



SUSTAINABLE

DEVELOPMENT

EKONÓM, 2024

STUDENT SERVICES COURSE



MASUDEM

MASTER STUDIES IN SUSTAINABLE DEVELOPMENT AND MANAGEMENT



MASUDEM

MASTER STUDIES IN SUSTAINABLE DEVELOPMENT AND MANAGEMENT

Publisher:

University of Economics in Bratislava
Vydavateľstvo EKONÓM (publishing house)
Dolnozemska cesta 1
852 35
Bratislava
Slovak Republic
Year of publishing: 2024

The text was not language edited. Any remaining language and contextual mistakes are the responsibility of the authors.

ISBN 978-80-225-5147-2

© Copyright: 2024 Authors



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Education and Culture Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.



MASUDEM

MASTER STUDIES IN SUSTAINABLE DEVELOPMENT AND MANAGEMENT

STUDENT SERVICES COURSE

Authors

Rita Takács

Eötvös Loránd University, Budapest, Hungary

Anna Gogibedasvili

Eötvös Loránd University, Budapest, Hungary

Lili Hattinger

Eötvös Loránd University, Budapest, Hungary

Julianna Várnai-Ihász

Eötvös Loránd University, Budapest, Hungary

Thunyathorn Valapaichitra

Srinakharinwirot University, Thailand

Anett Pásztor-Nagy

Eötvös Loránd University, Budapest, Hungary

Master Studies in Sustainable Development and Management

MASUDEM

Project 101082797

Call: Erasmus-EDU-2022-CBHE



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Education and Culture Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.



MASUDEM

MASTER STUDIES IN SUSTAINABLE DEVELOPMENT AND MANAGEMENT

ABOUT THE AUTHORS



RITA TAKÁCS

PhD, counselling psychologist, senior lecturer, head of a Student Support Centre of the Faculty of Informatics ELTE, Budapest.

In this position, she supervises and coordinates all the psychologists' work in the Student Support Centre. She is the leader of the complex prevention and promotion programme for students. Her PhD dissertation examines in depth student retention in higher education and the possible psychological characteristics of computer science students who accomplish their studies successfully. Her goal is to combine the knowledge and information gained in empirical researches on student retention with practical counselling strategies.



ANNA GOGIBEDASVILI

Graduated psychologist (MA) with a specialization in counselling and educational psychology. In the Student Support Centre she is conducting individual psychological counselling for both national and international students. She has successfully implemented the complex student dropout prevention and intervention programme developed by the Student Support Centre of the ELTE Faculty of Informatics on the Savaria University Centre campus in Szombathely. She leads courses, coordinates the mentoring system, holds group trainings, and spearheads community building activities. Working with international students is her focus, promoting students' socio-cultural integration into the university and fostering their academic success and mental wellbeing.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Education and Culture Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.



MASUDEM

MASTER STUDIES IN SUSTAINABLE DEVELOPMENT AND MANAGEMENT



LILI HATTINGER

Certified psychologist, who received her degree at Károli Gáspár University of the Reformed Church in the specialization of Clinical and Health Psychology. During her studies, she organised psychological conferences within the framework of the university student association and gained experience as a volunteer in various organisations. Currently, she is responsible for the care of international and Hungarian students as a staff member of the Student Counselling Service. She participates as a trainer on the soft skill trainings to help and educate first year students. She also coordinates and assists mentor teachers participating in the mentoring system and provides one-on-one counselling to students on university or private life issues and on other topics of their choice.



JULIANNA VÁRNAI-IHÁSZ

Certified psychologist graduated at the Faculty of Education and Psychology of ELTE, with a specialization in counselling and educational psychology. She focused her attention to working with university students during and following her studies with particular regard to the various effects of online education. She is currently studying cognitive behavioural therapy methodology at VIKOTE Budapest and is expected to become a certified CBT consultant within 6 months. As a Student Counsellor at the Student Support Centre she is mainly responsible for the support of international students through taking part in the coordination and administration of background work regarding Student Support Centre lead courses, coordinating external trainers, holding group trainings and providing individual psychological counselling for student of the Faculty.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Education and Culture Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.



MASUDEM

MASTER STUDIES IN SUSTAINABLE DEVELOPMENT AND MANAGEMENT



THUNYATHORN VALAPAICHITRA

Mr. Thunyathorn Valapaichitra serves as an Educator for the International Programme and International Affairs at the Faculty of Economics at Srinakharinwirot University, Thailand. His academic pursuits include the attainment of a bachelor's degree in Political Science in International Relations from both Srinakharinwirot University and Ramkhamheang University. He acquired a master's degree in Political Science in International Relations from Chulalongkorn University. Currently, he is a PhD candidate in Social Management at Srinakharinwirot University.

His tenure at the Faculty of Economics serves as a testament to his exemplary contributions to the realm of educational services and administrative functions within the academic domain. His steadfast commitment, coupled with a nuanced understanding of the multifaceted dimensions of student-related matters, underscores his pivotal role in fostering an environment conducive to academic excellence.



ANETT PÁSZTOR-NAGY

Anett Pásztor-Nagy completed her Master's degree at the Faculty of Education and Psychology of Eötvös Loránd University Budapest (ELTE PPK), specializing in Counselling and Educational Psychology. She graduated from a specialist postgraduate programme in Counselling Psychology for Career Counsellors at ELTE PPK.

Currently, Anett is a full-time counselling psychologist at the Faculty of Informatics at Eötvös Loránd University Budapest, where she provides student services as part of a comprehensive dropout prevention programme for computer science students.

Anett possesses more than five years of professional experience in supporting special education needs students, serving as one of the faculty coordinators of students with Disability at the Faculty of Informatics.

Her research interests encompass dropout in higher education, particularly focusing on the academic progress of students with special needs.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Education and Culture Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.



MASUDEM

MASTER STUDIES IN SUSTAINABLE DEVELOPMENT AND MANAGEMENT

Reviewers

Máté Pusker, *University of Pázmány Péter Catholic University, Hungary*

Eszter Kiss, *Haaga-Helia University of Applied Sciences, Finland*

Anetta Caplanova, *University of Economics in Bratislava, Slovakia*

Sari Sitalaksmi *Gadjah Mada University, Indonesia*

ACKNOWLEDGEMENT

We would like to express our sincere gratitude and appreciation to the Erasmus+ CBHE programme for their invaluable support and funding towards the implementation of the project titled "Master Studies in Sustainable Development and Management." This project has been an instrumental initiative in promoting international cooperation and enhancing the quality of education in the field of sustainable development.

We would like to extend our heartfelt thanks to the European Commission and the Erasmus+ programme for their vision and commitment to fostering cross-cultural learning opportunities. The financial assistance provided has played a crucial role in facilitating the development and delivery of this innovative Master's programme.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Education and Culture Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.

CONTENT

Introduction	8
chapter 1: Introduction – Understanding and building an effective support system in HEI	10
1.1 Different members of the student services	11
1.2 Gaining insight into the student experience and their supportive network (administration, coordinators, student services, community programmes, peer counsellors etc.)	13
1.3 Methodology of creating an effective mentor system in their own HEI.....	15
1.4 Methodology of creating an effective mentor system in their own HEI.....	20
Summary	23
Discussion questions	23
References.....	24
chapter 2: Guidelines of effective mentoring	26
2.1 Cooperation with students (the role of feedback, working with senior students).....	26
2.2 Networking, intra-institutional connections and the importance for the flow of information..	30
2.3 Becoming a mentor (mentoring guidelines: weekly, optional meetings; organising extra-curricular events, organising informal and professional events, help with career guidance at university - in collaboration with former students and professionals).....	34
2.4 Mentor identity and how student services can be a part of it.....	35
2.5 Student’s survey – gaining better understanding of students’ needs and challenges in the university.....	37
2.6 Effective feedback mechanisms from students to improve student services	48
Summary	50
Discussion questions	50
References.....	51
chapter 3: Supportive intervention and drop-out	53
3.1 Discussing good practises in order to prevent dropout.....	53
3.2 Basics of supportive intervention.....	54
3.3 Communication skills and strategies with students.....	60
3.4 Safe and open environment (how it can be achieved, what confidentiality means and why is it important, maintaining boundaries and abiding by the necessary framework)	62
3.5 Practicing hands-on situations	64
3.6 Introduction to mental health first aid, learn ways to support	65
3.7 Designing a thinking framework adaptation.....	67
Summary	70
Discussion questions	70
References.....	71
chapter 4: Methodology of handling students of HEI in the 21st century	73
4.1 Generations: generational differences -from understanding differences to being able to take advantage of them	73
4.2 Getting to know learning habits of students and getting familiar with advanced approaches to their education.....	76
4.3 Understanding typical, atypical students and students with special needs	81
4.4 Student Services and supporting options regarding the needs of typical and atypical students	85
4.5 Important influences that affect students on and off campus	94

4.6 Understanding the specific challenges of the age group and the generation of students in the university regarding to ASEAN countries	98
Summary	107
Discussion questions	109
References.....	110
chapter 5: Adaptability, online mentoring and follow-up	117
5.1 Mentoring in online and hybrid settings.....	117
5.2 Practical tips for online and hybrid mentoring	119
5.3 Taking advantage of the online world.....	123
5.4 Role of community building in drop-out prevention	127
5.5 The role of sustainability in drop-out prevention	132
Summary	139
Discussion questions	140
References.....	140

INTRODUCTION

Sustainability in higher education has become a critical focal point as institutions seek to address environmental, social, and economic challenges. Various concerns have emerged within the academic sphere, ranging from campus operations and resource management to curriculum development and student engagement. Universities are striving to minimise their environmental footprint, adopting sustainable practises in energy consumption, waste management, and building design. Moreover, integrating sustainability into academic programmes, research initiatives, and campus life has become pivotal. This includes developing courses that emphasise ecological responsibility, promoting community engagement to create a culture of sustainability, and encouraging research and innovation that tackles real-world sustainability challenges. Higher education institutions (HEI) are increasingly recognising their role in nurturing future leaders who understand and actively contribute to a sustainable world.

As a worldwide phenomenon, the dropout crisis requires complex interventions for encouraging students in order to complete their studies. Addressing such sustainability issues requires an actionable interdisciplinary movement based on a foundation of partnership among academics, student coordinators and other possible faculty members, who can be involved in the solution.

Given the extensive work on how universities can support students to meaningfully address those sustainability challenges, the question is how can we further help students' adaptation process to university challenges? Our aim is to highlight points in the education system where further improvements can be made in the institutions.

Supporting students in higher education has become a worldwide phenomenon because it is highly necessary to maintain the career development of junior scholars. Students' dropout rate is a crucial issue in higher education in the last few decades. Attrition has serious consequences on an individual (e. g. Nagrecha et al. 2017), economic (Di Pietro, 2006; Belloc et al., 2011) and educational (Cabrera et al., 2006) level. Universities around the world should have knowledge about how to establish interventions and student support systems to help students from different areas because it is important to support the professional growth of students in HEI.

This handbook works as a toolkit that supports building up an effective student support system. This collection of methods and good practises based on ten years of experience by Eötvös Loránd University, Faculty of Informatics, Student Support Centre (Hungary, Budapest, dtk.elte.hu). This handbook proposes a structured mentoring system for students, and it involves different kinds of elements of a basic support system such as mentors, senior students, student counsellors (psychologists). Different universities, colleges, and other participants of mentoring in higher education can find valuable information on how to build their own mentoring system and practises that best fit their students' needs. There are five chapters to cover all necessary information for different participants of mentoring.

The first chapter aims at summarising general information about understanding and building an effective student support system in higher education. It describes the general aim of student support services such as dropout prevention programmes, building a support system for first year students. Understanding the mentoring processes and gaining access to the necessary background knowledge about a possible mentoring system framework is crucial.

The second section provides insights into effective mentoring, offering a comprehensive overview of what one-on-one counselling entails. It also covers a wide range of topics designed to help mentors better comprehend their role and the areas in which they can contribute to the academic and professional growth of their mentees.

The third part is dedicated to offering practical suggestions for the development of the mentoring system itself. This includes the implementation of additional methodologies like online mentoring, follow-up mentoring, and peer mentoring groups.

The fourth part introduces the new generation of students from a pedagogical point of view. The main goal is to better understand the characteristics of typical and atypical students.

The fifth section, we also introduce evaluation tools for the mentoring system that can provide valuable feedback on the efforts of mentors and their impact.

We recommend approaching this handbook with the perspective of "how can I apply the content when I'm dealing with students, how can I predict if a student is going to drop out or have problems?"

- As you read through the chapters, consider using a visual system, such as a green square, to mark sections that you are already familiar with or have previous knowledge of.

- You can use a different symbol, like a red circle, to identify areas where you want to gain more expertise or further knowledge.

- For parts where you have specific ideas about how to implement them in your institution, make notes and mark them with a yellow rectangle. You might have additional insights to add.

- We suggest creating a log for these ideas or additions at the end of the handbook, including the page number, topic, and your thoughts. This log can serve multiple purposes, such as tracking what to study further, noting common questions from your students, or identifying areas you feel need improvement throughout the semester.

- Any valuable additions or ideas you come up with can also be shared with the student counsellor and potentially incorporated into future editions of this handbook or the mentoring system for upcoming generations.

The target readership of a student services handbook encompasses a wide range of individuals involved in the university community, all seeking to support student success, well-being, and engagement on campus. Faculty members, academic advisors, teachers, PhD students, and university staff who interact with students on a regular basis can benefit from a student services handbook. It provides them with information on how to refer students to appropriate support services and resources, as well as insights into best practises for supporting student success. The handbook can provide them with information on how to support their student's academic and personal development. University administrators, student affairs professionals, and other staff responsible for overseeing student services may use the handbook as a reference tool for developing and implementing policies, programmes, and initiatives to support student success and well-being.

CHAPTER 1: INTRODUCTION – UNDERSTANDING AND BUILDING AN EFFECTIVE SUPPORT SYSTEM IN HEI

In the first part of this chapter, we are going to overlook the theoretical background of students' service systems. The key concept of this chapter revolves around exploring the theoretical foundations of student service systems. It aims to provide a comprehensive understanding of the theoretical underpinnings that govern the design, implementation, and management of services catering to the needs of students within educational institutions.

Education is vital for economic development because it has direct influence on entrepreneurship, productivity growth and then increases employment opportunities. Education helps in reducing unemployment, enhancing students' ability and skills. Students' performance after the first academic year is a topic of significant interest: the lack of students' engagement in the academic life and their unpreparedness are mainly responsible for dropout after the first highly crucial period. Diverse authors have made grand calls for change in academic institutions to support students. Various higher education institutions developed mentor programmes or prevention and promotion programmes. These programmes can be held by mentors and senior students. The following topics can be covered: time-management, study techniques and various soft skills. Improving attention helps students stay on track and be able to achieve successful test scores. In the literature there are several concepts and such programmes for all first-year students. These programmes can be voluntary or compulsory. In our expertise, for example at a large public university in Europe with compulsory prevention and promotion programmes the dropout rate was reduced by 30 % (Takács et al., 2017, 2021a, 2021b, 2021c).

Students' lives can be supported from many perspectives. A different approach can be highlighted from an educational organisation perspective. According to industrial proposals every position requires soft skills so mentoring programmes are useful for universities and companies as well. Such changes were expected to help students develop better skills in communication, interpersonal relationships, critical thinking, and other areas essential for being successful at the university, and would result in a better preparation to completing the BSc or MSc programme. In conclusion, promoting student engagement and self-regulation (Trevors et al., 2016) is crucial for the successful retention of students (Alarcon and Edwards, 2013; Moulin et al., 2013; Ruiz-Gallardo et al., 2016).

This mentoring handbook is structured to provide a comprehensive theoretical and practical guide for establishing and managing a multi-faceted mentoring system tailored for first year students in higher education. The goal is to offer a clear insight into the available possibilities and how to integrate them into university life. Additionally, this chapter outlines the roles and responsibilities of various elements within the mentoring system, including mentors and senior students.

The primary objective remains guiding first-year students through the transition to a new academic and cultural environment. This guidance encompasses educational and professional support while nurturing robust social networks among students and their mentors through small group communities. Team-building activities, intercultural communication exercises, and soft skills training serve as essential tools to enhance individual learning strategies and facilitate integration into the university community, thereby supporting academic progress and achievements.

The basic student support system can be described by the following main principles and guidelines:

Specifically, it is crucial to consider the following areas as essential for fostering the educational, professional, and personal development of students. To enhance students' awareness of

programme requirements and policies, mentoring can provide comprehensive information, ensuring they are well-informed about the necessary regulations and guidelines.

- The focus extends to fostering intellectual development in students throughout their academic journey and research activities, aiming to nurture their intellectual growth in HEI.

- In addition to academic support, a mentor can offer regular feedback on students' progress toward meeting degree requirements, which includes assisting them with qualifying and comprehensive exams, ensuring they are well-prepared for their academic milestones. The goal is to prepare students to broaden their horizons and keep up with the latest trends in their respective fields, equipping them with the necessary knowledge to stay updated and engaged.

- The student services system encourages independent, critical, and creative thinking through a variety of engaging activities, nurturing students' abilities to think independently and innovatively. By communicating specific requirements and deadlines outlined in departmental guidelines, we help students meet these academic milestones, ensuring they understand and meet the necessary academic benchmarks.

- Our approach is also sensitive to the unique needs of students, ensuring a supportive environment for all, catering to the diverse needs of the student population. The student support system promotes information sharing, encouraging peer mentorship by sharing knowledge, experiences, and insights about faculty members, fostering a culture of learning and support among peers.

- Students remain informed about scholarly literature, emerging ideas, and innovative projects in their field to stay at the forefront of their disciplines, encouraging students to stay updated with the latest advancements. Furthermore, the student support system provides constructive feedback to help students improve their skills.

- Challenges students face during their studies are identified and addressed, and we guide them toward relevant resources for assistance, ensuring they receive the necessary support when encountering difficulties.

- We actively encourage students to engage with the campus and the broader professional community, fostering connections and opportunities for growth, enhancing their professional networks and opportunities.

- Supporting students in pursuing successful professional careers is a priority. This includes participation in research or creative projects that align with their career goals, preparing them for successful career paths. We offer valuable career guidance and explain job and fellowship opportunities to help students make informed decisions about their future careers.

- Our commitment extends to developing students' professional skills, including report and paper writing, creating compelling presentations, and building essential professional networks, equipping them with a diverse skill set for their professional journey.

1.1 Different members of the student services

The following table shows possible members of a basic student service system. The primary objective, whether as a mentor or a senior student, is to cultivate a positive atmosphere and foster group cohesion within the student groups, thus promoting long-term collaboration. When specific topics arise, senior students share their personal experiences to make conversations with first-year students more relatable and engaging. Encouraging organic functioning and communication within the groups takes precedence over covering every aspect of certain topics during their studies. While it's crucial to convey essential information for students, the primary responsibility for adhering to these guidelines lies with the mentor (Takács et al., 2022, 2023a, 2023b).

Table 1.1 Possible members of a basic student service system

Mentor	They can be employed administrators, student coordinators, university teachers or PhD students entrusted with the responsibility of guiding their mentees. They maintain a strong collaboration with the other members of the possible student service system, such as senior students both during and outside university, and they maintain communication with the mentees. Their role involves assisting students in their academic and personal development, as well as promoting the academic and social integration of students, working alongside the senior student. If the mentor identifies that a student's question is better suited for the student coordinator or other faculty member within the institution, the mentor can make the appropriate referrals.
Senior student	These are fellow university students in their second or third year who have already gained firsthand experience of the educational environment within the institution. They are generally excellent students with good grades, and they can serve as examples for the first-year students. They have undergone preparatory training to become senior students and are well-versed in the needs of their peers due to their own experiences. They actively maintain a close collaborative relationship with mentors, both inside and outside the classroom. Their role involves aiding the first-year students in acclimating to campus life and establishing connections with their peers. Their role involves assisting fellow students in getting oriented on campus. Typically, they serve as trustworthy references outside the classroom, and first-year students often rely on them during the initial phases of adaptation to the new environment.
Mentee	A mentee at a university is typically a student who receives guidance, support, and mentorship from more experienced individuals within the academic community, such as senior students, mentors or other faculty members. Mentees are usually in their early stages of their academic journey, often first-year or junior students, and they seek advice, assistance, and knowledge from mentors to navigate the complexities of university life. Mentees may be exploring academic disciplines, seeking guidance on coursework, or adapting to the university environment. They benefit from the wisdom, experience, and direction offered by their mentors, who assist in their personal and academic development. Mentees often engage in regular meetings or sessions with their mentors, where they can discuss challenges, set goals, and receive advice to enhance their overall university experience and educational journey. The relationship between a mentee and a mentor fosters a supportive environment that encourages the mentee's growth, confidence, and success during their time at the university.

The motivation of senior students to assist first-year students and build a supportive community is often deeply personal, especially in international programmes. They have successfully navigated the many challenges that first-year students encounter upon their arrival and can offer potential solutions and authentic stories as examples. Another key motivation behind their commitment to fostering a strong student community and a supportive system among peers is rooted in their own experiences of isolation or challenges in connecting with university life.

This allows them to make a significant contribution to the mentors' work. Establishing close cooperation between the mentor and the senior student through regular communication can be the first step toward successful mentoring.

Values of a mentor include active listening, openness, and consideration towards others. They work to create an environment in which students feel comfortable sharing their experiences and opinions. Mentors are also attuned to the challenges students face and are ready to offer assistance. They take their role seriously, understanding their strengths and limitations, and respect

the diverse personalities and cultural backgrounds of their mentees. They serve as role models, sharing examples of how they managed to adapt to the new environment. Empathy and patience are hallmarks of mentors, as they are attuned to the difficulties and problems encountered by first-year students.

The tasks of a mentor or senior student encompass sharing their experiences, organising extracurricular programmes and activities for their mentees, and helping create a trusting and accepting environment within the group of students. They also support first-year students in adapting to university and local living conditions, assessing problems, and collaborating with the teachers or other members of the faculty. Clear communication is essential if any issues or challenges arise within the students, whether it's a personal matter for a student or a group-related concern. Additionally, they stay in contact with other members of the institution to ensure a holistic support system.

According to a general consent, it is beneficial to have at least one in-house person responsible for coordinating the mentoring system within the university; this person can be an administrator, a psychologist, a student coordinator or a teacher with some social qualification. This special member of the institution can be called as student counsellor and can be responsible for setting up and managing the mentoring system. According to their expertise they can offer one-on-one counselling to university students but also arrange community-building events and workshops. Within the mentoring system, they serve as the primary sources of guidance, providing professional support to mentors, senior students, and other faculty members (Takács et al, 2023b).

Figure of representing the key members of the student service system:

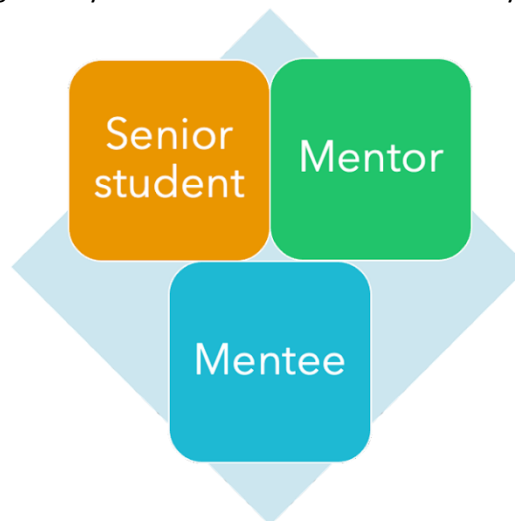


Figure 1.1 Basic members of the student service system

1.2 Gaining insight into the student experience and their supportive network (administration, coordinators, student services, community programmes, peer counsellors etc.)

In this section we would like to draw attention to other possible members in the institution who could be part of the mentoring system. Many of these members or communities are already present in many institutions, so it is important to involve them and create an integrated network to help students.

Table 1.2 Members of the Student Support team

<p>Student counsellor (psychologist)</p>	<p>Student counsellors are professionals who provide guidance, support, and counselling services to students within educational institutions. They are typically experienced and trained psychologists who aid students facing personal, academic, or emotional challenges. Their role involves offering a safe and confidential space for students to express themselves, explore their concerns, and develop coping strategies to navigate various aspects of their academic and personal lives. Student counsellors aim to promote mental health and well-being while fostering a conducive learning environment for students.</p>
<p>Student coordinators</p>	<p>The professionals within the Academic or International Relations Department possess comprehensive knowledge of the necessary documentation, potential challenges inherent in administrative procedures, and effective strategies to mitigate these issues. They serve as an invaluable resource for guiding individuals through the complexities of administrative tasks.</p>
<p>Psychologist trainer</p>	<p>They can be external psychologists hired by the institution responsible for leading workshops and up-skill trainings in various topics. Psychologist trainers can be engaged on a contractual basis and operate as external professionals within the institution. They can assist in recognising and enhancing the extensive skill set the mentees need in order to complete their studies. They can also help mentees overcome challenges through one-on-one counselling sessions or by conducting training sessions to acquire new skills in various areas, such as communication, time and stress management, and learning methods.</p>
<p>Student Union</p>	<p>The Student Union is a dedicated group of students who have united to represent the interests of their fellow students throughout their academic journey. They not only organise regular meetings for themselves but also plan engaging programmes for their peers. They have a deep knowledge of the university, so they are able to provide support as well.</p>
<p>Peer counsellors</p>	<p>Peer counsellors or peer helpers are a group of empathetic, professionally trained individuals who are attuned to addressing various student concerns. Serving as a crucial bridge between students and professionals, they also establish informal connections with their peers, seamlessly integrating them into the well-structured mentor system when necessary. Their primary role involves providing compassionate support within the student community. They possess the capability to assist those seeking both short-term and long-term support, and during one-on-one interactions, can gauge whether professional intervention is needed.</p> <p>This form of assistance holds significant potential for building relationships with those in need, as shared experiences and common backgrounds create a fundamental connection. This shared identity facilitates the establishment of a relaxed and open atmosphere, which is foundational for a supportive relationship.</p> <p>Peer counselling offers tailored support to fellow students, led by trained and supervised team members who offer diverse services. These services encompass engaging in self-discovery activities such as organising film clubs, themed events (e.g., addressing exam anxiety), and self-awareness board games, all informally aiding students in connecting with each other.</p>

The establishment of student support service can offer face-to-face meetings and allow students to trust in confidentiality and seek assistance for their personal issues. This encompasses personalised on-call services and accessibility through telephone and the internet.

The university can maintain a peer support group that serves as an entry-level mental health service, relying significantly on human resources and the efforts of volunteers for its sustainability. The university furnishes the necessary infrastructure for the programme, providing a distinct, well-defined space for conducting training sessions and facilitating helper interviews for student assistance. To meet financial requirements and other expenses, it's crucial to pursue grant opportunities aligned with the group's objectives.

Continuous professional support plays another pivotal role in aiding the work of peer helpers. Periodic recruitment of new members is balanced by the need for a professional leader responsible for ensuring the group's continuity. This leader holds two primary responsibilities: offering group and individual supervision for members and assisting in the internal organisation and coordination of the group. The professional leader, well-versed in counselling, talent management, and mentoring, is readily accessible to students at the institution.

1.3 Methodology of creating an effective mentor system in their own HEI

In this subchapter we mention the structure of the student service system programmes' and provide basic information about organisation of these activities.

These programmes are designed for BSc, MSc, and PhD students and typically encompass two types of activities. Firstly, the mentor team members can coordinate mandatory programmes, which may include the introduction of soft skill courses. Secondly, these programmes can also be optional.

Creating a comprehensive student support service involves multiple steps that require planning, resource allocation, and a well-structured approach. In the following section there is a step-by-step guide on how to establish such a service:

1. Research and Needs Assessment

Conduct comprehensive research and needs assessment to gain a deep understanding of the challenges and requirements faced by students. Collect feedback, conduct surveys, and analyse the specific issues students face regarding academic, social, emotional, and career-related aspects.

2. Define Objectives and Services

Based on the gathered information, define the objectives of the student support service. Determine the services required, including academic assistance, counselling, career guidance, health services, financial aid, and social support.

3. Formulate a Team

Assemble a dedicated team of professionals, including administrative staff, teachers and mentors. Each member should specialise in addressing different facets of student support.

4. Design the Service Framework

Create a framework that outlines the structure of the support service. Define roles and responsibilities, the chain of command, and communication methods within the team. Establish clear protocols for referral and collaboration among team members.

5. Implement Support Systems

Develop an integrated support system that includes helplines, online resources, in-person counselling, peer mentoring, and workshops. Ensure these services are easily accessible and well-publicised to students.

6. Technology Integration

Utilise technology to enhance service delivery. Develop online portals for resource sharing, appointment scheduling, and remote counselling. Implement a student information system to track and monitor student progress and feedback.

7. Budget Planning and Resource Allocation

Create a budget plan, allocating funds for various services and team members. Secure resources necessary for infrastructure, staffing, training, and service improvement.

8. Training and Professional Development

Provide extensive training to staff and mentors. This includes upskilling on the latest counselling techniques, diversity and cultural competency, mental health first aid, and academic advising practises.

9. Continuous Improvement and Evaluation

Periodically assess the effectiveness of the services offered. Use student feedback and performance metrics to evaluate the impact of the service. Make adjustments and improvements as necessary.

10. Launch and Promote Services

Publicise the student support service through various channels, including social media, orientation sessions, college websites, and information packets for new and existing students.

By following these steps, institutions can establish a robust student support service that caters to the multifaceted needs of the student population and ensures a supportive environment for their overall well-being and success.

Implementing a compulsory student support programme ensures universal participation, although it may present more challenges in execution. However, it reaches a larger proportion of students. For instance, for master's students, it could involve an introductory course focusing on academic, cultural, and social aspects, significantly aiding their integration into the university. Such a course holds the potential to reduce dropout rates. Specific instances of compulsory programmes include the development of soft skills or mentor-led classes. Students completing these courses may be eligible to earn credits, thereby providing an effective incentive for their active involvement. Additionally, the mentoring system might incorporate fixed composition groups of students or implement a student monitoring system to enhance its effectiveness and support structure (Rajab et al., 2020). The following table consists of some examples of possible programmes.

Non-obligatory programmes for mentoring offer diverse opportunities for student engagement outside the structured academic curriculum. These programmes present advantages in their flexibility, catering to individual interests and needs. They allow students to participate based on their preferences, fostering a sense of autonomy and personal choice. Examples of such programmes include activities like language assistance sessions, social clubs for language practise, specialised welcome events for new students, forums showcasing ongoing projects within a faculty, guided tours, thematic discussions on specific topics, and individual counselling sessions addressing career, crisis, and study-related issues. However, the main disadvantage lies in their potential inability to reach a broader student population due to voluntary participation, resulting in limited outreach. Moreover, these programmes might not attract or retain students at higher risk of dropping out, which could limit their impact on addressing critical issues within the student body.

Table 1.3 Possible programmes

Programme/Initiative	Description
Mentor class	Mentor class can be a group of students who come to the office of the mentor or can be held in a classroom. The mentor class could be co-facilitated by a mentor or a senior student. The mentor class is an informal, forum-like setting where first-year students familiarise themselves with university life, culture, local living, and address administrative and accommodation inquiries. In addition to general guidance, students receive mentoring in their specific academic field, learning how to access academic opportunities and collaborate with peers.
Groups	Organising students into fixed study groups throughout their first year, ensuring consistent peer interaction and support.
sgs	Optional programmes offer a more flexible and informal approach, typically consisting of short training courses lasting 2-3 hours on specific topics. These sessions primarily focus on soft skill development and can be conducted by mentors or a psychologist trainer. The overarching goal is to cultivate robust communities within student groups and improve their learning strategies, thereby enhancing their soft skills.
onnaire	An assessment tool used at the beginning and end of semesters to evaluate the effectiveness of the mentoring system and course curriculum, allowing for necessary improvements.
Software Recommendation: - Improvement of the university's grade tracking system.	Suggests the implementation of a grade tracking system. A customised system can help to monitor student progress. It can be the integration with platforms like Moodle, Canvas, etc. Provides mentors the ability to intervene and assist students with unsatisfactory results. A unified grade tracking system should also assist in tracking students' results, allowing mentors to intervene and directly assist those students who do not have satisfactory results.
Individual Counselling	Offers assistance for career, crisis, and study-related issues, aiming to inform students about available resources and support, encouraging seeking help when needed.
Projects and Academic Opportunities	Mentors can promote available projects, labs, and academic opportunities for students and offer guidance on accessing and engaging with these opportunities, they can provide links for applying to research and training opportunities. Benefits of Participating: Engagement with science in informal settings, fostering innovation, promoting teamwork, introducing new concepts, conveying the value of science, and staying updated with scientific developments. - Motivations for Involvement: Factors including knowledge, systematic investigation, expansion of expertise, improvements in scientific or technological domains.
Non-obligatory Mentoring Programmes	Tea Afternoon: Office open for discussing matters. Clubs: Weekly programme for practising other languages or spending time together. Discussing digital challenges and topics. Welcome Party: Introduction and welcome programme for students. Project Forum: Presentation of ongoing projects in the university. Sightseeing Tours: Guided tours in the city.

Optional programmes, such as short training courses (2-3 hours) on a specific topic, can be more flexible and informal. Soft skill development sessions can be led by mentors, a psychologist trainer with the aim of fostering strong communities within the groups and enhancing students' learning strategies and soft skills. These skills are not only beneficial during their university studies but are also applicable in their future careers. The topics covered in student training may vary depending on the institution, student group, programme level, but they can include team-building, intercultural communication, learning methods, time management, stress management, networking, career management, and adapting to new cultural and educational settings. Additional topics may include leadership, project management, intercultural sensitivity, professional identity, general communication, problem-solving thinking, improving learning motivation, cooperation and student-teacher communication. Therefore, the purpose of this training is to enhance the learning and soft skills of students, thereby empowering them to complete their university studies.

Monitoring student attendance serves various functions, and it can play a crucial role in the mentoring of students. To begin, if a student is absent from the class, it can initiate a discussion to check if anyone has information about the missing student, promoting a culture of attentiveness and mutual care within the mentees. Additionally, it's valuable to investigate the reasons for the absence by personally inquiring with the student to understand if any issues or problems need assistance. This approach can strengthen the sense of belonging within the group. Furthermore, treating attendance as a requirement for completing the course can aid in the students' adaptation to university expectations, better preparing them to tackle more significant professional or academic challenges successfully.

The mentor class can take place in a fixed group, creating a supportive community where students can seek solutions to their challenges in a safe environment.

The questionnaire can measure the student service programme's effectiveness and its impact on study success and dropout rates. These questionnaire responses help in evaluating the mentoring system, making necessary improvements, and optimising the system regularly. See it in detail in chapter 3.

Participating in scientific labs, projects, and academic opportunities offers several benefits. Engaging with science in informal settings is a multifaceted endeavour with various intended outcomes. It can evoke emotional responses, foster innovation, reshape perspectives, promote teamwork, introduce new concepts, convey the societal and personal value of science, create profound experiences with natural phenomena, and keep participants informed about cutting-edge scientific developments. Key motivations for getting involved in academic opportunities: 1. Knowledge, principles, experience, practise, and scientific learning commence early in life and persist throughout one's lifetime, largely shaped by cultural factors. 2. Science involves systematic investigation and experimentation as a means of acquiring knowledge. 3. The body of scientific knowledge is continually expanded, refined, and revised by the scientific community. 4. Science education effectively mirrors the practises of real scientists.

