional development courses were identified and categorized with the flipped learning approach.

Sixth step: quality control of the extracted codes: When researchers are designing their study and during its implementation, they should always think of ways to optimize the validity of the research. [Sandelowski and Barroso \(2006\)](#) introduce four types of validation for Meta synthesis, which include descriptive validation, interpretive validation, theoretical validation and practical validation. In Table 4, the validation improvement process is provided.

Table 4. Validation improvement process of Meta synthesis

| Process | Descriptive | Interpretive | Theoretical | Practical |
|---|-------------|--------------|-------------|-----------|
| Communication with the main authors of the article | √ | √ | | |
| Consult with the reference librarian | √ | | | |
| Consultation with a specialist in Meta synthesis research | | | √ | |
| Independent search of sources by at least two reviewers | √ | | | |
| Independent evaluation of each report by at least two reviewers | √ | √ | | |
| Weekly meetings of the research team in order to discuss the results of the searches and to shape and modify the search strategies | √ | | | |
| Weekly meetings of the research team to discuss the results of the evaluations and decide on the evaluation strategies of the studies | √ | √ | | |
| Weekly meetings of the research team in order to establish the agreed areas and negotiate about the areas and cases including disagreements until reaching a consensus. | √ | √ | √ | |
| Documenting all the processes, procedures, changes in the work process and the results of holding team meetings | √ | √ | √ | √ |

In the current research, all the mentioned steps have been used to optimize and improve the validity, except for communication with the main authors of the article. In this way, the current research has four types of descriptive, interpretive, theoretical and practical validity according to these steps. Also, to control the extracted concepts, the researcher's opinion was compared with an expert (familiar with the subject of professional development and qualitative research) and the agreement between the two reviewers was measured with the Kappa index. In this research, the Kappa index of 0.718 was obtained ($p < 0.001$) which indicates that the extraction of codes has good reliability.

Table 5. Cross table of the first and second reviewer

| Index | The first reviewer | | | The total of second reviewer |
|------------------------------|--------------------|----|----|------------------------------|
| | | 0 | 1 | |
| The first reviewer | 0 | 55 | 32 | 87 |
| | 1 | 12 | 19 | 30 |
| The total of second reviewer | | 63 | 50 | 118 |

Seventh step: presentation of findings: In the last stage, the findings from the previous stages are presented, which were categorized in a similar concept according to the analysis of the meanings of the codes. Then the obtained concepts were accumulated and placed in more general categories. In this research, 971 initial codes were identified, which were categorized into 46 sub-categories and ten general categories. In conclusion, the results obtained from Meta synthesis are presented in the form of a conceptual model.

Results

In the fifth stage of meta-composition, each study was carefully examined and analyzed, and using the open coding method proposed by Glaser (1992), the main points of each study were extracted and considered as a concept (code). Then these concepts were grouped in one category according to their commonality according to the researcher. Then, the researcher has placed the identified sub-categories in more abstract categories, at this stage the sub-categories are in 10 categories of institutional factors, management factors, pedagogy, evaluation and quality assurance, learning formats, social factors, personal development, educational development , research development, service development, organizational development (figure 3).



Figure 3. Conceptual model extracted from Meta synthesis

Discussion

In the current research, it was aimed to develop a model of professional development by using the method of meta synthesis with the approach of [Sandelowski and Barroso \(2006\)](#) and by using the inductive content analysis of previous domestic and foreign researches and the existing theoretical literature in the field of professional development of faculty members in Farhangian University with a flipped learning approach. For this purpose, scientific sources published in relation to the subject were examined and out of 3152 examined sources, finally, 60 articles were examined in the final stage of synthesis, which led to the identification of the components of educational development, research development, and service development, individual development, organizational development, institutional factors, management factors, social factors, pedagogy and learning format, which are explained as follow.

