

Model for Effective Peer Mentoring Program in Mongolian University Context

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Abstract

Mentoring is one of the primary programs schools are implementing in teacher development. Educators use mentoring skills and programs to support novice teachers, improve classroom management, and develop their teaching practice and skills. Numerous studies have been conducted to explain the importance and essentials of mentoring programs to the mentees. Researchers suggest that mentor training should enhance mentor teachers' skills, such as building the mentee's trust, improving classroom management, and developing instructional practice, followed by comprehensive program evaluation. The purpose of the article focuses on how peer mentoring can enhance teachers' personal and professional skills to be successful in their roles and find out what constitutes the effectiveness of mentoring processes in academic settings and what improves university teaching and ongoing training for the mentors. Quantitative and qualitative methods were used to collect the data and observe teachers' work experiences and skills. The result is that peer mentoring is accepted as an efficient program in teacher development and benefits those engaged in this program. However, as our research result showed, peer-mentoring programs should be designed, developed, evaluated and renewed constantly. In addition, institutions and educators should define mentors' roles and responsibilities in mentoring programs and evaluate them regularly.

Keywords: Peer-Mentoring Program, Effective Mentoring, Peer Mentoring Evaluation

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Introduction

Teaching is quite challenging and complex work requiring teachers to have high professional skills and knowledge and continuous learning. The workplace is one of the opportunities where teachers can develop their professional skills and learn continually. Therefore, educational institutions consider their teacher development issue and implement various mentoring and teacher development programs to support their staff learning and development. However, not all teacher development programs can be successful and beneficial. Mentoring has long been seen as not only one of the critical approaches to teacher learning and skill development but also one of the essential roles of experienced and successful teachers. Laverick (2016) emphasizes that mentoring is a professional development opportunity and should be included in the educational institute's professional development plan. In this research, we will introduce a peer mentoring program to be one of the effective programs for teacher learning within our university context and suggest ways how universities could implement this program.

Regardless of their experience in teaching, mentor teachers should have various skills to be effective in their mentoring roles, such as guide, supervisor, counselor, encourager, motivator, learner, and colleague. Therefore, teachers who have been working for many years at a university are assigned to be mentor teachers. However, they should be aware that they are involved in the process and understand their roles.

A recent survey shows less experience of having official peer mentoring programs for mentors and mentees regarding their individual needs and goals, followed by well-organized ongoing and end-of-evaluation in Mongolian universities. In this study, we will discuss the effectiveness of the peer-mentoring program and its implementation and propose some valuable ideas to design the program. Our research questions are: How peer mentoring can enhance teachers' personal and professional skills to be successful in their roles, and what constitutes the effectiveness of mentoring processes in academic settings when implementing the program.

Literature review

The theoretical framework of this study includes the context of higher education in Mongolia, and literature on peer mentoring programs in education. It also has vital learning theories related to peer mentoring strategies, not just with mentees but also with the mentors. It concludes with the study objectives that the survey tries to address.

Besides being mentored, teachers also can develop their skills by attending professional training, workshops, conferences, and meetings. By completing the courses and events, teachers can deliver more effective teaching based on their experience in continues learning. However, we do not have much productive teacher supporting programs based on individual teachers' learning goals and creating a more positive and confident learning environment. Teachers tend to be reluctant to share their ideas, share experiences, and ask for help, especially new teachers.

Researchers have highlighted the importance of peer mentoring programs for professional learning and teacher development. According to Laura et al., there is less work on the benefits to faculty members in mid and late careers, which is a future avenue researcher might explore (Laura, Gloria, & Brad, 2017). Learning, according to a self-regulatory model,