The role of the mentor for transitioning to an industrial career

Transitioning from the academic environment to the corporate world can be a significant adjustment. The mentor plays a crucial role in providing advice and support to help students succeed in their professional careers. In a highly competitive job market, it's essential for the mentor to have a clear understanding of the skills and qualities that students need to showcase to potential employers. They should exemplify the skills, qualities, and motivation that employers seek.

As the workforce evolves, particularly in the sustainable development sector, research indicates the skills that individuals will need in the future. Employers value graduates who have applied their knowledge and abilities beyond the classroom. Students can distinguish themselves by demonstrating relevant skills from diverse perspectives and backgrounds. The mentor should consider that most programmes typically require two to three years of full-time study. Therefore,

students should familiarise themselves with working conditions, employment prospects, and other field-specific requirements.

The role of inclusivity

Recognising the importance of addressing the needs of diverse student populations, institutions of higher education are increasingly prioritising initiatives aimed at promoting inclusivity and cultural sensitivity. One key aspect of this endeavour involves providing comprehensive support services tailored to the unique challenges and experiences faced by students from diverse backgrounds. Cultural sensitivity training for faculty, staff, and student leaders plays a crucial role in fostering understanding and empathy towards the cultural identities and lived experiences of students. By equipping individuals with the knowledge and skills to navigate cross-cultural interactions respectfully, institutions create a more inclusive and welcoming campus environment where all students feel valued and supported. For example, the country presentation in the mentor class can serve as a valuable tool for acquainting ourselves with each other's cultures and promoting inclusivity. Support for international students is another critical component of efforts to enhance diversity and inclusivity on campus. International students often encounter various challenges, including language barriers, cultural adjustment issues, and unfamiliarity with academic and social norms. Establishing dedicated support services for international students, such as orientation programmes, immigration advising, clubs, and language assistance, helps facilitate their transition to the university environment and promotes their academic and personal success. Additionally, creating opportunities for cross-cultural exchange and engagement fosters a sense of belonging and community among international and domestic students alike, enriching the educational experience for all. To achieve true inclusivity, institutions must implement strategies that go beyond surface-level diversity and actively promote equity and representation across all facets of campus life. This entails creating policies and practises that address systemic barriers to access and success, fostering a sense of belonging for historically marginalized groups, and amplifying underrepresented voices in decision-making processes. By prioritising diversity, equity, and inclusion as core values, institutions can create a campus culture that celebrates and embraces the richness of human diversity, ultimately creating a more vibrant and equitable learning environment for all students.

Case study: Building a Student Support Centre: Addressing high dropout rates

In response to alarming rates of student dropout, a higher education institution embarked on a transformative initiative to establish a comprehensive Student Support Centre. This case study examines the institution's journey towards building the Student Support Centre and its impact on mitigating dropout rates while enhancing student success and retention. Factors contributing to this challenge included academic difficulties, financial constraints, lack of social support, and limited access to essential resources and services. Recognising the urgent need for intervention, university administrators initiated discussions on developing a centralized hub to address these issues comprehensively.

The planning phase involved extensive research. A multidisciplinary task force was formed, comprising faculty members, student affairs professionals, counsellors, financial aid advisors, and IT specialists. Their collaborative efforts led to the design of a holistic support model encompassing academic tutoring, financial aid assistance, counselling services, career guidance, and technological resources.

The physical space for the Student Support Centre was strategically located at the heart of the campus, ensuring accessibility for all students. A comprehensive promotional campaign was implemented to raise awareness and encourage student engagement. This included campus-wide announcements, social media outreach, informational sessions, and collaborations with student organizations.

The new Student Support Centre offered a wide range of services tailored to meet the diverse needs of students:

- Academic support: peer tutoring, study groups, workshops on study skills and time management.
- Financial aid assistance: guidance on scholarship opportunities, financial literacy workshops
- Counselling services: individual and group counselling sessions, mental health screenings, crisis intervention.
- Career development: resume writing workshops, mock interviews, career fairs, internship opportunities.
- Technological resources: computer labs, printing facilities, access to online databases and academic software.

The implementation of comprehensive support services resulted in a significant reduction in dropout rates, with more students persisting towards graduation. Students reported increased satisfaction with academic support, improved grades, and a greater sense of belonging and connectedness to the university community. Recognizing the Student Support Centre's success, the institution allocated additional resources to sustain and expand its services, ensuring continued support for future generations of students.

1.4 Methodology of creating an effective mentor system in their own HEI

Mentoring plays a vital role in the overall experience of students, involving effective communication and collaboration between students and mentors, with support from the programme and university. To put it concisely, active mentoring should revolve around engaging students by providing them with individual access to various opportunities and offering reliable guidance during their enrolment to the university and their studies.

The formulation and development of a methodology to be used in your own higher education system depends on the institution and the objectives to be achieved. Initially, it is worth reviewing the desired goals and the available resources. Creating a comprehensive system that effectively aligns with the institution's defined goals is worthwhile. Effective mentoring is characterised by a focus on instruction and is greatly influenced by the relationship built on trust and collegiality, which represents a collaborative interaction among colleagues.

Three levels of student support systems can be distinguished:

Level 1

Basic mentoring - A mentor is available for contact with as many students as possible, offering personal consultations. Students have the option to contact the mentor for academic matters.

The mentor is typically a more experienced and skilled member from the administrative staff, possessing the knowledge, expertise, awareness, and skills that the mentee aspires to acquire. This dynamic establishes a hierarchical relationship between the mentor and the mentee.

Mentors are often referred to using various terms such as guides, instructors, advisors, knowledge-sharing individuals, counsellors, supporters, and encouragers, as illustrated in Figure 2. Mentors offer educational guidance, emotional support, and facilitate the socialisation into the profession. Moreover, they exhibit empathy and serve as role models. Recognising that the experiences, knowledge, and skills of these mentors are event-driven, context-specific, and practically oriented, mentors assume diverse roles. Despite the array of roles within the mentoring process, many mentors understand that their role transcends that of an advisor providing instructions and recommendations solely on pedagogical practises; they also serve as motivators, encouraging the exploration of innovative ideas.

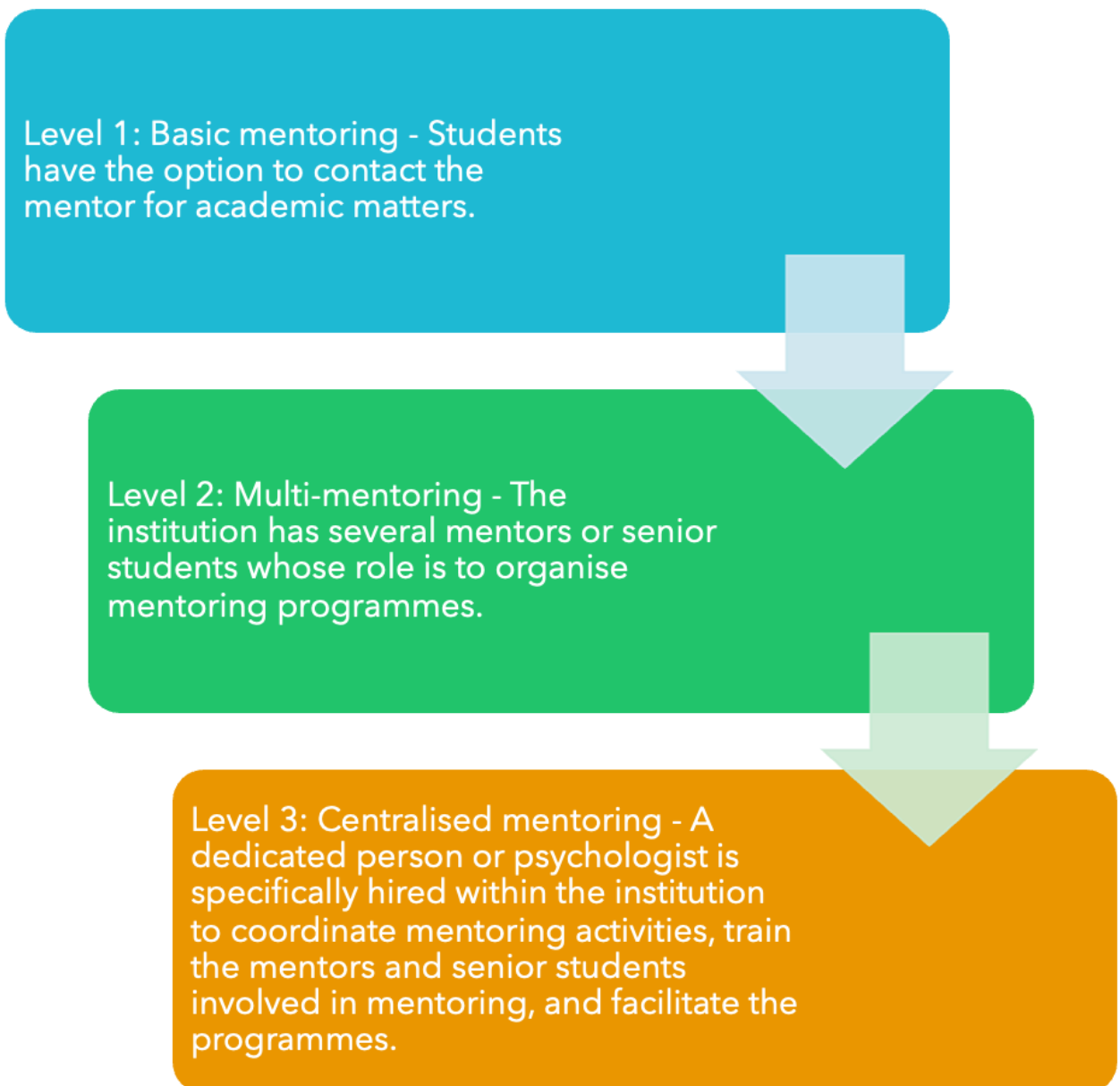


Figure 1.2 The different level of student services

Level 2

Multi-mentoring - The institution has several mentors and senior students whose role is to organise mentoring programmes. Level 2 of the mentoring system denotes a more comprehensive approach called Multi-mentoring. In this phase, the institution has a team of mentors and senior students specifically designated to coordinate mentoring programmes. These individuals not only engage in direct, personal interactions with students but also take the initiative to organise diverse and engaging activities beyond traditional mentoring sessions. These activities are designed to aid students in cultivating their academic and professional identities. They may arrange workshops, seminars, or events covering a wide range of topics aimed at bolstering students' understanding of their academic pursuits and preparing them for their future professional careers. This level of mentoring goes beyond individual guidance, focusing on creating a holistic experience for students by offering various avenues to explore and develop their skills and identity within an academic and professional setting.

Level 3

Centralised mentoring - A dedicated person or psychologist is specifically hired within the institution to coordinate mentoring activities, train the mentors and senior students involved in mentoring, and facilitate the programmes. Level 3 in the mentoring system represents a centralised

approach where the institution appoints a dedicated individual, often a psychologist or an experienced professional, entrusted with overseeing and managing all mentoring activities. This person assumes the responsibility of organising, guiding, and training the mentors and senior students involved in the mentoring process. Their role is not limited to administration but extends to active involvement in mentoring sessions, providing guidance, and ensuring the overall effectiveness of the programmes. As a psychologist, they offer personalised counselling sessions to students, addressing various personal challenges or life issues that might affect their academic performance. Simultaneously, this figure serves as a consultant to the faculty, offering advice and strategies to educators regarding the best practises and methods for teaching and supporting this current generation of students, thereby promoting a cohesive and supportive educational environment within the institution.

The following table (Table 1.4) summarises different mentoring activities based on the level of the student support service system, including obligatory and optional activities:

Table 1.4 Mentoring activities based on the level of student support service system

Level of Student Support System	Obligatory Mentoring Activities	Optional Mentoring Activities
Level 1: Basic Mentoring	<ul style="list-style-type: none"> • Initial orientation and academic guidance • Academic progress monitoring • Assistance with course registration • Guidance on university policies and resources • Assistance with navigating academic challenges 	<ul style="list-style-type: none"> • Regular one-on-one meetings with mentors • Group study sessions, mentor class or study groups • Workshops on time management and study skills • Career counselling and goal-setting sessions • Participation in campus clubs and extracurricular activities • Tutoring sessions for specific subjects
Level 2: Multi-mentoring	<ul style="list-style-type: none"> • All Level 1 mentoring activities • Introduction to student support services • Connecting students with academic advisors • Promoting involvement in student clubs 	<ul style="list-style-type: none"> • Coordination of mentoring programmes and activities • Organising career fairs and networking events • Soft skill development sessions led by mentors or trainers • Language exchange programmes and conversation partners • Workshops on time-management, learning methods, stress management etc. • Peer mentoring programmes for specific subjects or topics
Level 3: Centralised Mentoring	<ul style="list-style-type: none"> • All Level 1 and 2 mentoring activities • Extensive psychological and emotional support • Crisis intervention and counselling services • Academic advising tailored to individual goals • Holistic student wellbeing programmes • Integration of mentoring with academic curricula 	<ul style="list-style-type: none"> • Advanced career planning and internship placement assistance • Mentor training programmes for senior students • Advanced research opportunities, including publishing guidance • Organising academic conferences and research symposiums • Leadership development programmes and workshops • Cross-disciplinary study opportunities

(Please note that the table represents a general overview, and specific activities and obligations may vary by institution and programme. Additionally, the table illustrates how mentoring activities can evolve and become more comprehensive as the level of student support increases.)

Summary

This chapter described a student services methodology that provides essential information for mentors to help students navigate their studies and set realistic career goals, including the necessary steps, while allowing flexibility in applying the guidelines. The proposed student service centre could assist administrators in creating new programmes to improve student retention and academic success.

This handbook describes a student services methodology that provides essential information for mentors to help students navigate their studies and set realistic career goals, including the necessary steps, while allowing flexibility in applying the guidelines. The handbook presents a diverse range of exercises and activities to tailor the mentoring training, addressing group dynamics, specific challenges, and students' needs. The proposed student service centre could assist administrators in creating new programmes to improve student retention and academic success.

In the evolving landscape of educational institutions, the establishment of a robust student support service is paramount. The depth of this chapter's exploration has highlighted the multifaceted elements necessary to build an effective and responsive system. Understanding the diverse needs of students, from academic challenges to personal growth, is fundamental. The strategies outlined encompass a broad spectrum, ranging from structured mentoring programmes to tailored approaches that adapt to the characteristics of individual students. The chapter emphasises the importance of technology integration, the role of mentorship in a student's success, and the significance of soft skill development. Integrating these aspects into a comprehensive support service holds the potential to not only address current issues faced by students but also anticipate and prepare for the changing demands of future generations. By combining traditional approaches with innovative methodologies, the chapter advocates for a proactive, adaptive, and student-centric support system designed to empower and guide students through their educational journey.

Discussion questions

There are some discussion questions designed to think about how to establish student support service:

1. What specific challenges do students commonly face within your academic institutions, and how can a support service effectively address these challenges?
2. How can a student support service tailor its approach to meet the unique needs of students and those from diverse cultural backgrounds?
3. In what ways can technology be integrated into a support service to enhance student engagement and accessibility?
4. What role should mentors, counsellors, or advisors play in a comprehensive student support system? How can their responsibilities be delineated to offer optimal support?
5. How can a student support service balance the promotion of mental health and academic success among students?
6. What metrics or assessment methods should be utilised to measure the effectiveness of your student support service?
7. How can a student support service cater to the needs of different academic levels, such as undergraduate, graduate, and doctoral students?
8. What proactive measures can be implemented by the support service to prevent or minimise student dropout rates?

9. In what ways can a support service collaborate with academic faculty to ensure a cohesive and effective support system for students?
10. What strategies should be employed to encourage students to actively participate and engage with the support services offered?

References

- Alarcon, G. M., & Edwards, J. M. (2013). Ability and motivation: assessing individual factors that contribute to university retention. *J. Educ. Psychol.* 105:129. <http://doi.org/10.1037/a0028496>
- Belloc, F., Maruotti, A., & Petrella, L. (2011). How individual characteristics affect university students drop-out: a semiparametric mixed-effects model for an Italian case study. *J. Appl. Stat.* 38, 2225–2239. <http://doi.org/10.1080/02664763.2010.545373>
- Cabrera, L., Bethencourt, J. T., Pérez, P. A., & Afonso, M. G. (2006). El problema del abandono de los estudios universitarios. *Rev. Electrón. Invest. Eval. Educ.* 12, 171–203.
- Di Pietro, G. (2006). Regional labour market conditions and university dropout rates: evidence from Italy. *Reg. Stud.* 40, 617–630. <http://doi.org/10.1080/00343400600868770>
- Moulin, S., Doray, P., Laplante, B., & Street, M. C. (2013). Work intensity and non-completion of university: longitudinal approach and causal inference. *J. Educ. Work* 26, 333–356. <http://doi.org/10.1080/13639080.2011.653554>
- Nagreacha, S., Dillon, J. Z., & Chawla, N. V. (2017). MOOC dropout prediction: lessons learned from making pipelines interpretable, in *Proceedings of the 26th International Conference on World Wide Web Companion*, Perth, WA: International World Wide Web Conferences Steering Committee, 351–359.
- Rajab, H., Csikós, T., & Nagy, V. (2020). *Guidelines for Successful Mentoring*. Handbook [PDF]. ISBN 978-963-489-493-3. Budapest: Eötvös Loránd University, Faculty of Informatics, Student Support Centre.
- Ruiz-Gallardo, J. R., González-Geraldo, J. L., & Castaño, S. (2016). What are our students doing? Workload, time allocation and time management in PBL instruction. A case study in Science Education. *Teach. Teach. Educ.* 53, 51–62. <http://doi.org/10.1016/j.tate.2015.10.005>
- Takács, R., & Horváth, Z. (2017). Dropping-out prevention of computer science students: developing studying, thinking and soft skills among students, using training programmes. In 11th *International Association of Technology, Education and Development (IATED)*, Chova, L.G.; Martinez, A.L.; Torres, I.C. (eds), pp. 1-6. , 6 p.
- Takács, R., Csizovszky, F., Gogibedavili, A., Mihály, A., Nagy, V., Pásztor-Nagy, A., Rakovszky, D., Várnai-Ihász, J., Siposné Virág, S. (2023b). *Learning Methodology: Preparation Course for Master Studies and Developing Learning Skills. Training Handbook* (1st eds). ISBN 978-963-489-637-1. Budapest: Eötvös Loránd University, Faculty of Informatics, Student Support Centre.
- Takács, R., Kárász, J. T., Takács, S., Horváth, Z., & Oláh, A. (2021b). Applying the Rasch model to analyze the effectiveness of education reform in order to decrease computer science students' dropout. *Humanities & Social Sciences Communications*, 8(1). <http://doi.org/10.1057/s41599-021-00725-w>
- Takács, R., Kárász, J. T., Takács, S., Horváth, Z., & Oláh, A. (2021c). *Profiling computer science students through their performance and psychological characteristics using cluster analysis*. Manuscript submitted for publication.
- Takács, R., Kárász, J. T., Takács, S., Horváth, Z., & Oláh, A. (2022). Successful Steps in Higher Education to Stop Computer Science Students from Attrition. *Interchange*, 53(2), 1–16. <http://doi.org/10.1007/s10780-022-09476-2>

- Takács, R., Takács, S., Kárász, J. T., Oláh, A., & Horváth, Z. (2023a). The impact of the first wave of COVID-19 on students' attainment, analysed by IRT modelling method. *Humanities & Social Sciences Communications*, 10(1). <http://doi.org/10.1057/s41599-023-01613-1>
- Takács, R., Takács, S., T Kárász, J., Horváth, Z., & Oláh, A. (2021a). Exploring Coping Strategies of Different Generations of Students Starting University. *Frontiers in Psychology*, 12, 1–10. <http://doi.org/10.3389/fpsyg.2021.740569>.
- Trevors, G., Feyzi-Behnagh, R., Azevedo, R., & Bouchet, F. (2016). Self-regulated learning processes vary as a function of epistemic beliefs and contexts: mixed method evidence from eye tracking and concurrent and retrospective reports. *Learn. Instruct.* 42, 31–46. <http://doi.org/10.1016/j.learninstruc.2015.11.003>

Suggested reading

- Breaux, A. (2015). *101 Answers for New Teachers and Their Mentors: Effective Tips for Daily Classroom Use*. Routledge. ISBN 9781138856141. (Downloaded on the 1st of June, 2020).
- Burchard, B. (2003). *The Student Leadership Guide*. The Centre for Leadership Development, University of Montana. ISBN 13: 9780615120799
- Cartwright, N. (2005). *Setting up and Sustaining Peer Support Systems in a Range of Schools over 20 Years*. *Pastoral Care in Education*, 23, 45–50.
- Cox, J. R. (1999). *A Guide to Peer Counseling*. Northvale, N.J.: J. Aronson.
- D'Andrea, V. J., & Salovey, P. (1983). *Peer Counseling Skills and Perspectives*. Palo Alto, Calif.: Science and Behavior Books Inc.
- Hudson, P. (2013). 'Mentoring as Professional Development: 'Growth for both' Mentor and Mentee', *Professional Development in Education*, 39(4), pp. 771-783.
- Joubert, N., & Raeburn, J. (1998) *Mental health promotion: People, power and passion*. The International Journal of Mental Health Promotion. Inaugural Issue, September, 15-22.
- McCorkel, L., & Tamar, A. (1998), *What Mentoring Does for Mentors: A Cross-cultural Perspective*. *European Journal of Teacher Education*, 21(1), pp. 91-107.
- MTD Training Academy. Link: www.mtcacademy.com
- Nagy, V. (2021). *Online szinkron mentorálás, soft-skill készségfejlesztő tréning és közösségépítés nemzetközi programtervező informatikus hallgatók körében Magyarországon a Covid19-pandémia idején*. In. szerk. Füleki Beáta, Puskás-Vajda Zsuzsa. *FETA (Felsőoktatási Tanácsadás Egyesület) Könyvek 15. Interkulturális tanácsadás a magyar felsőoktatásban (15)*, 137 - 159. ISBN 978-615-80732-6-4, <https://feta.hu/kiadvanyok/megjelent-a-feta-konyvek-sorozat-15-kotete>. Downloaded: 2022.01.20.
- Rösch, M. (1995). *Einschätzung eines Ausbildungsprogrammms für behinderte BeraterInnen*. Mainz: unveröffentlichte Diplomarbeit. <http://www.peer-counseling.org/>
- Wieggersma, S. (1978). *How do you counsel? International Journal for the Advancement of Counselling*, 1, 63–80.

CHAPTER 2: GUIDELINES OF EFFECTIVE MENTORING

In this chapter, our objective is to impart valuable insights for establishing a stable mentoring network and programme. We will discuss pragmatic approaches to engaging with students and involve more experienced ones (seniors) to enhance the strength of the support system. Furthermore, we will examine the impact of effective networking and communication within the academic institution on student success. The chapter will include practises on how one can become a mentor and the natural integration of mentorship into one's identity, emphasizing its inherent value. Understanding student by survey of needs is also provided in this chapter to effectively mentoring and services improvements. Our primary aim is to provide a comprehensive understanding of how to develop a sustainable mentoring system that supports students in both their academic and personal pursuits.

2.1 Cooperation with students (the role of feedback, working with senior students)

Students as mentors are a crucial element of the mentoring framework. It is a collegial, less hierarchical relationship between students, which thus offers a different quality of mentoring experience, with several benefits both to the mentee and mentor students. Although peer mentor students and senior mentor students mean both students who are providing mentoring to other students, we can highlight some difference between the two. Peer mentor students typically involve individuals who are at a similar level of the education programme. While senior mentor students (short: senior students) indicate usually a more experienced student in a higher academic year (senior) who is providing guidance to junior or new students. In this section we are going to focus on the role and the cooperation with the senior students in the mentoring system. When organizing the mentoring system, it is important what kind of message we transfer to the students about this position. Senior students are supposed to be students with experience and knowledge, and with the ability to showcase positive patterns in their own actions and work to their mentees. They have already navigated themselves successfully through challenges of the university environment and are advancing effectively with their studies. This is an important selective measure that should be taken when recruiting senior students. Although senior students' role doesn't include subject related tutoring to junior students, it is expected that they are managing their studies with great efficiency, which is reflected in their academic progress. Therefore a certain level of GPA is advisable as a criteria for being selected as a senior student. It depends on the institute and the facility's resources what kind of rules the senior students will cover. According to our best practise the senior students are the first student contact points to junior students whom they can turn to during their integration into the university life and culture. The senior students' work might start therefore from prior to the arrival of the freshmen to the university.

In their role, they can cover the following tasks:

- Providing guidance to freshmen students before arriving to the university
- Providing orientation to university culture and structure
- Experience and knowledge sharing
- Guidance in academic matters and administrative arrangements
- Building a support system
- Promoting social integration and community building
- Facilitating professional development and networking

- Building bridges between professors, administrators and other participants of the mentoring

Before arriving to the university

Freshmen need to collect a lot of information about the university, the city, if arriving from an other country then even about the country. There are several little details which one has to think about in this transition to start studying at a university. It is important to highlight that transitioning from secondary school level to university is a major and normative challenge to students. The responsibility increases suddenly, they need new transferrable skills that they will help them cope successfully with the first steps of their adult life, and studying path. In this transition and adaptation period a well established mentoring network, with the involvement of senior students can be of a lot of help. Senior students have gone through this first phase and have completed these challenges successfully. It is inspiring to junior students to see higher year students being successful on their academic journey (which includes not only academic advancement, but the general life skills to manage their student life successfully). If students arrive from another country, it adds further additional layers to it, as freshmen students rarely have an in-depth knowledge and understanding of the country and the particular location of the university. The discrepancy between expectations and reality, cultural shock, and cultural challenges, homesickness can subject freshmen to intense emotions, and sharing the same experiences with someone who has already overcome the difficulties is resourcing. When considering students arriving from other locations, we need to keep in mind simple basic facts, like climate conditions, religious differences, eating habits, dress codes, behavioural customs and traditions, differences between urban environments, and between rural and urban environments etc. It can expose the freshmen with an increased level of stress, and the knowledge that they are not alone on this journey can help them cope with it. Senior students can help freshmen student prior to their arrival to university in their preparation, helping them with a reality check, providing factual information about the environment. In the best practise of the ELTE Student Support Centre senior students usually prepare an information package to students, providing them with useful locally relevant information, suggesting them items which they consider to bring with them (documents, medication, electrical outlet, climate appropriate clothing, formal clothing matching the university's requirements, items suggested according to the dormitory conditions, or culturally sensitive items that they can not find at the location of the university or even in the country, general cost of living, expenses etc.) They also provide guidance on travelling information, how to reach the university, from the nearby airports with what transportation tools. Often, on a voluntary base they offer students dates when they are providing a personal pickup at e.g. at the airport, collecting several students and travelling together to the location of the university. These information proved to be very useful for freshmen students and can be a great source to make the adaptation process smoother, by eliminating potential frustrations originating from the lack of local information and knowledge. Therefore they are the first continuous contact point whom the freshmen students can reach out to prior to their arrival, and already ask them questions.

After arriving to the university they are continuing providing orientation and guidance relating the university culture, academic matters, administrative arrangements, and everyday life matters.

Providing orientation to university culture and structure

Each university has its own structure and culture. Senior students can introduce new students to the university's cultural aspects, including its vision, values, traditions, customs and social norms. They might explain how the university community functions, highlighting important events, celebrations, and activities. They are familiarizing the new students with the academic structure of the university, including the organization of faculties, departments, etc. and they are navigating freshmen through the campus facilities and resources. They introduce the campus layout, and important facilities, such as libraries, laboratories, recreational areas, student support services etc. This will play an important role also in the social integration of freshmen to university life, as they

need to feel familiar with the space they are using. The group space in a particular environmental setting facilitates social-dynamic processes, including the formation of group identity (Minam et al, 1995) For freshmen students for their identity formation that they feel themselves as confident citizens of the university it is important therefore to get familiar with the physical space of the university as well.

This is connected to the next main area of support:

Promoting social integration and community building

Further, senior students help new students integrate socially by introducing them to clubs, organizations, and extracurricular activities. They may organize social events, excursions, gatherings to encourage networking among students. Senior students by providing information about the purpose, activities, and benefits of joining different groups and sharing their own involvement can inspire and encourage mentees to participate in these activities aligned with their interests. Freshmen students can feel more confident to choose where to join, or where to commit.

Supporting inclusivity is the attitude with which they are supposed to approach the mentees, promote an inclusive atmosphere by ensuring that all students feel welcome and valued. They instill a sense of connection among mentees, fostering a positive environment where students feel they belong to. They show a good example how to create and become a strong and supportive community.

Senior students introduce new students to key faculty members, department heads, and support staff, helping them establish connections within the academic community. This facilitates a smoother communication process for students when seeking for guidance.

Guidance in academic matters and administrative arrangements

Senior students are promoting the information flow and are creating platforms for freshmen students for interaction. They usually create an online platform to communicate with the mentees, to keep them continuously informed and updated. There are certain requirements towards the senior students in their knowledge regarding academic matters and administrative arrangements. They are able to provide information about the structure and requirements, academic policies and procedures of the programme which they and freshmen students are enrolled to. They are able to introduce the freshmen students the curriculum, the structure of the courses, the exam system, the online e-learning platforms, and university administration platforms. They are accurate and up-to-date with the terms and the flow of the academic year, and they are aware how to manage administrative issues within the university setting (student card, application for scholarships, demonstrator positions etc.) and outside the university setting but related to studies (e.g. opening a bank account to be able to receive scholarship payments, government office related administration etc.). They are aware of how to access specific academic resources and they are sharing this knowledge with their mentees. Despite of the fact that senior students are expected to excel in these areas of being informed and up-to-date, the main expectation is not being a constant source of knowledge base, but to teach freshman where and how to look for relevant information regarding academic and administrative matters. The aim is to empower students, to model them responsibility and to teach them an attitude of proactivity. For the first year students it is important to stay informed, have access to information easily. Often this is one of those areas where they need the most support, to learn which information they can receive where.

It is an important aspect of mentoring by senior students that they sharing their first hand experiences with the mentee students, they are able to draw their mentees attention to potential roadblocks and at the same time they can show a good example of how to overcome them. Seeing other students being successful on this road is inspiring and transmits the message that the challenges are doable.

Facilitating professional development and networking

Senior students are expected to stay informed about the different professors' research projects, and areas of expertise. They are also expected to know about professional projects

available to students on the campus which they can join to. These are e.g. the scientific student association's conference, or student projects.

Building bridges and the importance of feedback

Senior students also build bridges between the freshmen and the academic environment, other participants of the mentoring system. In order to ensure to understand students' needs, expectations, experiences that they gain on the university, we need to ask for feedbacks from them. This can happen in many ways and different forms. There are surveys which can report about students' subjective experiences, providing quantitative and qualitative data, which provides a good base for an evaluation of the student services. On the other hand senior mentor students can also be a bridge and a mediator, as they can make informal connection with the mentee students who may open up better and easier to them, so the feedbacks through the senior students often gives us more insight into their real feelings, and issues they are facing to. It is very important to respect confidentiality and not to put senior students in an ambiguous uncomfortable position. They are in this role on both sides of the represented parties. They are students but they are also representing the university. Their role is to facilitate a better understanding of the students' experiences and through the feedback loop to improve the student services to meet the students needs.

How to become a senior student if a multi-mentoring or centralized mentoring is available?

If there is a mentoring system available, to become a senior student can be bound to a multi-staged process starting from the selection process, through preparation trainings provided to the senior students. In the best practise of the ELTE Student Support Centre this position is available with a paid student contract, which gives an extra emphasis of the importance of the role. To become a senior student is available from their 3rd semester on, which means that they have already gained insights and understanding into the university culture throughout minimum one academic year. In the best practise of the ELTE Student Support Centre the application includes both filling out a form with specific questions aiming to map their knowledge and awareness in university-related and administrative procedures, plus including a motivational letter that supports their eagerness to become a senior student. At this stage we can estimate what level of informedness and knowledge is expected prior to any training from the future senior students. Based on this happens the first round selection which proceeds in the best practise of the ELTE Student Support Centre in an interview plus assessment centre. In the assessment centre we ask the chosen candidates to participate in a group task scenario in which they have to work together on a task. Usually it involves some community building task where we observe them how cooperative they are, how can they work together with the others, how can they come up with creative solutions, how much organized they show themselves etc. This performance together with the interview will give us a better understanding of the suitability of the students for the role. In the interview committee depending on the capacities of the university there can be administrative staff, student government representatives, other participants of the mentoring, psychologist coordinator (if available the centralized mentoring in the institute).

Trainings provided to the senior students

In the best practise of the ELTE Student Support Centre psychologist student counsellors are organizing trainings to the future senior students. One of the occasions is a 1,5 day training occasion. The training is equipping senior students to understand better their role and responsibilities, to be able to differentiate what is their task and what is not, to prepare them for possible situations and to practise with them how to handle them in a proficient way in their role. It provides also community building elements, so that they learn ice-brakers, and they experience and learn about themselves in a group, so they can practise their mentoring-, communication-, listening-, leadership- and problem solving skills.

In a further stage, when a centralized mentoring system is available, then the role of the senior students can be extended to a course level. In the best practise of the ELTE Student Support

Centre mentoring classes are available for the freshmen students with the leading of a mentor teacher and a senior student. These are weekly 45 minutes classes.

Feedback from senior students about their learning from the mentoring

Mentorship is a mutual relationship that holds extensive value for both the mentors and the mentees. Mentoring offers senior students the opportunity to enhance and improve their personal and professional development. Through the act of guiding others, senior students strengthen communication, leadership, and other interpersonal skills, and gain a deeper knowledge about their own strengths and weaknesses. Senior students learn to inspire, motivate, and help their junior or fresh peers. Senior students often report about increased confidence and an increased sense of self-efficacy by seeing the good effects of their guidance on their mentees. Senior students expand their network through the mentoring, and increase the level of their community engagement, which can also lead to long-lasting relations with their peers.

2.2 Networking, intra-institutional connections and the importance for the flow of information

In the context of effective mentoring, it's crucial to understand that the university is not just a collection of individual departments and faculties but a unified community working towards a common goal. In our case, the aim is to support, help and prevent students from dropping out. This is a complex and wide ranging task, so it is important that all the university's participants play their part together. In this section, we delve into the importance of networking, intra-institutional connections, and their role in facilitating the flow of information. Moreover, we explore how sustainability principles can be integrated into this collaborative mentoring framework.

Networking

The university as a united community

First of all, the most important thing is to see the university participants as a unit, not as individual departments, offices and faculties. We could say that the most fundamental first step is to develop an attitude of teamwork in supporting students in all areas. All employees at the university have a crucial role to play in supporting students, and the more they know each other and each other's work, the more they can work together effectively to solve their students' sometimes complex problems. This approach can not just make the support system more effective but also creates a sense of belonging and shared responsibility among faculty, staff, and students. By considering the university as a cohesive entity, we lay the foundation for an environment where sustainability and effective mentoring can thrive.

Goals of networking

As we established before, when it comes to mentoring, facilitating collaboration among university staff is essential. But what are the aspects that contribute to this cooperation through networking?

1. Raising Team Awareness

Working in a team has many advantages, not only practical but also psychological. Raising awareness among staff, teachers and students can greatly increase their commitment to their work and create a sense of security. To understand and support this, Tajfel's (1978) social identity theory can be very helpful.

Social Identity Theory (SIT) suggests that people form their identity based on social groups (which can be their workplace for example). This involves seeing their own group positively and categorizing others as different ("out-group"). This process helps boost self-esteem. Essentially, individuals identify with a group, see it in a positive light, and gain a collective identity based on their group membership (Tajfel, 1978). Having a shared social identity is crucial for motivation and performance at work, as shown in various studies. Instead of just depending on each other for success, what really matters is feeling emotionally connected and personally committed to the team and the organization.