Institutional factors with seven sub-components of credit provision, infrastructure, new educational technologies, motivation, rules and regulations, policy making and decentralization is considered one of the important components of professional development courses. According to [Sadeghitabar and Shariatmadari \(2020\)](#), in order to implement professional development courses in the flipped learning method, it is first necessary to create the necessary preparation in terms of providing credit and culturally, otherwise it is not possible to implement the courses in a new style and manner. As we know, as valuable assets of any society, faculty members play a very sensitive and decisive role in the training of expert resources, and the fruit of their efforts leads to the growth and development of human societies. For this purpose, it is necessary for professors to be supported and empowered in various fields of education, evaluation, educational planning, etc. One of the important components of institutional factors is the infrastructure (hardware and software) of professional development courses. Today, universities and institutions of higher education, like other organizations, are exposed to complex changes and development in higher education is a necessity and not an opportunity. In this case, training and development of human resources becomes especially important, and at the same time, despite major changes that in the teaching approaches created, it is necessary to hold professional development courses in virtual or semi-virtual form. In this case, there is a need for appropriate hardware and software facilities so that professors and academic staff members can get the most out of the content of the courses held. Therefore, educational technologies should be updated and teachers should receive the necessary training in this field ([esmaeilnia et al., 1397](#)).

The topic of motivation (internal and external motivators) of professors to participate in professional development courses is also of special importance. In adult education, the desire to learn is more important than the learning itself. The existence of factors such as previous preparations, intelligence and motivation has a significant effect on learning capacity. But in the meantime, the motivation to learn plays a much more important role, which can be a result of other internal factors. The more knowledgeable a person is the more willing and receptive he will be to changes and new ideas. Establishing a correct and strong relationship between the time, talent and needs of adults and educational programs and choosing real and short-term goals are among the factors that awaken the

motivation of adults to learn. Professional development programs have been mentioned in some studies ([Mohebzadegan et al., 2014](#); [Rodriquez et al., 2016](#)).

Another important issue that should be considered in professional development courses is the discussion of concentration or lack of concentration of professional development programs. In centralized systems, there is a general tendency towards centralized control of all stages of designing and producing educational programs. In contrast, decentralization refers to the transfer of power from a higher regulatory level to a lower level such as a college or school. The most important positive points of decentralization are things like improving the quality of programs due to more flexibility and removing rules and regulations, paying attention to radical and local innovations, strengthening collaborative efforts in the university, making the work environment more attractive for professors and paying more attention to the needs of learners. In universities, professional development programs emphasize professional learning communities, which cause the level of concentration to decrease and planning and decision-making to take a collective form. The professional learning communities themselves are based on the principle of cooperation and exchange of opinions and will spread the same in the society. Therefore, one of the components of the professional learning community will be decentralization. The results of the research findings are consistent with the researches of [Mohebzadegan et al. \(2014\)](#).

The next component is management factors, which was identified with seven sub-components of strategic planning, flexibility of courses, inclusiveness of professional development courses, support programs, evaluation and quality assurance and needs assessment. One of the most important components is strategic planning and it refers to a process that includes determining long-term goals and making decisions based on methods to achieve goals that have been predicted in advance. Due to the fact that the university system is very dynamic and complex, the university administrators should constantly examine the university situation and the needs of the professors and plan accordingly. Various studies show that successful universities have a planning, implementation, evaluation and quality assurance system. Therefore, in order for the higher education system and especially the Farhangian University to survive in today's competitive world, they need programs to improve their quality. In most of the reviewed studies, the planning discussion about the needs of professors in order to promote them in various fields is mentioned and emphasized ([Rodriquez et al., 2016](#); [Sirkis, 2013](#); [Wisniewski, 2019](#)).

In addition, if we believe that a qualified teacher trains a competent student, the professional development of academic staff members becomes important and the formation of training courses becomes necessary, but the more important issue than the formation of courses is the planning of training courses based on the needs of the professors. The discussion of needs assessment and extraction of required skills is very important. Knowledge of needs assessment can be used as a basis for developing a training program to increase people's skills and knowledge. Determining educational needs is an activity that determines and accurately measures needs and recommends different educational courses. From a scientific point of view, the first step of any educational program is to

determine the needs of the professors, and identifying the needs allows the optimal use of available resources, and this action is better with the participation of academic staff members. If the point of view of the professors as beneficiaries of the program is not taken into account, their dissatisfaction will probably increase and they will lose the motivation to participate in the programs ([Martin & Marion, 2005](#); [Zahedi & Bazargan, 2013](#)).

