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Nurturing Soft Skills in Engineering Education with Interactive Activities

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Abstract

In today's job market, soft skills are increasingly crucial, surpassing technical knowledge. Traditional lectures fall short in teaching these skills, prompting universities to explore new methods of instruction. A Turkish public university introduced a curriculum with non-disciplinary courses called Personal Development Pathway (PDP) courses for its Electrical and Electronics Engineering (EEE) department. These courses aim to enhance soft skills, motivate students, foster positive relationships, and improve employability. Employing Positive Education approach, the PDP courses include hands-on learning, one-on-one meetings, exercises, interactions with professionals, and self-reflection. This study evaluates four PDP courses that are offered for first-, second-, and third-year EEE students. It explores how these courses, designed similarly but offered in different semesters, enhanced EEE students' soft skills and their understanding of course concepts. A questionnaire was administered to sixty-one students after four semesters of teaching. Data triangulation utilized journals, interviews, and reflections. Data showed increased motivation, improved interpersonal skills, and enhanced confidence in self-expression among students. Despite the collaborative effort and time required from instructors, these courses seem to provide valuable opportunities for students to enhance their competence and success in future careers.

Introduction

As employers value engineers possessing soft skills, universities must emphasize personal and professional growth alongside technical skills. This includes enhancing academic achievement, emotional well-being, and social skills. As a result, students can effectively compete globally with peers from renowned universities (Joynes et al., 2019; Osipov & Ziyatdinova, 2014) which can also help to realize the United Nations Sustainable Development Goal 4- Quality Education (United Nations, 2015). One of the ABET (the Accreditation Board for Engineering and Technology) criteria is to equip students with the “ability to function effectively as a member of a technical team” (ABET, 2022, p.1), which entails soft skills such as being a dedicated team player, meeting deadlines, and communicating effectively. Research shows that students improving their self-esteem, adapting to new environments, and making quick decisions tend to take personal responsibility for their choices (Osipov & Ziyatdinova, 2014). Moreover, soft skills such as communication, time and stress management seem to be

considered more important than technical skills (Colman & Willmot, 2016; Di Battista et al., 2023).

Seeing the importance of integrating soft skills into the curriculum, a mid-size public university in the Central Anatolia of Türkiye has implemented a tailored curriculum to address the changing landscape of higher education and enhance global competitiveness (AGÜ, 2019). The Electrical and Electronics Engineering (EEE) Department initiated this curriculum after a thorough consultation and preparation with various stakeholders. Having been offered since 2019, one key aspect of the new curriculum is the "Personal Development Pathway," which consists of a series of non-departmental courses aiming to improve soft skills and promote personal and professional growth. Hence, the research questions guiding this study are:

1. What are the potential benefits of non-disciplinary courses, such as personal development, for Electrical and Electronics Engineering (EEE) students?
2. How can these non-disciplinary courses, such as personal development, be designed, implemented, evaluated, and improved based on Positive Education?

Literature Review

Positive Education

Positive Education is based on the Positive Psychology, which entails the well-being contributed by positive emotion, engagement, positive relationships, meaning, and accomplishments/achievements, known as PERMA model (Seligman, 2012). Based on Positive Psychology, Positive Education integrates academic learning with character development and well-being, emphasizing the importance of non-technical competencies. It combines Positive Psychology principles with effective teaching practices to create a holistic educational approach (White & Murray, 2015). This approach aims to cultivate positive emotions, resilience, positive mindsets, and happiness among students (Mitrović Veljković et al., 2020; Seligman et al., 2009).

Positive Education has demonstrated numerous benefits for students, including improved academic achievement, enhanced social and emotional skills, increased well-being, and a more positive attitude towards school and learning (Anand, 2019; Seligman & Adler, 2018). These approaches address the high stress levels experienced by engineering students and foster resilience, stress management, and a growth mindset, which are valuable in academic and professional endeavors (Cole et al., 2022).