This was evident among Dutch soldiers on a UN peacekeeping mission—when soldiers felt respected and included, their commanders were more likely to see the team as ready for combat. In

simpler terms, when team members feel a strong connection and commitment, it positively influences their readiness and performance (Scheepers & Ellemers, 2019). Wilder (1981) also points out that, when people feel a strong connection to their own group, they might form negative opinions about those outside their group. Additionally, they may start to see individuals in the other group as less unique and more like a faceless part of a larger entity. Here I think it is worth re-emphasising that it is therefore important to see the whole university community as a unit, and not as separate out groups, to develop a common identity and not to think in terms of smaller groups (administrators, lecturers, students, etc.)

2. Share responsibility

Students face a number of complex problems and challenges at university, which can rarely be solved by the involvement of one helper, and usually require the involvement of several departments. When the above-mentioned helper encounters such a problem - and does not feel the support of the team/other departments - or does not even know how to ask for help, the responsibility for the situation falls solely on them. This can lead to frustration and defensiveness. If, on the other hand, through networking, the group identity of all university staff can be developed, they are aware that the problem is not theirs to solve alone and that the responsibility does not rest solely on them. Dividing tasks in a university team is like putting together a strong team, where each person brings their own strengths to the group. This not only speeds up tasks, but also promotes collaboration and strong teamwork. As employees take on different tasks, they also grow professionally, gaining new skills that make them more valuable.

This approach eases individual pressure, preventing burnout and ensuring a healthier work-life balance. Koh et al. (2020) in their thematic analysis give examples of how, even in a stressful work process such as palliative care, sharing responsibility can have a burnout-preventing effect. It also creates a supportive culture where mutual support is the norm and shared responsibility promotes a sense of accountability and commitment. This collective mindset not only results in effective work, but also makes the team adaptable to change and challenges.

It's also smart from a resource perspective. Each team member brings something special to the table, and sharing responsibility ensures that these strengths are used wisely, leading to balanced results. This shared journey builds a cohesive team with shared goals, which enhances overall cohesion. When challenges arise, the team's diverse expertise encourages innovative problem solving. Sharing responsibility is essentially more than sharing workload; it is about creating a dynamic, supportive and highly effective university team.

3. Clear roles

Imagine a soccer team where each player knows their position and responsibilities on the field. Similarly, in a work setting, clear roles enhance efficiency. When tasks are assigned based on individual strengths and expertise, the team operates smoothly, and productivity soars. In a workplace, well-defined roles minimise confusion and conflicts as well. Everyone understands their responsibilities, reducing the likelihood of stepping on each other's toes. Clear roles also promote accountability. When individuals know they are responsible for a particular aspect, they take ownership of their tasks, ensuring quality and timely completion. When we make sure that everyone understands their roles, that can facilitate effective collaboration. Team members understand how their contributions fit into the bigger picture, promoting a collaborative culture.

Ways of Networking

We have previously reviewed why networking is important, its benefits and why it is essential in a university environment and in supporting students. Now let's look at how we can facilitate networking and how we can make it happen.

1. First steps

Newcomers should be familiar with the structure of the system, the different departments and their responsibilities, the communication channels and, if possible, a personal meeting and

introduction to the supporting/university system members. This will serve as a good basis for further networking events and future collaboration.

2. Regular meetings and communication

Establishing regular meetings or communication channels among different university departments allows for the flow of information and updates on student progress. These channels can be mailing lists, thematic Teams groups, shared google drive or any kind of platform they agree on. These meetings also serve as platforms for sharing insights, best practises, and experiences, contributing to the overall enhancement of the mentoring process.

3. Cross-training programmes

Implementing cross-training programmes for staff members can help them understand the roles and responsibilities of colleagues in other departments, promoting a more collaborative and informed approach to student support.

4. Interdisciplinary teams

Creating interdisciplinary teams that consist of members from different departments can encourage ongoing collaboration in addressing student needs.

5. Professional development opportunities

Encouraging staff to attend workshops, conferences, or training sessions related to student support can enhance their skills and broaden their understanding of effective strategies.

6. Team building events

Team building events play a crucial role in encouraging networking among individuals within an organization. These events create a relaxed and informal setting that encourages team members to interact, communicate, and build stronger professional relationships. Trust is a fundamental component of effective networking. Team building activities, especially those that involve problem-solving and collaboration, also contribute to building trust among team members. Trust is transferable to work-related tasks and projects.

7. 'Commensality'

Sharing meals together, known as 'commensality', is a powerful way to build community within a team (Kniffin et al., 2015). Eating together and creating a supportive environment where people can talk about the meaningful and tough parts of their work is a proven way to make work more engaging and reduce burnout (West et al., 2014). It's worth thinking about this when designing a community space, so that it is both suitable and conducive to connection and communication. Such spaces could be dining areas, working corners, corridors or offices (Swensen & Shanafelt, 2017).

Intra-institutional connections

After linking the different areas and forging the university staff into a team, how can we put this system at the service of student support?

Integrated support services

First, if resources allow, we can establish centralized support services that cater to various aspects of student needs, including academic, career counselling, mental health, and extracurricular activities. We can bring together experts and professionals from all the fields above under the same institutional structure, just like ELTE Student Support Centre.

Interdepartmental collaboration

If the institution has no possibility to do so, it may be worth considering the whole institution as one big student support centre. Bearing in mind what we discussed in the previous sections, relying on each other in a well-functioning system, using each other's resources to support students. Relying on the established system and networks, it is possible to keep this system running, but it is worth considering regular arrangements to help keep it going. For example promote cross-departmental training programmes to ensure that all staff members are familiar with the range of services available and can guide students accordingly. Encourage regular meetings and workshops that bring together representatives from different departments to discuss common challenges and share best practises. Foster an environment where faculty members from various disciplines

collaborate on interdisciplinary projects, enhancing the overall educational experience for students.
Guiding students through their university career

The main goal of building such a network is to be able to guide students through their university career and prevent dropping out. To make that happen it's crucial for the mentors and everyone who participates in supporting the students to understand the entire journey they undertake during their university career. This journey includes not only academic pursuits but also administrative milestones and the diverse individuals or units they interact with. By gaining insights into these aspects, mentors can offer tailored guidance that meets students' unique needs. To understand how we can get all the different departments involved in helping a student and why it's so important that they are connected and understand each other's and their roles, let's look at an example:

Consider a scenario where a student is struggling academically and facing personal challenges. In a university with a collaborative support system:

1. Early identification

The student's academic advisor notices a decline in performance and communicates this information to the centralized support services or whoever it concerns in the support system.
Interdepartmental communication

The academic advisor collaborates with the mental health counsellor, career services, and the student affairs office to understand the holistic challenges faced by the student.
Tailored support plan

A team of professionals from different departments comes together to create a personalized support plan that addresses both academic and personal issues.

2. Continuous monitoring

The academic advisor, mental health counsellor, and other relevant staff members regularly meet to discuss the student's progress and adjust the support plan as needed.

3. Student engagement

The student receives not only academic support but also emotional and career guidance from a team that understands and collaborates on their needs.

This collaborative approach ensures that the student's challenges are addressed comprehensively, and the support team works together to provide a seamless and integrated support experience. It also creates a sense of unity among faculty and staff, reinforcing the idea that supporting students is a collective responsibility.

Sustainability principles

A strong university mentoring and support system is crucial for promoting sustainability. It creates a community where students, faculty, and mentors work together to embrace and promote sustainable practises. Through mentorship, students learn about sustainable career paths and how to bring environmental and social responsibility into their academic and professional lives. Mentors, with their knowledge in sustainable practises, help guide students in making choices that contribute to a more sustainable future. The support system also encourages the sharing of resources and ideas about sustainability. This involvement inspires a campus culture that values sustainable actions. Clear communication within the support system is vital. It not only spreads information about sustainability initiatives but also plays a key role in keeping students and staff committed to the university. By offering guidance and support, mentors help reduce dropout rates and promote staff retention—a form of sustainability that goes beyond the environment to the overall well-being of the university community. In summary, a well-organized mentoring and support system not only equips students with the know-how for sustainable practises but also fosters a campus culture that values environmental and social sustainability. This contributes to the long-term health and vitality of the university community.

2.3 Becoming a mentor (mentoring guidelines: weekly, optional meetings; organising extra-curricular events, organising informal and professional events, help with career guidance at university - in collaboration with former students and professionals)

Mentoring is an important commitment to guide and support individuals in their personal and professional development. It transcends the simple act of teaching or advising, evolving into a dynamic relationship that promotes growth and resilience. A mentor, in essence, is a guiding light, navigating the path of knowledge and experience alongside their mentees. This role holds immense responsibility and requires a diverse set of skills and qualities to effectively contribute to the success of those under their guidance.

Understanding the role of a mentor

Being a mentor involves far more than imparting knowledge; it is a holistic process that encompasses academic, social, and emotional aspects of a mentee's life. A mentor must strive to comprehend the unique needs and challenges of each student under their wing. This involves active listening, observation, and creating an environment of trust where mentees feel comfortable sharing their concerns and aspirations.

It is equally important that the mentor understands and actively uses the system mentioned earlier. An essential part of effective mentoring is to understand the academic progress of the students (course structure, semester schedule, exams and evaluations, important deadlines), their administrative tasks and the offices they are assigned to. If the mentor is able to see through and comfortably move and navigate the student through the support system, a sustainable supportive environment that is comfortable for all can be developed

Goals of a mentor's work

The goals of a mentor's work are threefold: academic integration, social integration, and preventing students from dropping out. Academic integration involves assisting mentees in navigating the complexities of their coursework, providing guidance on study strategies, and fostering a love for learning. Social integration is equally crucial, as mentors aim to create a sense of belonging for their mentees within the academic community. Additionally, mentors play a pivotal role in identifying early signs of distress or disengagement, taking proactive measures to prevent students from dropping out.

Collaboration with senior students

A mentor's work is not solitary; it involves collaboration with senior students to create a supportive network for newcomers. Senior students can offer insights into the academic landscape, share experiences, and provide valuable tips on adjusting to university life. This collaboration not only enhances the mentorship experience but also establishes a sense of camaraderie among students at different stages of their academic journey.

It is important that the mentor is open to the student's comments and can treat him/her as an equal partner in the support process.

Qualities of a good mentor

The qualities of a good mentor are diverse and encompass both interpersonal and professional skills. Empathy is foundational, allowing mentors to connect with their mentees on a personal level and understand their unique challenges. Open-mindedness is essential to appreciate diverse perspectives and tailor guidance to individual needs. Good communication skills are paramount, enabling mentors to convey information effectively and foster a healthy mentor-mentee relationship.

Organizing supportive activities

To enhance the mentorship experience, mentors can organize weekly, optional meetings to check in on their mentees' progress and address any concerns. Beyond formal meetings, extra-curricular events can provide a relaxed setting for mentor-mentee interactions, fostering a sense of community. Additionally, organizing both informal and professional events creates opportunities for mentees to expand their networks and gain exposure to various aspects of their field of study.

Career guidance and beyond

A mentor's role extends beyond the academic realm, encompassing career guidance and personal development. Providing insight into career paths, internship opportunities, and networking events contributes to a mentee's professional growth. Ultimately, a mentor strives to empower their mentees to navigate the challenges of university life and emerge as confident, well-rounded individuals ready to contribute to society.

In conclusion, becoming a mentor is a transformative journey that requires dedication, empathy, and a commitment to the holistic development of students. By actively engaging with mentees, collaborating with peers, and fostering a supportive environment, mentors contribute significantly to the academic and personal success of those they guide.

2.4 Mentor identity and how student services can be a part of it

Mentor identity in a university setting is a multifaceted concept that encompasses various roles, including mentor teachers, mentor administrators, and mentor students. The formation and strengthening of mentor identity are influenced by several factors, including the institutional environment, personal attributes, and the nature of the mentoring relationship. The formation of mentor identity is a dynamic process that evolves over time and is shaped by various experiences and interactions¹. It involves recognizing and embracing the role of a mentor and developing the necessary skills and attitudes to effectively guide and support mentees¹.

Research in higher education has demonstrated that mentoring connections improve programme satisfaction and student perseverance to graduation (Mullen et al., 2010). Mentors play a crucial role in shaping the academic identities of their mentees, providing opportunities for self-reflection and creativity (Zanchetta, 2017). They provide guidance, motivation, they serve as role models. Role modelling recognizes the value of having one or more successful academic career and life models for the mentee to take inspiration from. (Hager & Weitlauf, 2017) Stronger relationship between mentee and mentor, higher quality interactions between them is also linked to improved academic performance of the mentees (Ogunyemi et al., 2010). Mentoring can serve as a buffer as well against the negative effects of new, non-supportive environments (South-Paul et al., 2021).

There are different models how mentoring activities can be viewed. (a) mentoring as a psychosocial support system, (b) mentoring as a learning partnership, (c) mentoring as a support for career development, and (d) mentoring as a component of developmental networks. (Hager et al 2023)

Mentoring as a Psychosocial Support System focuses on the social and relational side of the mentoring, on the sense of belonging and integration into the academic environment. Kram's (1985) psychosocial functions theory and Tinto's (2012) social integration theory are supporting frameworks for this model. Tinto suggests that university students who are more involved in academic and social life are more likely to proceed with their studies and graduate.

Mentoring as a Learning Partnership model advocates making mentoring an experimental component of education. Mentoring is a learning partnership, with the mentor as a facilitator and the mentee taking on self-directed learning roles and behaviours to grow personally and professionally (Kolb, 2014).

Career Support Theory suggests that in the beginning it may be more about giving orientation, but later it is rather about learning and development via career and psychosocial support for mentees in order that they achieve their goals of academic success. (Kram, 1985)

Developmental Stages Theory highlights the aspect, that mentees develop from dependency to independence to mutual interdependence with their mentors. (Kegan, 1982)

Essential skills of mentors that help in forming their identity:

- Active listening, being open and considerate towards others.
- Creating an environment where students feel comfortable sharing their experiences and opinions.
- An open perspective and awareness of the challenges of the students and readiness to offer guidance.
- Being responsible in their role, knowing their strengths, weaknesses and boundaries.
- Respecting the personality and cultural backgrounds of the students, cultural sensitivity.
- As role models offering a level of transparency by the willingness to share own examples of their lives which can show good example and good practises how to overcome challenges and grow through them.
- Empathy and patience towards the hardships and problems of mentee students.

Often mentors tell their narratives about how they got interested and involved in mentoring, and a common ground seems to be their own experiences from their studenthood. It is likely that whether they did not have any institutional help and were left alone in the integration into their academic journey, or on the contrary they had a good example even if not an assigned mentor, but in the form of a dedicated professor, administrative staff or higher year students providing navigation and guidance.

How can the mentor identity be strengthened?

Strengthening mentor identity in the university setting involves creating an environment that supports and values the role of mentors. This can be achieved through various strategies:

Professional Development: Providing mentors with opportunities for professional development can enhance their skills and knowledge, mentoring skills, can strengthen their identity as mentors. This could include workshops, trainings, webinars or courses on effective mentoring practises. The ELTE Student Support Centre consisting of psychologists is regularly providing mentor trainings and webinars to mentor colleagues on other campuses.

Recognition and Support: Recognizing the contributions of mentors and providing them with the necessary support can reinforce their identity as mentors. This could involve acknowledging their efforts publicly or providing them with resources to facilitate their mentoring activities. In the best practise of the ELTE Student Support Centre for the mentoring classes that are part of the curriculum as obligatory courses for first year students, the mentor teachers can receive an extra supplementary working contract for the course.

Mentoring Intervision groups: There can be organized intervision groups, which means professional peer-to-peer supervision or consultation within a group of mentors which facilitates the sharing of their mentoring experiences and best practises among eachother. It is a way to enhance commitment, personal and professional development, and to strengthen the mentoring identity and community. If there is a centralized mentoring available then psychologists can take a lead on organizing it, and leading the occasions.

Regular meeting with senior students: It could help to broaden perspectives and to look at the mentoring experiences and to the issues that students struggle with from different angles and different perspectives. Student mentors can always add valuable insights from their position of being students themselves. It can facilitate the collaboration of the different members of the mentoring system.

Writing a summary of their mentoring experiences: at the end of each semester and providing it to the institution leadership. To use the feedback loops in the mentoring work, being a

flexible responsive system it is important that the mentors continuously collect their experiences, identify points that need from the institution short-or long-term solutions and they forward it to the leadership who are in charge to make the necessary changes and adjustments. This is a tool for constant quality assurance as well.

Reflecting their own practises: it is a useful tool to reflect their own mentoring practises from semester to semester, which helps them understand where they would like to develop as mentors.

Student services can play a pivotal role in strengthening mentor identity in a university setting, by coordinating the mentoring activities, organizing an umbrella mentoring. They can provide continuous professional development, skills developing trainings, opportunities to networking and offering resources.

2.5 Student's survey – gaining better understanding of students' needs and challenges in the university

Education plays a role, in today's society as it encompasses the organized pursuit of knowledge and the development of skills in individuals. The knowledge and abilities acquired through education are then utilized to tackle challenges and drive progress ultimately leading to advancements in society. When individuals receive an education, they gain the capacity to effectively navigate obstacles, which has an impact on society as a whole. Consequently, educational institutions like schools, colleges and universities have an influence on both social evolutions. Education acts as a catalyst for thinking, initiative sustained effort and the desire to make improvements.

It's important to acknowledge that educational establishments include not schools but also universities and other tertiary organizations. Additionally various social entities such as ministries, government departments, corporations and industries significantly contribute to the framework of governance. In terms higher education institutions bear the responsibility of nurturing growth by promoting abilities, strong literacy skills, physical and mental well-being ethical behaviour cultural competence adherence to norms while fostering professional skills that lead to meaningful lives. Furthermore; education instils a sense of responsibility in individuals where they become aware of their rights and obligations towards their community and country. Apart from its role in growth; education also plays a part, in creating a happy and prosperous society.

In order to truly understand students, it is important to conduct surveys or analyses to identify their needs. This step serves two purposes; gathering information and reviewing/adjusting the collected data to align it with the students' requirements much, as possible. The main goal of this process is to develop an understanding of what students need making sure that any improvements made are completely in line with their needs. The idea of conducting a needs analysis (NA) is not new in the field of education and academia. Many scholars and educators worldwide consider this approach valuable for both programme development and evaluation. It acts as a bridge between students' current achievements and their future needs. An essential aspect of NA involves incorporating learners' perspectives, which's crucial because learners invest their time, money and energy into the learning process with the expectation of an outcome. Recognizing the importance of understanding language learners needs extensive research, on NA has been conducted across contexts using methodological approaches. (Poedjastutie & Oliver, 2017) In order to understand the needs a comprehensive analysis is conducted, which is divided into areas. In the chapter we discussed how educational needs can be identified, at the individual and community levels using various research methods. The effectiveness of components, in the needs analysis depends on the conditions in that particular field. Additionally the importance of indicators and factors well, as the appropriateness of certain tools relies on the specific context. (Sava, 2012)

The way we categorize fields, in needs analysis depends on whether the entities involved demonstrate a need or are presumed to have a requirement. When it comes to needs analysis the term "subject" refers to either an individual or an organization that has a need. In this context the subject is the one who expresses and takes actions towards fulfilling those needs. The term "subject" here represents a defined entity with agency and cognitive abilities. The three main actors in identifying needs within processes are individuals, local communities and regions that initiate activities and enterprises that are responsible for identifying specific categories of needs in their strategic and operational management.

Defining the term "subject" within the context of needs analysis poses challenges. The main difficulty lies in understanding how to distinguish between what's considered part of the subjects' aspects versus its external aspects. Having an understanding of the subject is crucial, for identifying and analysing their needs. The text delves deeper into the concept of 'needs as something that varies from person to person encompassing motivation, interest and action-oriented structures. It explains that 'needs are, like a out process where they originate within individuals and then extend outward. In terms these subjective needs are primarily connected to living beings and revolve around their desire to feel good and be happy.

Understanding the subject becomes challenging when the acting subject has both internal complexities. While this issue can arise with individuals the text highlights that it becomes more evident when dealing with entities like regions or businesses which may lack boundaries or have intricate connections with the outside world. Moreover, delineating needs is crucial for analysing the environment as it plays a role in recognizing how changes and influences impact acting subjects. For individuals this means navigating a world where they take on responsibilities and engage in diverse activities. It's important to recognize the boundaries between themselves and their surroundings while considering factors such, as how things can pass through those boundaries or how interconnected there.

In the process of specifying requirements, it is crucial to define the desired path or direction, for the subject. This involves evaluating the consensus among elements involved and ensuring that it aligns with the stated needs. The target corridor, which goes beyond objectives includes a guidance option within its boundaries. Defining this corridor is influenced by analysing the subjects' actions, towards their goals and considering the environment. Throughout this process actors may identify needs that complement those already identified especially when formulating and achieving the target.

The process of analysing needs follows a shaped progression that applies to all subjects. It is a process that requires introducing new emphases and focal points related to the targeted objective, as well as continually examining the subject's environment. Conducting a survey to determine students' needs is crucial, in developing curricula or educational services. It ensures the delivery of quality education that aligns well with students' requirements. One effective approach for this endeavour is the PDCA (Plan Do Check Act) methodology, commonly known as the Deming Cycle.

During the planning phase specific objectives for the needs assessment are carefully defined. This includes selecting survey methodologies and identifying the target demographic. The execution phase involves implementing the survey according to the predetermined plan and collecting data using approaches. After acquiring data in the checking phase, a thorough analysis is conducted to evaluate survey outcomes. This facilitates comparing student's needs, with the landscape. Finally in the acting phase, based on this process necessary improvements or innovations are implemented in frameworks or educational provisions.

This comprehensive report thoroughly documents the process of transformation. By applying the PDCA cycle we create an environment of measurement and improvement. This ensures that the surveying process, which identifies students' needs remains effective and sustainable, over time.

Making questionnaire

The survey questionnaire is a component of survey methodology. Requires careful consideration in terms of defining the sample selecting the sampling technique and deciding on the method, for collecting data. (Brace, 2008). Designing a survey requires thought taking into account the necessary elements to interpret the collected data. For example, when evaluating the impact of a marketing initiative it can be beneficial to establish baseline metrics before starting the activity. This approach allows for a survey design that includes both interview stages. When considering launching product recipes important factors to consider include whether each participant should evaluate both recipes for a comparison or if respondents should be randomly assigned to one product. While this adds realism it may also introduce challenges, in interpreting the results. These crucial stages greatly influence how suitable the survey is for addressing research goals and have an impact on formulating questionnaire questions though that aspect is, beyond the scope of this discussion. Additionally, the questionnaire author must anticipate preferred analytical approaches, crafting questions to identify key analytical subgroups, such as age cohorts, user segments, and distinctions between brand loyalists and repertoire buyers. Inquiries may also be required to provide contextual information essential for understanding key metrics. For instance, understanding a dog owner's preference for the pack size of dog food depends on variables like breed, size, and the number of dogs. It is essential to recognize that the process of questionnaire writing is intricately intertwined with the broader survey methodology, with the formulation of the questionnaire influencing other survey processes, and conversely, anticipated procedures in those processes shaping the construction of the questionnaire.

As mentioned earlier the purpose of a questionnaire is to facilitate an exchange, between the researcher and participants on a scale. In conversations people choose their words based on their shared understanding, which is known as "audience design." For instance, the way we ask our grandmother a question may differ from how we ask a friend and the responses we receive are often tailored to align with what the respondents think our intentions are. However, when it comes to questionnaires it's not possible to personalize each question for participants.

In conversations both parties have opportunities to check if they understand each other by using acknowledgments like "uh huh" or "ok," asking for clarification when needed or offering explanations when there's confusion. However, in self completion questionnaires this interactive process is missing. In scenarios where interviewers are involved there are limitations, on how clarification they can provide to avoid bias. Interviewers may only be able to rephrase questions or give an idea of the level of detail required.

They are trained to avoid going into detail about words in order to minimise biases and prevent the transmission of their own misunderstandings to respondents.

The skill of creating questionnaires revolves around helping respondents provide the information possible. Questions should be clear and unambiguous ensuring a shared understanding, among all participants. The language used should be familiar and relatable matching the way respondents typically think in order to elicit answers. Researchers sometimes overlook that technical terms are often used in their field, which may lead to a lack of comprehension or different interpretations from those outside the industry. To address this researcher, need to consider whether respondents need to understand nuances during interviews. If necessary, any differences should be explained without using jargon. The tone of the questions should create reassurance so that respondents feel comfortable and not provoked or confused by the language used. Feeling alienated or fatigued can cause participants to end interviews prematurely or provide responses.

The complex issue of ambiguity makes it challenging for questionnaire writers as they carefully consider the words and phrasing, they use. While some participants may recognize ambiguity and make decisions, about how they respond others may unintentionally overlook it. Interpret the question differently than intended. Therefore, the researcher who uses the data remains unaware of why the respondent chose their answer.

Identifying ambiguity is not always easy. It is difficult to predict the circumstances of each respondent and a question that seems clear, to people may have different interpretations for a minority group based on their specific situations. For example, when asking "How many bedrooms are in your property?" it may seem like a question. The term "bedroom" can be interpreted differently. For instance, if someone uses a study as a bedroom it raises the question of whether such a space should be included in the bedroom count.

In cases this level of ambiguity may not be a concern. If counting bedrooms is used for classification purposes based on approximate residence size in analytical studies researchers might consider this level of ambiguity acceptable. However, when this information is critically important for collected data (such as, in studies focusing on housing conditions) addressing ambiguity becomes vital. This could involve expanding the question to ask about rooms currently used as bedrooms rooms occasionally used as rooms potentially designated as bedrooms.

Selection of Data Collection Mode

The choice of how data's collection important, for the person creating the survey and it usually depends on the overall design of the survey and considerations about the sample. One common consideration is the cost associated with self-completion methods, where there is no need to pay interviewers. However, it's important to balance this against the challenges of getting a sample as self-completion studies often have a tendency for people to choose whether or not to participate. This self-selection can introduce bias especially when response rates are low. While survey design and sampling are topics, they go beyond what this book covers. The focus here is on understanding the advantages and limitations that influence decision making for those creating survey questions.

Another important aspect related to choosing how data is collected is the technology used for creating questionnaires and recording responses. This decision depends on whether scripted survey software will be used, which allows recording of responses or if it will be non-scripted (usually paper based) requiring input or scanning software for data entry. The choice between non surveys has significant implications, for question writers.

Online surveys that people fill out themselves are commonly created using scripts. These types of surveys known as CAWI (Computer Aided Web Interviewing) make data collection and analysis more efficient. On the hand paper surveys that people complete, on their lack scripting and have some disadvantages. When it comes to surveys conducted by interviewers, they can choose either scripting or a paper-based approach, which affects how the questionnaire is designed.

In fact, to face interviews CAPI (Computer Assisted Personal Interviewing) is often used. This involves using a computer with a questionnaire displayed on the screen for the interviewer to follow. PDAs have also been successfully used as a self-completion tool. In Computer Assisted Telephone Interviewing (CATI) scripting plays a role to CAPI especially in telephone surveys.

Challenges Arising from the Utilization of Digital Scripting Software

When contemplating the viability of scripting a questionnaire, question writers commonly lean toward this approach, driven by a myriad of discussed advantages expected to enhance data quality, irrespective of whether the data collection mode involves scripting or follows a non-scripted/paper-based format. Nonetheless, several challenges demand consideration from questionnaire writers:

1. **Complex Script Checking:** The script employed for a questionnaire introduces challenges in terms of verification, particularly when extensive capabilities for customization through piping answers and intricate routing are fully leveraged. Thorough testing of multiple routes through the questionnaire becomes imperative to ensure accurate functionality, requiring extensive script checking of various combinations of potential answers.

2. **Transparency and Visibility Issues:** Scripted questionnaires, when compared to their non-scripted counterparts such as paper questionnaires, may present challenges in identifying issues

due to reduced transparency. Problems, such as respondent comments or overlooked sections, may be more easily discerned in non-scripted questionnaires.

3. **Real-time Edits:** The implementation of real-time edits in scripted questionnaires necessitates caution to ensure they effectively identify genuine errors without unduly constraining data based on assumptions. Setting overly restrictive allowable ranges for numerically entered data, for example, may lead to the exclusion of genuine answers outside the specified range, potentially resulting in inaccurate conclusions.

4. **International Considerations:** Questionnaires designed for multi-country studies must account for potential variations in responses. Scripted intelligence rooted in national frames of reference may fail to accommodate international differences, introducing errors in the structure and content of the questionnaire.

5. **Forward-Driven vs. Backward-Driven Scripting:** The decision to script intelligence as forward-driven (piped through based on previous answers) or backward-driven (triggered by an edit check against an earlier answer) requires thoughtful consideration. Forward-driven programming carries the risk of perpetuating early mistakes and influencing subsequent respondent exposure, potentially resulting in incomplete or biased data.

6. **'Don't Know' Option Influence:** The scripting software's requirement for an answer at each question may lead to the inclusion of a 'don't know' option to prevent respondents or interviewers from skipping questions. Explicitly offering this as a valid response, however, may incentivize its use, resulting in higher reported volumes of 'don't know' responses compared to non-scripted surveys.

7. **Recording Open-ended Responses:** While one might expect challenges in recording open-ended verbatim responses in scripted questionnaires, experiences suggest that, despite typing speed limitations, the overall level of detail in capturing verbatim responses can be maintained.

Survey method

Online self-completion

The execution of internet-based surveys encompasses diverse methodologies, each characterized by its unique approach. The delivery of questionnaires transpires either through email or by accessing a dedicated web page. Bradley (1999) classifies the principal approaches as follows:

1. **Open Web:** This strategy involves the utilization of a publicly accessible website, allowing respondents to voluntarily engage in the survey without specific invitations.

2. **Closed Web:** Under this approach, respondents are formally invited to access a designated website for questionnaire completion. Access is confined to those who have received explicit invitations.

3. **Hidden Web:** The questionnaire becomes perceptible to a visitor under specific circumstances triggered by mechanisms like a predetermined date, visitor number, or interest in a particular page. This category encompasses surveys employing pop-up mechanisms.

4. **Email URL Embedded:** Respondents receive invitations via email to visit the survey site, wherein the email includes a URL or web address. Clicking on the provided link redirects respondents to the survey questionnaire.

5. **Simple Email:** In this modality, survey questions are directly incorporated within the body of an email. Respondents can furnish their responses directly within the email interface.

6. **Email Attachment:** The survey questionnaire is dispatched as an attachment to an email. Respondents are obligated to download the attachment, complete the survey, and subsequently return it.

Each of these methodologies furnishes a distinctive approach to engaging participants in the survey process, offering flexibility and accommodating diverse preferences and technological considerations. The selection of the most suitable method is contingent upon research objectives, the target audience, and the desired level of respondent engagement.

Paper self-completion questionnaires

Traditional paper-based surveys that individuals fill out themselves are commonly sent through mail to people who are believed to be eligible or meet the criteria, for participating in a study. Recipients are often chosen based on a database, which can include customers of a business or members of an organization. In countries the national address database is comprehensive and regularly updated especially when it comes to properties. Using this database for surveys allows for an inclusive approach to reaching different types of respondents particularly when aiming for a sample that represents the entire nation. However, it's important to consider that response rates are typically low especially when respondents need to send their completed questionnaires by mail, which requires effort from them. Sometimes postal contact includes a web link provided for completing the questionnaire making use of scripted methods easier.

Moreover, paper-based surveys that individuals complete themselves also play a role in convenience sampling target populations. This involves distributing questionnaires at events or places, like hotels and restaurants where people gather.

Face-to-face interviewing

In the United Kingdom face, to face interviews were the used method for collecting data until online surveys became popular. Face to face surveys is usually chosen when a study requires a sample of the population access to reach respondents or situations that involve product demonstrations (like car clinics or test kitchens). However due to their cost compared to surveys they are not as commonly used in countries like the United States where the population is spread out. Instead face to face interviews, in countries are mostly limited to intercepting people at malls.

Telephone-administered questionnaires

Most of the benefits offered by conducting interviews, over the telephone as opposed to face to face interviews pertain mostly to considerations related to survey design than questionnaire design. Notably there are cost and time efficiencies, especially when dealing with a dispersed sample or situations like business-to-business surveys where respondents willing to participate in telephone conversations but prefer not to have in person meetings.

One advantage that contributes to data accuracy is the increased anonymity provided by telephone interviews particularly regarding the relationship between respondents and interviewers. This helps minimise biases that arise when respondents try to make impressions or save face in front of interviewers although it doesn't completely eliminate biases as effectively as not having an interviewer present at all. Researchers often find that respondents are more willing to discuss topics such as health over the phone than during face-to-face interactions with an interviewer. Telephone interviews tend to elicit responses to open ended questions and respondents are more likely to provide honest answers since there isn't a physical presence of an interviewer. As a result, telephone interviewing is preferred for interviews where an interviewer's involvement's necessary and involves subject matter.

However, from the perspective of questionnaire writers conducting interviews, over the phone has disadvantages.

Firstly, it places limitations on questions that involve providing a list of prompted answers. These questions require respondents to listen to all the options before providing their response. The lists could consist of reasons or attributes from which respondents need to select the one or they could be semantic rating scales where each point, on the scale must be understood before answering. It is important for these lists to be concise and clear enough for respondents to remember mentally. In cases where the response options lengthy or if the same lists are repeated respondents might be asked to write them down. However, it cannot be guaranteed that they will comply with this request or provide information, in doing

Process of making questionnaire

Crafting thought out questions requires a time investment as each questions importance needs careful consideration. It's crucial to ensure that the final questionnaire is of a length. Without budget constraints maintaining data quality is crucial. This can be achieved by keeping the interview

concise to keep respondents motivated in providing thoughtful responses. The order and sequence of questions can affect the reliability of the data collected. Therefore, making early decisions, on the organization and flow of questions is highly important. While future chapters will delve into the details of wording, format and layout for questions this chapter focuses on explaining how to create an outline for a questionnaire. This outline serves as a tool, for visualizing the content and structure of the questionnaire.

1. Establish a clear understanding of the core purpose and intended use of the questionnaire.

Before initiating the intricate process of designing a questionnaire, it is imperative to cultivate a profound comprehension of the foundational purpose and the envisaged application of the survey instrument. This necessitates elucidating the business imperative that underpins the research objectives. Achieving lucidity at this preliminary stage holds paramount importance in sculpting pivotal questions and judiciously deciding what elements to incorporate or exclude within the questionnaire.

2. Identify additional factors that should be taken into account during the design phase.

Beyond the primary objective, a multitude of contextual elements assumes a pivotal role in moulding the design of the questionnaire. Deliberations pertaining to the mode of data collection, financial constraints, temporal limitations, the intrinsic nature of the subject matter, attributes of the target respondents, and the potential necessity for comparability with other surveys demand meticulous consideration. These considerations provide an elemental framework guiding the subsequent intricate stages of detailed design.

3. Define the scope of the content by broadening your perspective on question areas.

Incorporating diverse viewpoints is imperative for the development of a comprehensively structured questionnaire. This step entails convening stakeholders, conceivably in a workshop dedicated to questionnaire development, to solicit varied perspectives. Each research objective should be scrutinized individually, and brainstorming sessions can assist in identifying potential dimensions or angles. The overarching goal is to explore a broad spectrum of information, ensuring that no salient aspect is overlooked before converging on a specific focus.