involves an interplay between three learning-process components: cognitive (what to learn), affective (why to learn), and meta-cognitive (how to learn). Support mechanisms for learning and development must address all three components. Both practical and regulative learning activities lead indirectly to learning outcomes due to the influence on processing subject-specific learning material (Abrahamson, Puzzar, Ferro, & Bailey, 2019). What differentiates mentoring relationship from supervisory is that it is voluntary on both the mentor and mentee's side, has a precise time limit, and specifies goals together. In other words, this relationship is collaborative, not top-down (Virginia Commonwealth University, 2019). Vygotsky (1978, as cited in Nguyen, 2017) highlighted that learning is not obtained in isolation but rather through building interaction with others in a socially embedded environment. Implementing peer-mentoring programs allows teachers to learn from peers and develop their skills together. Our Institute of Foreign Languages does have consistent and regular mentoring programs and teacher development activities that improve teachers' skills; we can design and implement a well-organized peer-mentoring program that promotes collaborative learning and skill development. Effective mentoring requires mentors to be in multiple roles, such as a teacher, a guide, role models, a sponsor, a counselor, a motivator, and a colleague (Jonson, 2008; Smith, 2015). Pitton (2016) noted that all individuals involved in the mentoring process should know and understand their roles. Having a clear picture of their roles in mentor-mentee relationships would help mentors be more responsible and effective (Pitton, 2016). It has been viewed as the responsibility of senior faculty to mentor new faculty members (Laura et al., 2017). Peer-group mentoring is an activity that consists of a group of teachers who share and reflect on their experiences, discuss issues and challenges in their work, engage and motivate each other as well as learn together (Heikkinen et al., 2012). Mentoring programs are not just confined to higher education; within professional practice, mentoring schemes are used to provide staff with support and assistance and encourage professional development within a workforce (Abrahamson et al., 2019).

Literature also indicates that effective mentoring in school settings can improve mentee teachers' teaching practice and teacher retention (Smith, 2011; Sowell, 2017). Influential mentors show respect to their mentees and create a positive environment where they can feel more comfortable expressing themselves or discussing their issues (Virginia Commonwealth University, 2019). Hudson (2010) considers that to be successful in mentoring, mentors need to continuously enhance not only their practice in mentoring and teaching but also develop their mentees' teaching practices. Hudson (2010) determines five effective mentoring models based on mentors' reports who reflected on their practice. According to him, the five models of potential mentors are (1) personal attributes, which include encouraging the mentee's reflection on practices by supporting continuously, communicating freely, and listening actively, (2) system requirement, which involves mentor's goal, policies and curriculum for meeting education system (3) pedagogical knowledge for effective teaching, (4) modeling and (5) oral and written feedback on mentee's teaching and learning environment. Observation and feedback (Giebelhaus & Bowman, 2002), a clear understanding of mentor and mentee roles and expectations (Anderson, 2012; Smith, 2011) are also critical features that influence the effectiveness of mentoring processes. An essential skill associated with mentorship benefits is the ability of the mentor to develop confidence in their communication with a mentee and assume a leadership role within the mentor/mentee relationship (Abrahamson et al., 2019). Building a positive relationship with the mentee is one of the essential skills for the mentors. In addition to this, some researchers consider that excellent teaching skills are not enough for potential mentors.

Many researchers agreed that skills to build trust in their mentor-mentee relationship is one of the most crucial skills (Pitton, 2016; Hicks, Glasgow, & McNary, 2005; Jonson, 2008; Johnson, 2016; Langdon, 2017; Sowell, 2017). Jonson (2008) emphasizes that trust in relationships with beginning teachers makes a mentor's relationship different from other helpers and lets the mentee know that their communications will be kept confidential.

This peer mentoring program will address the issues and consider crucial aspects of peer mentoring for teachers' successful learning.

Methodology

Purpose of the research

This study aims to determine the needs of an effective mentoring program and identify the characteristics that make it successful through a questionnaire, followed by developing a model for a mentorship program in the university setting. The questionnaire for the survey on 'Review of Teacher Model in the Workplace' consists of nineteen questions, including age, work, mentor experience, position, skills, relationships, challenges, opinions, goals, objectives, benefits, etc. This study explored teachers' skills that they desire to improve by working collaboratively. As a result of the survey, we aim to develop an action plan to implement a new mentorship program in a university setting depending on educators' needs. Due to a pandemic, the survey was conducted on Google form in May 2021.

Data collection

There are eighty-eight universities in Mongolia, and 6,102 teachers who work at the tertiary level, according to the National Statistics Office of Mongolia (NSO, 2021)¹. Thirty random educators and scholars from different eight universities were involved in the questionnaire, for example, the National University of Mongolia, Mongolian University of Science and Technology, Mongolian National University of Education, Mongolian National Defence University, University of Finance and Economics, Ulaanbaatar University, Mongolian National University of Medical Sciences, University of Labour and Social Relations on May 2021. In the framework of this research, we used quantitative and qualitative methods to collect the data. Data were analyzed and categorized regarding the teachers' age ranges, work experiences, and skills.