Soft Skills in Higher Education

One use of Positive Education and Positive Psychology can be in teaching soft skills to university students to prepare them for the job market and improve their well-being (Kern et al., 2014). Prestigious universities have traditionally focused on teaching hard skills, neglecting the development of soft skills (Colman & Willmot, 2016). However, to meet the demands of the competitive job market, universities now offer courses and co-curricular activities to enhance students' professional and personal competencies (Ahn et al., 2014; AlGhamdi, 2023; Murray et al., 2021; Shabbir & Rahat, 2021; Swingler et al., 2022; Tusyanah et al., 2023). For example, at Linköping University, Berglund and Heintz (2014) implemented a course called "Professionalism for Engineers" that aimed

to enhance students' soft skills throughout their education and careers, which seemed to increase students' awareness of the importance of soft skills.

Students in higher education often start university with excitement and anticipation (Picton et al., 2018) and are motivated by new experiences as they transition to the professional world (Foong et al., 2020). However, social changes and academic uncertainties can overshadow these positive feelings, leading to challenges in emotional, mental, and physical health (Kahu et al., 2020; Knoesen & Naudé, 2017). Similar to other countries, Turkish institutions generally lack professional support for improving students' soft skills (Mançe Çalışır & Can, 2021), and students often hesitate to seek counseling (Kızıldağ et al., 2012), making it essential to create programs that can effectively address barriers to success (Deveci & Ayish, 2017). To prevent negative consequences, proactive measures should be taken at the beginning of and continue throughout the university years. Hence, as the explicit integration of soft skills into a curriculum through a series of compulsory courses is relatively new, this study will add to the literature to show how non-disciplinary courses, such as personal development courses, contribute to the development of university students' soft skills.

Methodology

This study aims to gather university students' perspectives on developing soft skills. Qualitative design helps researchers to understand participants' perspectives and insights through interviews, observation, document analysis, and qualitative questionnaires (Merriam, 2009). Qualitative data collection tools provided us with the in-depth analysis to examine students' understanding and development of soft skills. This qualitative study commenced upon receiving ethical approval from Abdullah Gül University's Ethical Committee.

Research Site

This study was conducted at Abdullah Gul University (AGU), a public university located in the Central Anatolia, which defines itself as a new generation university aiming to merge the three roles of universities: research, education, and societal impact (AGU, 2019). Thus, AGÜ created a novel three-dimensional curriculum, one of which is Personal and Professional Pathway (PDP) with the participation of various stakeholders such as students, instructors, NGOs, business people, and consultants (AGÜ, 2019). This novel curriculum started to be piloted in the Electrical and Electronics Engineering (EEE) department in 2019. Taking into consideration the premises of Positive Education, as a team of faculty members from the departments of Psychology, Education, and Electrical and Electronics Engineering, we designed a series of PDP courses.

Premises of PDP Courses

The PDP courses aim to help students identify their strengths and weaknesses, establish achievable goals during and after their university education, and familiarize them with professionals in the field (Appendix 1). The courses also aim to improve students' soft skills through interactive activities. Hence, the design of PDP courses is based on several key premises:

1. Prioritizing teamwork and interaction among students and instructors, with activities structured accordingly.
2. Scheduled one-on-one meetings between students and instructors at least twice per semester.
3. Regular attendance from students to ensure their participation in guest speaker presentations and interactive activities.
4. Alumni and department instructors as guests for first- and second-year students, and engineering experts primarily for third-year students. During these events, students actively listen, engage in meaningful interactions, and ask questions.
5. Critical reflection after each session to encourage internalization of newly acquired knowledge, fostering transformation, and developing meta-cognitive skills.
6. Team-teaching approach involving instructors from educational sciences, EEE department, and psychology working collaboratively throughout all semesters.
7. Supportive learning environment promoting open expression and eliminating judgment
8. Alternative assessment techniques including self-assessments, reflection exercises, SWOT analysis, personality tests, journaling, CV writing, mock interviews, minute papers, and collaborative team activities.
9. Team activities such as role-playing, simulations, games, and online collaborations facilitated by digital tools like virtual bulletin boards or interactive whiteboards.