4. Pinpoint the three to four key questions that are absolutely critical.

While numerous questions may be regarded as useful, the identification of a subset of questions deemed genuinely critical to realizing the research objectives is essential. This process involves a meticulous evaluation aimed at determining the questions that will wield the most substantial impact. Prioritizing these key questions is imperative, given that they necessitate particular attention during subsequent stages, including effectiveness assessment, review, and optimization.

5. Develop a comprehensive questionnaire outline.

The creation of a meticulously structured outline stands as a pivotal phase involving the visualization of the overarching framework of the questionnaire. This encompasses the organization of broad topic areas in a logical sequence, identification of sections tailored for specific groups, ensuring a coherent arrangement of questions within each section, accentuating the position of key questions, determining question types, setting pertinent limits, anticipating visual cues, estimating time allocations for each section, aligning questions with objectives, and ensuring equilibrium in terms of questions and timings in relation to priority objectives.

6. Obtain approval for the questionnaire outline from end-user stakeholders.

Securing the support and approval of stakeholders who will ultimately use the survey results is a step, in the development of questionnaires. By gaining endorsement for the questionnaire outline we can minimise last minute requests or changes. This stage sets the foundation for a process aligning the expectations of end users and facilitating a transition to the next phase of detailed question development.

The strategic arrangement of questions in a survey is an aspect of questionnaire design. It is generally recommended to progress from broader to topics. Starting with questions about general market behaviour then moving on to inquiries about clients' products and concluding with discussions about ideas for their products follows this overarching principle. There are two reasons behind this approach.

Firstly, including product or brand related questions at the beginning may make respondents aware of our focus potentially biasing their responses to market related questions that are more broadly oriented. They might overemphasize that product or brand in their answers. Secondly respondents often show enthusiasm, towards market related topics compared to researchers and clients.

When it comes to answering questions, about a brand or product it can be challenging. To make things easier for respondents it's an idea to start the survey with general questions. This helps them remember their experiences and opinions about brands and products before diving into queries. Course there may be exceptions depending on the research goals. If any deviations are made from this approach, it's important for the questionnaire writer to explain why.

Another important aspect to consider is where to place questions in the questionnaire. It's beneficial for respondents to answer some questions related to the topic before facing inquiries. This way they can immerse themselves in the subject matter. Provide thought out responses. However, timing is crucial when it comes to asking these questions. They should be posed while respondents are still actively engaged with the survey so as not to risk boredom or lack of attention. For instance, customer satisfaction surveys often show ratings when key questions are asked late in the survey. This highlights how the process of completing a questionnaire can significantly influence responses to questions. Therefore, careful consideration in questionnaire design is essential, for maintaining survey results.

Question type

Question types are categorized based on fundamental characteristics, with the primary classification revolving around the nature of the question:

Open or closed

This classification discerns whether the response can originate from an infinite or, at the very least, an unknown spectrum of answers, or if it must be selected from a closed or finite set of possibilities.

Open-ended questions invariably aim to extract spontaneous, unprompted responses. In a conversational context, an individual seeking to initiate discourse on a particular subject employs an open question. The nature of responses to open questions can range from concise answers, such as the respondent detailing the items consumed for breakfast, to more extensive narratives, where respondents articulate their thoughts in their own words, particularly when responding to inquiries like, 'Why do you prefer consuming a specific brand of breakfast cereal over others?'

Responses to open questions can be recorded in an open-ended format, capturing verbatim expressions. Alternatively, in interviewer-administered surveys, a pre-coded list of commonly provided responses may be supplied to the interviewer for coding purposes. However, this necessitates swift and accurate matching of the respondent's answer to the available codes. It is imperative for the questionnaire writer to ensure that the code list is lucid, comprehensive, unambiguous, and easily navigable for the interviewer.

Conversely, closed questions have a tendency to curtail conversation as they typically elicit a foreseeable and often limited set of responses. Questions demanding a binary response, such as a simple 'yes' or 'no,' fall under the category of closed questions. However, such questions do not contribute to expanding a conversation. For instance, an evening spent with a new acquaintance may not unfold productively if dominated by closed questions.

Prompted or spontaneous

In this context, the distinction lies in whether the question displays potential answer options or requires respondents to generate answers without predefined choices.

A spontaneous question lacks a predefined list of potential responses, distinguishing it from questions that offer predetermined answer options. While all open-ended questions share a spontaneous quality, it is crucial to acknowledge that not all spontaneous questions are inherently open-ended, as elucidated earlier.

Spontaneous questions find justification in scenarios where the questionnaire writer:

- lacks insight into the expected range of responses;
- seeks to document the respondent's answer in their own language; or
- intends to stimulate independent thought in the respondent without offering explicit guidance.

Open-ended or pre-coded

This classification hinges on whether the response is documented verbatim or matched against a predefined list of possible answers. It's crucial to note that a pre-coded list is applicable to spontaneous questions only when administered by an interviewer and concealed from the respondent.

An open-ended question, frequently employed interchangeably with open inquiries, affords participants the opportunity to provide their spontaneous responses without being limited to predefined answer options. This approach is not suitable, for or no questions, which are referred to as "unstructured" or "free response." These types of questions serve purposes, such as capturing responses avoiding assumptions understanding subtle language nuances and gathering comprehensive information for reports or presentations.

Ended questions cover a range of topics and delve into opinions about product preferences, spontaneous descriptions of product visuals or advertisements explanations behind product/service selections, exploration of motivations for specific actions and soliciting recommendations for improvements.

However, ended questions also have limitations. Respondents may struggle to articulate their feelings leading to use of responses like "nothing" or "don't know," especially when expressing negative emotions. The absence of predefined answer options can sometimes lead to misinterpretations or selective answers. In surveys conducted by interviewers' errors can occur during the recording and transcription processes potentially introducing inaccuracies. Analysing ended responses requires time and financial resources due, to its resource intensive nature.

The issue of respondents being too wordy raises concerns, about the fairness of analysis leading to suggestions that we should only focus on the responses, from those who're verbose. To encourage participants to provide answers we often use measures and probing techniques.

Satisfaction survey to understand students' need

The university uses satisfaction surveys to understand and meet the needs of students. These surveys cover aspects well as services and facilities provided. Students are given the opportunity to express their thoughts on a range of topics from their experiences, with transportation services to their opinions on brands of tomato ketchup and their views on foreign aid policies. However, it can be challenging to measure emotions and perceptions that may not have been previously considered or expressed making it more complicated than measuring data.

In the field of business administration students are seen as customers or clients of the university. As part of customer service practises students may be asked to participate in customer satisfaction surveys. These surveys come in formats, such as cards for customers to fill out or more extensive studies conducted online or through telephone interviews. One common feature of these surveys is the use of rating scales for assessment.

Rating scales are tools that allow customers to assess services based on attributes in a relatively straightforward manner. For researchers analysing the results the interval properties of the data enable them to calculate scores and make comparisons, across dimensions.

The analytical toolkit encompasses correlation and regression analyses which involve incorporating data from measures.

While performance ratings provide a way to track changes over time a key consideration is the connection, between reported performance and customer expectations. For example, a "good" rating might be seen as news for a two-star hotel but might be considered subpar for a five-star establishment where excellence is expected in all aspects. The challenge lies in understanding whether customers take these expectations into account when completing satisfaction questionnaires. Moreover, services of the quality could receive a "rating in a two-star hotel but be deemed as "poor" in a five-star hotel due to differing expectations. It would be unwise to assume that these factors remain constant since ratings may decline despite service quality, influenced by the arrival of competitors that reshape customer expectations. Another crucial responsibility for questionnaire developers is determining the number and level of detail for assessment items. In the field of customer satisfaction research items are often categorized based on factors such as the cleanliness of accommodations the effectiveness of call centre representatives, in addressing inquiries or the user friendliness of website design.

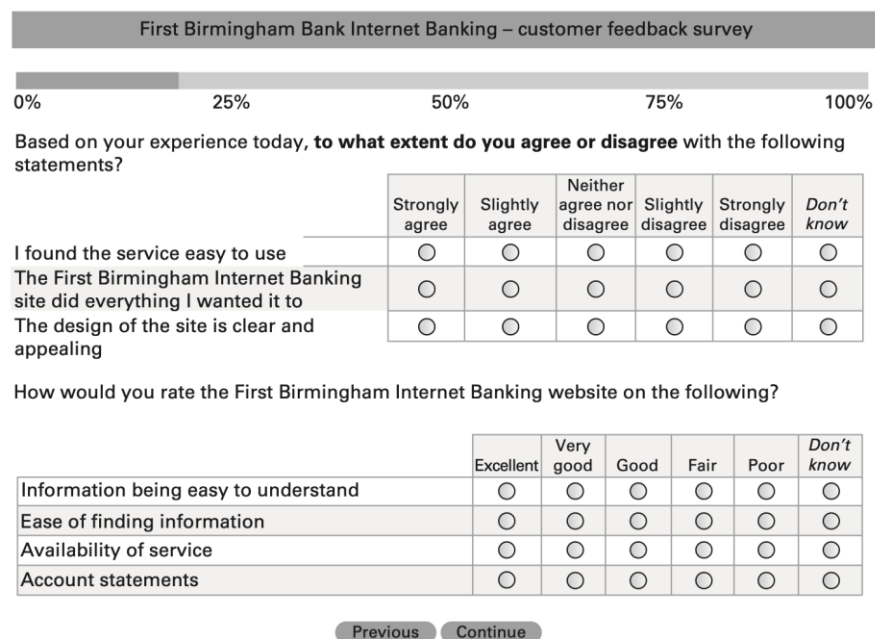


Figure 2.1 Example of assessing the absolute performance of an internet banking website

In the example mentioned earlier the person creating the questionnaire has chosen to examine how well the internet banking website performs. One notable aspect is that in the section they included a question, about customer needs, which goes beyond evaluating specific performance metrics of the site. It's worth noting that for the three attributes they used a disagree scale for assessment while for the next four attributes they used a scale ranging from excellent to poor. Both scales have five points, which may lead researchers to compare these two sets of attributes. However, assuming that a 'strongly agree' response, to "the design of the site's clear and appealing" means an excellent assessment of the sites design and clarity might not be universally valid. This highlights why it's crucial to interpret data when formulating questionnaires.

In the realm of student services evaluating performance ratings is crucial, for keeping an eye on progress over time. When it comes to this evaluation process it's important to establish a connection between the communicated performance and the various expectations students have. This becomes particularly significant in institutions that offer a range of services to cater to different needs and preferences.

One key aspect that needs highlighting is the nature of performance ratings. What may be considered "good" for a student service may not align with the expectations set for a specialized or

premium service. To put it in perspective imagine giving feedback to a two-star hotel which would be seen as noteworthy. That same rating would be seen as substandard for a five-star establishment where excellence is expected in every aspect of service.

Understanding how students perceive and align their expectations with communicated performance poses a challenge. This raises questions about how thought students give to their specific expectations when providing feedback through satisfaction questionnaires. Are their evaluations based on the merits of the service. Are they influenced by preconceived notions, about what they think the service should deliver?

Furthermore, the variability intrinsic to expectations introduces an additional stratum of complexity to the evaluative milieu. A service appraised as "good" in a conventional context might be appraised as "poor" when subjected to scrutiny in a disparate setting characterized by loftier expectations. Contemplate a scenario wherein a service garners a favourable rating within the confines of a two-star facility, only to be regarded unfavourably when juxtaposed against the heightened standards expected in a five-star establishment.

It would be judicious to eschew presumptions of the constancy of these factors and expectations over time. The educational milieu is dynamic, and the advent of new competitors or alterations in the educational landscape can effectuate a recalibration of student expectations. Consequently, fluctuations in service ratings may transpire not necessarily due to a deterioration in service quality but rather owing to the evolution of expectations influenced by extrinsic factors.

A pivotal onus incumbent upon those engaged in the formulation of student service questionnaires is the discernment of the optimal quantity and granularity of assessment items. This necessitates a nuanced comprehension of the multifaceted dimensions characterizing student experiences. In the realm of student satisfaction research, items are conventionally categorized based on variables such as the cleanliness of accommodations, the efficacy of academic support services, the responsiveness of administrative staff, or the user-friendliness of online platforms.

For example, one cluster of assessment items might focalize on the efficiency and efficacy of academic support services. This could encompass inquiries pertaining to the accessibility of resources, the responsiveness of instructors, and the perspicuity of communication regarding academic processes. Another set of items might delve into the accessibility and user-friendliness of online platforms, reflecting the escalating significance of digital tools in the educational domain.

Furthermore, the scrutiny of the cleanliness and upkeep of physical spaces on campus is often undertaken, acknowledging the pivotal role of the environment in shaping the overall student experience. This might encompass considerations such as the condition of classrooms, libraries, and communal areas. Fundamentally, the objective is to encapsulate the holistic student experience, recognizing that satisfaction emanates from a confluence of factors transcending the purely academic sphere. The infusion of open-ended questions into the questionnaire design stands poised to confer augmented profundity to the comprehension of student experiences. These qualitative insights have the potential to unveil facets that may elude capture by standardized rating scales. Students might articulate sentiments concerning the sense of community on campus, the efficacy of communication channels, or the influence of extracurricular activities on their holistic satisfaction.

As the terrain of education continues its evolutionary trajectory, so too do the expectations of students. The burgeoning prevalence of remote and online learning, for instance, has introduced a novel set of considerations. Students may now scrutinize the accessibility and efficacy of virtual learning environments, the quality of online resources, and the responsiveness of support services in the digital milieu. Moreover, the pivotal role played by administrative staff in addressing student inquiries and concerns emerges as a pivotal dimension of the student experience. Consequently, the evaluation of the effectiveness of administrative services assumes critical significance within the overarching satisfaction questionnaire. Students may proffer insights into the clarity of communication, the expeditiousness of problem resolution, and the accessibility of administrative support.

It is imperative to acknowledge the diversity inherent in the student service landscape, encompassing varied needs across disparate academic disciplines and echelons of study. Consequently, developers of questionnaires must tailor their approach to ensure that assessment items are germane and reflective of the distinctive experiences of students undergoing diverse programmes and traversing distinct stages of their academic odyssey.

An additional facet deserving contemplation is the temporal dimension of satisfaction assessment. Student expectations and experiences are wont to evolve over the course of their academic sojourn. Thus, the implementation of periodic assessments at pivotal junctures, such as the culmination of each semester or academic year, avails a more dynamic apprehension of the mutability characterizing the landscape of student satisfaction.

In summation, the evaluation of student service performance constitutes a multifaceted enterprise necessitating a nuanced apprehension of the dynamic interplay between reported performance and the ever-evolving expectations of students. The challenges intrinsic to this undertaking reside in disentangling the manner in which students align their expectations with communicated performance and discerning the variabilities inherent to these expectations across diverse services and contexts. Developers of questionnaires assume a pivotal role in this process, tasked with ascertaining the optimal quantity and granularity of assessment items to encapsulate the diverse dimensions characterizing the student experience. The integration of open-ended questions and an acknowledgment of the evolving educational landscape contribute substantively to a comprehensive comprehension of student satisfaction. As the educational paradigm undergoes continual metamorphosis, so too must the methodologies for assessing and augmenting the student service experience, ensuring its alignment with the expectations of a heterogeneous and dynamic student cohort.

2.6 Effective feedback mechanisms from students to improve student services

The implementation of efficacious feedback mechanisms within educational institutions is an imperative undertaking, directed towards the enhancement of student services and the cultivation of a positive and conducive learning milieu. This complex process involves the deployment of diverse channels for soliciting feedback, the perpetuation of regular survey initiatives, the integration of real-time feedback mechanisms, and the cultivation of an institutional culture inclined towards viewing feedback as an ongoing refinement process.

At the core of robust feedback systems lies the provision of a myriad of channels through which students can articulate their perspectives and concerns. These conduits encompass various modalities, such as online form submissions, suggestion repositories, electronic mail platforms, and dedicated feedback sessions. By affording options for both anonymous and non-anonymous feedback provision, institutions foster a culture that esteems candid expression, wherein students feel empowered to convey their insights without apprehension of reprisal. This commitment to diversifying feedback channels establishes the groundwork for a resilient and comprehensive feedback framework.

Regular surveys, constituting an indispensable facet of the feedback apparatus, play a pivotal role in the comprehensive evaluation of various facets of student services. These surveys traverse a broad spectrum, encompassing realms from academics and infrastructural provisions to support services and extracurricular activities. The imperative of sustaining surveys characterized by conciseness and precision is non-negotiable, as this not only amplifies response rates but also ensures that the insights procured are both meaningful and amenable to actionable interventions. The cultivation of a perceptible linkage between student feedback and tangible institutional

enhancements, thereby instigating a constructive feedback loop, contributes substantively to sustained student engagement in forthcoming survey initiatives.

Real-time feedback mechanisms, positioned as an indispensable adjunct to conventional feedback avenues, confer immediacy to the feedback solicitation process. Technologies including mobile applications and online platforms facilitate expeditious polls and concise surveys, simplifying the provision of timely feedback by students. The integration of real-time feedback not only attests to institutional responsiveness but also capitalizes on technological proclivities, resonating effectively with the preferences of the contemporary, technology-savvy student demographic.

Crucially, the assimilation of student feedback into decision-making processes forms the bedrock of any efficacious feedback infrastructure. Educational institutions must unequivocally evince a bona fide commitment to perpetual improvement by actively incorporating and implementing changes predicated upon the feedback received. This dual-channel communication, wherein students tangibly witness the consequential impact of their contributions, reinforces the perception that their perspectives are esteemed, thereby further motivating sustained engagement in the feedback loop.

The cultivation of a feedback-embracing culture necessitates the establishment of designated spaces and occasions wherein students can articulately express their experiences and recommendations. Regularly convened forums, town hall meetings, or structured feedback sessions serve as platforms for judicious dialogue. The facilitation of these sessions in a manner conducive to open and candid communication is paramount. Concurrently, the training of faculty and staff in the art of receiving and responding to feedback in a constructive manner contributes substantively to the creation of an environment wherein both laudatory and critical feedback are accorded a salient role, fostering a collaborative and nurturing learning ambiance.

Clear and unambiguous communication regarding the purpose of feedback assumes pivotal importance in the cultivation of trust and transparency. Students must be cognizant of the trajectory whereby their feedback contributes to the amelioration of student services and overarching learning experiences. Periodic elucidations of alterations implemented in direct response to feedback not only underscore the valorisation of student input but also serve as a testament to the institutional dedication to perpetual refinement.

The incorporation of technology for streamlined feedback solicitation and analysis is an indubitable cornerstone of contemporary feedback mechanisms. Data analytics tools wield the capacity to discern trends and patterns within student feedback, engendering nuanced insights conducive to targeted enhancements. The integration of technological modalities into the feedback framework not only expedites data compilation but also fortifies the institutional agility to adapt and respond to evolving student requisites.

Acknowledging and commending students for their instrumental role in augmenting student services represents a pivotal motivational catalyst. The instantiation of incentive programmes, characterized by nominal rewards or recognition certificates, not only manifests institutional acknowledgment of the worth of student feedback but also serves as a tangible incentive impelling sustained and active participation in the feedback continuum.

The conceptualization of feedback as an iterative and perpetual enhancement process, rather than a singular and sporadic initiative, constitutes an imperious imperative for the instantiation of a dynamic and student-centric learning milieu. The recurrent reassessment and calibration of feedback mechanisms, contingent upon the mutable exigencies of the student demographic, warrant that the feedback processes remain germane and efficacious. This iterative paradigm resonates harmoniously with the dynamic vicissitudes intrinsic to educational environments, underscoring the institutional dedication to remaining attuned and responsive to student concerns and aspirations.

In conclusion, the establishment of robust feedback mechanisms in educational institutions transcends a mere unidimensional pursuit and entails a multifaceted process. This

process spans the provision of diverse channels for feedback, the systematic conduct of regular surveys, the integration of real-time feedback mechanisms, and the cultivation of an institutional ethos that perceives feedback as an iterative and continuous refinement process. Through the active incorporation of student feedback into decision-making processes, the judicious leveraging of technology, and the explicit acknowledgment of the value inherent in student contributions, institutions can inaugurate a responsive and student-centric learning environment in consonance with the fluid requisites of the student populace.

Summary

This comprehensive section explores the importance of networking and relationships within the institution in the context of effective mentoring within the university. It emphasises that the university is seen as a united community with common goals, particularly in supporting and preventing student drop-out. The discussion covers the goals of networking, ways to facilitate networking, the role of relationships within the institution, and the integration of sustainability principles into mentoring frameworks. It also details how a collaborative support system can accompany students throughout their university journey and prevent drop-outs, ultimately contributing to the overall sustainability of the university community. The paper concludes with an outline of the responsibilities and attributes of mentors, and practical steps for organising support activities and providing career guidance to mentored students.

Mentoring in academia offers numerous benefits. It's crucial to develop diverse, high-quality relationships. It's a dynamic process that involves various functions and types of mentoring, including career and psychosocial. Mentoring focuses on developing knowledge, skills, and abilities, as well as cultivating networks of people and communities, social influence (Zagenczyk et al., 2008) processes and a catalysator for identity development.

Discussion questions

1. How can the principles of social identity theory be effectively applied in fostering a sense of unity and collaboration within a university community?
2. In what ways can regular meetings and communication channels among university departments contribute to the flow of information and enhance the mentoring process?
3. How might interdisciplinary teams positively impact the effectiveness of student support services within a university setting?
4. Discuss the potential challenges and benefits of implementing cross-training programmes for university staff members to enhance their understanding of colleagues' roles in different departments.
5. How can a mentor strike a balance between academic integration, social integration, and preventing student dropout, considering the diverse needs of mentees?
6. Explore the role of career guidance in a mentor's responsibilities and its impact on the professional development of students.
7. In what ways can mentor-organized team building events and 'commensality' contribute to building a sense of community within a university support system?
8. How might the integration of sustainability principles in mentoring contribute to creating a campus culture that values environmental and social responsibility?
9. Discuss the challenges and benefits of relying on intra-institutional connections to establish centralized support services for students.
10. How can mentors collaborate with senior students to create a supportive network for newcomers, and what benefits can this collaboration bring to both mentors and mentees?

11. What kind of level mentoring do you aim to implement in your institution? (Basic, Multi-level, Centralized)
12. Who are you planning to involve in the mentoring system and what kind of roles do you delegate to them? (professors, coordinators, administrator, students)
13. What will be the frames of the mentoring?
14. How do you plan to train mentors and senior students?
15. How do you plan to select senior students?
16. How will you ensure the continuous quality assurance for the participants of the mentoring network?
17. How do you plan to use feedback loops in the development of the university provided student services?

References

- Hager, M. J., & Weitlauf, J. (2017). How can developmental networks change our view of work-life harmony? *The Chronicle of Mentoring and Coaching*, 1(Special Issue 10), 894–899.
- Hager, M. J., Hales, K., & Domínguez, N. (2023). Recognizing Mentoring Programme Identity and Applying Theoretical Frameworks for Design, Support, and Research. In *Making Connections* (Chapter 2). Paper 4.
- Kniffin, K. M., Wansink, B., Devine, C. M., & Sobal, J. (2015). Eating together at the firehouse: How workplace commensality relates to the performance of firefighters. *Human Performance*, 28(4), 281-306.
- Koh, M. Y. H., Khoo, H. S., Gallardo, M. D., & Hum, A. (2020). How Leaders, Teams and Organisations can prevent Burnout and build Resilience: A thematic analysis'. *BMJ Supportive & Palliative Care*.
- Kolb, D. A. (2014). *Experiential learning: Experience as the source of learning and development*. FT Press.
- Kram, K. (1985). *Mentoring at work: Developmental relationships in organizational life*. Scott Foresman.
- Minam, H., & Tanaka, K. (1995). Social and Environmental Psychology: Transaction between Physical Space and Group-Dynamic Processes. *Environment and Behavior*, 27(1), 43-55. <https://doi.org/10.1177/001391659502700104>
- Mullen, C. A., Fish, V. L., & Hutinger, J. L. (2010). Mentoring doctoral students through scholastic engagement: Adult learning principles in action. *Journal of Further and Higher Education*, 34(2), 179–197. <https://doi.org/10.1080/03098771003695452>
- Ogunyemi, D., Solnik, M. J., Alexander, C., Fong, A., & Azziz, R. (2010). Promoting residents' professional development and academic productivity using a structured faculty mentoring programme. *Teaching and Learning in Medicine*, 22(2), 93–96. <https://doi.org/10.1080/10401331003656413>
- Pommerening, A. (2021). Empowering Researchers: Academic Mentoring. In *Staying on Top in Academia: A Primer for (Self-) Mentoring Young Researchers in Natural and Life Sciences* (pp. 1-21). Cham: Springer International Publishing.
- Scheepers, D., & Ellemers, N. (2019). Social identity theory. *Social psychology in action: Evidence-based interventions from theory to practise*, 129-143.
- South-Paul, J. E., Campbell, K. M., Poll-Hunter, N., & Murrell, A. J. (2021). Mentoring as a buffer for the syndemic impact of racism and COVID-19 among diverse faculty within academic medicine. *International Journal of Environmental Research and Public Health*, 18(9), 4921.
- Swensen, S. J., & Shanafelt, T. (2017). An organizational framework to reduce professional burnout and bring back joy in practise. *Joint Commission journal on quality and patient safety*, 43(6), 308-313.

- Tajfel, H. (1978). The achievement of inter-group differentiation. In H. Tajfel (Ed.), *Differentiation between social groups* (pp. 77–100). London: Academic Press.
- Tinto, V. (2012). *Leaving college: Rethinking the causes and cures of student attrition*. University of Chicago Press.
- West, C. P., Dyrbye, L. N., Rabatin, J. T., Call, T. G., Davidson, J. H., Multari, A., ... & Shanafelt, T. D. (2014). Intervention to promote physician well-being, job satisfaction, and professionalism: a randomized clinical trial. *JAMA internal medicine*, 174(4), 527-533.
- Wilder, D. A. (1981) Perceiving persons as a group: Categorization and ingroup relations. In D. L. Hamilton (Ed.), *Cognitive processes in stereotyping and intergroup behavior* (pp. 213-257). Hillsdale, NJ: Erlbaum.
- Zagenczyk, T. J., Gibney, R., Murrell, A. J., & Boss, S. (2008). Friends don't make friends good citizens, but advisors do. *Group & Organization Management*, 33, 760–780.
- Zanchetta, M.S., Bailey, A., Kolisnyk, O., Baku, L., Schwind, J.K., Osino, E., Aksenchuk-Metersky, K., Mehari, N., Babalola, O., Christopher, J.J., Hassan, A., Leong, N., Mohamed, M., Nemhbard-Wedderbrun, P., Rodríguez, A.R., Sales, R., Salvador-Watts, L., Santiago, L., Sizto, T., Stevenson, M., & Yu, L. (2017). Mentors' and mentees' intellectual-partnership through the lens of the Transformative Learning Theory. *Nurse education in practise*, 25, 111-120 .
- Bennett, J., Owers, M., Pitt, M., & Tucker, M. (2010). Workplace impact of social networking. *Property Management*, 28(3), 138-148.
- Lumpkin, A. (2011, October). A model for mentoring university faculty. In *The educational forum* (Vol. 75, No. 4, pp. 357-368). Taylor & Francis Group.
- Van Zyl, A. S. (2009). The impact of Social Networking 2.0 on organisations. *The Electronic Library*, 27(6), 906-918.

CHAPTER 3: SUPPORTIVE INTERVENTION AND DROP-OUT

In this chapter we will discuss the vital issue of preventing student dropout in higher education, and the key role mentoring can play in such programmes, by introducing the programme at Eötvös Loránd University's Student Support Centre, featuring a mandatory soft skills development course and a mentor programme. We aim to share practical experiences and best practises, highlighting the essential role of mentors in supporting students and preventing dropout. Additionally, we will explore supportive interventions in various contexts, from one-on-one interactions to group settings, showcasing effective strategies like mentor classes and team-building events, while underlining the significance of these interventions in creating a connected university community that extends beyond academic support. It also focuses on communication skills for mentors, emphasizing assertive communication and addressing diverse communication styles and language barriers. We will close out the chapter by stressing the importance of a safe environment, effective conflict resolution, and mental health first aid training for mentors. Additionally, the effective practise to deal with student issues immediately, design thinking, is also concluded.

3.1 Discussing good practises in order to prevent dropout

The investigation and prevention of student dropout in higher education are vital considerations for institutions, with established models like emphasizing the pivotal role of student-institution interactions, academic and social integration, personal characteristics, and commitment. The correlation between social and academic integration underscores the importance of community building and faculty-student interactions. Beyond individual success, preventing dropout has broader implications, contributing to the financial sustainability of educational institutions, enhancing their reputation, and fostering a self-sustaining academic model. This section explores the imperative of studying and preventing dropout, delving into literature, key factors influencing dropout, and the potential benefits of proactive intervention.

Tinto's exploratory model of student attrition is widely recognized as a fundamental framework for understanding the factors that contribute to student departure from higher education institutions (Tinto, 1975, 1998, in Takács, 2022). This model emphasizes the critical role of student-institution interactions, particularly in terms of academic and social integration, as well as other key factors such as personal characteristics, experiences, and commitment.

In addition, Pascarella and Terenzini (1983, in Takács, 2022) highlighted the significant correlation between social and academic integration, including peer relationships and interactions with faculty members, and their impact on academic success. Braxton et al. (2004) further emphasized the importance of community on campus as a key component of social integration, and the need for developing relationships between students. Interactional theories suggest that building connections between students and their institutions is crucial for promoting student persistence and success. University engagement, collaboration with students, and performance are also critical factors that can influence a student's decision to persist in their studies or lead to dropout.

The performance of students after their first academic year is also of significant interest, with HEFCE (1997 in Takács, 2022) finding that the lack of student engagement in academic life and unpreparedness are mainly responsible for dropouts after the first highly critical period. Cook and Leckey (1999) also emphasize the importance of developing new attitudes among first-year students, as they are considered the most vulnerable at the early stage of their academic career.

As academic dropout is a well-known phenomenon that requires analysis and intervention, this could result in significant savings for both governments and students (Bernardo et al., 2017). By lowering the rate of attrition and retaining the students who already take part in the university

programme, institutions could contribute to the development of a more financially sustainable and self-sustaining model of higher education. Working on the prevention of the dropout of students from HEIs could lead to a more financially sustainable way of operating by retaining the tuition revenue, reducing recruitment and marketing costs, and enhancing the reputation of the institution, which can, in turn, attract more students. All of which increasing the chance of receiving valuable alumni contributions, potentially qualifying for government funding or winning esteemed tenders. In summary, preventing dropout in higher education is not only beneficial for students but also for the financial health and sustainability of educational institutions. It allows them to maintain consistent revenue streams, optimize resource allocation, and enhance their overall reputation.

Additionally, by lowering the rate of dropout and retaining talented scholars, HEIs are more likely to nurture and educate their students into becoming the next generation of academics of their field and even take their place among the professors of the institution thus contributing to a self-sustaining academic model.

Based on the literature on the topic of attrition in HEIs, Takács (2022) states that it is imperative for institutions to thoroughly examine the phenomenon of academic dropout and consider implementing a variety of prevention strategies in order to successfully intervene. A deeper examination of the problem reveals that preventive actions can be taken which could yield considerable benefits (Aljohani, 2016). A successful dropout prevention programme should provide students with ample opportunities and support in order to reduce dropout rates and increase student success. To achieve this end such programmes should engage community organizations and institutions as collaborators beyond the typical school day. Additionally, prevention programmes should contain components that strengthen the personal and social skills of students, such as those outlined by Durlak et al. (2010) and Huang & Dietel (2011).

To tackle the issue of student dropout, a programme was implemented at the Student Support Centre of the Faculty of Informatics at Eötvös Loránd University with a proactive approach aimed at retaining students (Takács, 2022). Our project suggests a novel concept for a prevention and promotion programme designed for computer science (CS) students. In the realm of higher education literature, this concept is relatively recent, and a comprehensive programme for all first-year students is not widely recognized. The programme includes a mandatory course for all first-year students of the faculty conducted by psychologists and peer counsellors in groups of 20 students with the focus of soft skills development and community building. In addition, a mentor programme was introduced, which involves assigning peer mentors to support and guide new first-year students, fostering their success at the university. Each group is assigned both a peer mentor and a mentor teacher, with regular weekly meetings. As part of the buddy programme, students share their challenges with teachers and peers, who then assist them in navigating university life.

In the following subsections of this chapter, we aim to share our hands-on experiences and best practises used in the aforementioned mentor programme. Mentors can act as a key part of a supportive network in the development of services that the literature connects to dropout prevention such as community building, facilitating of goal-oriented learning strategies, social integration, and forging a strong connection between students and their HEIs. We believe that by supporting mentors in their soft-skill development and providing them with a well-rounded understanding of how best to help their mentees they will play a crucial part in the prevention of dropout in their institutions.

3.2 Basics of supportive intervention

Mentoring, a practise involving the guidance and support of students and the advancement of career goals, has been widely recognized as a valuable complement to teaching in the realm of higher education (Daloz, 1986, in Darwin & Palmer, 2009). There are different ways we can describe and categorize the role and function of mentoring and it is important to take some into consideration

before delving into the details on what type of supportive interventions a mentor can lead. Kram (1983, in Strokes, 2003) identifies two primary categories of mentoring, namely career and psychosocial functions, and the associated skills required for each of these categories are presented in Table 3.1.

Table 3.1 The functions of mentoring (Kram, 1983, in Strokes, 2003)

Career functions	Psychosocial functions
Sponsorship	Role modelling
Exposure and visibility	Acceptance and confirmation
Coaching	Counselling
Protection	Friendship
Challenging assignments	

Meanwhile Clutterbuck and Megginson (1999, in Strokes, 2003) proposed that mentors are capable of assuming various roles in the mentoring relationship at different stages. The table below outlines the various roles they identified. Based on this theory, when the mentor perceives emotions in the mentee's dialogue, they should adopt a person-centred counselling stance by asking reflective questions and validating the mentee's feelings. However, when practical guidance, advice, or challenges are required, the mentor should draw upon their own experiences and adopt a different orientation, such as that of a sounding board or coach.

Table 3.2 Different roles identified in mentoring (Strokes, 2003)

Role	Brief description
Sounding board	Someone independent and uninvolved, who can give honest feedback based on experience
Critical friend	Someone willing and able to speak truth to power, to say openly the things that colleagues are reluctant to expose, either from embarrassment, fear, politeness or malice
Listener	Someone who simply listens
Counsellor	An empathetic listener who uses reflective and questioning skills to help the mentee to analyse their own problems
Career advisor	Someone who helps the executive think through career options and plan personal development for career goals
Networker	Provides access to useful networks
Coach	Helping to make specified personal change happen at a behavioural level within a specified time limit

Clutterbuck and Megginson (1999) emphasize in their book on executive mentoring that a significant aspect of mentoring involves utilizing skills commonly associated with counselling, such as being an empathetic listener" and possessing "reflective and questioning skills" to help the executive objectively analyse problems and opportunities. This connection between the skills used by professional counsellors and mentors is frequently noted in mentoring literature.

Both in the literature of counselling and mentoring researchers have found common links between the skills needed for successful counselling and mentoring such as the following (Strokes, 2003):

- Attentive listening
- Accurate understanding
- Ability to understand the viewpoint of another person
- Ability to articulate what one has heard and understood
- Skill in paraphrasing
- Skill in summarizing another's concerns expressed through conversation
- Re-affirming
- Reflecting
- Understanding
- Summing up
- Provision of emotional support
- Confirmation
- Caring
- Sharing
- Emotional assistance

Other than the obvious question of the topic of mentoring and the competence of the helper some of the important differences that might help in distinguishing between the two are the specific characteristics of mentoring. For example, mentoring literature stresses the importance of being 'human' and that mentors do not need to be perfect, only human, referencing to the less structured aspect of a mentoring relationship (Alred & Garvey, 2000).