Data analysis

Review and evaluation of professional learning in our context show that mentoring processes for young teachers were mainly informal and did not sufficiently address the mentee's learning goals and make them feel more self-reliant in their profession.

Table 1 illustrates the number of participants who participated in the survey.

¹ The information was adopted from the official website of NSO issued on 15 January, 2022 (www.nso.mn)

Table 1: Number of participants and universities

№	Universities	Participants
1	National University of Mongolia	5
2	Mongolian University of Science and Technology	4
3	Mongolian National University of Education	2
4	Mongolian National Defence University	3
5	University of Finance and Economics	8
6	Ulaanbaatar University	2
7	Mongolian National Universities of Medical Sciences	3
8	University of Labour and Social Relations	3
9	Overall	30

A review of the experience of teacher development practice in our institution suggests that both mentors and mentees should have carefully designed learning goals and expected outcomes. Moreover, even though teachers have to experience mentoring novice teachers, they also need to promote more collaborative learning (*see Appendix 1, Table 2*). It is also clear that we need to design a straightforward mentoring program. From the table above, it's clear that mentors and mentees do not collaborate well enough to foster their knowledge and skills. Even though there are some skilled mentors in our institute, they don't set clear goals, meet their expectations, and have specific learning outcomes because there is no peer-mentoring program. To promote an effective mentoring program model, there will be questions such as:

1. What effective mentoring is.
2. What are teachers' needs.
3. Why mentoring programs, especially peer mentoring, should be implemented in our institutional context.

Last few years, the number of new teachers has increased in our institution. This increased number of new teachers requires us to implement peer mentoring programs that allow the teachers to learn from each other and promote collaborative learning. It will help us to solve issues of lacking a sufficient number of experienced mentors, matters of an unequal balance of professional and novice teachers, and prepare future mentor teachers. The following are why peer mentoring programs should be implemented in our institutional context.

Even though teachers in our institute participate in training, workshops, and conferences, those training sessions cannot cover individual learning needs. Having a learning goal and participating in peer mentoring programs enable teachers to learn constantly based on their plan for learning.

Discussion

As a part of higher education institutions, our Institute of Foreign Languages at the University of Finance and Economics of Mongolia has long seen teachers' professional learning and development as its primary issue. Teachers who are new or less experienced in teaching have opportunities to develop their skills and learning by guiding or working with senior teachers who are more experienced and willing to share their experiences.

Peer mentoring programs allow us to make changes in our traditional mentoring program. Mentoring relationships in the institute are mainly hierarchical and more instructional regarding classroom management, material development, and feedback on classroom observation. Peer mentoring programs will be more developmental and support teacher learning based on their learning needs. Peer mentoring differs from traditional mentoring as equality replaces hierarchy in the mentoring process (Nguyen, 2017; Collier, 2017). The program should be focused on both the institution's and the teacher's own goals. Achieving personal growth and improving departmental performance can go together closely. Besides developing teachers' skills, peer mentoring also promotes collegial relationships among teachers. Professional friendship with peers and colleagues is one of the essentials in schools to create professional friends and share attitudes, beliefs, and knowledge (Whitton, Barker, Humphries, Nosworthy & Sinclair, 2016). Furthermore, paying attention to teamwork and team cohesion is a practical approach to making teamwork innovative and remain up to date, developing professional knowledge and skills, and collective building responsibility among teachers (Poell & Woerkom, 2011).

From above, we define that effective mentoring is not only for improving teachers' teaching skills and practices but also for giving mentors and mentee teachers opportunities to communicate, collaborate, and enhance their skills together, which influences university achievement.

Studying in developed countries such as Canada, Australia, America, Russia, and China is one of the advantages teachers benefit from in their professional learning. However, information sharing with other teachers about their experiences is insufficient. Well-established collegial relationships within the workplace will improve teachers' desire to share information and support each other (Abrahamson et al., 2019). Pounder (1999, as cited in van Woerkom, 2011) assured that teachers who work in a collaborative environment are more likely to be committed to their job, interact with their colleagues, and have broader knowledge. These advantages of peer mentoring programs motivate educational institutes to organize peer-mentoring programs as part of their teacher development programs and support learning.