We have continuously monitored and revised the courses based on our observations, student suggestions, mid/end-of-semester evaluations, and individual meetings with students. For example, during the COVID-19 pandemic, as we transitioned from face-to-face to online, we could invite more guest speakers. Recognizing the challenges students might face in adapting to the new stay-at-home lifestyle, we did three one-on-one meetings instead of two. Additionally, rather than collecting hard copies of reflective journals, we began to collect them through the learning management system.

Participants

Approximately 210 students in the EEE department who had completed at least one PDP course were invited to participate in the study. The questionnaire was shared with the students on March 10, 2021 and a total of 61 students responded to the questionnaire (participation rate: 30%) open for a month (Table 1). This response rate was considered acceptable given that the data collection period coincided with the COVID-19 pandemic and AGU transitioned to a fully online learning platform.

Table 1. The Distribution of The Student Numbers in Years

Year at the department	Number
First-year	22
Second-year	27
Third-year	12
Total	61

Data Collection Tools

The data for this study were collected through a questionnaire with qualitative and quantitative questions, as well as physical and digital documents such as reflection assignments on weekly activities obtained after the course activities. The online questionnaire, delivered via the 2020 version of the Qualtrics platform, was developed with input from faculty members and underwent revisions based on expert reviews. The final version of the questionnaire was distributed to EEE students and consisted of 21 questions, including demographic and open-ended questions. The notes from one-on-one interviews, course evaluations and personal development journals were included to triangulate the data and evaluate the curriculum from multiple perspectives.

Data Analysis

Descriptive quantitative analysis involved means and graphs, while qualitative analysis employed coding, classifying, and interpreting findings. Triangulation was used to ensure validity and reliability. Thematic analysis was employed (Braun & Clarke, 2006). The data was organized, analyzed, and revised as part of the themes. The data were categorized into five major themes aligned with the PERMA model (Seligman, 2012).

Limitations

This study has limitations, including the reliance on self-reports from students in which some students may have shared merely to meet course requirements. To address these limitations, future research should employ experimental models and pre/post-tests and longitudinal studies to assess soft skill development and retention. The study focused solely on EEE students at this University, so results may vary for students in other departments or institutions. Replicating the study with different student groups would allow for meaningful comparisons. Successful implementation of these courses requires trained instructors in soft skills and team teaching. Thus, providing in-service training for instructors to enhance PDP courses is recommended.

Results

This study aimed to investigate EEE students' comprehension of development of soft skills after their participation in PDP courses, and this section provides the results under key themes emerged from the data along with their relationship to PERMA model (Seligman, 2012). The data unveiled that PDP courses not only fostered students' awareness of self-development but also acquainted them with essential soft skills and equipped them with the necessary tools to enhance these skills.

Self-Exploration/ Self-Awareness with Positive Emotions

Positive emotions entail the pleasant life (Seligman, 2012). EEE students consistently expressed positive sentiments when describing the PDP courses. Commonly used words included 'fun,' 'joyful,' 'relaxed,' 'beneficial,' 'unusual,' 'motivational,' 'guiding,' and 'creative.' Overall, the study shows that the PDP courses effectively fulfilled

their intended purpose of enhancing students' soft skills.

Moreover, as we believe that positive emotions come with the knowledge of self, the PDP courses were designed to help students recognize their strengths and weaknesses, making them aware of opportunities to work on their strengths and eliminate their weaknesses. In that sense, the students shared feelings of not being alone and became aware of their interests in different fields. For example, one student stated, "[these courses] allowed me to discover myself and convinced [myself that] I can do better." They also expressed the need to practice critical thinking and the ability to progress in a more disciplined way while not being afraid to try. A student wrote, "this course helped me to recognize my own weaknesses and strengths, and showed me how to work on [them]." Similarly, another student added, "I learned that I [was having] trouble respecting myself and needed to focus on my own development." That is to say, the PDP courses seem to encourage students to reflect on their understanding of themselves and explore their inner selves.