The similarities in counselling and mentoring might be confusing regarding how far a mentor's competencies and capabilities reach. We find that following Wiegersma's model of counselling can be helpful when deciding how to best support a student and when to ask for the help of professionals working with mental health. Wiegersma classifies the forms, levels and functioning of counselling (Karner, 2010), and at the same time defines its boundaries. He describes five levels of counselling, where each level is assigned a degree of difficulty of the problem and indicates the suggested level of intervention and method of intervention. Wiegersma's model is very useful in counselling, as it considers rather than problem definitions and diagnostic approaches he considers decision-making as the basic model of human problems, the quality of the decision and the trigger of the crisis determining the form of intervention (Lisznyai, 2009, in Karner, 2010) (Table 3.3). In the context of counselling, the notion of psychological counselling emerged as a specialized practise exclusively conducted by psychologists in various counselling domains. This type of counselling demands specific training, a requirement, which in Hungary, as in other parts of the world, is fulfilled through specialized programmes within the broader training of psychologists.

As Table 3.3 shows below the first and second levels of consultations can be provided by professionals in supportive roles if they have been trained in the skills needed to fulfil their role. However, from levels 3 to 5 only psychologists and psychotherapists are competent in providing sufficient support.

Table 3.3 Levels of consultation based on the Wiegiersma model (Karner, 2010)

	Nature of the problem	Characteristics of the client	Nature and goal of the consultation		Pool of competent advisors
Level 1 Information focused consultation	An unclear everyday situation in which the client requires more information about the possibilities.	They are capable of making a decision independently.	General knowledge-sharing and providing layered information about the possible choices and their predicted outcomes		People in supportive roles and professions (such as teachers, professors, social workers, pastors), who have received training in counselling.
Level 2 Consultation	A more complicated dilemma, where even more information is required, and contradicting aspects need to be considered and weighed.	They are unsure and in need of support in order to make a decision, set goals, understand the circumstances and choosing a solution.	Providing specific information tailored to the client. The main dimensions of the aspects and evaluation of the decision-making need to be presented and studied.		
Level 3 Consultation	Serious internal conflicts.	They are undecided regarding the future with unrealistic and/or inconsistent desires.	Helping to reduce the negative effects of the emotions experienced by the client. Working on a realistic evaluation of the situation. Understanding and solving the conflicts. Classic counselling process.	Psychological counselling	Exclusively psychologists
Level 4 Focal counselling	A range of problems affecting various aspects of life, where the inner structures of the personality are involved. Problems of neurotic and decision-making nature are interacting	They have unrealistic expectations, immature interpersonal relationships. They might experience anxiety, worry, rigidity or isolation	Focusing on a chosen problem. The decision requires thorough and serious self-reflection.	Psychological counselling and psychotherapy	Exclusively psychologists
Level 5 Psychotherapy	Lack of integration and a disorganized personality. Psychological or organic pathology.	They are unable to coordinate their behaviour, follow the expectations of reality. Lack of integration and severe anxiety is typical.	Supporting integration and forwarding the client into psychotherapy.	Psychotherapy	Psychotherapists

Based on the previously mentioned viewpoints one might think about mentoring as a process built on dyadic relationships and well-structured meetings of supportive conversations and information-sharing, however a mentoring attitude can be applied in various types and forms of interactions. At the Student Support Centre of the Faculty of Informatics at Eötvös Loránd University we aim to apply, share and promote the mentoring attitude in everyday academic life among faculty members. We believe that mentoring can take place even in a 1-minute interaction in the hallway.

Here are some of our best practises on how to use the mentoring mindset in one-on-one situations in different forms of supportive intervention:

One-on-one situations

One time support

It can be considered a form of supportive intervention to run into a student in the hallway, who might be having trouble finding the right classroom. In this situation the mentoring skillset of undivided attention and readiness to help might mean that a mentor notices that the student is in trouble just by looking at them and offering their help in advance. The mentor might also provide additional information based on their knowledge related to the topic. In this case a proactive mentor might not only give directions but accompany the student to the classroom, start up a conversation regarding the other important places on campus and how to best orient yourself in the building in the future, and close the interaction by sharing some contact information on how to ask for help next time.

While this is a very specific example, it serves to demonstrate how one heartfelt interaction might lead to future possibilities for mentoring and the overall feeling of a mentee being welcome and supported in an institution.

Informal mentoring relationships

If a mentor starts interacting with the students of an institution in a similar manner to the first example it usually results in several short-term connections with students and loads of familiar faces within the hallways of a campus. Being an active and helpful presence in the HEI means that the mentor will most likely meet some students more than once at community building events, chance meetings and even in classrooms. This is a great opportunity to try and broaden the network of students, which later on might result in a more structured and official mentoring relationship.

Explicit mentoring process

A mentee and mentor might have an official mentoring relationship, that might occur organically through the aforementioned slow build of academic connections, or it may be part of an institution-wide programme, course or curricular activity. In an ongoing mentoring process, the supportive intervention is ongoing and might happen through several channels of communication, from regular check-ins via chat platforms, to detailed emails, shared documents, informal meetings or pre-organised consultations. In this form of supportive mentoring relationship, the possibilities are endless, and they are always defined and agreed upon by the mentor and mentee according to the needs of the mentee, availability and competence of the mentor and their shared focus regarding the mentoring.

Supportive conversations

A key form of support is a one-on-one meeting between the mentor and mentee. As mentioned in Table 3.3 detailing the Wiegiersma model of consultation, these consultations might serve different purposes based on the nature of the problem, characteristics of the client and competency of the mentor. However, they should always be approached in an empathetic manner, without judgement and with the authentic and congruent presence of the mentor. Supportive conversations focus on the problem brought by the mentee and require the mentor's skills of 'attentive listening, accurate understanding, an ability to understand the viewpoint of another person as if from their own perspective, an ability to articulate what one has heard and understood and to know how to paraphrase and to summarize another's concerns expressed through conversation' (Feltham, 1995, in Strokes, 2003). As the Wiegiersma model suggests a mentor's role only reaches to a certain point, and the mentor is obligated to reach out to mental health professionals (such as psychologists, psychiatrists) and involve them in the support of the mentee should the topic or the conversation, severity of the situation and the extent of the problem to the different aspects of the mentee's life and personality demand it.

Supportive intervention in group settings

Support from parents and significant others plays a crucial role in helping students navigate challenges during university (Grant et al., 2006). For new university students, social support is vital for adjusting academically and finding satisfaction in their first year (Akanni & Oduaran, 2018; Coetzee & Beukes, 2010; Mason & Nel, 2011, as cited in Mostert & Pienaar, 2020). Social support from family, friends, and peers with similar backgrounds significantly aids in successfully transitioning to university life (Diab et al., 2012; Pillay & Ngcobo, 2010).

Students who lack support from family, faculty, and significant others are more prone to burnout (Bonafe et al., 2014; Dyrbye et al., 2009; Jacobs & Dodd, 2003, as cited in Mostert & Pienaar, 2020). Mostert & Pienaar (2020) found that in their study, social support from parents and significant others helps moderate the impact of burnout on both the intention to drop out and satisfaction with studies.

After reviewing the literature, it is clear that social support and community play an important role in student integration, dropout prevention and satisfaction with their studies. This is why group settings can be a very effective form of basic intervention. The Student Support Centre of Eötvös Loránd University has effectively used a number of group interventions, of which we will give some examples and good practises below.

Mentor Classes

Weekly (if that's possible) mentor classes, led by trained mentors, focus on social and academic integration, and provide essential guidance. These classes offer a structured platform for students to address academic challenges, practise key skills, and receive personalized advice, creating a mentorship-driven support system. Also a great opportunity for them to get used to a university environment.

Mentors are always asked to be flexible with their classes and to prioritise the needs and requests of the students. This is why each mentoring session starts with what we call an 'opening circle', which gives the opportunity to phrase and ask questions, followed by a discussion. This is repeated at the end of the session if anyone has any questions that may have been raised during the session. If students do not have a topic for a particular session, the following topics are considered useful to discuss during the semester:

- Introduction to the Course
- Getting to know each other.
- University experiences and course discussions
- Career Guidance
- Crafting CVs and motivational letters
- Leadership and Project Management
- Projects, labs, and scientific opportunities
- Developing professional communication skills and networking
- Community Building Outside of the University

These mentor classes act as supportive intervention. Students have the opportunity to ask questions, seek guidance, and receive personalized advice. Mentors, through regular monitoring, can identify potential challenges early on and help students navigate academic and personal hurdles. This structured intervention not only supports academic success but also contributes to the overall well-being and sense of belonging for students within the university community.

Trainings

Training sessions could be organised during the year to develop soft skills to help students integrate and adapt. These opportunities will enable students to assess and develop their own skills and rely on them in their academic and professional careers. It also provides a space to get to know each other and to deepen relationships, which will further support the student's academic journey.

The topics can be communication, learning methodology, time management, stress and student identity.

Workshops

Throughout the academic year, covering diverse topics for professional and personal growth. Workshops offer a platform for students to gain insights, share knowledge, and collaboratively explore solutions to challenges, promoting a culture of continuous learning.

Team Building Events

Organising activities like hiking, movie nights, cooking sessions, gaming events, and more promotes a strong sense of community among students. By combining these social connections with activities that promote sustainability, we create a comprehensive approach that not only strengthens bonds among students but also contributes to building a supportive community.

Creating Clubs and Societies

Encouraging the formation of clubs and societies allows students to explore diverse interests and passions. Engaging in group activities through clubs enhances teamwork, collaboration, and problem-solving skills, creating a sense of belonging. At our university we have several sport related, professional and language learning clubs.

Implementing these interventions goes beyond traditional academic support; it creates a vibrant and interconnected community within the university. Weekly mentor classes and training sessions serve as structured platforms for skill development, while workshops provide ongoing opportunities for knowledge sharing and collaboration. Team building events and the creation of clubs contribute to a sense of community, promoting connections that extend beyond the academic realm. They not only provide an opportunity for early intervention in their own unique way, but also a supportive environment for students.

These interventions are not merely extracurricular; they are integral components of a comprehensive strategy to prevent dropout. By building a supportive community, universities empower students to share knowledge, collectively address challenges, and foster a collaborative spirit. This, in turn, enhances academic performance, personal growth, and the overall university experience, making it more likely for students to persist and thrive in their academic journey.

3.3 Communication skills and strategies with students

Mentoring, while incredibly rewarding, comes with its share of challenges, requiring a toolkit of essential skills. At the heart of this toolkit is effective communication, a crucial element for cultivating a positive and constructive mentoring relationship. Whether working one-on-one or in group settings, the ability to master communication plays a crucial role in creating an environment that is supportive, encouraging, and conducive to the growth and development of those involved in the mentoring process.

Our most important tool and leading communication style: Assertive communication

Assertive communication is a popular and widespread technique, often referred to as the most effective and followed style of communication. But what exactly does it mean to be assertive and to communicate assertively? To briefly summarise this, we aim to provide a useful technique for future mentors.

Being assertive means expressing disagreement elegantly without being verbally aggressive. It involves communicating openly and respectfully to avoid frustration and disappointment. Assertiveness is the ability to represent oneself honestly, expressing feelings and rights while respecting others. Mastering assertiveness reduces conflicts, stress, and promotes self-worth. The assertive style, a blend of passive and aggressive, involves fighting for rights while being sensitive to others. It requires balance and openness, fostering long-term relationships. Studies show that

assertive communication leads to emotional well-being, allowing one to express opinions without aggression or humiliation (Pipas & Jaradat, 2010).

An article written by Gatchpazian (n.d.) on The Berkeley Well-Being Institute’s website provides a really great summary on what are the main principles of assertive communication. According to Pipas and Jaradat (2010, as cited in Gatchpazian, n.d.) and Bishop (2013, as cited in Gatchpazian, n.d.), assertive communication is characterized by the following traits. The first five relate to non-verbal communication, while the last four relate to verbal communication:

- Direct eye contact: This conveys confidence and shows that the person is not intimidated.
- Assertive posture/stance: A balanced approach is key - avoid appearing too aggressive or too weak.
 - Tone of voice: Strong, but not aggressive - raising your voice is not necessary.
 - Facial expression: Avoid expressing anger or anxiety through your facial expression.
 - Timing: Be socially aware and choose the right time to assertively communicate, such as asking for a raise at an appropriate moment.
 - Clarity: Use specific words to clearly communicate your needs.
 - Non-threatening: Avoid blaming or threatening the other person.
 - Positive: Frame your request in a positive way, such as "I would appreciate it if you could help me with this task."
 - No criticism: Avoid criticizing yourself or others when trying to be assertive.

For easier understanding, Gatchpazian (n.d.) has created the following table, presenting assertive communication in comparison with passive and aggressive:

Table 3.4 Passive versus Aggressive versus Assertive communication

Passive	Assertive	Aggressive
Too scared to say what you think	Expresses self clearly and confidently	Expresses self with aggression and irritation/anger
Avoids eye contact	Maintains eye contact	Stares in a judgmental way
Speaks softly or weakly	Speaks firmly	Speaks loudly (e.g., shouting)
Reduces own self-esteem	Increases own self-esteem	Reduces others’ self-esteem
Makes body smaller (e.g., slouching)	Firm yet welcoming posture	Closed posture (e.g., making body bigger)
Others’ needs are put first	Self and others’ needs are taken into account	Own needs are put first
Can't say 'no' to others' requests or demands	Is able to say no in a calm and direct way	Says no in an aggressive and reactive way
Aims to please others	Aims to express needs	Aims to win

Gatchpazian, A., (n.d.), **Passive Versus Aggressive Versus Assertive Communication** . [Website]

In summary, assertive communication is a great way for mentors to communicate with students in the right way. Not only is this important for effective collaboration, but by setting an

example, students can also learn this form of communication, which they can later use successfully in their interactions with other university participants or in their professional lives.

Other crucial communication guidelines

Open questions

The art of posing open-ended questions is a powerful tool in mentoring. These questions encourage thoughtful responses, fostering meaningful conversations. By steering away from yes/no answers, mentors promote deeper exploration of ideas and feelings, thus enriching the mentoring experience.

Importance of non-verbal communication

Non-verbal cues play a significant role in effective communication. Being mindful of factors such as personal space, maintaining eye contact, turning towards the speaker, and adopting a posture that conveys interest enhances the overall communication experience. These non-verbal elements contribute to building trust and understanding in both one-on-one and group interactions.

Recognizing varied communication styles

Understanding that not everyone expresses themselves primarily through verbal communication is crucial. Some students may rely on written communication, artistic expression, or other forms. Mentors should create an inclusive environment that allows for diverse modes of self-expression.

Addressing language barriers for international students

For international students, language barriers can pose challenges. Mentors should speak clearly and audibly. Establishing this as a group rule ensures a shared commitment to effective communication. Additionally, fostering an environment where it is acceptable to ask for clarification multiple times and agreeing on a common language for group discussions can help bridge language gaps.

Clarifying questions

Encouraging and utilizing clarifying questions is essential in both one-on-one and group scenarios. These questions help mentors gain a deeper understanding of students' perspectives, ensuring that communication is clear and that both parties are on the same page. Clarifying questions also demonstrate active listening and genuine interest in the mentees' experiences.

In conclusion, effective communication is the base of successful mentoring relationships. Whether engaging in one-on-one discussions or facilitating group interactions, mentors who employ assertive communication, open-ended questions, non-verbal cues, and a recognition of diverse communication styles create an inclusive and supportive mentoring environment. This approach is not only beneficial for academic guidance but also contributes to the personal and professional development of students.

3.4 Safe and open environment (how it can be achieved, what confidentiality means and why is it important, maintaining boundaries and abiding by the necessary framework)

In any mentoring situation, whether individual or group, professional or more personal, creating a safe and open environment is essential and one of the most important tasks of mentors. It is also crucial for promoting positive interactions, trust, and collaboration. We start every session by laying down group rules and getting everyone to agree to them. This can be visualised by making a collective poster or recording it online. This also helps to resolve the conflict that it can feel more difficult to discipline in a university environment, as we are dealing with adult people. Or sensitive issues may come up that the mentor is unable or unwilling to respond to. In such a situation, you can

also rely on group rules, as you only have to refer back to the fact that everyone has agreed on this and so you have to obey it. To achieve a safe and open environment, several key principles and practises should be considered

General mood in the classroom

In a classroom where students feel they have arrived at a safe place where it's always okay to ask questions and express their feelings, a positive and nurturing atmosphere is cultivated. This type of learning environment goes beyond academics; it encompasses the emotional and social well-being of students.

Clear communication

Encourage open and transparent communication and motivate individuals to express their thoughts and feelings without fear of judgment. Establish channels for feedback and ensure that communication is two-way. Always communicate your expectations consistently and try to communicate the requirements as clearly as possible when it comes to a course. It is important that students feel that they have all the information and feel safe. Lack of information leads to confusion and frustration.

Respect and inclusivity

Promote a culture of respect for diverse opinions, backgrounds, and perspectives. Create an inclusive environment where everyone feels valued and heard. Address and prevent discrimination or bias.

Agree on a shared language (that everyone speaks and understands) and stick to it throughout the whole class. Important to learn each other's names at the beginning of every occasion, it creates a more personal environment and everyone can feel more included. We clearly have to state that there's no place for any kind of discrimination or disrespect, and being open to each other and listening is one of the main rules of the time we spend together. Respect includes punctuality and attention to the process (not being on our phone for example). It greatly increases the sense of inclusiveness when sitting in a circle, already implying listening to each other, team awareness and openness.

Confidentiality

Clearly define and communicate confidentiality expectations. Respect individuals' privacy and ensure that sensitive information is handled with care. Establish protocols for handling confidential information and adhere to legal and ethical standards.

Trust building

Build trust through consistent and reliable behaviour. Demonstrate integrity and authenticity in all interactions. Acknowledge mistakes and work towards resolving conflicts in a constructive manner.

Easy to improve it with icebreaker games.

Establishing boundaries

Clearly define and communicate boundaries to ensure a respectful and comfortable environment.

Set expectations regarding acceptable behaviour and consequences for violations. Empower individuals to communicate when their boundaries are crossed. It is also important to clarify when the mentor is available, where and in what form in person, on which platform online, on what issues exactly they can be contacted, and to clarify the nature of the relationship (e.g. whether it is acceptable to add the mentor on social media, etc.). These are important boundaries that the mentor needs to draw in order not to feel burdened by the mentoring process and not to burn out in the support. Clear boundaries provide a sense of security for all parties while creating predictability.

Conflict resolution

Implement effective conflict resolution mechanisms. Encourage open dialogue to address conflicts promptly and constructively. Seek win-win solutions and promote a culture of continuous

improvement. It is important that we have conflict management techniques so that we are not caught unprepared in such a situation and can present our own and the university's position clearly.

In summary, creating a safe and open environment involves a combination of clear communication, respect, trust-building, adherence to boundaries and frameworks, and the recognition of the importance of confidentiality. These principles contribute to a positive and supportive atmosphere in various contexts.

3.5 Practicing hands-on situations

All of the above gives a mentor an opportunity to get an idea of what skills they should have, what an ideal mentoring process looks like and what techniques to use. It's one thing to read and understand all this, but to learn and practise it all on your own would be quite a task. Eötvös Loránd University's Student Support Centre organises training sessions for prospective mentors, so that together they can gain the knowledge they need to do their job.

In such a training session, we tell them the ideal course of any group event, intervention or programme, giving them a framework and an idea of what it looks like in practise.

To start with, we also sit in a circle during the training and begin with the important and essential step of learning each other's names. This immediately brings group members closer together, improves engagement and provides a good basis for working together.

Then, just as we would start any group session, we play an icebreaker game to lighten the mood, get group members comfortable with each other and increase cooperation. Then we agree on what we call group rules. The essential elements of this are mutual respect, punctuality, open and clear communication, confidentiality and listening to and being open with each other.

We start with an opening circle, usually with the simple question of 'how are you?' to assess everyone's current state, mood and energy level. Then we'll talk through any important topics, creating an atmosphere where it's safe to ask and share. To do this, we use assertive techniques and take into account the communication points made earlier.

We discuss the issues raised, facilitating the group to find solutions to the problems raised.

We will then summarise what has been said during the training and clarify the remaining issues in a closing circle.

If, during the training sessions, mentors experience for themselves the techniques and elements that they will later need to apply, they are more likely to take these methods on board with a deeper understanding and motivation. If they can practise on real-life examples, it gives them the opportunity to gain a confidence that can be easily translated into all forms of mentoring practise.

In the following diagram, we try to summarise the ideal process of a group mentoring process and thus of a training through the example of a mentoring lesson:

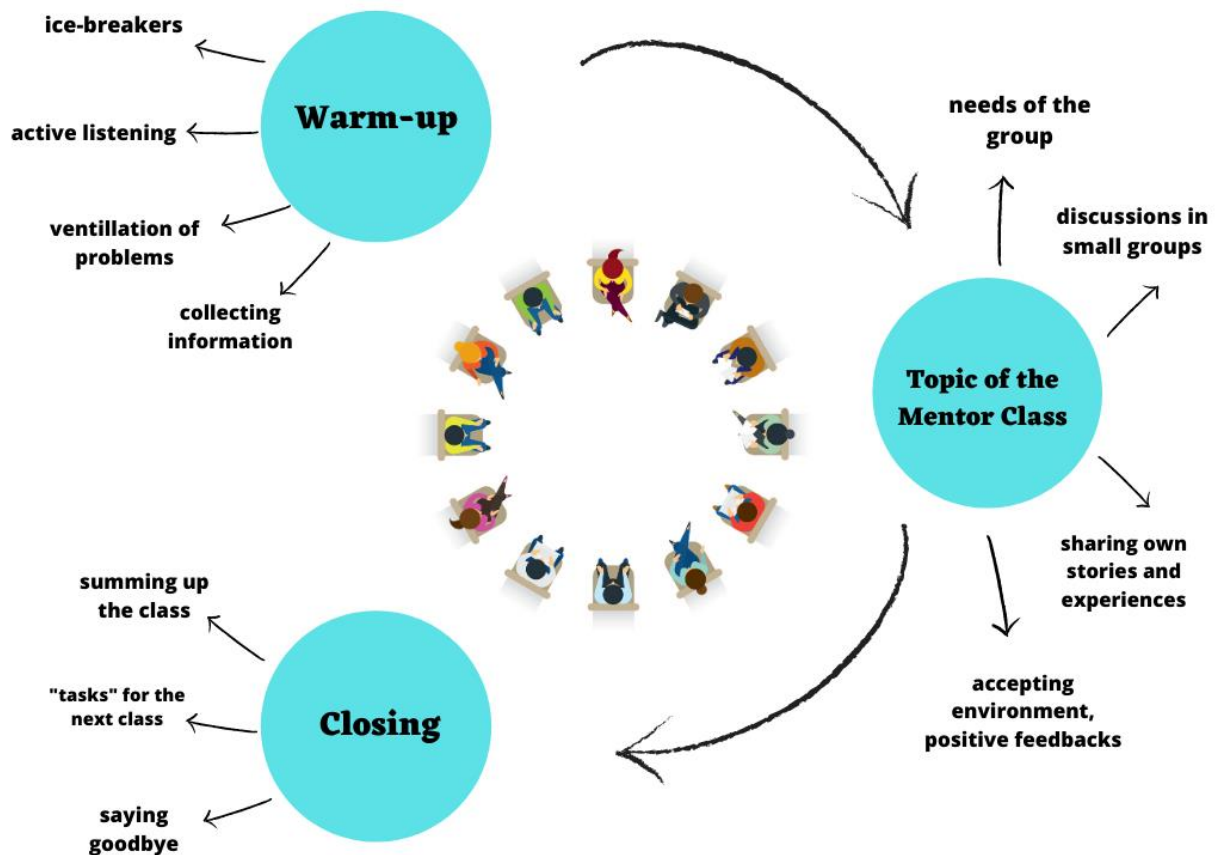


Figure 3.1 How to hold a mentor class

3.6 Introduction to mental health first aid, learn ways to support

Taking on the role of a mentor could also mean that the mentor is the closest connection of a mentee to the institution, their first point of contact, a person of confidence and someone to reach out to or depend on in times of need. This could also mean that the mentor might be the first to get information if a mentee is in crisis or in need of urgent care and support. For this reason we find that getting to know the basics of mental health first aid as a mentor could equip the mentors with a knowledge, skillset and confidence needed in difficult situations to be able to assess the circumstances and possibilities and offer a helping hand.

The World Health Organization (2011) has created a psychological first aid guide for field workers which has been published in more than 36 languages with the purpose of making the widely agreed upon psychological first aid (PFA) materials and knowledge available for use in low and middle income countries of the world as well. The guide offers information on psychological first aid and suggestion and consideration on when and how to use psychological first aid responsibly, what are the good practices in applying this method and how to care for yourself as a helper in difficult situations. The information of the guide can serve as a model and help you better understand the intricacies of providing support for people in distress and exposed to crisis events.

This subsection of the chapter cannot and does not fully encompass the information necessary to responsibly provide psychological first aid. This section merely strives to open the eyes of a reader to the issue, provide basic information on what PFA is, and encourage the reader to choose the WHO publication on the topic as their next learning material to read.

Psychological First Aid as per WHO (2011)

As per Sphere (2011) and IASC (2007, in WHO, 2011), psychological first aid (PFA) refers to a compassionate and supportive response to an individual undergoing suffering and potentially requiring assistance. Psychological first aid (PFA) is intended for individuals who have recently experienced a significant crisis event, offering assistance to both children and adults. While ongoing support may be necessary for an extended period, PFA specifically targets those who have been recently impacted by a crisis event.

PFA encompasses various aspects, including offering practical care without intrusion, assessing needs, aiding in addressing basic requirements (e.g., food, water, information), listening without imposing conversation, providing comfort to instil calmness, facilitating connections to information and support services, and safeguarding individuals from further harm. It is crucial to clarify what PFA is not: exclusive to professionals, a form of professional counselling, psychological debriefing involving a detailed discussion of the distress-causing event, an analysis of the events, or a pressure to disclose emotions and reactions to an event.

When working with the methodology of PFA it is crucial to conduct yourself in a manner that upholds the safety, dignity, and rights of those you are aiding. Some guideline to follow with regards to this mindset are the following:

- Avoid actions that may pose additional risks to people.
- Ensure, to the best of your ability, the safety of both adults and children you are assisting, protecting them from physical or psychological harm.
- Interact with individuals respectfully, considering their cultural and social norms.
- Ensure equitable access to assistance without discrimination.
- Assist individuals in asserting their rights and accessing available support.
- Act in the best interest of every person you encounter.

The manner in which you communicate with someone who is going through a difficult time is extremely significant. Individuals who have experienced a traumatic event may be feeling overwhelmed with emotions such as anxiety or confusion. Here are some recommendation for effective communication in difficult situations:

- Remain calm and display empathy:
 - Approach individuals in distress with a calm demeanour.
 - Display empathy to create a sense of safety, understanding, and respect.
- Acknowledge overwhelming emotions:
 - Recognize that individuals may be experiencing intense emotions like anxiety or confusion.
- Avoid blame and judgment:
 - Refrain from assigning blame, especially if the person may be blaming themselves for the crisis.
- Verbal and nonverbal consistency:
 - Ensure consistency between your verbal and nonverbal communication.
 - Align facial expressions, eye contact, body posture, and physical distance with your verbal messages.
- Cultural sensitivity:
 - Be aware of cultural differences and adapt your communication style accordingly.
 - Consider factors such as age, gender, customs, and religion when communicating.

WHO (2011) also focuses on the importance of taking care of yourself and being mindful of your own mental and physical well-being and seek mutual support with your fellow helpers.

We'd like to again highlight, that this is only a quick introduction to PFA and reading this subsection in itself does not grant a full understanding or adequate level of knowledge to responsibly support with the help of physical first aid. We strongly urge everyone who wishes to be prepared to

help to seek out the WHO (2011) guide in the suggested reading materials and attend training in the topic in your area.

3.7 Designing a thinking framework adaptation

In the field of User Experience (UX) design it is crucial to develop and refine our skills in order to understand and effectively respond to the changing environments and behaviours of users. The modern world, with its increased connectivity and complexity has undergone a transformation since scientist and Nobel laureate Herbert A. Simon introduced design thinking in 1969 through his influential work "The Sciences of the Artificial." Simon's ideas have laid the foundation for design thinking, which has been further expanded upon and enriched by professionals from disciplines, like architecture and engineering. These efforts represent an approach aimed at addressing the needs of humans.

In today's world design thinking has become a tool, for organizations in industries. It is highly valued as an approach to problem solving especially when it comes to meeting the needs of users who consume their products and services. Design teams that embrace design thinking have the ability to tackle unfamiliar problems referred to as "wicked problems." This approach involves redefining challenges from a human centered perspective and giving priority to aspects that enhance user experiences. Among design methodologies design thinking stands out as a leading method, for encouraging unconventional ideas. By utilizing this approach teams can conduct user experience research create executed prototypes and carry out rigorous usability testing ultimately uncovering fresh opportunities to meet user's needs.

Design thinking has had an impact, on the business world with big players like Google, Apple and Airbnb adopting it. Nor is it widely practised in business but it's also a popular subject of study, at top universities worldwide. Design thinking empowers teams to come up with solutions by offering a framework that helps uncover insights and encourages the use of various hands on methods to generate innovative ideas. (Dam, 2022)

The Design thinking process

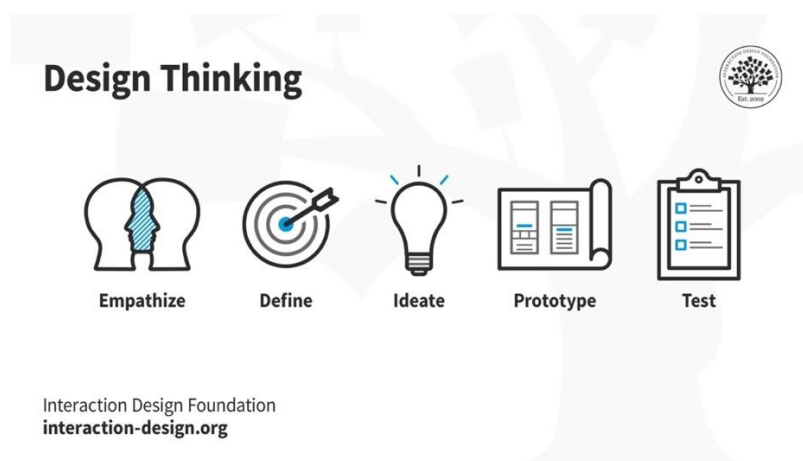


Figure 3.2 Design thinking process

Stage 1: Empathize—Exploration of User Needs

The initial stage of the design thinking process focuses on understanding the users and their needs. The main goal is to develop an empathetic understanding of the problem at hand. This involves consulting with experts, in the field to gain insights well as observing and engaging with the end users themselves. Additionally immersing oneself in the environments where users present helps gather a more comprehensive understanding of their experiences, challenges and motivations.

Empathy plays a role in this problem-solving approach as it allows designers to set aside any assumptions and truly grasp the genuine needs of the users.

The first step, in the design thinking process is about understanding the needs of the users. It's important to have an understanding and empathy for the problem at hand. We consult with experts, in the field to gain insights. We also observe and engage with end users to truly understand their experiences. Additionally, we immerse ourselves in their environments to get a grasp of the context, issues and motivations they face. Empathy plays a role in this problem-solving approach as it helps us let go of any notions and truly uncover the authentic needs of our users.

Stage 2: Define—Articulation of User Needs and Problems

In the Define stage we organize the information gathered during the Empathize stage. We carefully analyse our observations to identify the problems as seen by our design team. We approach formulating the problem statement with a focus, on people than our company's interests. Of expressing it in terms of what we want as a company we aim to understand what users truly need. For example, of saying "We must increase our market share for food products among teenage girls by 5% " we reframe it from a user perspective; "Teenage girls require nutritious food, for optimal health and growth."

The Define stage aims to help generate solutions setting the groundwork for the following phase of ideation where we ask questions to encourage exploring solutions. For example, we can frame questions, like "How can we motivate teenage girls to engage in activities that're beneficial, to them and also relate to your company's food related product or service?"

Stage 3: Ideate—Challenging Assumptions and Conceptualizing Ideas

In the phase of the design thinking process designers begin to generate ideas. They build upon their understanding of users and their needs which they acquired in the Empathize stage. Additionally, they formulate a problem statement that is centered around the user in the Define stage. The design team then approaches the problem from angles to come up with innovative solutions.

There are methods, for generating ideas, such as Brainstorming, Brainwriting coming up with the Worst Possible Idea and using SCAMPER. In the stages of ideation techniques like Brainstorming and Worst Possible Idea encourage thinking and help explore a wide range of possibilities. As the ideation stage progresses other techniques are used to examine and evaluate ideas in order to determine the effective options, for addressing the identified problem.

Stage 4: Prototype—Initiation of Solution Creation

During the Prototype stage the design team creates versions of the product or specific features to showcase the solutions proposed in the earlier brainstorming phase. These prototypes are carefully examined by the team, other departments or a select group of individuals. This stage is, about experimentation aiming to find the possible solutions, for the issues outlined in the initial three stages. The proposed solutions are put into practise within these prototypes. Evaluated based on user feedback to determine if they should be accepted refined further or discarded altogether.

By the end of the Prototype stage the design team gains insights, into the limitations and difficulties of the product. They also develop an understanding of how users think, behave and feel while interacting with the prototype.

Stage 5: Test—Validation of Solutions

The Testing phase involves an evaluation of the product using the most effective solutions identified during the Prototype phase. It is considered the stage in a five-stage model, commonly used in processes like design thinking. The outcomes obtained from this phase may trigger a re-evaluation of one or more problems leading to an understanding and potentially requiring a return, to a stage in the design thinking process. Through iterations adjustments and improvements are made to eliminate solutions. The ultimate goal is to gain insights, into both the product and its users.(Dam, 2023)

The PDCA process as design thinking reinforcement

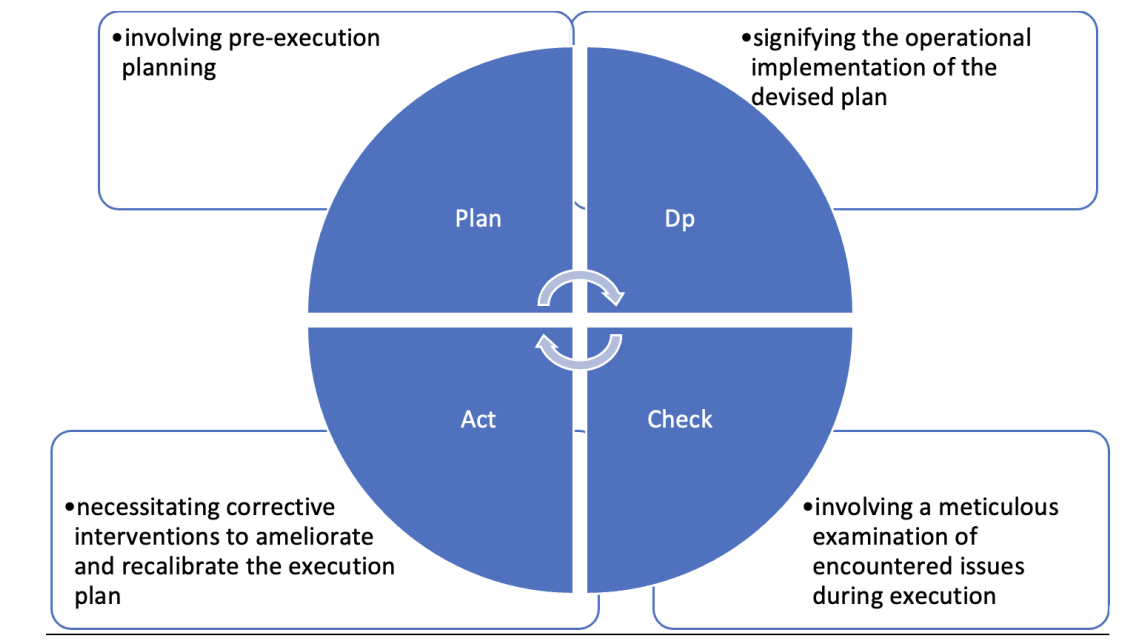


Figure 3.3 Deming cycle

The Deming Cycle, which is also referred to as PDCA is a known framework that helps improve efficiency in response, to changing environments. It consists of four stages that are repeated over and over to ensure development. These stages include planning (P) where the actions are planned beforehand; doing (D) which involves putting the plan into action; checking (C) where any issues encountered during execution are carefully examined; and acting (A) which requires making necessary corrections to improve and adjust the execution plan. (Tague, 2005)

In the planning phase it is crucial to focus on defining quality policies based on customer requirements goals and customer satisfaction. At the time it is important to establish guidelines, for business processes that outline the procedural connections between different departments, within the organization. This involves mapping out the work processes of the organization.