To make a good peer mentoring program, researchers suggest the following model and elements: the purpose of the peer mentoring program, target audience, implementation plan, and evaluation. We also support this model. The explanation of the aspects of the model is mentioned below.

a. Purpose of the peer mentoring program

The peer mentoring program aims to initiate and improve peer mentoring to support teacher learning and create an environment where teachers can learn collaboratively, share their ideas,

engage other teachers to participate in professional discussions, and meet individual teacher learning goals.

b. Target audience

The target is those who are not only new in the teaching profession but also those who are willing to develop their professional skills and learning through effective peer mentoring programs. Teachers are engaged in a peer mentoring program that will start from the beginning of the academic year and be implemented for 3-6 months.

c. Implementation plan

Before implementing the peer-group mentoring program, the group members will agree on the following principles. According to Heikkinen et al., principles of peer-group mentoring, the group needs only to address issues relevant to teaching, and issues discussed in the group must be confidential. Each group member will address a professional matter that suits their personality. Members will also identify the topic of an issue that will be addressed during the next meeting. If a conflict arises, it will be handled by the team before the session ends. Finally, group members must respect each other and create a positive atmosphere (Heikkinen et al., 2012).

d. Evaluation

Evaluation of the mentoring program is an essential part for the participants to determine whether the purpose of the mentoring program is being met and identify further development. According to Anderson, Silet, and Fleming (2011), the primary purposes of evaluation of mentoring programs are (1) to support learning, (2) to lead to success, and (3) to guide further development activities. These three elements cannot be separated and exist without one of them. Both program and evaluation must be precise enough for the mentees and mentors. When designing the program, both novice teachers and mentors need to see what goals they will set, how they will succeed, and what they will do further to cultivate themselves.

We will evaluate the peer mentoring program in three stages; early, formative and summative assessment. We think that a survey or questionnaire can work during the early stage of the review to identify early needs at the beginning of the program. Then, both mentee and mentor can see whether they have developed their skills or reached their goals mutually during the short or long-term program by completing the formative evaluation.

Formative evaluation will be completed by both participant teachers and the program coordinator. It will help identify if the program is on track and meets both schedule and mentors' goals.

In our study, 30 teachers from various universities were asked to determine their needs and evaluate current peer mentoring experiences. We have invited five teachers from our department to implement and benefit from our developed model based on the questionnaire. The participants, who have over five years of teaching experience, participated in our program to achieve their goals to develop their research, digital, and other soft skills which are essential in their academic careers. The teachers actively participated in our peer mentoring procedure, ongoing study for three months, and evaluated our program.

Appendix 2 (*Table 3*) shows the formative evaluation tool for peer-mentoring. The evaluation should be conducted in the middle of the program to improve its effectiveness. In our case, we worked on a three-month peer-mentoring program from September to December 2021 and completed the formative evaluation in October.

Appendix 3 (*Table 4*) illustrates summative evaluation, and it should be conducted at the end of the program. The mentor/supervisor should assess data to identify the program's effectiveness and further improvement.

Depending on the early stage of the evaluation process, we consider that an action plan can be developed as follows. Before peer mentoring programs begin, participant teachers are required to attend peer mentoring training, which allows teachers to be familiar with the peer-mentoring process and gain mentoring skills. All individuals involved in mentoring programs should have a clear understanding of their roles and responsibilities (Pitton, 2016). The purpose of the session is to offer support and develop teachers' skills as a mentor and a mentee and let them become familiar with the peer-mentoring process (see *Appendix 4, Table 5*). Peer matching is one of the essential elements of peer mentoring. Nguyen (2017) suggested that peer mentoring programs should emphasize peer matching as most of the issues in peer mentoring can arise from mismatching and reduce the program's effectiveness. In order to prevent issues among peers, the following aspects will be taken regarding personality, working styles and perspectives, the difference in age, teaching experience, and the difference in purpose and interest.