Course Delivery as Part of Engagement

Engagement refers to the focusing on the moment and the activity itself, being "absorbed by the task" (Seligman, 2012, p. 16). Thus, we sought to understand students' opinions regarding the instructional format of the courses. Initially designed for face-to-face delivery, the courses had to be adapted due to COVID-19 restrictions, necessitating a shift to online instruction. Table 2 presents the distribution of instructional modes experienced by students, with the majority having exposure to both face-to-face and online formats.

Table 2. Student Experience of The Mode of Instruction

Mode of Instruction	%	Count
Face to face	8.89%	4
Online	26.67%	12
Both	64.44%	29
Total	100%	45

When asked about their perspectives on face-to-face and online learning modes in PDP courses, a majority of students (64%) preferred traditional face-to-face instruction, appreciating the benefits of in-person interaction and better participation. They also highlighted potential distractions in online learning that could hinder their learning experience. However, 20% of students preferred online learning due to their comfort level and the diverse range of activities and topics offered, including interactions with upper-level students engaged in internships.

The students found online education to be a better fit for these courses. Meanwhile, 16% of students expressed contentment with either mode of instruction, recognizing the benefits of both face-to-face and online learning. They appreciated the effectiveness of face-to-face instruction while also acknowledging the value of online courses, which brought high-quality guest speakers from various locations.

The PDP courses were a collaborative effort involving instructors from various disciplines, including EEE,

Education, and Psychology. Consequently, students reflected on the benefits of team teaching in their learning process, and the majority of the students (77.27%) found it highly effective noting that it provided them with diverse perspectives of different instructors.

Future Recommendations by Students

We sought students' suggestions regarding the courses, and while they expressed considerable satisfaction, they also provided feedback primarily on the sessions featuring guest speakers, as well as technical visits and debate sessions. Although the students found these meetings highly beneficial, they expressed that the meetings were a bit monotonous, wanted "not to be passive in the classroom" and pointed out that "the sessions should be more interactive." One of the students suggested, "[I] would love to see more [speaker] engagement with the students, maybe by using polls, games, etc." Another one added, "interactive lessons are more pleasant than seminars where only one person speaks." In addition to these comments on guest speaker sessions, one student expressed the importance of exploring additional methods to enhance information retention from these courses:

> Some of the soft (non-technical) topics covered in the course content are really issues many students should pay attention to. However, among the realities of life, it is very possible for students to forget [what they learn] in these activities. For example, [activities] such as what we value the most in this life, what is our biggest dream, how we can achieve it may be forgotten after this class hour. I think something can be done to make this more permanent.

Students expressed a growing desire for increased exposure to activities resembling these courses, yearning for opportunities to engage in discussions about these concepts beyond the confines of the classroom. All things considered, the PDP courses appear to foster substantial improvements in students' self-awareness, while also providing an enjoyable learning journey. This heightened awareness, combined with active participation in various activities, effectively enhanced the EEE students' soft skills.

Interactive Activities Leading to Positive Relationships

Positive relationships are crucial pieces of well-being and developing soft skills (Seligman, 2012). Therefore, the core premises of PDP courses aim to create a learning environment promoting active interaction between students, instructors, experts in the fields, alumni, and many more. The courses also aimed to acquaint EEE students with their field, providing them with a comprehensive understanding of their future profession. Hence, the sessions encompassed various interactive activities, including one-on-one meetings, CV preparation, mock interviews, and meetings with professionals. Students shared contentment for the effectiveness of the activities (see Figure 1), as these activities allowed students to gain insights into their chosen career path and engage with experts in the field.