After that the Do stage takes place once the organizational plan is put into action. Its main focus is, on carrying out the plan to achieve predetermined goals. At the time the Check stage involves examination of completed tasks to gather various sets of data for analysis purposes. The main aim is to ensure that organizational objectives are being met, which can be confirmed through verification, by task performers or oversight from managers.

During the Act phase, after evaluation the next step is to identify which objectives have been achieved successfully and which ones have not met the established criteria. We then. Investigate the reasons behind any shortcomings. The main goal is to adjust measurements and introduce performance indicators for the year with a strong dedication, to ongoing improvement. (Somkit, 2011, pp. 269-270).

The PDCA process, which stands for Plan Do Check Act is a framework widely used in business management to drive improvement. It consists of stages; planning, execution, evaluation and corrective action. This structured and cyclical approach ensures refinement. On the hand Design Thinking is a paradigm, in business management that focuses on creative problem solving and innovation. It is tailored to meet the evolving needs of stakeholders such as students or customers. By combining PDCA with Design Thinking we integrate the nature of PDCA with the emphasis on problem solving found in Design Thinking. This synergistic alliance enables a substantial enrichment

of the improvement process. This collaborative approach promotes improvement and development fostering a culture of enhancement in the field of business management. Design Thinking, with its human centric approach effectively addresses stakeholder requirements by helping entities develop solutions that're not only efficient but also align closely with their unique needs. In summary the integration of PDCA and Design Thinking offers a powerful approach, to business management by combining refinement with innovative problem solving to navigate dynamic stakeholder demands adeptly.

Summary

This chapter explores the crucial issue of preventing student dropout in higher education. The chapter underscores the broader implications of preventing dropout, including financial sustainability, enhanced reputation, and a self-sustaining academic model for institutions. It reviews literature on dropout factors and the benefits of proactive intervention, highlighting the significance of community building and faculty-student interactions. The model of proactive prevention programme of the Student Support Centre of Eötvös Loránd University is introduced. The programme includes a mandatory soft skills development course and a mentor programme with peer mentors and mentor teachers. The chapter shares hands-on experiences and best practises from this programme, emphasizing the role of mentors in supporting students and preventing dropout. Additionally, the chapter introduces the basics of supportive intervention, categorizing mentoring functions into career and psychosocial, and describing different roles mentors can assume. It explores the similarities between counselling and mentoring, stressing the importance of human aspects in mentoring relationships.

The chapter also discusses supportive interventions in one-on-one interactions, informal mentoring relationships, explicit mentoring processes, supportive conversations, as well as group settings, showcasing mentor classes, training sessions, workshops, team-building events, and the creation of clubs and societies as effective strategies in preventing dropout and fostering a supportive university community. The chapter argues that these interventions go beyond traditional academic support, creating a vibrant and interconnected community that contributes to preventing dropout and enhancing the overall university experience.

This chapter also focuses on communication skills and strategies for mentors working with students. Assertive communication is highlighted as a key tool, involving expressing disagreement respectfully, promoting open and honest self-representation, and reducing conflicts. The chapter emphasizes the importance of assertiveness in mentor-student interactions and provides specific traits associated with assertive communication. Additional communication guidelines include posing open-ended questions, understanding non-verbal cues, recognizing varied communication styles, addressing language barriers for international students, and utilizing clarifying questions. The chapter underscores the role of effective communication in fostering positive mentoring relationships and promoting students' personal and professional development. It also explores the establishment of a safe and open environment, emphasizing principles such as clear communication, respect, confidentiality, trust-building, boundary setting, and conflict resolution. The chapter concludes with insights into practical training sessions for mentors and the importance of mental health first aid, encouraging mentors to be equipped with the knowledge and skills to support students in times of need by delving further into the literature of the topic.

Discussion questions

1. How do academic and social integration play a crucial role in preventing student dropout, and what are the key factors influencing these aspects in higher education?

2. In what ways can community building and faculty-student interactions contribute to social integration and impact academic success, according to the literature presented in the chapter?
3. Explore the connection between mentoring and counselling skills, as highlighted in the chapter. How do the skills mentioned, such as attentive listening and emotional support, contribute to both mentoring and counselling relationships?
4. Based on the Wieggersma model of consultation, how can institutions determine the appropriate level of support for students, and what role do psychologists and psychotherapists play in more complex cases of intervention?
5. Reflect on the presented examples of supportive interventions, such as one-time support and explicit mentoring processes. How might these practises contribute to a positive and supportive academic environment?
6. Share insights on how mentoring attitudes can be applied in everyday academic life, and discuss the potential impact of mentorship on students' overall well-being and sense of belonging within an institution.
7. How do mentor classes contribute to both social and academic integration for new university students?
8. How do group interventions, such as mentor classes and workshops, contribute to preventing student dropout?
9. How does assertive communication contribute to a positive mentoring relationship?
10. Share examples of how mentors can use clarifying questions to ensure effective communication with their mentees.
11. How can mentors effectively communicate and establish group rules to create a safe and open environment?
12. Why is the use of icebreaker games important in creating a positive and cooperative group dynamic?
13. How does practicing on real-life examples during training sessions contribute to mentors' confidence in their role?

References

- Aljohani, O. A. (2016). A comprehensive review of the major studies and theoretical models of student retention in higher education. *Higher Education Studies*, 6(2), 1–18
- Alred, G. & Garvey, B. (2000). Learning to produce knowledge – the contribution of mentoring. *Mentoring & Tutoring*, 8 (3), 261/272.
- Ann Darwin & Edward Palmer (2009) Mentoring circles in higher education, *Higher Education Research & Development*, 28:2, 125-136, DOI: 10.1080/07294360902725017
- Bernardo, A., Cervero, A., Esteban, M., Tuero, E., Casanova, J. R., & Almeida, L. S. (2017). Freshmen programme withdrawal: Types and recommendations. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2017.01544>
- Clutterbuck, D. & Megginson, D. (1999). *Mentoring Executives & Directors*. Butterworth/HeinemannAQ2.
- Daloz, L.A. (1986). *Effective teaching and mentoring: Realizing the transformational power of adult learning experiences*. San Francisco, CA: Jossey Bass
- Diab, P. N., Flack, P. S., Mabuza, L. H., & Reid, S. J. Y. (2012). Qualitative exploration of the career aspirations of rural origin health science students in South Africa. *Rural and Remote Health*, 12, 1–11
- Feltham, C. (1995). *What is Counselling?*. London: Sage.
- Gatchpazian, A. (n.d.). *Assertive communication: Definition, Examples, & Techniques*. Berkeley Well-being institute. Retrieved November 19, 2023, from <https://www.berkeleywellbeing.com/assertive-communication.html>
- Grant, K. E., Compas, B. E., Thurm, A E ., McMahon, S. D., Gipson, P. Y, Campbell, A. J., Krochock, K., & Westerholm, R. I. (2006). Stressors and child and adolescent psychopathology: Evidence of

- moderating and mediating effects. *Clinical Psychology Review*, 26, 257–283. <https://doi.org/10.1016/j.cpr.2005.06.011>
- HEFCE. (1997). Undergraduate non-completion in higher education in England. Technical Report 97/29
- Karner, O. (2010). Karrier tanácsadói kompetenciák nemzetközi összehasonlítása. *Alkalmazott Pszichológia*, 3-4.
- Kram, K. (1983). Phases of the mentor relationship. *Academy of Management Journal*, 26 (4), 608/625.
- Mostert, K., & Pienaar, J. (2020). The moderating effect of social support on the relationship between burnout, intention to drop out, and satisfaction with studies of first-year university students. *Journal of Psychology in Africa*, 30(3), 197-202.
- Pascarella, E. T., & Terenzini, P. (1983). Predicting voluntary freshman year persistence/withdrawal behavior in a residential university: A path analytic validation of Tinto's model. *Journal of Educational Psychology*, 75, 215–226. <https://doi.org/10.1037/0022-0663.75.2.215>
- Pillay, A. L., & Ngcobo, H. S. (2010). Sources of stress and support among rural-based first-year university students: An exploratory study. *South African Journal of Psychology. Suid-Afrikaanse Tydskrif vir Sielkunde*, 40(3), 234–240. <https://doi.org/10.1177/008124631004000302>
- Pipas, M. D., & Jaradat, M. (2010). Assertive communication skills. *Annales Universitatis Apulensis: Series Oeconomica*, 12(2), 649.
- Stokes, P. (2003) Exploring the relationship between mentoring and counselling, *British Journal of Guidance & Counselling*, 31:1, 25-38, DOI: 10.1080/0306988031000086143
- Takács, R., Kárász, J. T., Takács, S., Horváth, Z., & Oláh, A. (2022). Successful Steps in Higher Education to Stop Computer Science Students from Attrition. *Interchange*, 53(3-4), 637-652.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45, 89–125. <https://doi.org/10.3102/00346543045001089>
- Tinto, V. (1998). Colleges as communities: Taking research on student persistence seriously. *The Review of Higher Education*, 21, 167–177.
- World Health Organization. (2011). Psychological first aid: Guide for field workers. World Health Organization.
- Suggested reading**
- Lunsford, L. G., Crisp, G., Dolan, E. L., & Wuetherick, B. (2017). Mentoring in higher education. *The SAGE handbook of mentoring*, 20, 316-334.
- Pipas, M. D., & Jaradat, M. (2010). Assertive communication skills. *Annales Universitatis Apulensis: Series Oeconomica*, 12(2), 649.
- Samfira, E. M. (2020). Assertive communication skills in universities. *Educația Plus*, 26(1), 361-373.
- Stokes, P. (2003) Exploring the relationship between mentoring and counselling, *British Journal of Guidance & Counselling*, 31:1, 25-38, DOI: 10.1080/0306988031000086143
- World Health Organization. (2011). Psychological first aid: Guide for field workers. World Health Organization.

CHAPTER 4: METHODOLOGY OF HANDLING STUDENTS OF HEI IN THE 21ST CENTURY

This chapter in this handbook will guide you through the general needs and characteristics of the new generation of students, recognising the diversity among student groups. The different roles within the mentoring system play a significant role in reinforcing commitment to the field of higher education programmes. It aims to explore innovative approaches, strategies, and best practises for effectively managing and supporting students within the higher education. The chapter also delves into issues of diversity and inclusion in student handling methodologies. This entails developing strategies to support students from diverse backgrounds, cultures, and identities. Additionally, the chapter explores the importance of prioritizing student well-being and mental health.

4.1 Generations: generational differences -from understanding differences to being able to take advantage of them

This chapter in this handbook will guide you through the general needs and characteristics of the new generation of students, recognising the diversity among student groups. The different roles within the mentoring system play a significant role in reinforcing commitment to the field of higher education programmes.

According to recent studies, the new generation is markedly more conscious and proactive in matters concerning sustainability than previous generations. This generation is more aware than previous generations and emphasises more the critical need to address ecological issues, advocating for sustainable lifestyles, eco-friendly products, and renewable energy sources. They tend to favour companies and brands that prioritise sustainability, expressing their disapproval of those that neglect environmental responsibilities. Furthermore, this generation tends to urge governments and organisations to adopt eco-conscious policies and address climate change. They are conscious about these issues but we should actively engage them in initiatives like reducing waste, recycling, promoting renewable energy, advocating for green transportation alternatives, and supporting ethical business practises. Their commitment to sustainability should be evident in their actions, choices, and calls for systemic change, reflecting a deep concern for the planet's future. In our HEI we have a role in their education and increasing their sensibility towards these issues. In the following sections, we collected research articles about the new generations of students.

New generation of students are often called Generation Z or after that Generation Alpha (Mannheim, 1952; Pilcher, 1994). Generation Z, born between 1995 and 2012, is an intriguing transitional cohort situated between Generation Y, commonly known as Millennials, with birth years spanning from 1981 to 1995 (National Endowment for Financial Education, 2015). The first wave of the Generation Z cohort began graduating from high school in 2013, with many entering college in 2017 or currently pursuing higher education. Although Generation Z shares some similarities with the Millennial generation, they introduce distinct behavioural patterns in the university setting (Iorgulescu, 2016). Like Millennials, they exhibit a strong desire for rapid access to new information, although the lack of face-to-face communication during their upbringing necessitates mentoring and training in essential study skills. Generation Z will be replaced by Generation Alpha in higher education. Generation Z members and Generation Alpha place a premium on social connectivity and desire to maintain relationships with a broad network of peers (Turner, 2015). Generation Alpha, born from 2010 onwards, represents the most tech-savvy and digitally immersed cohort to date. Often dubbed the "screenagers" or "digital natives," they are growing up in an era defined by

technology's omnipresence. Born in the wake of the digital revolution, these youngsters are characterised by a profound fluency in navigating various digital platforms, such as smartphones, tablets, and other smart devices, almost from infancy. Their exposure to technology from an early age shapes their cognitive development, social interactions, and learning methodologies. For Generation Alpha, technology isn't just a tool but an integral part of their lives. Their education, communication, entertainment, and even play are greatly influenced by this digital landscape. Therefore, Generation Alpha's ability to adapt and innovate in the digital sphere is expected to redefine future societal and technological norms (McCrindle & Wolfinger, 2018; Nagy & Kölcsey, 2017). As a consequence, in the HEI, we must adjust our methodologies to the new generation of students.

Generation Z represents a generation raised in a climate of overprotective parenting, characterised by limited opportunities to develop vital life management skills (Lukianoff and Haidt, 2015). Nurtured in an environment of excessive protection, they have had fewer chances to become self-reliant individuals capable of making decisions and assuming responsibility for their actions in ambiguous and unfamiliar circumstances. Overprotective parenting has impeded their social, emotional, and intellectual development, acting as a hurdle when it comes to navigating the challenges presented by life and adapting to various educational and occupational environments, including universities and colleges (Gabrielova and Buchko, 2021; Turner, 2015). The extent to which the COVID-19 pandemic influenced Generation Z and Alpha remains an area of limited information and ongoing study. Much research has delved into exploring the characteristics of these generations within the realm of higher education, driven by the belief that generational disparities manifest in distinct values, attitudes toward learning, and behavioural patterns (Gabrielova and Buchko, 2021). Higher education institutions encounter various challenges, making it vital to analyse how different generations cope in order to enhance their retention at universities. Many people from Generation Z are in the middle of their academic activities. This generation has certain characteristics that might be a challenge in the labour market as well (Correia, Buzotti, 2017). Thus, mentors have a great role in their preparation. However, academic staff might face difficulties dealing with their specific characteristics. The chapter aims to collect recent studies to enable an understanding of the greater challenges and difficulties in dealing with the students of the new generations.

Some research was conducted in order to find out the profile of the new generation of students through their performance and psychological characteristics using cluster analysis. Takács et al. (under publication) explored the relationship between psychological characteristics and dropout. Results indicated six different cluster groups, two of which were described as dropping out students. University leavers had low scores in the most important personality traits (Openness, Conscientiousness, Agreeableness, Extraversion), had low scores in coping strategies (PICI), and occupational identity; however, they showed high scores in bravery (VIA-S). They had low general occupational identity, which meant that they lacked sufficient information and professional guidance for them about their chosen career. Low coping skills also meant that they might have difficulties in stressful situations, and university life has many assignments and duties. High scores in the bravery score can be interpreted smoothly. Even if they decide not to try a second or third time to retake the exam, then they give up and change quickly what to study.

While some teachers integrate a limited amount of technology into their teaching, there is a growing interest in enhancing technological integration as part of their modules. However, they often lack the knowledge to implement these initiatives effectively. To address this, they are exploring applications to gradually shift towards more innovative approaches. In contrast, some educators are already embracing a shift away from traditional teaching methods, moving towards more learner-centred learning. They seek to include visual methods and creative teaching sessions, both indoors and outdoors. They understand that the Generation Z students are born into the internet era and have a different perspective. Cilliers (2017) conducted research focusing on understanding the technology preferences and usage of the Generation Z student population within

formal educational settings. The aim was to uncover the intricate dynamics and difficulties encountered when teaching the new generation. The study culminated in a synthesis of the perspectives from both student and lecturer groups, offering potential solutions to bridge the gaps and improve teaching and learning strategies. 1. Teachers should be ready to apply various software, hardware, digital tools and social media platforms in their teaching. 2. This includes replacing traditional PowerPoint presentations with open discussions, lively debates, and structured group work.

The new generation of students have high expectancy toward the academic staff. The following table (Table 4.1) contains a summary about the characteristics of the new generation. Communicating with the new generations of students can present a range of challenges from an academic standpoint, including:

Table 4.1 Summary about the characteristics of new generation of students

Characteristics of the new generation of students	Impact on Education	Strategies in HEI
Technology dependency	Hinders face-to-face interactions and traditional learning	Incorporate technology in education using interactive apps or platforms to engage students in discussions and lectures (Erazo, 2015)
Shortened attention spans	Potential shorter attention spans	Break down complex academic material into shorter, more digestible segments; incorporate interactive elements to maintain engagement (Cicekci & Sadik, 2019)
Diverse learning preferences	Differing learning styles, preferences, and paces	Implement a variety of teaching methods such as visual aids, group activities, and individualised projects to accommodate different learning styles (Lozano-Rodríguez et al., 2022)
Need for instant gratification	Desire for immediate results conflicting with learning	Offer quick, encouraging feedback on smaller tasks; emphasise the value of patience and persistence for deeper learning (Wisniewski, et al., 2020)
Higher expectations	Expectations for engaging, interactive learning	Incorporate interactive tools, multimedia resources, and discussions to align with these expectations, enhancing the learning experience (Gobbi, 2023)
Critical thinking and analytical skills	Emphasise critical thinking, problem-solving	Integrate real-world problem-solving exercises and discussions into the curriculum to foster these skills (Donlevy et al., 2019)
Work-Life Balance	Balancing multiple responsibilities	Provide flexible learning options and schedules to support students in managing various responsibilities effectively (Beer and Bray, 2019)

Adapting teaching approaches, integrating technology effectively, engaging students in interactive and diverse learning experiences, and understanding their diverse needs are crucial in effectively communicating and engaging with the new generation of students.

4.2 Getting to know learning habits of students and getting familiar with advanced approaches to their education

Understanding the learning habits and preferences of the new generation of students is crucial for mentors in delivering effective student service support. This contemporary era sees students highly adept at leveraging technology, preferring more interactive and engaging learning experiences. From a mentoring standpoint, acknowledging and adapting to these preferences become essential. In this subchapter we are going to give some examples and good practises about advanced approaches (Turcsányi-Szabó, 2020).

The experience of remote learning during the pandemic served as a catalyst for a re-evaluation of traditional educational methods. It emphasised the importance of providing varied learning approaches, leveraging technology, and offering more flexibility in education to cater to the diverse needs and learning habits of the new generation of students (Turcsányi-Szabó, 2020).

Several researchers have embarked on studying how the COVID-19 pandemic has affected the mental health of university students. Browning et al. (2021) emphasise that university students are increasingly viewed as a vulnerable demographic, given the elevated levels of anxiety and depression they experience. With the radical transformation of education due to the pandemic, it is evident that students are grappling with amplified mental health challenges. Padrón et al. (2021) conducted a path-analysis model examining stressors, coping mechanisms, and mental health. Their findings indicate that coping strategies play a partial mediating role in the relationship between stressors and psychological well-being. Agbaria and Mokh (2021) delved into the connections between active, problem-focused, and maladaptive coping strategies with stress during the initial wave of the coronavirus outbreak among college students. They discovered that positive social support can enhance students' ability to cope effectively with the current circumstances.

Overall, these studies underscore the profound impact of the COVID-19 pandemic on students' mental health. The academic and interpersonal changes brought about by the pandemic have been particularly significant sources of stress. Research on student stress and its repercussions has been extensively documented from various perspectives, highlighting common academic stressors such as time-management, exam anxiety, and course-related stress (Malarvili and Dhanapal, 2018). Takács et al. (2021a, 2023a) aimed to compare coping skills between Generations Y and Z in higher education, given the lack of prior studies examining these perceptions. Generation Y (born 1981–1994) and Generation Z (born 1995–2012) were selected as the latest groups in higher education. The study assessed self-regulation and resilience subsystems. While both generations exhibited similar tendencies in most psychological immune subsystems, a notable difference arose in the self-regulation subsystem. Generation Z seemed to have weaker emotional control during stress and reduced self-regulation in academic settings, potentially impacting their adaptation and handling of distress. Addressing these differences is crucial for supporting Generation Z students, ensuring their successful adaptation in challenging academic environments. The study emphasised the importance of preventive programmes to bolster these coping skills, especially given the adjustments required amid situations like the COVID-19 pandemic. Further research is suggested to explore differences between generations.

Mentoring aimed at fostering mental health development within the university setting could offer assistance. Peer-to-peer programmes may prove valuable in enhancing students' coping mechanisms. Student service programmes targeting the development of students' abilities, including self-regulation and resilience, are essential for effectively managing stress. This handbook underscores the importance of promoting student service programmes across all generations to fortify their self-regulation skills and resilience not just in HEI but also in their life situations.

The contemporary educational landscape encourages a shift toward collaborative learning environments. These students often appreciate self-directed learning and the autonomy to explore educational material on their terms. With this in mind, mentors can employ various approaches, incorporating digital tools, gamification, and multimedia resources to engage students more effectively. This presents an opportunity for mentors to facilitate these interactions, encouraging teamwork, enhancing communication skills, and promoting knowledge sharing among students. Harnessing the benefits of blended learning, combining online resources with traditional teaching methods, can offer students the flexibility they desire and allow mentors to deliver education that aligns with the preferences of the new generation. Moreover, considering the accelerated pace of information in today's world, mentoring strategies need to be agile and conducive to fostering critical thinking, problem-solving, and adaptability, preparing students for lifelong learning. For example, agile techniques can be also useful for mentoring students (Turcsányi, 2020; Takács et al., 2020).

Furthermore, mentors should recognise that today's students are more inclined towards personalised learning experiences. Tailoring educational content to their interests and allowing space for exploration and creative expression tends to fit well. Supporting students to set and achieve their individualised learning goals is a pivotal aspect that mentors should embrace. Employing regular feedback loops and fostering a growth mindset can encourage students to take ownership of their learning process and nurture their development both academically and personally. Contemporary academic environments confront distinctive challenges when engaging with the newer generation of students. One of the primary issues is the pervasive dependence on technology that hinders traditional face-to-face interactions and impacts conventional learning methods (Prensky, 2001). The prevalence of digital communication has made it increasingly challenging to maintain students' attention during lectures or discussions (Kabilan, Ahmad, & Abidin, 2010). Furthermore, the rapid information dissemination in a world of multitasking has led to shortened attention spans (Rideout, Foehr, & Roberts, 2010). This significantly affects the delivery of comprehensive academic content and may hinder engagement in prolonged academic activities (Richtel, 2010). A notable challenge is catering to diverse learning preferences and paces within a single classroom setting. Students nowadays exhibit a variety of learning styles, making it more challenging to adapt traditional teaching methods to accommodate these varying styles.

This contemporary generation of students is characterised by their desire for instant gratification and feedback. They often expect immediate results and find the academic processes that necessitate time and effort for comprehensive learning less appealing. With higher expectations for interactive and technology-integrated learning environments, educators face the challenge of aligning these expectations with traditional teaching methodologies. Another notable challenge is the potential lack of critical thinking and analytical skills among students due to an over-reliance on

easily accessible information (Donlevy et al., 2019). Students' overdependence on readily available data may hinder the development of these critical skills vital for their academic growth.

A balanced work-life scenario is becoming increasingly pertinent. With students juggling multiple responsibilities - including work commitments and social activities alongside their academic pursuits - their availability and focus during academic sessions may be compromised. Adapting teaching approaches, integrating technology effectively, engaging students in diverse and interactive learning experiences, and understanding their unique needs and diverse learning styles have become essential to effectively communicate and engage with this contemporary generation of students (e.g., Adedoyin & Soykan, 2023; Bailenson, 2021; Turcsányi-Szabó, 2020).

The change brought about by the pandemic increased the significance of flexibility and adaptability in students' learning habits. Adapting to asynchronous learning, coping with potential distractions at home, and finding a balance between personal life and academics became essential skills. There was a noticeable shift toward a preference for recorded lectures, access to educational materials at any time, and more personalised approaches to learning.

An ongoing challenge faced by university instructors is finding ways to engage and involve every student enrolled in a class.

In a flipped classroom, students prepare for active in-class learning by engaging with lectures or other materials outside of class. This teaching approach, although not entirely novel, commonly involves students engaging with materials online and then participating in in-class activities, which often centre around peer learning or small-group work. The flipped classroom encompasses various activities, such as discussions, debates, clicker questions, Q&A sessions, demonstrations, simulations, peer tutoring, feedback sessions, and role-playing exercises. Instructors might flip only specific classes where the subject matter allows for active learning experiences, or they might choose to flip every class. Flipping the classroom presents several advantages: it helps maintain students' focus and learning throughout the class period, allows students time to process concepts and enhances their knowledge before applying it in class, and provides instructors with insights into students' learning challenges. This method, often referred to as "just-in-time teaching" (JITT), enables instructors to adapt their teaching based on student feedback. Students benefit from the flexibility to control the timing, pace, and location of their learning with online materials, allowing them to revisit content when necessary and enabling a deeper understanding of the subject matter. While creating online materials initially demands time, they can be reused in subsequent years. Flipping some classes adds diversity to the teaching approach, making the course more engaging for both students and instructors. Moreover, active learning in class and peer engagement are known to lead to better comprehension (e.g., Turcsányi-Szabó, 2020; University of Waterloo Centre for Teaching Excellence, 2000).

Designing activities that are challenging yet achievable and demonstrating the personal relevance of the material can boost student's motivation. Yet, there are two other essential aspects that necessitate planning in the design of a flipped class: 1. introducing the tasks to the students and ascertaining their readiness for the in-class activities. Introducing the task involves the goal of maximising student participation and preparedness for both online and in-class activities. 2. Instructors need to clearly communicate their expectations, the time required for preparation, and the significance of readiness for in-class activities. A transparent approach can alleviate potential

anxiety among students unfamiliar with participatory learning in the classroom. Out-of-class tasks require a thoughtful choice of media for online activities. Instructors can create their own materials or reuse online content, emphasising concise video content and providing prompts to highlight key objectives. Including a platform for students to submit questions about difficult concepts enables the instructor to address these concerns in class. **Short self-assessment or low-stakes online quizzes** that focus on application rather than mere factual knowledge can provide insights. Incorporating formative feedback and allowing students to pose their questions helps to bridge the preparation gap. There are potential challenges when flipping a class, including increased workload for the instructor and potential adjustments in course content, which might need to be revised. Implementing active learning in larger classes may pose feasibility challenges, but multiple strategies, such as mini-lectures and think-pair-share activities, can still engage students. Some students might resist the shift from a lecture approach, and there may be technical challenges with new technologies. It's crucial to anticipate these issues and navigate them to foster a successful flipped classroom (e.g., Turcsányi-Szabó, 2020).

Blended Learning, seen as the potential "new normal" in course delivery, combines face-to-face and online learning. These courses incorporate activities and course materials, both in-class and online, to complement each other. Blended courses offer increased flexibility, enabling students to choose when and where they want to learn. They leverage pedagogical strategies only feasible through learning technologies, thereby enhancing the learning experience. This approach transforms learning by engaging students in the active construction of knowledge through dynamic interactions. Studies suggest that students benefit from blended courses, showing more effective learning and higher satisfaction compared to purely online or traditional face-to-face courses. However, blended learning isn't standardised, featuring various approaches. Some leverage the online environment for content delivery and in-class sessions for active learning, termed the flipped classroom. Others might use face-to-face time for lectures and online platforms for discussions, assessments, or other learning activities. The broad meaning of blended learning in educational research allows institutions to adapt it to their context, often leading to reduced face-to-face time in comparison to traditional in-person courses (e.g., Dziuban, et al., 2018; Turcsányi-Szabó, 2020).

Individual study plan during mentoring

In the following section, we would like to give some tips and good practises for successfully mentoring the new generations of students.

Independent study experiences present significant benefits for students and their guiding mentors. "Individual study plan" can be used as a tool for fostering mentor activities. This method allows students to not only explore specific subjects but also to navigate their unique learning strategies and objectives. Individual study plan is like a "Learning contract" that stands as a cornerstone in ensuring the success of this process by granting students control over their learning journey from the beginning of the study process. These plans prompt students to contemplate their learning approaches, set clear goals, and establish timelines. It is recommended that the mentor knows the structure of the subjects and adjusts the study plan of the mentored student accordingly. It is important to distribute the load more or less equally during the semester. The point is that the student's goals are visible and attainable, the SMART goal can be used. To harness the full potential of these advantages, students are urged to compose their individual study plans. Guiding mentors meticulously review these contracts, offering constructive feedback and suggestions for potential enhancements. The individual study plan can be adjusted to a calendar (e.g., Hargreaves & Fullan, 2000).

Mentoring benefits of individual study plan:

- Engage students actively in formulating their study unit.
- Encourage students to evaluate their readiness and self-directed learning capabilities.
- Increase motivation by allowing students to select their learning agenda.
- Aid less independent learners by establishing specific goals and deadlines.
- May incorporate a regular meeting schedule with the advising mentor.
- Cultivate student independence, potentially lessening demands on mentors' time.
- Provide a structured approach to establish learning goals, perform activities, and evaluate these goals, reducing misinterpretations.
 - Schedule continual feedback on student progress.
 - Enable mentors to promote the use of diverse resources like peers, libraries, communities, and experiences.

Student responsibilities:

- Develop a comprehensive study plan detailing learning goals and approaches with deadlines.
 - Create a detailed schedule to engage in contract activities each week.
 - Initiate prompt contact with the mentor for necessary assistance.
 - Regularly meet with the mentor to review progress and discuss materials.

Mentor responsibilities:

- Assist in developing the study plan and ensure its quality.
- Provide guidance as a resource while allowing students to take the initiative in seeking learning assistance.
 - Conduct regular meetings with students to review progress and encourage learning.
 - Evaluate the student's work.
 - Understanding the specific challenges of the age group and university life

The introduction of these changes can help us become more student-centred in higher education.

While numerous international studies tend to compare different generations, there's often less focus on the psychological aspects of university adjustment within a generation. This chapter aimed to identify differences between generations as well as in coping strategies among various student generations. Recognising these differences is pivotal for enhancing the learning process and providing more effective guidance, vocational, counselling, and other student support services (e.g., Adedoyin & Soykan, 2023; Bailenson, 2021; Turcsányi-Szabó, 2020). The following table (Table 4.2) contains some further mentoring and teaching strategies and practises. By implementing these strategies, mentors can bridge the gap between traditional academic methodologies and the expectations of the new generation of students, fostering a more engaging and productive learning environment.

Table 4.2 Mentoring strategies of the new generation of students

Characteristics	Impact on education	Mentoring strategies	Example of good practises/Tools/Techniques
Adaptive Teaching Techniques	Engaging diverse learning preferences	Employ interactive sessions, multimedia presentations, and hands-on activities to cater to varied learning preferences	Learning management systems, Interactive whiteboards, Hands-on kits
Utilise Technology Effectively	Enhancing collaborative learning and resource access	Guide students in using technology for online collaboration, accessing digital resources, and participating in discussions	Learning management systems, Online discussion forums
Encourage Critical Thinking	Developing analytical skills and problem-solving	Foster critical thinking through problem-based assignments and guidance in analysing, evaluating, and synthesising information	Socratic questioning, Case studies, Problem-based learning
Support Student-Centric Learning	Empowering students for self-directed learning	Empower students to set goals, plan study schedules, and take charge of their learning journey	Study groups within mentoring, Self-assessment tools, Goal setting techniques, Study planners.
Provide Constructive Feedback	Encouraging improvement and managing expectations	Offer timely feedback to show incremental progress and clarify expectations.	Feedback on learning assistant software (e.g., Moodle), Timely grading
Balance Tradition and Innovation	Fostering a balanced and evolving learning approach	Blend traditional teaching with innovative techniques to optimise learning outcomes	Blended learning, Flipped classroom
Life Skills and Soft Skill Development	Holistic development beyond academics	Guide students in developing time management, stress coping, and communication skills	Time management apps, Stress coping workshops, Communication workshops
Building Relationships	Creating supportive and trust-based environments	Establish a supportive and inclusive environment for students to seek guidance and discuss challenges	Regular check-ins or meeting with the mentor, Supportive group sessions e.g., mentor class
Understanding and Awareness	Tailoring mentorship to students' needs and expectations	Understand students' characteristics, needs, and expectations to personalise mentorship approaches	Feedback from students, questionnaires

4.3 Understanding typical, atypical students and students with special needs

In this subsection, we present the characteristics of both typical, or traditional, and atypical, or non-traditional students. We also discuss the characteristics of students with special needs. In addition to outlining the definitional characteristics of each student population, the subsection emphasizes the importance for lecturers, university staff, and fellow students to understand the needs of nontraditional and disabled students. It addresses the differences and other individual factors influencing their university success, drawing from literature sources. The summary underscores the areas that institutions should pay attention to.

Furthermore, in the second half of the subsection, we provide suggestions for recommended student services and support options to help those affected in the university environment, including

the sharing of good practises. All of this aligns with sustainable development and is part of education designed in accordance with its objectives to provide a university environment that serves the well-being of students, as the goal of sustainable education (Reid et al., 2006, cited by Truta et al., 2018).

As higher education institutions can be seen as one of the main contributors to regional sustainability by creating an appropriate educational and institutional environment to increase the number of university students, and by establishing industrial partnerships to improve research activities and labour market opportunities, they contribute to creating a knowledge-based community capable of facing the challenges of learning and innovation changes in the 21st century (Karatzoglou, 2013; Truta et al., 2018).

The UNESCO 2030 Agenda (2017) for Sustainable Development designates quality education and the reduction of inequalities as two of the 17 important goals. 'Quality education raises consciousness about existing inequalities and contributes to ensuring that laws and social programmes primarily protect disadvantaged and vulnerable people. It helps to empower and promote the social, economic, and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion, or economic or other status' (UNESCO,2017). Furthermore, to achieve sustainable development, it is important to 'provide inclusive and equitable quality education and promote lifelong learning opportunities for all' (Incheon Declaration and Framework for Action, 2015).