The next stage of the peer mentoring program is the procedure which requires both a mentee and mentor to have a clear picture of what they desire to foster and in what ways or how they can achieve it. As shown in *Appendix 5 (Table 6)*, processes and purposes are given. In other words, teachers must participate in mentoring sessions to become familiar with their purposes, ideas, and interests, set cooperative learning plans, and specify outcomes to have a common goal based on their learning needs.

In teaching, mentors are heroes who never stop learning, reflecting, investigating, and developing in their field (Hicks, Glasgow & McNary, 2005), though, like novice teachers, beginning mentors also need ongoing support from a program coordinator and mentor training (Jonson, 2008). Building a trusting relationship, receiving ongoing training, and developing their instructional practice are crucial in mentor training (Sowell, 2017; Langdon, 2017; Hudson, 2010). Targeting mentor teachers' professional development can enhance their skills and engage them to contribute to education reform by developing their mentoring skills (Hudson, 2010; Henning, Gut, & Beam, 2015). Hudson's study also suggested that to make the mentoring process more effective, educational reform should emphasize educating mentors to be proactive and effective in mentoring practices and ready to address issues (Hudson, 2010). Moreover, the literature also confirms that even though experienced teachers commonly become mentor teachers (Langdon, 2017; Smith, 2015), they can have limited experience mentoring adults, which causes them to feel unqualified (Langdon, 2017). Smith (2015) argues that even though mentoring is a profession within the teaching profession, the purpose, roles, and methods of mentoring and teaching are distinctively different. Experience is not sufficient for the mentors. Therefore, formal education for mentor qualifications needs to be considered (Smith, 2015). Sowell (2017) highlights that lack of mentor training in current practices would make mentors deliver outdated and ineffective practices.

Findings

The findings reveal that the participants were successful and satisfied to be involved in this peer mentoring program. Even though there were some challenges, such as not having face-to-face meetings, mentors had online meetings. Mahsa (2017) suggests that personalities and opinions may clash during mentoring. What contributes to this problem is the lack of open negotiations of ideas and expectations. Mentor teachers can create more positive mentoring experiences for teachers by initiating open discussions in the early stages of mentoring to learn about their mentee's wants and needs and make explicit their views and expectations. It is recommended that mentors invest enough time with their mentees not only to ascertain their academic and professional needs but also to develop a collegial relationship with them, characterized by constant care and undivided attention to inspire and motivate them to remain true to their aims along the way (Mahsa, 2017). Based on the questionnaire and survey, we found out that our peer mentoring program was successful because we considered peer matching, a trusting relationship between mentees and mentors, their purposes, interests, and made an action plan regarding our participants' digital research soft skills. Below is the result of our program:

It was a successful and valuable program for me as a mentee.

I identified my needs and weaknesses and defined my goals very carefully during my first meeting with mentors in person.

My mentor and I developed the action plan at the beginning of the program to determine what to focus on further.

I learned some new things, specifically how to conduct online teaching, and developed my research skills.

I was confident to communicate with my mentor when I had issues.

The program participants answered as follows, indicating that the participants benefited from the program.

Implementation of the program worked well. It was according to the plan.

Peer matching was good, so I was confident to make contact and communicating with my mentor.

My interest and purpose matched. So, I could easily understand my mentor.

Following the action plan was easy for me because I developed a plan with my mentor.

As shown below, the teacher participants learned some critical lessons from the program and what they would do differently next time.

I learned that building a close and trusting relationship with my mentor is essential during the peer mentoring program.

Next time, I would like to see my mentor every week as specified in the action plan in person.

Next time, I will be more initiative and active in participating in the program.

I acquired some leadership skills from my mentor.

I understood what mentoring relationship should be.

Mentees faced some challenges throughout the program due to the pandemic, as specified in the feedback.

There was a lack of chance to meet my mentor in person because of the covid19. All of the meetings were held online.

I didn't have enough time to see my mentor regularly because of my busy schedule.

I had classes from the morning until evening. I think this affected my efficiency in improving my research skills. I needed more support and understanding from my administrators and managing directors.

Regarding the peer mentoring program results, the teacher participants defined the program outcomes as follows.

I wish there were many social and official events between mentee and mentor to develop our network.

In general, mentoring programs should be carefully designed to encourage further and cultivate the participants' needs and skills.

To develop participants' research skills, both mentee and mentor need to specify specific research interests and collaborate in joint research.