One-on-one meetings were highly valued by students, closely followed by CV preparation. A student expressed the impact of these meetings by stating, "talking to my instructors about my student life during one-on-one meetings reduced my stress to some extent." Moreover, students acknowledged the significance of learning how

to compose or update their CVs. One student emphasized, "[b]oth the SWOT analysis, the CV and the mock interview made me aware of the issues I might encounter in the future." The third most beneficial activity reported by students was attending meetings with guests from the EEE field.

Students expressed satisfaction with these sessions in their comments. They found these meetings highly valuable as the meetings provided an opportunity for students to hear firsthand experiences from the speakers. For instance, one student mentioned, "[the guest speakers assist us in improving] our knowledge about the sector", while another student stated, "[they help me to] gain new perspectives about the field of EEE." Furthermore, students agreed that these interactions with professionals allowed them to contemplate their future and career plans. One student reflected, "[guests from our field assists us] to draw a road map for our careers," another one admitted to having "realize[d] that [they have] no plans for the future."

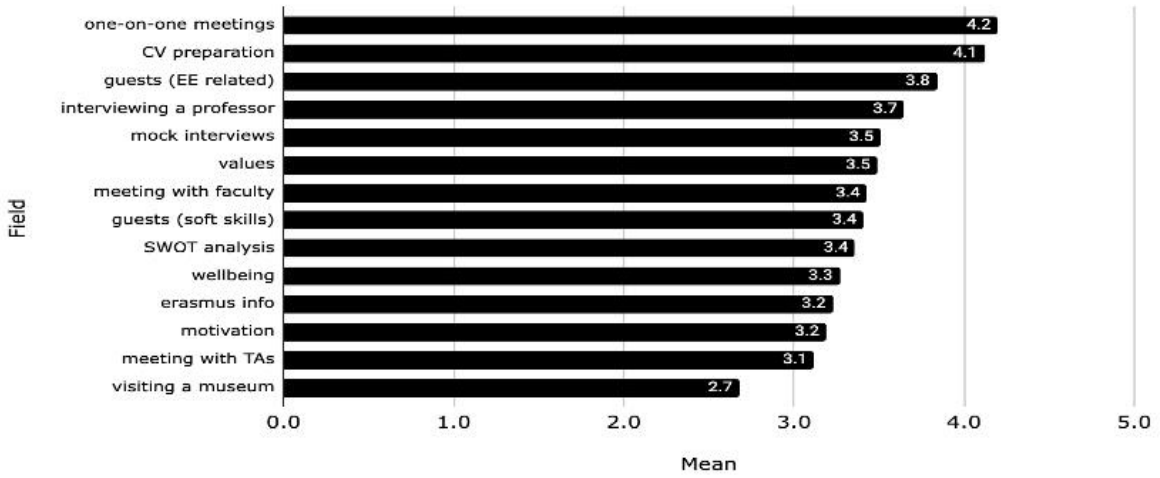

Figure 1. Activities Scored from The Most Effective to The Least Effective

An additional activity that helped them to develop positive relationships and enhance their professional skills was conducting interviews with EEE professors as part of a course assignment for first-year students. Reflecting on this activity, a student stated, "although I questioned the usefulness of that activity at first, [as a result of the activity] I learned to email my superiors respectfully." To complete this task, students were required to email the instructor, explain the assignment, schedule an appointment, and ask relevant questions about the instructors' personal and professional experiences. They then presented the gathered information during class time; all contribute to enhancement of various soft skills.

Similarly, mock interviews conducted with second- and third-year students were regarded as highly beneficial for professional development. Many students appreciated the inclusion of activities, as one student wrote "CV writing and mock interviews were a great addition to [our] professional development. Guest speakers invited in this context were very helpful in understanding the process [of mock interviews]." Overall, students placed significant value on activities aimed at addressing professional development, with one-on-one meetings, CV preparation, and interactions with professionals (through speeches, meetings, or mock interviews) being particularly rated considerably high.