One of the important components of professional development courses with a flipped learning approach is pedagogy, which includes educational goals, educational content, attention to teacher and learner characteristics, and interaction ([Philipsen, 2019](#); [Philipsen et al., 2019](#)). The purpose of holding professional development courses is to increase their professional knowledge and develop their professional skills in order to adapt to the ever-increasing changes. These courses are offered with the aim of updating the abilities and helping to make changes in the environment and informing the professors about the changes and improving their understanding and helping them to acquire the necessary knowledge, skills and attitude. Deep changes in the structure of the educational system and planning faced fundamental challenges, and therefore continuous professional development can be a suitable solution to overcome these challenges. This issue is also emphasized in high-level documents such as the fundamental transformation document and the strategy document of Farhangian University in the vision horizon of 2025. In addition to that, in various studies, especially [Sadeghitabar and Shariatmadari \(2020\)](#) and [Philipsen et al. \(2019\)](#), it was approved that communication (interaction with fellow professors and course instructors) or social networks has an effect on the professional development experience of professors and will lead to an increase in the knowledge, skill, attitude of professors, interaction and providing the basis for increasing effective communication between the teacher and the learner and educational content. According to [Aydin \(2014\)](#), the interaction between teachers and learners is very important in the teaching-learning process, and the participation and cooperation of learners is an important factor influencing learning in professional development courses, especially in the virtual sector. This participation and cooperation in group activities triggered learners to make sense of their learning and build knowledge in new ways and turns the passive role of learners into an active and responsible role.

The next component is learning formats, which was identified with two sub-components of face-to-face and non-face-to-face formats. [Harida and Syarif \(2020\)](#) believe that blended learning and flipped learning combine seemingly opposite approaches such as formal and informal learning, online and face-to-face, guided and self-directed paths, digital resources, etc. to create an optimal educational program. For specific audiences, it combines technologies, activities and types of events ([Salehi Omran E. & Salari Z., 2012](#)). Flipped learning is formed from the combination of offline and online training courses, and learners practically find the opportunity to use both offline and online packages. Therefore, it is necessary to provide various formats for learning. The participation of faculty members in domestic and foreign congresses and conferences to learn about new scientific findings and exchange experiences can be a part of face-to-face learning format. In addition, the use of self-learning content in the form of podcasts and e-learning can provide a learning environment for professors. In

other words, flipped learning and blended learning can create suitable learning environments for teachers. Blended learning models, especially flipped learning, are a convergence of two traditional learning environments and technology and media-based learning environments that use each approach to make education more effective ([Evans et al., 2020](#); [Philipsen et al., 2019](#); [Sadeghitabar & Shariatmadari, 2020](#)).

The next component, personal development refers to the promotion and development of new knowledge and skills and behaviors that result in the increase and improvement of performance related to the individual's current job and has an important role in the growth and promotion of academic staff and includes the sub-components of technical skills including continuous learning and updating information, knowledge management, expression technique, time management and administrative skills including creativity and innovation, flexibility and self-regulation. Leadership skills include communication skills, regular and effective supervision, transformational management and counseling with students. Possessing professional and ethical characteristics is necessary for the professional development of professors, because they work as lecturers, researchers, etc. in different fields. Considering that flipped learning is a type of blended learning that turns education into a student-centered model, in which class time spent examining topics in more depth and creating attractive learning situations, and it has challenges such as time management, lack of face-to-face interactions, etc. So it is necessary for professors to make a continuous effort towards their growth and abilities and to improve their skills, knowledge and increase their self-confidence by participating in workshops and seminars.

The next component i.e. educational development is a set of skills and capabilities that faculty members must have in order to guide the teaching-learning process of students. After studying and reviewing previous researches, eight sub-components including classroom skills, mastery of lesson content, mastery of teaching methods and teaching-learning approaches, communication with students, role model, evaluation skills, familiarity with educational technology were obtained ([Abedi et al., 2017](#); [Bandali et al., 2021](#)).