Accordingly, preventing dropout plays an important role in sustainable education, and the services provided by higher education institutions discussed in this Course Student Services can contribute significantly, especially concerning the vulnerable groups discussed in the chapter and those at risk of dropping out.

For personnel in student affairs, educators, and those collaborating on student academic and social services, gaining an understanding of the characteristics, needs, and behaviours of both traditional and nontraditional students can contribute to the enhancement of services aimed at improving students' overall educational experiences (Johnson, Kestner, 2013).

Characterising typical and atypical students

The literary sources mention several criteria based on which students can be considered typical or atypical (Chung, Turnbull, Chur-Hansen, 2014). The most commonly used criterion for differentiation is age (Bean and Metzner, 1985; Langrehr, Phillips, Melville, Eum, 2015, cited by Remenick, 2019), other includes gender, ethnic minorities and students with low socioeconomic status (Jones and Watson, 1990), whether they enter university directly after high school or later (Hurtado, 1996, cited by Murata and Vaichis, 2022), financial background, disability, and other learning difficulties (Leggins, 2021). It also takes into account whether they are full-time students or if they have part-time or full-time employment alongside university studies, their financial and family background, with considerations for responsibilities in the latter case e.g., caring for older or ill parents, family members, or being a single parent raising a child (Bean and Metzner, 1985, Cleveland-Innes, 1994; Hurtado, 1996, cited by Murata and Vaichis, 2022).

Distinguishing between typical and atypical students

Traditional college undergraduates are typically aged between 18 and 23, starting their college education immediately after high school graduation, reside in university housing, enrol in full-time classes, and rely on financial support from their parents (Johnson et al., 2016; Pelletier, 2010, cited by Remenick, 2019).

In contrast, nontraditional undergraduate students are usually older than 24 or have taken one year or more break from higher education. A few author referred nontraditional students being woman (Hansen, 1999; Home, 1997; Hooper and Traupmann, 1983, cited by Chung, Turnbull, Chur-Hansen, 2014). A significant number of nontraditional students have shared experiences of parental responsibilities, mortgages, or career commitments (Johnson et al., 2016). The U.S. Department of Education defines nontraditional students by other additional characteristics: part time course

enrolment, financially responsible for themselves or their families' having dependents other than a spouse, being a single parent, working full time while enrolled (Radford, Cominole, Skomsvold, 2015).

The literature considers those nontraditional students as "neo-traditional" who are first-generation learners, meaning they are the first in their families to attend university and pursue a degree. Additionally, it includes those who have previous academic credits and transfer them (Leggings, 2021). It also encompasses individuals who, for financial or cultural reasons, do not reside in dormitories or on the university campus but live in their parents' house, commuting daily between home and the university (Southall et al., 2016).

Table 4.3 Comparing traditional and non-traditional students based on literature

Factors	Traditional Student	Non-Traditional Student
Age	18 to 23	24 and older
Sex	Male	Female
Civil status	Single	Single, married or living together
Ethnicity	Ethnic majority	Ethnicity minorities
Socio-economic status	High	Low
Parental status	No kids	May have kids
Financial status	Dependent	Independent
Employment status	Unemployed	Employed part-time or full-time
First generation student	No	Yes
Enrolment time	Right after high school	Delayed after high school
Enrolment type	Full-time	Part-time
Career path	Uncertain or certain	Certain
Academic programme	Undergraduate degree	Short courses, certificates, accelerated programmes
Living situation	On-campus	Off-campus or commuter
Extracurriculars	Active	Less- or non-active
Having a previous degree	No	May have
Disability	No	Yes

It is important to emphasize that these characteristics do not necessarily can apply to every student. There are cases where a non-traditional student, as defined, may exhibit a characteristic that is typically traditional. Kim et al. (2010, cited by Chung, Turnbull, Chur-Hansen, 2014) argued that many students under the age of 25, who are often considered as "traditional," have work and family responsibilities. On the contrary, some older students do not have these responsibilities.

Challenges in university life for traditional and non-traditional students

For almost all of the freshman students the transition to a whole new university environment can be a big change and the student being traditional or nontraditional may experience challenges during this process, especially in the first term (Cheng et al, 2023)

Some of them need to move to a new city because of university studies and live far from their families and friends and try to fit into an unfamiliar educational system and form new relationships with other students and university lecturers and academic staff as well. To help this transitional process and empower students to be successful, support on various levels can be needed (Jindal-Snape 2010, cited by Cheng et al, 2023).

Table 4.4 Challenges and coping strategies during the transition into Higher Education (Cheng et al, 2023)

External Changes	Potential Challenges	Strategies
Environment		
Location	Homesickness, depression, anxiety, isolation	Develop new supportive relationships
Cultural Shock	Fear of being ignored	Adjustment, adaptation
Financial		
Loan (family, friends, or bank)	Stress, worry of future debt	Seek institutional support, monitor expenditure
Employment (part or full time)	Stress on establishing priorities, time commitments, and responsibilities	Good time management
Social		
New friends	Anxiety	Be open and flexible
Academic staff	Isolation, feeling of not belonging	Engage in classroom and institutional activities, and develop self-efficacy
Flatmates	Stressed, unsettled, unhappy	Consideration, communication, and compromise
Academic		
Learning environment	Anxiety, confusion	Interact with peers through student societies and clubs, and institutional activities
Expectations	Disappointment, stress	Attend induction, self-management of expectations
Performance	Stress, anxiety	Develop self-efficacy, good time management, and academic and information literacy
Presentations and exams	Stress, anxiety, fear of getting embarrassed, lack of confidence	Develop communication and academic study skills, and develop self-efficacy and critical self-reflection

Additional challenges can be experienced by nontraditional students due to their life circumstances, family commitments, working roles, and other specific circumstances.

It might be thought that the characteristics of students considered nontraditional are maladaptive in higher education, and they achieve worse results because their commitments outside of university occupy them too much. They may not be able to focus as much attention on their studies and progress more slowly due to the challenges of meeting multiple roles. On the contrary, studies focusing on nontraditional student populations consistently show that these students tend to achieve higher grade-point averages, employ adaptive coping strategies when faced with challenges, and are more likely to pursue adaptive motives and minimise distraction from the learning tasks in educational environments (Johnson et al., 2016; Johnson, Kestler, 2013; Johnson, Nussbaum, 2012).

Better results among nontraditional students are supported by other research as well (Ryan, 1972; Darkenwald and Novak, 1997, cited by Bendixen-Noe and Giebelhaus, 1998). Additionally, Iovacchini, Hall, Hengstler (1985, cited by Bendixen-Noe and Giebelhaus, 1998) found that adult learners in higher education study more hours per week than do traditional fellow students.

The study of Bendixen-Noe and Giebelhaus, 1998 suggest, that nontraditional students are more intrinsically motivated and goal-directed than traditional students.

According to Tinto's Integration Theory (Tinto, 1975), the strength of students' social and academic integration determines their persistence in the institution. According to his longitudinal theory, students' characteristics, such as family background (parents' education, financial situation), personal traits, and previous studies, influence their expectations related to the university and their initial commitment to completing the institution and obtaining a degree. This commitment, modified over time during their time at the university, is directly indicative of their intention to persist and their likelihood of dropping out, depending on the degree of integration into the academic and social life of the university environment. Later, as an extension of his theory, Tinto listed four conditions for student persistence: transparent expectations set by the institution related to individual performance, academic and social support provided by instructors and peers, frequent and developmental nature of assessments and feedback, and the perceived level of university and social engagement he considered most significant (Tinto, 2012).

Based on Tinto's model, to better integrate students into university life, university staff worked on how to bring students to campus and involve them in activities (Astin, 1984, cited by Remenick, 2019). According to research results, this approach was less effective for non-traditional students who could only commit to the university part-time due to other commitments (Benshoff, 1993; Streeter, 1980, cited by Remenick, 2019). That is why universities found it hard to organize and advertise activities (e.g., clubs, student government, sport programmes) for nontraditional peers. Cohen and Brawer, 2003, cited by Remenick, 2019 says that child-care facilities, on-campus jobs, and early alert systems for advisors if students missed more than two classes can be better options to support them in university life.

Osborne, Cope, and Johnstone (1994, cited by Bendixen-Noe and Giebelhaus, 1998) discovered that older students express greater concerns about flexible class scheduling, childcare issues, and the recognition of experiential learning credits compared to traditional students. Additionally, nontraditional students face similar challenges as their "typical" counterparts, such as significant worries about insufficient time for coursework and a lack of information about career paths. Considering these factors, it is unsurprising that older students often find it challenging to integrate into student life (Bradley and Cleveland, 1992; Vanderpool and Brown, 1994, cited by Bendixen-Noe and Giebelhaus, 1998).

4.4 Student Services and supporting options regarding the needs of typical and atypical students

Institutions of higher education have seen a growing number of nontraditional students in recent decades (Johnson et al., 2016). In 2015, the National Centre for Education Statistics (NCES) identified approximately 74% of students as non-traditional. The NCES also forecasted that the number of non-traditional students would reach around 13.3 million by 2026. This implies that only 25% of the college student population is considered traditional.

According to the literature, the typical university student differs in many ways from their atypical peers. For example, the two groups of students prefers other things when choosing university. In case of traditional students the academic reputation of the university was important by the selection, while the nontraditional student population take into consideration whether an

institute offers specialized programmes, financial support and low tuition (Solomon and Gordon, 1981; Bers and Smith, 1987, cited by Bendixen-Noe and Giebelhaus, 1998).

To shape the university environment appropriately, it is important to understand the characteristics of individual students and comprehend their needs. In this context, it may be crucial for instructors to tailor and enhance their teaching practises and methods based on this information. Additionally, administrative staff, as well as other service providers or fellow students, should be able to participate in mentoring and support throughout the university journey.

While nontraditional students may require support in managing multiple roles in their lives, departments providing student services, such as academic advising, career services, counselling, financial aid, and tutoring centres, are well-equipped to assist them. However, these departments often operate on the assumption that the majority of students are traditional, with services primarily available during standard working hours on weekdays and limited online offerings (Fairchild, 2003, cited by Remenick, 2019). Institutional policies and practises reflect the presumption that students have minimal responsibilities beyond their academic commitments, evidenced by daytime class schedules and the expectation that coursework takes precedence (Tyson, 2012, cited by Remenick, 2019). While these practises are suitable for traditional students, they lack the adaptability, support, and comprehension needed by nontraditional students. Consequently, nontraditional students may experience feelings of alienation, discrimination, and marginalization within the institution (Colvin, 2013; Witkowsky, Mendez, Ogunbowo, Clayton, & Hernandez, 2016, cited by Remenick, 2019).

Summarizing the good practises to support both traditional and nontraditional students can be highlighted that the most important thing is to understand their needs. There are similarities, for example lack of time for course work, but there are multiple differences between the two student population. Loesche and Foley (1988, cited by Bendixen-Noe and Giebelhaus, 1998) found that nontraditional students would like to organize their own learning experiences, the contrary younger students prefer more teacher directed experiences.

To regard everyone's needs there are various opportunities from universities:

- support services
- psychological counselling
- career counselling
- extracurricular activities (e.g., clubs, student organisations, sport activities)
- in the classrooms include more group discussions, problem-based learning, be open to questions
 - instructors offers variety of assignments from which students can choose
 - flexibility (e.g. opening hours of university offices and service centres, contact with instructors between lectures)
 - online classes, e-learning platforms
 - developing more personal contact with students
 - peer counselling, peer support
 - mentoring, tutoring
 - soft skill development training or courses (e.g., regarding time-management, stress management in university life)
 - many universities offer special support for nontraditional students (offices, nontraditional student organizations) - holds regular meetings and have activities throughout the year for families, adults and children
 - financial assistance
 - organizing events and programmes to support networking

Students with special needs

In recent years, the number of students with special educational needs has significantly increased in international higher education institutions, thanks to new regulations, the establishment of support offices, and technological advancements that broaden access. Obtaining a degree holds better prospects for young individuals with special needs in life, as it facilitates easier job acquisition and retention, enabling them to lead independent lives and, not least, boosting their self-confidence (Moriña et al., 2018).

The social dimension of higher education forms part of the so-called third mission of universities. Colleges and universities, beyond education and research, play a crucial role in social mobility. They can significantly contribute to broadening the employment opportunities for disabled individuals, thereby promoting their social integration (Wulz et al., 2018). As above mentioned, this is part of sustainable development.

For young individuals with special needs, the path to higher education is more challenging. Several authors emphasize their higher vulnerability to early school dropout and difficulties in labour market placement (Burchardt, 2005; Wulz et al., 2018).

Regarding the situation of disabled individuals in higher education, the American Disabilities Act represents a milestone. It contributed to creating equal access to university education, leading to an increased number of students with special needs in US universities (Kovács, 2011).

The social dimension of higher education is emphasized in various European documents too, considering the universities' so-called third mission, taking into account their role not only in education and research but also in social mobility. The social dimension was first included in the Prague Communiqué, a ministerial document adopted in 2001, which expands the objectives of the Bologna Process. Despite this aspect being present in the functioning of higher education institutions for 20 years, students with disabilities are still underrepresented within the student population (Wulz et al., 2018).

The UN Convention adopted in 2006 obligates member states to protect the fundamental freedoms of disabled individuals, including access to further education and lifelong learning (Convention on the Rights of Persons with Disabilities, UN, 2006).

In the following, we are going to get to know the meaning of special education needs (SEN) and the definition of students with disabilities (SwD):

There are two official definitions of disability: the modern social definition outlined in the United Nations Convention on the Rights of Persons with Disabilities and a WHO definition. Both definitions seek to prevent discrimination and assist individuals in comprehending their rights and obligations.

The UN definition says: „Persons with disabilities include those who have long-term physical, mental, intellectual, or sensory impairments, which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others”.

According to WHO definition, „disability is neither purely a biological nor a social construct but the result of interactions between health conditions and environmental and personal factors (WHO, 2001). Disability can occur at three levels: an impairment in body function or structure; a limitation in activity, such as the inability to read or move around; a restriction in participation, such as exclusion from school or work. As such, people with disabilities include those who are traditionally understood as disabled (for example wheelchair users, people who are blind or deaf or people with intellectual impairments), and people who experience difficulties in functioning due to a wide range of health conditions such as chronic diseases, severe mental disorders, multiple sclerosis and old age”.

„Special Educational Needs (SEN) refer to learners with learning, physical, and developmental disabilities; behavioural, emotional, and communication disorders, and learning disabilities. SEN refers to teaching learners who for intellectual or medical reasons fall behind in their education when compared to most of their peers (Briant et al., 2017).” Marie Delaney, in Special

Educational Needs (2016. p. 12) maintains that: „Students have special educational needs if they have significantly greater difficulty in learning than the majority of students of the same age and special educational provision needs to be made.”

In some countries (e.g., Hungary), legislation related to higher education does not include the term "intellectual impairment" as stated in the UN convention. This means it does not encompass mental or psychiatric disorders, and individuals living with chronic illnesses are also excluded. In many countries worldwide, including Australia (DDA), the USA, and most European countries, a broader interpretation is applied (Kovács, 2011).

Challenges in university life for students with special needs

When entering university, students with disabilities not only need to adapt to a new organization but also to an entirely unfamiliar educational and social environment, where they may not yet be aware of their rights and opportunities. They must adjust to new methods of teaching and learning, which often differ significantly from their previous experiences (Ketonen et al., 2016, cited in Moriña et al., 2018).

They might encounter obstacles such as physical and attitudinal barriers, financial constraints, mental health issues, a lack of support, as well as stigma and discrimination. Additionally, depending on the nature of their disability, students may face academic challenges that restrict them from certain tasks like reading, writing, or taking tests, especially when the learning materials aren't accessible. Often, these challenges act as deterrents, hindering students from completing their studies. It is crucial for universities to proactively tackle these challenges and offer support, ensuring that all students have equal opportunities to succeed.

Environmental hindering factors that these students still must contend with include, according to several studies, issues like information gaps and lengthy, bureaucratic procedures. There are also various architectural and infrastructural barriers within universities, such as accessibility of classrooms and furniture (Holloway, 2001, cited by Moriña et al., 2018).

Additionally, obstacles can be found at the level of department staff and instructors in the form of negative attitudes, as they may not always be familiar with the needs of these students. Challenges include difficulties in accessing textbooks in alternative formats (Hong, 2015). Among environmental influences, the regulatory legal environment and the presence of support services also play crucial roles. For instance, students emphasize the importance of university coordinators supporting those with special needs (Babic and Dowling, 2015, cited by Virág, 2017).

In general, disabled students often lack the academic, personal, and social skills necessary for university integration (Brinkerhoff et al., 2002, cited in Hong, 2015). They struggle to communicate their needs effectively, evaluate their performance, and are less aware of their interests, strengths, and limitations (lack of self-awareness) (Hong et al., 2007 and Wehmeyer, 1996, cited in Hong, 2015). This often results in passive integration, leading to social awkwardness, academic challenges, and psychological stress during the adaptation to the new environment (Frieden, 2004; Rosenbaum, 2004, cited in Hong, 2015).

In contrast to secondary education, on the university stage, adult students themselves must decide whether to disclose their disability and request the necessary additional support. This is a crucial decision point because most of them want to be treated equally and normally, like any other student. Therefore, especially in cases where the impairment is "not visible from the outside" (e.g., dyslexia, dysgraphia), they only seek help if it is absolutely essential (Hong, 2015; Moriña et al., 2018).

Table 4.5 Types of disabilities and definitions (Kovács, 2019)

Disability	Definition	Characteristics
Autism	Autism is a lifelong developmental disorder affecting the way individuals create relationships and interpret the world. It manifests in difficulties in social behaviour, communication, and different cognitive styles. Sensory overload and challenges in organization, planning, and transitions may occur. Heightened sensitivity to sensory stimuli and specific information processing styles are common. Individuals may focus well on intellectual activities but struggle with navigating classes and organization.	<ul style="list-style-type: none"> • Sensory overload • Difficulty in social behaviour and communication • Challenges in organization and planning • Heightened sensitivity to sensory stimuli • Delayed processing of speech and verbal information
Learning disability	Learning disabilities involve low performance in learning despite average or above-average intellect, affecting one or more learning aspects. Dyslexia (reading disorder), dysgraphia (writing disorder), dyscalculia (math disability), and dysorthography (spelling disorder) are examples. Common accompanying symptoms include lack of motivation, anxiety, task scrolling, procrastination, and shame. Dyslexia affects word decoding, reading rate, and comprehension. Dysgraphia affects written expression, including grammar and punctuation. Dyscalculia affects number concepts and understanding mathematical rules.	<ul style="list-style-type: none"> • Dyslexia • Dysgraphia • Dyscalculia • Dysorthography
Visual impairment	Visual impairment refers to a loss of vision that cannot be corrected to normal vision. Two main categories exist: blind individuals unable to obtain information through visual stimuli, and those with functional vision (low vision or partially sighted). Blind students use Braille or screen reader software, while those with partial sight use magnification aids or screen enlargement software. Severe low vision may require both techniques simultaneously.	<ul style="list-style-type: none"> • Blindness • Low vision • Partially sighted
Hearing impairment	Hearing impairment results in an increased hearing threshold, making it difficult to hear sounds. Degrees range from mild to severe hard of hearing and deafness. The types include mild, moderate, and severe hard of hearing, transition between hard of hearing and deafness, and deafness. Individuals may rely on hearing aids, cochlear implants, lip reading, and sign language for communication.	<ul style="list-style-type: none"> • Mild hard of hearing • Moderate hard of hearing • Severe hard of hearing • Transition between hard of hearing and deafness • Deafness
Physical disability	Physical disability results from congenital or acquired injury or damage to supporting and/or locomotor organ systems, leading to permanent and significant disabilities in movement and socialization. Types include flaccid paralysis, cerebral palsy, orthopaedic disorders, amputation, and congenital anomalies. Mobility impairment may be accompanied by delayed speech development, communication disorder, or an inability to speak. Consequences include difficulties in changing location, manipulation activities, self-service, and communication.	<ul style="list-style-type: none"> • Flaccid paralysis • Cerebral palsy • Orthopaedic disorders • Amputation • Congenital anomalies/disorders

According to American surveys, students with special needs are reported to have lower graduation rates compared to their peers (U.S. Bureau of Labor, 2015, cited in Malloy, 2019), and they need to dedicate more time to preparation and utilize various forms of tutoring (ASHE, 2013, cited in Malloy, 2019). Additionally, data from the United States indicates that the average duration of education is twice as long for students with disabilities as compared to the majority of students (National Council on Disability, 2003, cited in Hong, 2015).

In Hong's (2015) research, various students with disabilities were analysed based on their written reports of their university experiences over a period of 10 weeks. Many students described their days as stressful, upsetting, and frustrating. Stressors included the tension-inducing effects of the physical environment, either making concentration difficult or posing challenges in transportation. Emotional and mental burdens were frequently mentioned. They often felt they exerted more effort than their peers but still struggled to complete tasks, leading to frustration, self-blame, and negative impacts on their self-esteem. Another source of stress for students was difficulty in time management, as the preparation and acquisition of study materials required significantly more time, reducing their free time and time dedicated to socializing and building relationships. The main difficulty for most students was caused by stigmatization and discrimination from university staff and peers due to special treatment.

To cope with these challenges, forming friendships was identified as a potential solution. In Ambati's (2015) study, 64% of students with disabilities reported being able to make new friends, build close relationships, and believed that their friends could provide support, whether on a practical level (e.g., preparing notes) or emotionally. However, 36% found it challenging to establish friendships, as these students were sensitive to others' perceptions of their disabilities, leading them to be more introverted.

The university years can strengthen students with special needs in their personalities. They can benefit greatly from daily struggles with the challenges arising from their disabilities, developing various coping strategies over the years (Strnadová, Hájková, and Květoňová, 2015, cited in Virág, 2017).

Services and supporting opportunities for SEN students

The transition between high school and university is a challenging period for every young person, but especially for those with disabilities. In addition to their disabilities, they face numerous academic and social adaptation challenges (Bell et al., 2017, cited in Moriña et al., 2018). Successful social and academic integration significantly contributes to obtaining a degree (Tinto, 1993, 2012, cited in Czakó, 2017).

The first year is crucial for their retention (Goodman and Pascarella, 2006, Moriña et al., 2018), with research indicating that the highest dropout rates for special needs students occur in the first few weeks of the semester, making this period the most sensitive for their marginalization (Wessel et al., 2009, cited in Moriña et al., 2018).

Key elements in supporting the transition between high school and university include self-management skills, self-representation, strengthening confidence, and providing adequate technical support (Garrison-Wade, 2012, cited in Moriña et al., 2018).

Building relationships with peers and mentoring are crucial factors in achieving academic success and retention. It is also advantageous if they encounter helpers early on who are prepared to address the needs of special needs students and apply the principles of universal design in practise. Proper communication with counsellors and university staff is also important for successful integration (Corcoran, 2010, cited in Moriña et al., 2018).

A study by Patrick and Wessel (2013, cited in Moriña et al., 2018) concluded that a departmental coordinator provides significant support for disabled students in adapting to university life.

However, there is a range of approaches and technologies utilized to support students with disabilities, tailored to their specific needs. These methods leverage various Information and Communication Technology (ICT) tools, both physical and digital, which play a crucial role in assisting students with disabilities in their educational journey.

Students with disabilities present distinctive needs and opportunities in their academic lives. On one hand, every student with a disability should have access to an inclusive infrastructure, ensuring that buildings, accommodation facilities, and other amenities are fully accessible. This encompasses features like ramps, elevators, and other accommodations that facilitate easy navigation of the campus, including participation in extracurricular activities. On the other hand, digital accessibility harnesses technological advancements to support an inclusive curriculum. Assistive technology, including screen readers, text-to-speech software, and other tools, aids students in accessing and interacting with digital materials more effectively. The benefits of assistive technology for these students are manifold, contributing to improved academic performance, increased class participation, and enhanced independence. Research has highlighted the positive impact of assistive technology on the academic performance of university students with disabilities, emphasizing its role in significantly improving grades and overall academic achievements (Beukelman, Mirenda, 2005; Alnahdi, 2014).

In higher education, equality advisory services have an impact at every level of prevention, and it is crucial for it to be a "low-threshold," accessible service. It includes **informational counselling**—both regarding current laws and available opportunities—for the individuals involved. Tailored information is often necessary as the types of disabilities and the heterogeneity within each type vary. The goal is also to enhance students' career-building skills, taking into account their special needs, and providing assistance in exploring post-university advancement opportunities. Uniquely, equality advisory services, unlike other counselling forms, often extend to family members and the relationships of the individuals involved. Additionally, it involves interactions with key players in higher education, such as instructors and administrative staff, to address specific situations (Burgyán, 2015).

The psychological counselling for students with special needs does not differ significantly from the service provided to other students. It is a supportive process aimed at solving everyday questions and situations in an individual's life, taking into account their specific characteristics and circumstances. This is true for students with disabilities as well, although they may experience these developmental or accidental crises as even greater challenges due to their unique situation. It requires a greater insight from the counsellor into the possibilities and regulations affecting these special students (Rupp, 2002; Burgyán, 2015). Generally, it is necessary for multiple people to collaborate and work together with students with special needs in the university environment. Team members may include the student counsellor, instructor, disability coordinator, academic advisor, special education teacher, peers, and family members, as well as social workers.

Additionally, other financial and social support options can be identified (Wulz et al., 2018). Furthermore, most studies emphasize the dropout-reducing impact of peer mentoring programmes (Cullen, cited in Wulz et al., 2018).

International literature calls ensuring equal opportunities reasonable accommodation, equitable treating. The widespread practise of eliminating obstacles related to various disabilities is generally referred to as disadvantage compensation. Beside the commonly followed equitable treatment practises for supporting individuals with disabilities a completely new approach is gaining ground, aiming to overcome obstacles related to disabilities during learning. The essence of this new approach and perspective can be summarized concisely: instead of compensating for disadvantages specifically, it creates a built physical and educational environment where potential obstacles are minimised from the outset. This approach, known as the "Universal Design approach" (UD), involves the design and creation of products, the built environment, educational technology, and teaching methods in a way that is accessible to the largest possible user base without the need for adaptation

or special design. "Universal Design" refers to the design of products, environments, programmes, and services in a way that is as accessible as possible to all people, without the need for adaptation or special design. Universal design cannot exclude the justified use of support and assistive tools and technologies for groups of people with disabilities when necessary (Fazekas, 2019)

Best practises to support Students with Special Needs in Higher Education

Best practise #1 – ELTE Disability Centre

"Eötvös Loránd University" (shortly: "ELTE"), was founded in 1635, is one of the oldest universities in Hungary. It has an excellent reputation both in Hungary and abroad for the quality of its educational and research programmes.

ELTE university is committed to supporting students with disabilities and follows the UN Convention on the Rights of Persons with Disability. The university has a Disability Centre (SHÜTI as the Hungarian acronym) is an independent department of the Service Directorate of the University. The aim of the services is to ensure equal opportunity, accessibility and offering support to domestic and international students/teachers and staff across the University who have disability or chronic illness which impacts upon their ability to participate fully in university life. They also focus on improving awareness and facilitating self-empowerment of students with special needs. The Office is responsible for forming the inclusive policy of the University. They are committed to spreading knowledge of and to changing attitudes towards disability affairs. Their goal is to give platform to students with disability in all of the programmes they organize for the university students, academic and administrative staff, to the public or to the community of people with disability. They aim to reach full participation of the students with special needs with the motto: „Nothing about us without us!” . Above their special education teachers and specialists, there are disability coordinators in each faculty responsible for registering the students, writing their special needs report and providing the reasonable accommodations on the campuses.

They provide various services:

- individual training and therapy to students with special needs (social-communication skill development; guidance and counselling on study affairs, learning techniques, time management and every day activities; route teaching with white cane or guide dogs; making adapted, electronic learning materials, tactile materials and audio-maps; accessible IT counselling; speech therapy; etc.),
- group activities (e.g. Asperger group; English Speaking group; Game Club; Career management course; Goal ball course; Para-swimming course, etc.).
- Accessibility provision: adaptation of the learning material; narration and capturing of video films; sign language interpretation; note-taking.
- They recruit, hire, train and supervise personal assistants who are students of ELTE to provide peer support to the students with special needs. The utilization of this service is very high: they work with, something like 50 personal assistants every semester.
- Organizing sensibility programmes; disability awareness campaigns; open days; sport events and workshops and giving presentations to different national and international conferences.
- The staff also give lectures for lecturers. Disability Centre offers digitalized, adapted learning material and has great experience in accessible information technology.

Webpage: <https://www.elte.hu/en/equal>

Best practise #2 – Student Support Centre of Faculty of Informatics at ELTE

At the Student Support Centre, we provide services to our students at the faculty. Not only for students with special education needs, but for all Hungarian and international students of ours. The members of the Student Support Centre strive to facilitate the successful university studies of students with a wide range of counselling tools. In addition to individual counselling, various workshops and community-building activities play an important role.

In 2016, a programme aimed at reducing dropout rates was introduced as part of the curriculum for undergraduate students majoring in computer science. The course was named "Preparation Course for studies and Learning Methodology Course" and is considered a preventative

programme organized by the Student Support Centre. It serves as transitional support for first-year students between high school and university. Its dual purpose is to promote the development of students' individual, conscious learning strategies (academic integration) and to ease students' integration into the university environment (social integration), thereby reducing the dropout rate.

In the computer science programme, which counts approximately 500 students each year, students learn in fixed groups, and every first-year student participates in the programme as part of the curriculum. The course can be broadly divided into a 30-hour training block and weekly group sessions. The first part of the training begins during the registration week when freshmen are very open to opportunities supporting university integration. The goal of the training is team building, creating learning communities that can support each other throughout their university years, and developing essential soft skills for the job market (time management, stress management, project management, collaboration, communication). The course aims at preparing students for the possible challenges of university life through enhancing individual learning skills, maintaining motivation for studying and developing a problem-solving mindset. During the course students can discover their learning styles and attitudes, they acquire efficient learning methods to reveal the most suitable methods for them guaranteeing successful academic advancements and the completion of their studies. In the second part of the course, students attend weekly scheduled group sessions, led by an instructor and a senior fellow student, who support newcomers for six months by providing information and discussing everyday questions arising in university life, thus aiding in the formation of their university identity and institutional commitment. Additionally, within the course, peer support group students from the ELTE Faculty of Informatics provide discipline-specific learning methodology knowledge (Takács, 2018).

It is very important, that our services are provided for every student and the student with special needs may benefit more from it.

In the research carried out at the Faculty of Informatics of Eötvös Loránd University (Pásztor-Nagy, 2021), 80 students with special needs were involved who were admitted to the faculty between 2010 and 2021. It was examined whether there is a difference in the study results in the achievement of subjects between the groups of students with special needs who enrolled in the faculty before or after 2016. Those who entered after 2016 participated in the complex transition support, which consists of group soft skill and team building training within the student groups. Within the course, the communities of the fixed learning groups of 15-20 people can work together in different skills development trainings, and the course itself has a cohesive, team-building effect on the group members, so students with special needs can gain more social contacts and help with their studies. According to Richman et al.'s (1998) research on the topic, social support has a positive effect on school academic performance, including school grades.

The results show that the 43 students with disabilities who were admitted after 2016 and participated in the transfer and skills development prevention programme provided by the faculty performed significantly better in terms of subjects in the first semester. The better results of the first semester are of great importance in the light of the literature reports, where we can read that the drop-out rate among students with special needs is higher already in the first weeks of university (Wessel et al., 2009) and the first year is decisive for their stay (Goodman and Pascarella 2006 , Moriña et al., 2018). The fact that they can complete the subjects with a good academic result in the first semester gives them the opportunity to start the following semesters with well-founded knowledge, which also gives them a better chance of graduating and entering the labour market.

Webpage: <https://dtk.elte.hu/main-page/>

Best practise #3 – Social Welfare Office at University of Patras

Their goal is to record, address the needs of the vulnerable groups, solve problems, and strengthen them. Student's social background is obtained through an individual interview and an individual action plan with the ultimate goal of improving their quality of life throughout their academic career and their inclusion in the University community.

The Social Welfare Office provides:

- Development of proposals and interventions to cover the learning processes
- Personalized action plan
- Psychosocial Support
- Advisory support
- Psychological support
- Medical Support and Physiotherapy
- Academic and Vocational Guidance
- Counselling
- Training seminars on approach and support of Vulnerable Social Groups issues
- Information on the facilities of the University of Patras
- Financial Aid Scholarships
- Connection with services of the University of Patras and with the wider Community
- Referral of students, where deemed necessary
- Transportation of students with disabilities to and from the University Community
- Assistive Technologies Organization

Webpage: <https://socialwelfare.upatras.gr/social-welfare-office/?lang=en>

4.5 Important influences that affect students on and off campus

As Goal 4: Quality Education of UNESCO 2030 Agenda for Sustainable Development (2017) says „by 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university”. The challenges of higher education institutions include preventing dropout, thereby supporting sustainable development.

Therefore, we need to review in this subsection the on-campus and off-campus influences on the student population, in relation to their university performance and experience, and social relationships as well.

Influence on students' university performance is affected by institutional factors, including the quality of education, instructors' attitudes, relationships with peers, university services, and infrastructure. It is also important to highlight the impact of off-campus factors, such as family, financial factors, work commitments, and other personal influences. In the previous subsection, characterising traditional and nontraditional students we already got familiar multiple factors influencing the students transitional process into the university and also their academic performance.

Now we are trying to summarize these as on-campus and off-campus effects, as well as detail them along these aspects.

Fleming et al. (2005) categorize on-campus impacts into three parts:

- Relationships with peers,
- Within academic environmental impacts, they specify classroom, and
- Physical environmental impacts.

The authors further emphasize that the size and type of the university (private or public), which determines how many students it can admit and with what qualifications, as well as the curriculum, all have an impact on students, which in turn reflects on the university's characteristics.

It's important to answer questions regarding on-campus impacts, such as the atmosphere on campus, whether it's open and accessible to everyone. What kind of relationship develops between the university environment and the students, including administrative staff and instructors? What

counselling and other services are available? What is the university or departmental identity, and how is the community? Below, we will examine these aspects in more detail.

On-Campus Influences

Peers and Social Environment

According to Tinto's theory (Tinto, 1975), cited above, social integration into the university is very important to persist.

The research of Maunder (2018) says that social relationships play a significant role in institutional belonging and social integration is an important factor in the successful transition to university life and in remaining there. This article explores the dynamics of students' social connections, their affinity towards the university, and their impact on university adaptation. A group of undergraduate students (N = 135) participated in a survey, detailing their interactions with university peers, their connection to the institution, experiences of challenging peer relationships, and the overall quality of their adjustment to university life. Findings revealed that students with a strong attachment to their peers demonstrated higher levels of adjustment and university affinity. Conversely, those facing challenges in peer relationships reported lower levels of peer attachment and university adjustment. The primary predictor of university adjustment was found to be attachment to university peers, followed by attachment to the university itself.

Here are some ways in which peers and social interactions can influence students:

Social Support and Friendship: Positive relationships with peers can provide emotional support, encouragement, and a sense of belonging. Lowe and Cook (2003, cited by Cheng, 2015) note that a significant portion of individuals living away from home encounter challenges related to missing their family and friends, impacting their capacity to adapt to the new environment. Building friendships and a sense of belonging within the university programme and peer community is considered crucial for facilitating personal and social adjustment to university life (Katanis, 2000, cited by Cheng, 2015). Research indicates that the absence or scarcity of social support not only correlates with lower academic performance but also contributes to negative psychological experiences, including feelings of tension, confusion, and depression (Pederson, 1991; Owens and Loomes, 2010, cited by Cheng, 2015). Peer conflicts or social difficulties can negatively impact mental health and academic performance. Feeling excluded or facing bullying can lead to stress and a decline in overall well-being.