Understanding of the Course Concepts to Discover the Meaning

People tend to find a purpose in life in general or in all of the activities they are engaged with specifically (Seligman, 2012). Thus, it is crucial to understand the course concepts to get the best out of the courses and enhance the soft skills. In line with this, students successfully defined self-development and reflected on the course's impact on their lives. Students formulated their own definition of self-development in three main themes (along with the participants' quotes): a) impact on life "the acquiring of new abilities and the development of existing ones in line with one's goals," b) skills, capabilities, and values "developing soft and hard skills, being ready to gain new skills and changing of lifestyle for the better," c) self-sufficiency "reaching the consciousness that will provide self-motivation in the way of personal purpose". In other words, students emphasized the transformative nature of self-development, importance of skills and values, and concept of self-sufficiency. Their definitions closely aligned with widely recognized definitions such as "the act of deciding for yourself how to improve your skills and taking action to do this" (Cambridge Dictionary, n.d.). Quantitative data also showed high ratings for the courses' contribution to self-development, primarily in personal and professional skills.

Traits That Engineers Should Have as Part of Achievement/Accomplishments

Depending on the values we assign to the achievement/accomplishments, the sense of success is another key point contribute to well-being (Seligman, 2012). While one primary objective of the PDP courses was to enhance students' soft skills implicitly, i.e., without explicitly stating the skills during classroom activities, another aim was to help students to recognize their success. Students were guided towards activities that fostered their skill development. In the questionnaire, students identified key skills that engineers should possess, including problem-solving (rated at 4.1 out of 5), time management (rated at 3.6 out of 5), curiosity (rated at 3.6 out of 5), and creativity (rated at 3.5 out of 5) (Figure 2). They also prioritized time management (rated at 3.49 out of 5), effective communication (rated at 3.22 out of 5), and creativity (rated at 3.15 out of 5) as skills they wanted to enhance immediately. Students expressed that these courses led to beneficial transformations in skills, with effective communication, teamwork, and time management being prominently mentioned.

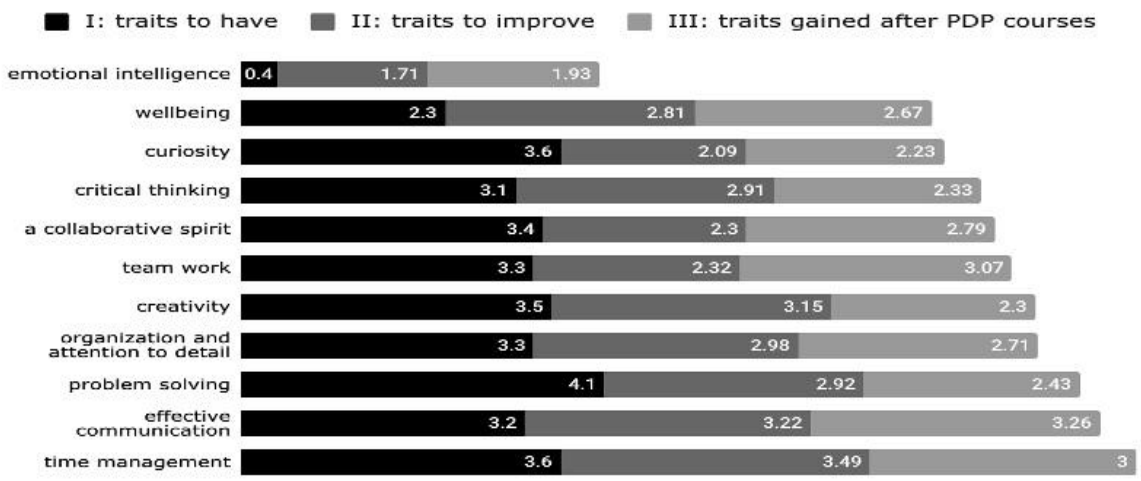

Figure 2. Engineer Traits (From the Least Essential to The Most)

The qualitative responses aligned with the quantitative data, emphasizing the impact of the courses on students' self-development in these areas with the comments such as "I was a little quieter (shy) before. With this course, I was able to express myself even better, and I took great steps towards my social development", "this course assists [them] to acquire teamwork", "before this course, I was a student without a plan and a schedule to follow. With this course, I started to keep regular schedules and notes (about my daily activities and course schedule)", "I was not aware that I was 'procrastinating'. Now I'm working on that." In other words, the PDP courses both helped students to be aware of these soft skills and showed them the ways improve their soft skills with different activities and tools.