Higher education is a system that includes professors, students, and staff, and has different and complex processes and mutual dependencies with its environment, and it needs capable professors with excellent scientific ability and high-quality processes to meet its needs. One of the very important processes that show the ability of professors is the teaching process of professors and educational capabilities. Educational capabilities are the most important capabilities that academic staff members must have, and before they enter the educational work, they must be equipped with the necessary skills in this field. Of course, this does not mean that other faculty members do not need training in this field, but they should continuously improve the knowledge of faculty members in all fields, especially in the field of teaching skills. Therefore, one of the main components of the professional development of academic staff members has been mentioned in the studies on educational development. [Grant \(2004\)](#) summarizes the growth of academic staff members in educational growth and considers it to include the training of new technologies, new theories of teaching-learning, evaluation and teaching

method, which is aligned and coordinated with the findings of the current research. The main duty of academic staff members is to teach, and they are expected to have the necessary skills in their specialized field as well as in the field of teaching methods and techniques. This issue is important in all universities, but in Farhangian University, which it is the training of human resources and academic staff members are responsible for training a new generation of teachers, it is more necessary for them to master what they teach. In addition, they must have expertise in how to teach, plan and evaluate. The use of new teaching methods and new evaluation methods are among the effective measures that improve the quality of education, and in this regard, the role of academic staff members should be changed from lecturers and information transmitters to learning facilitators, so it is necessary to focus on this in professional development courses. The role should be addressed and activities such as course design, educational support, classroom management, use of educational media, evaluation and interactive skills should be retrained.

The next component i.e. organizational development is focused on the growth of faculty members in relation to the organization and university environment. Skills and capacities that help faculty members to work better in the university environment as a group or individually are working group skills, interaction with scientific communities, management skills, compliance with academic norms and ethics and values ([Abedi et al., 2017](#); [Grant, 2004](#)). One of the important aspects of organizational development is emphasizing the role of members as colleagues and as members of the organization. The academic staff member should be able to work well in the university in interaction with his colleagues, manage potential conflicts and take on leadership roles and, where necessary, manage the university. The basis of professional development in this dimension is the improvement of human resources and deals with formulating new and creative organizational solutions for functional issues as well as increasing compatibility and adaptation among the structure, culture, business processes, organizational strategies and emphasizes on creating an effective educational atmosphere in which people are able to implement new activities and measures in line with the teaching-learning process. Studies have shown that in the courses formed by flipped learning, the interaction between peers has increased, which has led to the management and sharing of knowledge and has had a positive effect on the teaching skills and knowledge of academics ([Evans et al., 2020](#)).

The fourth component i.e. research development is a research that has been mentioned in all the reviewed studies. By studying the duties and assignments of academic staff members in different countries of the world, four types of scientific activities can be identified, which include research (production of knowledge), dissemination of knowledge (education), integration of knowledge (interdisciplinary perspective) and application of knowledge (providing specialized services to society). Undoubtedly, one of the important duties of academic staff members is to conduct research, especially applied research for the development of fields of knowledge. In research development, professors must be aware of the needs and problems of the society and research and research subjects of themselves and students in order to correctly identify the issues and prioritize them. They should

guide and solve the problems of the society. For this purpose, professors should be able to be creative and innovative in the field of their specialty and have the courage to theorize.

Another component is service development, which is a set of skills that help the faculty member to provide specialized and social services to the community outside the university in relation to his knowledge. These services can include providing specialized advice to the industry and market, entrepreneurship, giving speeches, providing advice to the community in relation to their specialized field. The review of various researches shows that in the past researches, service growth is less mentioned and only has been mentioned in a little of studies ([Evans et al., 2020](#); [Zahedi & Bazargan, 2013](#)). The important point is that the mission of university professors is not only limited to education and research, and the faculty member must be in contact with the society and provide specialized and social services to it. Nowadays, due to the importance of entrepreneurship and the application of scientific and research information, this aspect has gained significant importance and it is expected from the faculty members to have the necessary abilities in this field so that they can play an influential role in the society and use their knowledge, skills and research findings to use it in order to serve it and fulfill their social mission. The scientific findings of the university should be placed in the direction of the welfare and comfort of the society.

In addition to presenting the findings, the current research has also been associated with limitations. The cost of downloading some foreign and domestic articles has been one of the most important of these limitations. Also, according to the results of the research, there is a need for empowerment in five areas: individual, education, organizational, research and service. The first step is to identify the needs in the design and planning of the empowerment and professional development activities and to design and implement the professional development activities by comparing the current and desired situation. It is suggested to the interested researchers that the professional development courses of Farhangian University professors be held with the model obtained in this research and the efficiency and effectiveness of this model should also be tested in practice. It is also suggested that the proposed conceptual model of this research be used as a basis for developing programs and activities for the growth and professional development of academic staff in Farhangian University and other higher education centers in Iran.

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