In the middle of the process, formative evaluation helped me track my progress and proceed in my action.

From the above, we assume that training is a must work and can be a part of a continuous development program. Although teachers at universities are busy teaching and doing some research work, administrators and human resources should support the pieces of training, workshops, and seminars which means they need to be flexible, supportive, and responsible for monitoring, assessing, and evaluating the outcomes. Due to this, we see that there will be great opportunities to mentor each other. Evaluation of mentoring programs allows the participants to ensure if the purpose of the mentoring processes is being met and to determine what aspects need to be considered for further development. Jonson (2008) affirms that all techniques for gathering information, such as structured interviews, surveys, and observations, can be used to evaluate the effectiveness of mentoring programs. The primary purposes of mentoring program evaluation are (1) providing learning opportunities, (2) helping mentors to be more successful, and (3) guiding further training activities (Anderson, Silet & Fleming, 2011).

As mentioned before, building a positive relationship with the mentee is one of the essential skills for the mentors. Our study shows that both mentee and mentor have a strong, good, trustful, and close relationship, which promotes activity, initiative, and collaboration. In addition to this, it is necessary to organize more social and official events to encourage networking and reduce tension between them. Our research result also identified that it is vital to clearly describe the further processes, roles, and actions based on the mentees' demands. It is clear that if teachers are involved in the program, both must have a timetable for devoting their time to a meeting to foster mentees' professional and personal skills. The study also reveals that teachers are busy with their work and private life and have no time to meet their mentors, although they are involved in the program. Also, mentor teachers should be more open and negotiable with mentees to design the collaborative program, match mentees' schedules, and develop a reliable, positive collegial relationship. We found out that if one of them has a busy schedule in their workplace, it is not efficient and collaborative work through the program. Both must dedicate some specific time to perform given tasks besides their work to make it effective. In addition, human resources and managing directors need to support the peer mentoring program to have good results for mentees' development.

Recommendation and further research

This study was conducted only in the framework of our university. More research should be conducted on the program we designed as a model to improve mentoring skills. Further, benefits for the mentor should be investigated and determined through the peer mentoring program. It is also recommended to study what types of approaches should be used to enhance mentors' skills. Furthermore, efficient peer mentor training sessions should be explored in order to strengthen mentors' abilities. Finally, the program should be

implemented in more universities, if possible, it could be executed in the educational sector. Also, the program could be designed for staff development.

Conclusion

In conclusion, the peer mentoring program is essential when considering teacher development and school achievement. However, not all mentoring programs can be successful if universities and institutions cannot design comprehensive and standardized models followed by regular monitoring and evaluation at the end of the program and during the implementation process. Even though most mentors in the education field are experienced, experience alone is not enough in mentoring. Besides good teaching skills and experience, a successful peer mentoring program requires good relationships, explicit purposes, pictures, and specified roles and responsibilities throughout the program. In order to make the peer mentoring process more effective, mentors' skills need to be enhanced continuously by involving in continuous professional development, mentoring, and leadership programs. Therefore, we can conclude that the peer mentoring program will be beneficial for teacher development and promote a positive environment in a university and institute.

Appendix 1

Table 2: Review of the teacher development model in Mongolian universities

№	Questions	Options	Percentage
1	What is your age?	18-25	0
		26-35	20
		36-45	66.7
		45-60	13.3
2	Are you a lecturer or a staff member?	Lecturer	10
		Staff	90
3	How long have you been working at this university?	1-5	16.7
		6-10	6.7
		11-15	43.3
		More than 15 years	33.3
4	Do you have any experience of having a mentor or being a mentee?	Yes	40
		No	36.7
		There weren't any chances	23.3
5	If you answered YES to the above question, how long would the mentoring relationship last?	Less than 3 months	20
		More than 3 months	16.7
		Others	63.3
6	It is important to pay attention to the matching of mentor and mentee carefully.	Strongly agree	16.7
		Agree somehow	63.3
		Disagree	6.7
		Do not know	13.3
7	Do you agree that a carefully designed and organized peer mentoring program can help both mentor and mentee teachers to develop their professional and other soft skills?	Strongly agree	30
		Agree somehow	60
		Disagree	6
		Do not know	4
8	To identify participants' soft skills when they work in a team, we asked the following question: what skills do you think you have when you work in a team?	Others	3.3
		Technical skills	50
		Collaborating with others in any situations/ conditions	40
		Self-confidence	30
		Attitude towards learning and working	63.3
		Critical/analytical skills	53.3
		Professional skills	36.7
		Career development	53.3
		Social skills	36.7
		Communication skills	70