In summary, participants taking PDP courses, regardless of the number of courses taken at the time of data collection, expressed high satisfaction with the course contents. These courses effectively enhanced their understanding of self-development and equipped them with the necessary soft skills to meet the demands of the global world. Not only were students able to grasp the course concepts, but they also gained awareness of the tools available for self-improvement. Additionally, they actively contributed to the design, implementation, and advancement of these courses, which aimed to familiarize them with development of soft skills. Ultimately, this study emphasizes that integrating similar courses designed with Positive Education into a curriculum may significantly impact university students' personal and professional growth.

Discussion and Implications

This study aimed to explore university students' understanding of soft skills after attending non-departmental courses. Unlike some prestigious universities that overlook the importance of soft skills (Colman & Willmot, 2016), this mid-size university implemented personal and professional development courses in its EEE department as an exemplar. These courses provided EEE students with opportunities to enhance their personal and professional competencies, which have been proven effective in previous studies (Ahn et al., 2014; Berglund & Heintz, 2014; Murray et al., 2021; Shabbir & Rahat, 2021; Swingler et al., 2022). The study aimed to contribute to the existing literature on effective strategies to overcome barriers to success, particularly for first-year students who often face challenges (Deveci & Ayish, 2017). By recognizing the importance of proactive measures and the hesitancy of students to seek counseling (Kızıldağ et al., 2012), PDP courses offered valuable support, a rare strategy among other universities (Manҫe Çalışır & Can, 2021). Hence, integrating similar courses into the curriculum can equip students with the necessary skills for the job market.

Based on the data, we strongly believe that the PDP courses, offered in various semesters and formats, have effectively facilitated the development of soft skills in students, aligning with the findings of Berglund and Heintz (2014). Similar to Colman and Willmot's (2016) study, our PDP course participants emphasized the importance of soft skills such as communication and time management for their personal and professional growth. Students also defined self-development as acquiring knowledge, learning skills, and discovering abilities to improve themselves, which is consistent with Joynes et al. (2019). While creativity, curiosity, and critical thinking were implicit goals of the courses, students reported significant improvements in these skills, despite not being explicitly covered. On the other hand, emotional intelligence, an essential concept in the course design, received

low scores from students, possibly due to its abstract nature (Cherniss, 2016). Therefore, PDP courses should prioritize the explicit teaching of emotional intelligence and focus on enhancing these soft skills.

Students appreciated the engaging learning environment provided by the PDP courses, but they expressed a preference for face-to-face sessions, as they believed it fostered better engagement. Dixson's study indicates that using multiple communication channels in online courses increases student engagement (Cavinato et al., 2021; Dixson, 2012). Therefore, it was crucial to incorporate meaningful and diverse forms of interaction with students, especially during the pandemic. To enhance engagement, we increased the number of one-on-one sessions, which students found beneficial for self-expression and self-exploration. This highlights the importance of instructors actively listening to student voices regarding their personal and professional lives. Instructors should explore ways to create opportunities for students to be heard.

Guest speakers from various fields played a significant role in enhancing student motivation and understanding the opportunities in their disciplines. Valentine et al. (2021) and Wolfe (2006) also underscored the importance of guest speakers in connecting students' education to the job industry. Guest speakers expanded students' knowledge of career options (Achen et al., 2019; Carbone et al., 2020). However, students desired more interactive sessions with guest speakers, which can be challenging as industry professionals may lack teaching skills despite their strong communication abilities. Moreover, their availability for face-to-face classes may be limited, and online classes can pose difficulties in maintaining student attentiveness. To address these challenges, course instructors can guide guest speakers to incorporate interactive activities into their presentations before joining the sessions.

The provision of mock interviews in these courses offers students a valuable opportunity to demonstrate their technical and professional competencies simultaneously (Olewnik et al., 2021). Therefore, it is essential to create more avenues for students to internalize the soft skills they have acquired through these courses. One approach could involve aligning PDP courses with departmental courses and projects to provide such opportunities across all departments. Considering the evolving student body and changing employer demands, it is important to incorporate additional topics into the course design as necessary (Osipov & Ziyatdinova, 2014). These topics could include technical visits, debate sessions, and non-violent communication, which were also highlighted by students in the current study.

Conclusion

As researchers, our objective is to disseminate the outcomes of these PDP courses, which have shown significant benefits for educators and other stakeholders. Addressing the concerns expressed by employers regarding the lack of soft skills in recent graduates, our study demonstrates that a well-designed sequence of PDP courses can effectively enhance students' soft skills, essential for thriving in the 21st-century job market. Furthermore, the collaborative nature of team-teaching proved advantageous for both students and instructors, fostering mutual learning within the course. Instructors also improved their teaching practices by engaging in teamwork and co-constructing their understanding of higher education instruction through diverse active learning strategies.

Although this study was conducted at a mid-size university with a limited sample size and relied on self-reported student data, it yielded promising findings for universities considering the integration of personal and professional development courses into their curricula. The recent encouragement from the Higher Education Council (YÖK) in Türkiye, urging all universities to incorporate compulsory career planning courses, further underscores the significance of these results. The outcomes of this study not only provide a valuable model for universities in Türkiye but also offer insights for institutions worldwide. By promoting students' self-awareness through enjoyable interactive activities, these courses effectively foster the development of students' soft skills.

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Appendix. List of Topics in the PDP Courses

Students ➔	**1st year 1st semester**	**1st year 2nd semester**	**2nd year 2nd semester**	**3rd year 1st semester**
1	Introduction	Introduction	Introduction	Introduction
2	Differences between high school and university values	Personality Test	One-minute Elevator Talk	Time Management*
3	SWOT Analysis	SWOT Analysis	SWOT Analysis	SWOT Analysis
4	One-on-one meeting	One-on-one meeting	One-on-one meeting	One-on-one meeting
5	Guest: Communication	Guest: soft skills & engineering	Guest: soft- skills & engineering	Guest: soft skills & engineering
6	Student Voices: life at university, surviving EEE, study techniques, Erasmus experiences, advice, undergraduate Research, student clubs	Teamwork: Trust	CV writing	Polishing CVs
7	Knock Knock your Professors' Door (interviewing a faculty member at AGU)	Erasmus+ Office: Exchange opportunities/short-term programs	Learning during pandemic*	Guest: soft skills & engineering
8	Time Management	Meeting with 4th-year intern students	Meeting with 4th-year intern students	Guest: soft skills & engineering
9	Meeting with EEE TAs/RAs	One-on-one meeting	One-on-one meeting	One-on-one meeting
10	Meeting with EEE Faculty	Motivation	Information on Volunteerism	Guest: soft skills & engineering
11	Guest: soft skills & engineering	Guest: soft skills & engineering	Guest: soft skills & engineering	Guest: soft skills & engineering
12	Values Exercise	Guest: soft skills & engineering	Entrepreneurship for Engineers	Guest: soft skills & engineering
13	Acing your Exams	Career Office for career opportunities	Interview Preparation	Interview preparation

14	Student Clubs	Guest: soft skills & engineering	Mock Interview I	Mock Interview I
15	Guest Speaker: Well-being	Guest: soft skills & engineering	Mock Interview II	Mock Interview II
16	One-on-one meeting	One-on-one meeting	One-on-one meeting	One-on-one meeting
17	Conclusions & Course Evaluation	Conclusions & Course Evaluation	Conclusions & Course Evaluation	Conclusions & Course Evaluation
	*These topics were added specifically for the pandemic.			