9	The skills I feel that I can develop through peer mentoring program is/are:	Get used to the right way of life	16.7
		Technical skills	33.3
		Collaborating with others in any situations/ conditions	40
		Self-confidence	26.7
		Attitude towards learning and working	16.7
		Critical/ analytical skills	36.7
		Professional skills	26.7
		Career development	53.3
		Social skills	16.7
		Teamwork	30
		Communication skills	43.3
10	Please, specify the skills you need to develop for your personal development.	New technology	23.1
		Rhetoric skills	19.8
		Critical thinking	3.3
		Nothing	6.6
		Listening	3.3
		Writing a research work in a foreign language	3.3
		The right way of life	3.3
		Analysis of resources	3.3
		Professional	6.6
		Social	3.3
		Communication in a diverse culture	3.3
		Doing research	3.3
		Emotional Intelligence	3.3
		Learning continuously	3.3
		Time management	3.3
New teaching methods	3.3		
Dedicating time to yourself	3.3		
11	Which of the following skills should both mentors/mentees have?	Social skills	73.3
		Language skills	50
		Dedication towards his/her profession	50
		Use of new technology	50
		Career advice	56.7
		Well organized	60
		Time management skills	63.3
		Get used to the right way of life	33.3
		Others	3.3
12	If you face any challenges at your workplace, how would	Communicate with others	40
		Get some advice from others	30

	you deal with them?	Work in teams	23.3
		Have a mentor	6.7
13	It is necessary to set goals before starting the mentoring relationship.	Strongly agree	33.3
		Agree	63.3
		Disagree	0.4
14	Your mentoring relationship should meet your objectives, needs, and expectations.	Strongly agree	30
		Agree	60
		Disagree	10
15	It is important to have a mentorship program at our university.	Strongly agree	33.3
		Agree	66.7
		Disagree	0
16	If so, in your opinion, how can a peer mentoring program be effective? You can select more than one answer.	Provide mentoring training	53.3
		Build a mentoring support system	30
		Help employees build a good mentoring relationship	33.3
		Assess mentoring program regularly	40
		Clarify program outline	43.3
		Set clear goals	43.3
		Others	3.3
17	How do mentors and mentees benefit from a mentoring relationship?	Develop skills	10
		Work efficiently	20
		Share experiences	16.7
		Career development	16.7
		Learn from each other	10
		Improve organizational culture	23.3
		Networking	3.3
18	How does the organization benefit from the peer mentoring program?	Achieve organizational vision	16.7
		Staff development	16.7
		Increase work efficiency	23.3
		Understand each other well	6.6
		Create positive environment	16.7
		Staff work satisfaction	10
		Creative and analytical solution	10

Appendix 2

Table 3: Formative Evaluation Tool for Peer-Mentoring

№	Questions	Rate your answers
1	Underline whether you are a mentor or mentee.	
2	How would you rate the program?	1 2 3 4 5
3	Do you think you matched with your mentor or mentee?	1 2 3 4 5
4	Do you agree that a peer-mentoring program is carefully designed and organized?	1 2 3 4 5
5	Do you agree that this program helped both of you to develop your professional and other soft skills?	1 2 3 4 5
6	My mentor/mentee is accessible.	1 2 3 4 5
7	My mentor/mentee is an active listener.	1 2 3 4 5
8	As a peer, we provide a useful comment on our work.	1 2 3 4 5
9	As a peer, we demonstrate mutual professional skills.	1 2 3 4 5
10	As a peer, we motivate each other to improve our work experience.	1 2 3 4 5
11	Both of us are helpful in providing direction and guidance on professional issues.	1 2 3 4 5
12	Both of us acknowledge our contribution appropriately.	1 2 3 4 5
13	My mentor/mentee takes a sincere interest in my goal/ plan.	1 2 3 4 5
14	As a peer, we facilitate building our professional network.	1 2 3 4 5
15	We provide essential advice on our scholarly/ research work.	1 2 3 4 5
16	Both of us are supportive of each other.	1 2 3 4 5
17	Overall, I am satisfied with my mentor/mentee.	1 2 3 4 5

Explanation of the ratings: 5-Excellent, 4- Good, 3 - Average, 2 – Bad, 1- Poor

Appendix 3

Table 4: Peer Mentoring Program Evaluation Form

№	Evaluation criteria	Scale				
1	The peer mentoring program had clear goals and addressed the intended outcome	1	2	3	4	5
2	The peer mentoring program promoted collegial relationship	1	2	3	4	5
3	The peer mentoring program improved participants' mentoring skills	1	2	3	4	5
4	The peer mentor meetings were supportive and encouraged participants to make decisions	1	2	3	4	5
5	The peer mentoring program addressed participants' issues and concerns	1	2	3	4	5
6	The peer mentoring program created a positive atmosphere that support teacher learning	1	2	3	4	5
7	The program contributed to the development of teacher individual needs	1	2	3	4	5
8	The program met the purpose of the institutional teacher development plan	1	2	3	4	5
9	The program included all necessary materials and equipment	1	2	3	4	5
10	The program included all participants in professional learning activities	1	2	3	4	5

For the statements above, please select a number. 5 is excellent, 4 is good, 3 is average, 2 is bad, 1 is poor.

Appendix 4

Table 5: Peer Mentor Training Sessions

Sessions	Purpose
Orientation	<ul style="list-style-type: none"> <input type="checkbox"/> Engage participants in peer mentoring program <input type="checkbox"/> Introduce overview of the program
Familiarizing peer-mentoring	<ul style="list-style-type: none"> <input type="checkbox"/> Understand peer-mentoring <ul style="list-style-type: none"> ● Benefits ● Functions ● Key principles
Peer observation and feedback	<ul style="list-style-type: none"> <input type="checkbox"/> Introduce participants the nature of peer observation and feedback <input type="checkbox"/> Introduce benefits <input type="checkbox"/> Orient the participants about how to use observation sheet
Mentoring skills	<ul style="list-style-type: none"> <input type="checkbox"/> Introduce required mentoring skills and quality <input type="checkbox"/> Help teachers understand peer mentoring attributes
Peer matching	<ul style="list-style-type: none"> ➤ Match mentors and mentees with their interests and learning goals
Conclusion	<ul style="list-style-type: none"> <input type="checkbox"/> Introduce requirements, task and responsibilities <input type="checkbox"/> Motivate participants to address key issues <input type="checkbox"/> Engage them to develop action plan

Appendix 5

Table 6: Peer Group Mentoring Program Procedure

Process	Purpose
Invite teachers initial mentoring session	<input type="checkbox"/> To make both mentors and mentees to be familiar with their purposes, interest and idea <input type="checkbox"/> Let the participants understand each other's attitudes and perspectives
Facilitate a dialogue and exchange ideas and experiences in a confidential environment	<input type="checkbox"/> To engage mentee teachers in dialogue with the mentors and peers to reflect and discuss teaching issues and contents that will be addressed throughout the program
Set cooperative learning plan and specify outcomes	<input type="checkbox"/> Both mentors and mentees will have a common goal based on their learning needs
Classroom observation and peer feedback	<input type="checkbox"/> Through observation, mentees will receive effective feedback on their performance and identify their area of development <input type="checkbox"/> Make a plan for further learning based on feedback
Implement cooperative activities based on learning needs	<input type="checkbox"/> Build team cohesion through collaborative work <input type="checkbox"/> Develop skills <input type="checkbox"/> Promote experience sharing
Evaluation	<input type="checkbox"/> Both mentors and mentees will receive valuable feedback <input type="checkbox"/> Identify learning needs <input type="checkbox"/> Identify if they meet their learning goal

Appendix 7

The questionnaire items:

1. Was the Peer mentoring program successful? Please provide details.
2. What worked well with the peer mentoring program? implementation?
3. What were the key lessons learned? What would you do differently next time?
4. What were the major challenges/problems?
5. What changes happened as a result of your Peer mentoring program? and why? What have been the outcomes of these changes?

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