For students studying abroad, it is vital to connect with both fellow compatriots and local students. Engaging with co-national networks in the host country can contribute to a more relaxed adjustment process. Simultaneously, interacting with local students aids international students in building local connections, gaining insights into the culture, and developing essential social skills (Li and Gasser, 2005, cited by Cheng, 2015).

Peer Pressure: Various factors contributing to peer pressure, including gender, family environment, and academic performance. Peer pressure is described as a powerful force influencing individual behaviour, with both positive and negative effects. Positive peer pressure is noted in the context of healthy competition among college students of similar age, enhancing learning processes. However, negative aspects include unhealthy competition, giving up on learning, experiencing psychological inferiority, blindly following others, and losing self-esteem. When individual views conflict with group norms, peer pressure to conform arises. Peer pressure can have a dual nature, positive influences on performance, motivation, and improvement, but also negative impacts on self-confidence and anxiety (Cheng and Deng, 2021).

Collaborative Learning: Group study sessions, collaborative projects, and shared academic goals can enhance the learning experience. Learning from peers can provide different perspectives and deepen understanding, as research indicates that the learning of subject matter is connected to elements like learning communities, small-group learning, and collaborative learning (AAC&U 2018; Mayhew et al. 2016, cited by Senter, 2023).

Social Activities and Extracurriculars: Participation in clubs, sports, or other extracurricular activities helps students build a social network outside the classroom. The extent and regularity of college activities in which students engage, encompassing employment, involvement in student organizations, community service, and academic pursuits. Studies have shown a positive correlation between this variable and retention rates (Astin, 1993, cited by Hakes 2010). Promoting social relationships through activities is considered impactful. (Senter, 2023).

Role Modelling: Observing successful peers can inspire motivation and ambition. Positive role models within the peer group can influence choices related to academics, career goals, and personal development (Filade, 2019).

Academic Environment – Classroom environment (based on Fleming et al., 2005)

Quality of professors, class sizes, and overall academic atmosphere can influence a student's learning experience. The academic environment plays a crucial role in shaping students' experiences and influencing their academic success. „Students learn firsthand to think about and solve practical problems by interacting with faculty members inside and outside the classrooms. Through interactions with students, faculty become role models, mentors, and guides for continuous lifelong learning” (Kuh, Kinzie, Schuh, Whitt, 2005, cited by Hakes, 2010).

Here are some key aspects of the academic environment and how they can impact students:

Quality of Teaching: Professors who are knowledgeable, engaging, and supportive contribute to a positive learning experience. Effective teaching methods can enhance comprehension and retention of material. It is also important to the students getting feedback regularly from the professors.

Class Size and Interaction: Smaller class sizes often facilitate more personalized interactions between students and professors. Increased opportunities for participation and discussion can contribute to a richer learning environment. It can be helpful during the classes encouraging students to use their names, to have a classroom discussion, have questions related to the learning materials.

Resources and Facilities: Access to well-equipped libraries, laboratories, and other resources enhances the learning experience.

Technology Integration: The use of modern technology in classrooms and for online learning can enhance educational outcomes. Availability of online resources and platforms can support flexible learning.

Curriculum Design: A well-designed curriculum that aligns with industry standards and provides relevant skills is essential for preparing students for their future careers. Opportunities for interdisciplinary studies can broaden students' perspectives.

Assessment Methods: Fair and transparent assessment methods contribute to a positive academic environment. Diverse assessment approaches, such as projects, presentations, and exams, can cater to different learning styles.

Research Opportunities: Availability of research opportunities for students fosters a culture of inquiry and innovation. Involvement in research projects can deepen understanding and provide practical experience. For example, at the Faculty of Informatics at ELTE University in Hungary we organize every year a Project Forum, where the projects running in the faculty can be presented, which are waiting for students to join them. The event provides a good opportunity to present the ongoing work at the Faculty, to inform the students about the available research opportunities, and in many cases, in addition to professional development opportunities, it also means a financial advantage for the students if they join a project.

Physical environment (based on Fleming et al., 2005)

An institution's characteristics, including its type, size, and location, significantly influence the campus atmosphere, impacting factors like administration, residential proximity to campus, and the overall university ambiance. Initially, the physical environment encompasses spaces directly linked to student life or the academic programme, such as classrooms, laboratories, and libraries (Astin, 1968).

However, at a more detailed level, it extends to the university setting (residence halls, classrooms) and encompasses the local community and the university's surrounding geographical location.

University dormitories are also part of the physical environment, as students living there spend a lot of their free time, engage in social life, and sleep there. Their well-being is significantly influenced by the physical conditions and the quality of the environment for the mentioned activities. It's worth mentioning that it is also crucial whether the dormitories are located on the university campus or farther away, as the proximity can impact participation in classes or activities that provide leisure or academic support; fewer people may attend if the locations are too far apart. The location of the university's building is also important, whether is in downtown or it is on the outskirts of the city and difficult to access, especially for students with disabilities.

Not only the dormitories but also the immediate surroundings of the university, its geographical location, the city itself, and the opportunities it offers in terms of work and other activities (such as museums, shopping, sports, concerts, etc.) are crucial. Especially when they significantly differ from what one is accustomed to (e.g., someone moving from a village to a capital city may require adjustment not only to the university environment but also to city life; moreover, for an international student, this may involve adapting to different weather and climate, which can be unfamiliar). The opportunities provided by the city can offer support for academic studies alongside opportunities for relaxation and rejuvenation. However, too many distractions from studies, excessive stimuli, therefore striving for balance between the university settings, and the opportunities provided by the broader environment may be important.

We can also list here those companies that are close to the campus or that are in cooperation, where the students complete a professional internship or have entered into some sort of research-related cooperation with the university. Furthermore, this may make it likely that these companies play a major role in the post-graduation employment for the students of the given university.

Off-Campus Influences

As discussed in the previous subchapter, there are several factors that may influence students outside of the university. Primarily, the family factor can be mentioned, which is significant in various respects. On one hand, it can provide significant support, motivation from the family background, and financial assistance for studies. However, excessive family expectations regarding university completion, performance, or the lack of proper support can have a negative impact. Additionally, when we talk about a student who has their own family, children, or is a single parent possibly working to support the family, other responsibilities and commitments can divert attention from university.

Financial situation, in itself, is noteworthy alongside family status, as many students have to take part or full-time jobs to finance their studies, including dormitory or rent, if studying away from their hometown, as well as potentially tuition fees and other living expenses during their studies. If they take on employment, they must also balance between multiple roles, leading to time management issues, and often commuting can significantly hinder adequate preparation for exams or attendance at university classes.

External influences can include the overall legal and political situation, or, in the case of an international student, events in their home country (e.g., war), which can distract attention from university.

Furthermore, technological advancements and, in the case of the young adult generation, Generation Z and the emerging Generation Alpha, the digital world and social media platforms can be sources of distraction or stress, but of course, depending on how they are used, they can also provide assistance and support for university life.

Addressing off-campus influences requires a proactive and comprehensive approach from universities.

To assist students in coping with these external challenges, it is worth considering various opportunities within the institutions. Each of these can serve as a means to reduce dropout rates.

- **Financial Aid and Assistance:** Offer a range of financial aid options, including scholarships, grants, and emergency funds. Provide financial literacy programmes to help students manage their finances effectively.

- **Job opportunities within the university, e.g.:** getting involved in research programmes, teaching, or other administrative tasks in exchange for financial support can help many students overcome financial problems and it is much easier to combine studies with local employment.

- **Counselling and Mental Health Services:** Establish on-campus counselling services to support students dealing with personal and emotional challenges. Promote awareness of mental health resources and reduce stigma surrounding seeking help.

- **Career Guidance and Planning:** Offer career counselling services to help students align their academic goals with future career opportunities.

- **Facilitate internships, co-op programmes, and networking events** to enhance students' employability.

- **Parental Support for Student Parents:** Provide support services for student parents, including childcare facilities and parenting resources.

- **Flexible Learning Options:** Implement flexible learning options, such as online courses or part-time study, to accommodate students with external responsibilities.

- **Train faculty and staff** to recognize signs of distress and connect students with appropriate resources.

4.6 Understanding the specific challenges of the age group and the generation of students in the university regarding to ASEAN countries

Southeast Asia is widely recognized as a region of diversity consisting of 11 nations. Within the Association of Southeast Asian Nations (ASEAN) there are ten member countries, with Timor Leste in the process of joining. As of 2020 ASEAN had an estimated population of 661,826,000 people with 45% residing in areas. It's worth noting that this population is predominantly young with around 51% falling into the age group of 20 to 54 years old while a significant portion is under the age of 20. This vast geographical area is home to, over a thousand ethnos groups and boasts a diverse mix of religious affiliations including Christianity, Islam and Buddhism.

From a point of view the ASEAN Member States together contributed USD 3 trillion to the global economy in 2020 showing a range of different levels of economic development. At the top are high income economies, like Singapore and Brunei Darussalam followed by upper middle-income economies such as Malaysia and Thailand. On the hand Indonesia, the Philippines, Viet Nam, Lao PDR, Cambodia and Myanmar are considered lower middle-income economies. Despite this diversity in status ASEAN remains determined to achieve economic integration and aims to become an inclusive, harmonious and fair community with a well-integrated single market, on a global scale.

In this context higher education plays a role, in achieving ASEAN integration. Over the past decade there has been growth and internationalization in this sector. The ASEAN Socio cultural Community Blueprint 2025 emphasizes the need for an approach to education aiming to promote more interaction and mobility among people within and beyond the ASEAN framework. This vision aligns with the goal of facilitating the flow of ideas, knowledge, expertise and skills to inject dynamism into the region. However, the expanding higher education systems face challenges due to the changing political, economic and socio-cultural landscape in the area. Despite these obstacles

there is a shared belief, among ASEAN Member States that developing capacity and harmonizing education systems will greatly contribute to prosperity. (Miguel Antonio Lim, 2023)

During the COVID 19 education, in the ASEAN region has experienced disruptions affecting around 140 million children and adolescents over the past 18 months. School closures have averaged 136 days during this time which could have lasting effects on young individuals in ASEAN, especially those who are already vulnerable. To prevent consequences, it is crucial to implement strategic measures and interventions promptly. In this section we will briefly discuss the challenges faced by children and adolescents in ASEANs landscape due, to the impact of the COVID 19 pandemic.

(ASEAN Secretariat, 2021)

The effectiveness of development practises heavily relies on policies, programmes and strategies that are supported by evidence. In today's changing landscape it is crucial to have well supported evidence and systematic progress evaluation in order to promote inclusivity and provide necessary assistance to those who face various challenges. The youth population, often seen as an asset, for development presents an opportunity for achieving our goals. It is important to recognize the role that young people play as a resource, in contributing to the economic, social, environmental and cultural advancement of nations.

In 2020 the ASEAN region had, around 224.2 million people with Generation Z (15 25 years old) making up 53 percent and Millennials (26 35 years old) making up 47 percent of the population. This division of demographics highlights the significance of the youth population in today's world. Furthermore, projections indicate that the proportion of people, in the population will reach its highest point in 2038.

In order to achieve this goal, the countries of ASEAN have consistently and purposefully dedicated their efforts to creating and implementing youth development policies and programmes based on evidence. The main objective is to unlock the potential of the youth population, within ASEAN. As a result, several ASEAN countries have introduced frameworks like youth laws well as policies and strategies focused on youth development. This commitment also extends to establishing infrastructure and creating an environment that supports the growth of a generation of individuals who are not only willing but also ready to make significant contributions, to the overall development of their respective nations and the collective progress of the ASEAN community. (ASEAN Secretariat, 2022)

The situation in aspects

The latest version of the Global Youth Development Index (YDI) is the Global YDI 2020. While it cannot be directly compared to the ASEAN YDI due, to differences in indicators and areas of focus it serves as a benchmark for evaluating ASEAN Member States against 181 countries. In the report ASEAN is not presented as a region; instead, its Member States are grouped with neighbouring countries in South Asia. According to the Global Youth Development Index 2020 South Asia showed performance on a global scale ranking 8th out of 9 regions in 2018 and being the second lowest ranked region, after Sub Saharan Africa. However, despite this ranking South Asia made progress in YDI between 2010 and 2018.

Education and Skills

The Education and Skills category showed a range of scores, across Member States from 2013 to 2022. The regional score increased from 0.486, to 0.573 with Singapore achieving the score of 0.992. It's important to note that all 10 Member States made progress during this time period with Myanmar showing the improvements.

Health and Well-being

The scores, for Health and Well-being varied among countries from 2013 to 2022. The overall regional score increased from 0.582 to 0.605 with Singapore achieving the score of 0.958. Out of the 10 countries 7 showed improvements while 3 experienced a decline during this period. Myanmar showed the improvement, between 2013 and 2022.

Employment and Opportunity

From 2013, to 2022 the Employment and Opportunity category showed a range of scores among Member States. It emerged as the domain with the performance with only Singapore achieving a score above 0.700. The regional score increased slightly from 0.522 to 0.541. Singapore took the lead with a score of 0.768. Among the 10 Member States five showed improvements while five experienced a decline during this period. Notably Indonesia made progress from 2013, to 2022.

Participation and Engagement

The scores, for Participation and Engagement showed a range of variations among the Member States between 2013 and 2022. The regional score increased from 0.477 to 0.577 with Viet Nam achieving the score of 0.765. Among the 10 Member States 9 showed improvement while only 1 experienced a decline during this time period. Cambodia made the progress from 2013, to 2022.

Equity and Inclusion

From 2013, to 2022 there were varying scores in Equity and Inclusion across Member States. The regional score showed an increase from 0.455 to 0.606 with Brunei Darussalam achieving the score of 0.770. Out of the 10 Member States 9 showed improvement while only one experienced a decline during this period. Notably Lao PDR made progress, between 2013 and 2022.

Safety and Security

The scores, for Safety and Security varied greatly among Member States between 2013 and 2022. The regional score increased from 0.651, to 0.722 with Singapore achieving the score of 1.0. All 10 Member States showed improvement during this period with the Philippines making the progress.

ASEAN Values and Identity

The scores, for ASEAN Values and Identity Domain remained unchanged universally as all indicators used data from a year (collected in 2020) that was kept constant over time. According to the proxy data from 2020 the regional score in 2022 was 0.670. ASEAN Values and Identity stood out as the performing domain, at the level with all Member States scoring above 0.500.

Brunei Darussalam

Brunei Darussalam achieved the position, in the Youth Development Index (YDI) among the group of 10 ASEAN countries in 2022 indicating an improvement in its score from 0.665 to 0.692 between 2013 and 2022. The significant progress was observed in the Participation and Engagement category with an increase in the score from 0.628 to 0.729 over the past decade. This positive trend can primarily be attributed to a rise in Internet usage, which has grown from 64.50 percent in 2013 to a 100 percent, by the year 2022.

In the field of Education and Skills Brunei Darussalam achieved the score of 0.818 in 2022. The noticeable improvement, during the ten-year period was seen in Gross Graduation Tertiary, which increased from 14.05 percent in 2013 to 28.52 percent in 2022. While there was an improvement in Youth Literacy Rate, indicators within this domain remained relatively stable over the years. Brunei Darussalam made progress in the areas of Health and Well-being Equity and Inclusion and Safety and Security. Indicators for Equity and Inclusion as Safety and Security showed minimal or no change (less than a score increase of 0.05). Notably within the Health and Well-being domain there was an improvement in Youth Mortality rate per 1,000 decreasing from 4.48 in 2013 to 2.78. Life Expectancy at age 15 also increased (from 60.70 years, to 61.86) while rates of disorders transmitted infections including HIV and Substance Use showed a decline. On an aggregate level, Employment and Opportunity faced a downturn owing to a considerable surge in NEET (Not in Education, Employment, or Training) and a reduction in Youth Labor Force Participation. However, discernible improvements were observed in indicators such as Unemployment Rate, Financial Institution Account, and Adolescent Fertility Rate.

Brunei Darussalam's performance, in the ASEAN Values and Identity category was ranked 6th achieving a score of 0.660. Tailoring policies that focus on areas such as Tertiary Graduation, Mental Health, Disaster Risk Reduction and Employment and Opportunity could further contribute to the development of individuals in Brunei Darussalam. It is worth noting that Employment and

Opportunity have been significantly influenced by a decline in Labor Force Participation, which decreased from 0.29 to 0.20 between 2013 and 2022 along with scores in NEET (Not, in Education, Employment or Training) and Youth Unemployment.

Cambodia

Cambodia achieved the spot, in the ASEAN Youth Development Index (YDI) in 2022, which showed the notable improvement among the ten nations from 2013, to 2022. The score increased from 0.440 in 2013 to 0.568 in 2022 resulting in Cambodia's rank improving from 8th to 7th during that period of time.

Cambodia has made progress in the domain of Participation and Engagement. This can be mainly attributed to a 30-percentage point increase, in Voter Turnout Rates and a remarkable 59 percentage point rise in Internet Usage. The domain of Equity and Inclusion has also seen an improvement, driven by increased Access to Electricity representation of Women in Managerial Positions and improved Gender Parity in Literacy. Access to Electricity has nearly doubled over the decade while the proportion of Women in Managerial Positions has risen from 28.39 percent to 33.45 percent. The Severe Disability Rate has remained consistent. There has been a decline in Access, to Sanitation.

There were improvements, in the fields of Education and Skills well as Safety and Security. In terms of Safety and Security there was an increase of 0.132 in score which can be attributed to a decrease in the poverty rate. The percentage of people earning than \$1.90 a day dropped from 8.96 percent to 0.20 percent. As for Education and Skills there was a score increase of 0.112 driven by a boost in the Youth Literacy Rate, which went from 83.93 percent, to a 100 percent.

There were also some improvements, in the Health and Well-being and Employment and Opportunity areas with scores increasing by 0.033 and 0.026. Notable improvements within the Health and Well-being domain include a decrease in Youth Mortality (from 10.01 deaths per 1,000 to 7.19) and an increase in Life Expectancy at age 15 (from 55.75 years to 57.63 years). However, some other indicators showed declines over the decade. In the Employment and Opportunity domain there was improvement in the percentages of people Not in Employment, Education and Training (decreasing from 7.86 percent to 7.12 percent) as those with a Financial Institution Account (increasing from 8.98 percent to 30.20 percent) despite slight declines, in other indicators.

In the ASEAN Values and Identity category Cambodia consistently achieved the position with a score of 0.710, over the course of ten years. Cambodia can benefit from policies that focus on reducing disaster risks addressing fertility improving financial institution account rates promoting volunteered time and enhancing education and skills. The Education and Skills category specifically stood out with a score of Gross Graduation Tertiary at 0.09 from 2013, to 2022.

Indonesia

Indonesia has made strides, between 2013 and 2022 leading to an ASEAN Youth Development Index (YDI) of 0.578. This achievement places it in the position out of the ten ASEAN countries in 2022. Notably the country excelled in the ASEAN Values and Identity category securing the position, with a score of 0.72. Additionally, it ranked 4th in Health and Well-being.

Alongside countries, in the region Indonesia experienced improvements in the area of Participation and Engagement even though there was a slight decrease in Voter Turnout Rates from 75.62 percent to 71.05 percent. The progress mainly came from a rise in Volunteered Time and Internet Usage. Volunteered Time doubled, going from 0.37 in 2013 to 0.74 in 2022 while Internet Usage increased from 32.70 percent, to 52.69 percent.

Indonesia has shown achievements, in the realm of Safety and Security with a score of 0.815 in 2022. This success can be attributed to the country's rates of Interpersonal Violence, Conflict and Terrorism. Furthermore, Indonesia has effectively reduced the percentage of people earning than \$1.90 per day (2011 PPP) from 7.3 percent to a 0.3 percent, which demonstrates their enhanced Disaster Risk Reduction Capability. Significant progress has also been made in domains such as Education and Skills, Employment and Opportunity and Equity and Inclusion. In terms of Education

and Skills there have been improvements in Gross Graduation Tertiary, Mean Years of Schooling and Educational Attainment Rate. Of significance is the increase in Gross Graduation Tertiary from 16.42 percent to 27.68 percent over the past decade. Within the domain of Equity and Inclusion Indonesia has excelled in providing Access to Electricity for its population. The nation has also made efforts to extend Access to Sanitation to 80.96 percent of its people in 2022 compared to 71.75 percent in 2013. Another positive development is seen in the percentage of Women occupying Managerial Positions which increased by a margin of 12.59 percentage points.

There have been some changes, in the area of Health and Well-being. We've noticed a decrease in Youth Mortality from 11.12 percent to 9.39 percent as an increase in Life Expectancy at age 15 from 57.12 years to 58.92 years. Indonesia stands to benefit from targeted policies that address issues, like Severe Disability Rate, National Youth Policy, Digital Natives and Child Marriage.

Lao PDR

In 2022 among the ten member nations of the Association of Southeast Asian Nations (ASEAN) Lao PDR ranked 9th in the Youth Development Index (YDI) with a score of 0.476. This shows an improvement, from the baseline score of 0.368 in 2013. Notably Lao PDR has made progress in the Equity and Inclusion domain over the decade surpassing all other ASEAN Member States (AMS). This impressive growth has propelled Lao PDR from the position in 2013 to a second place in 2022. This positive trend can be attributed to improved access to electricity and sanitation for the population well as an increase in literacy rates, among women.

Furthermore, there have been developments, in the fields of Education and Skills well as Safety and Security in Lao PDR despite its lowest ranking among all AMS in these areas. The Education and Skills sector has made progress in terms of improving the Youth Literacy Rate, which has increased from 72.06 percent to achieve literacy (100 percent). However other indicators within this sector have remained relatively stable. In the Safety and Security domain there has been a decrease in rates of Interpersonal Violence and the percentage of people earning than \$1.90 per day (2011 PPP) has more than halved during the specified period. Nonetheless Child Marriage continues to be prevalent among all ten countries while scores for Disaster Risk Reduction have shown a decline, over time.

There were improvements, in both the Health and Well-being and Participation and Engagement areas. We saw progress in reducing Youth Mortality improving Life Expectancy at age 15 and increasing Internet Usage. However, there were some trends well. The prevalence of Mental Disorders increased from 0.08 percent, to 0.11 percent cases of STIs including HIV rose from 20,395.83 to 21,592.29 and Volunteered Time declined from 0.24 percent to 0.00 percent. On the whole though most other indicators remained relatively stable.

The job market and opportunities, for employment have experienced a decline, highlighted by a decrease in the unemployment rate from 1.81 percent in 2013 to 3.32 percent in 2022 along with a decrease in the number of people participating in the labour force. Additionally, the NEET rate (Not in Education, Employment or Training) has increased from 5.67 percent to 8.25 percent. In terms of raising awareness, values and identity within the ASEAN region Lao PDR has achieved the position. Taking policy measures to address issues such as disability rates, adolescent fertility rates, child marriage rates, national youth policy implementation and educational attainment levels can pave the way for further progress in youth development initiatives, in Lao PDR.

Malaysia

In 2022 Malaysia secured the spot, in the Youth Development Index (YDI) among the ten ASEAN countries. This marked an improvement from its ranking in 2013. One notable aspect was the increase in its score with a rise of 0.037. However, it is worth mentioning that Health and Well-being experienced a decline, over the course of ten years.

The Education and Skills domain demonstrated discernible progress, primarily attributed to the elevation in Gross Graduation Tertiary and Educational Rate, notwithstanding a marginal decrement of 2.64 percentage points in the Youth Literacy Rate. Within the Employment and

Opportunity domain, a commensurate augmentation in its domain score was observed, predominantly influenced by the reduction in the percentage of NEET individuals and an upswing in the proportion of the population aged over 15 holding accounts at financial institutions.

The areas of Participation and Engagement, Equity and Inclusion and Safety and Security showed some stability with positive changes. In terms of Participation and Engagement the use of the Internet increased significantly from 57.06 percent to 97.97 percent. However, there were decreases in Volunteered Time and Voter Turnout Rates. As, for Equity and Inclusion Access to Sanitation saw an improvement with an increase of 9.21 percentage points in the proportion of Malaysia's population accessing safe sanitation services between 2013 and 2022. The domain of Safety and Security experienced change with a slight decrease, in Conflict and Terrorism.

Malaysia has achieved the position, in the ASEAN Values and Identity category with a score of 0.69. Among the domains evaluated Equity and Inclusion had the scores ranging between 0.49 and 0.52 over the span of ten years. Factors such as Gender Parity in Literacy and Severe Disability Rate played a role in shaping this domain. Gender Parity in Literacy witnessed a decline from 0.45 to 0.44 while Severe Disability Rate remained steady at 0.31 from 2013 to 2022. To enhance youth development in Malaysia targeted policies can be implemented focusing on Graduation Tertiary, Youth Labor Force Participation, STI and Women, in Managerial Positions.

Myanmar

Myanmar's position, as the ranked country among all ASEAN Member States (AMS) in the Youth Development Index (YDI) with a score of 0.466 in 2022 contrasts with a remarkable improvement of 0.092 since 2013 primarily driven by a substantial increase, in the Education and Skills domain score.

Myanmar has consistently ranked 8th in the Education and Skills domain over the past decade showing improvement compared to ASEAN countries. One notable achievement is the increase of 25.91 percentage points, in the literacy rate among youth aged 15-24 indicating their proficiency in reading and writing. The Equity and Inclusion domain score also follows a trajectory with improvements in various indicators except for Access to Sanitation. Noteworthy progress can be seen in Access to Electricity (from 56.34 percent to 73.89 percent) Women holding Managerial Positions (from 26.16 percent to 40.63 percent) Gender Parity in Literacy (from 0.980 to 1.014). Severe Disability Rate (from 0, to 17.40 percent).

Health and well-being, participation and engagement and safety and security domains also showed progress. In terms of health and well-being there was a decrease, in youth mortality rate and an increase in life expectancy at age 15. Participation and engagement saw growth in internet usage. There was a simultaneous decrease in volunteered time. Safety and security experienced expansion in the rate of conflicts and terrorism which offset an 8% reduction in poverty headcount. The employment and opportunity domain in Myanmar witnessed a decline as the unemployment rate increased from 1.6% to 6.7% along with a drop of around 20 percentage points in labour force participation. However, there were trends observed in the reduction of individuals (Not Employed, Education or Training) and the adolescent fertility rate, as well as an increase, in the number of individuals having financial institution accounts.

Myanmar has achieved the position, in the ASEAN Values and Identity Index scoring 0.650. To further enhance its development Myanmar should focus on implementing policies that prioritize Disaster Risk Reduction, Life Expectancy, Severe Disability Rate Digital Natives and National Youth Policy.

Singapore

Singapore has achieved the spot, in the ASEAN Youth Development Index (YDI) for 2022 showing considerable progress over the period of 2013 to 2022. Its score increased from 0.804 to 0.830 during this time frame. Notably Singapore performed well in four out of the seven defined areas, Education and Skills, Health and Well-being Employment and Opportunity as well, as Safety and Security.

Participation and engagement showed improvement, due, to a substantial increase in volunteered time and internet usage. The percentage of time increased from 31.0% to 45.0% while internet usage saw an ascent from 80.9% to 96.67%. In the education and skills domain there was enhancement with the score progressing from 0.951 to 0.992. This improvement was primarily influenced by advancements in four out of the five indicators within the domain while the metric, for natives remained consistently high at 88%.

There has been an improvement, in health and well-being which can be attributed to an increase in life expectancy at age 15 from 67.17 to 69.01 years. However, it's important to note that the rate of transmitted infections (STIs) including HIV has also gone up from 13,109.47 to 14,716.29. In terms of equity and inclusion there has been a change with women holding managerial positions with the percentage rising from 33.70% in 2013 to 36.57% in 2022. Singapore has also seen an improvement, in gender parity when it comes to literacy scores.

On the hand the Safety and Security category didn't show any signs of improvement. This was mainly because Singapore consistently achieved the scores across all indicators, in this domain from 2013 to 2022. When it comes to ASEAN Values and Identity Singapore's position remained unchanged with a score of 0.61 placing it at the spot among the ten Member States. To further enhance its youth development Singapore can benefit from implementing targeted policies focused on areas such as the National Youth Policy, Youth Labor Force Participation, Women in Managerial Positions and Gender Parity, in Literacy. These initiatives present opportunities for Singapore to advance further.

Thailand

Thailand's Youth Development Index (YDI) showed progress rising to 0.574 in 2022 an improvement, from its previous value of 0.505 in 2013. However, despite these advancements the country experienced a decline in rank from the position to the 6th position, over the course of ten years.

The area of Equity and Inclusion stood out as the performer with an increase of 0.244, in its score. This progress was driven by a rise in the percentage of women holding positions going from 33.02 percent to 38.90 percent and a remarkable transformation in the number of people with severe disabilities receiving disability cash benefits surging from 0.00 percent to 100.00 percent. Positive changes were also observed in indicators within this domain. Following trends Thailand experienced improvement in its Participation and Engagement score. The percentage of the population using the internet increased from 28.94 percent to 78.87 percent accompanied by an uptick in Voter Turnout Rates from 64.92 percent, to 69.40 percent.

There were improvements, in the Education and Skills domain well as the Safety and Security domain. In terms of Education and Skills there was an increase in the number of years of schooling along with a rise in the percentage of people completing secondary or higher education. This led to an increase in the score for this domain by 0.053. On the hand in the Safety and Security domain there was a decrease in interpersonal violence and conflict as well as terrorism. However, this positive change was balanced by a reduction in the country's ability to handle disaster risks. Thailand ranked low in the Health and Well-being domain with a decrease in score from 0.454 in 2013 to 0.449 in 2022. This decline can be attributed to an increase in life expectancy at age 15 (from 60.82 years to 63.30). It was offset by an increase in substance use and mental health disorders. In terms of Employment and Opportunity Thailand experienced a decline with a decrease in unemployment rate (from 1.27 percent to 5.83 percent) and labour force participation (from 43.87 percent to 38.66 percent). Despite these challenges Thailand saw an increase in individuals having financial institution accounts while also witnessing a decrease in the number of births, per thousand women.

According to the ASEAN Values and Identity Index Thailand was ranked 10th with a score of 0.59. To promote youth development, in Thailand it is crucial to implement policies that address

areas such as access, to sanitation sexually transmitted infections (STIs) youth labour force participation, youth mortality, volunteered time and child marriage.

Vietnam

Vietnam has achieved the position, in the ASEAN Youth Development Index (YDI) for 2022 showcasing an improvement in the YDI score from 0.595 to 0.661 over the span of a decade. The significant advancements were observed in the areas of Equity and Inclusion and Participation and Engagement. The ASEAN Values and Identity Index remained consistently high at 0.730 while there was a decline in the Health and Well-being domain, throughout the ten-year period.

In the domain of Equity and Inclusion all the indicators showed progress. Access, to Sanitation saw an increase of 9.21 percentage points and the percentage of people with disabilities receiving cash benefits reached 100.00 percent from a 0.00 percent. The representation of women in positions also improved, going from 23.91 percent to 27.91 percent, which has implications. In Vietnam there was a surge in Internet Usage rising from 36.80 percent to 83.00 percent along with an increase in Volunteered Time; however, there was a decline in Voter Turnout Rates, at the same time. As a result, Vietnams score for Participation and Engagement showed an improvement.

The field of Education and Skills experienced growth mainly driven by the Gross Graduation indicator. The percentage of people who completed a first-degree programme, in education rose to 25.42% in 2022 showing an increase from the baseline of 11.47% in 2013. Both the Employment and Opportunity and Safety and Security domains also saw growth. Throughout the decade there was a decrease in the Unemployment Rate and an increase in Labor Force Participation balanced by people having financial institution accounts and fewer births per 1,000 women. It is worth mentioning that all indicators within the Safety and Security domain except for Child Marriage demonstrated improvements. However, there was a decline in the score of the Health and Well-being domain over the decade. This decline was driven by increases in Mental Health Disorders, Sexually Transmitted Infections (STIs) and Substance Use. Nonetheless Life Expectancy at age 15 increased from 61.96 years in 2013 to 62.27 years in 2022 while the probability of death for ages 15 24 declined from 7.25, to 5.85.

Vietnam is, in a position to gain advantages by implementing specific policies that target Substance Use Disorders, STIs increasing the number of women in managerial positions encouraging volunteer work improving tertiary graduation rates and achieving gender parity in literacy. These efforts will contribute to progress in the development of youth, in Vietnam.

The situation of people in ASEAN

In the midst of changes, in the structure of industries it is crucial to ensure that workers skills are effectively matched with the evolving demands of the job market. When there are disparities between the supply and demand for skills, we encounter two scenarios; "skill shortages," where it becomes difficult to acquire the skills within the current job market and "skill surpluses," which indicate an excess of certain skills compared to what the market needs. Another aspect to consider is skill mismatches, where workers qualifications either exceed or fall short of what's required for a job under current market conditions.

Empirical evidence strongly suggests that skill shortages have impacts on firms productivity in countries as seen in examples like Ireland and Canada. Studies conducted at a level also show that when employees are under qualified for their positions it has an effect on productivity in Belgian firms. On the hand over qualification has been found to have effects on productivity. This observation holds true at an level within the OECD as well. It's important to note that while having skilled employees can boost firm level productivity it can simultaneously hinder labour productivity by potentially stifling growth opportunities, for more efficient firms that could better utilize these skilled workers.

The importance of tackling skill imbalances to enhance productivity and promote employment growth is widely recognized worldwide including in Southeast Asia. For example, the Malaysian government emphasized in its 2017/18 Economic Report that addressing skill shortages

and mismatches, in the workforce is a challenge to boosting productivity. Similarly, Cambodia's National Employment Policy 2015-2025 identifies skill shortages as a hindrance, to innovation and the growth of businesses.

Many employers rely on surveys to measure skill imbalances by asking about their hiring plans and difficulties, in recruiting. For instance, the World Bank Enterprise Survey is an example that shows a number of employers in different countries face difficulty in finding the right skills, which hampers their current operations. This issue is particularly notable. Affects around 10 to 15% of employers in the Philippines, Indonesia, Lao PDR and Malaysia well as 18% of employers in Cambodia. However it is clear that while employers do face challenges, in finding the workforce the severity of this problem seems to be less pronounced compared to OECD countries. (OECD Southeast Asia, 2021)

In the changing environment of the Association of Southeast Asian Nations (ASEAN) people face complex challenges that are closely connected to the widespread problem of skill shortages. This situation highlights the importance of an ongoing dedication, to education. However, it is important to recognize that each country's unique circumstances call for an adaptable approach to strategies and academic services. A thorough examination of this situation reveals a multitude of interconnected factors that influence the landscape, in ASEAN countries including differences, technological progress, cultural diversity and geopolitical considerations.

The difficulties faced by people, in ASEAN nations are examples of the socio-economic dynamics at play. Economic imbalances, changes in industries and global market demands all contribute to the lack of skills. This skill shortage presents a challenge for individuals and society as a whole. As a result, it becomes crucial to prioritize education as a means to bridge the gap, between skills and the ever-changing needs of the job market.

The ASEAN region is known for its nations each, with its unique culture, economy and social fabric. This diversity calls for an education system that takes into account the needs and circumstances of each country. Adapting educational and academic services becomes crucial in order to tackle the challenges faced by learners in ASEAN nations. This adaptability requires an understanding of the socio environment, cultural nuances and educational infrastructure that are specific to each country. One of the factors shaping education in this region is the economic context. Economic conditions vary greatly across ASEAN countries ranging from developed economies like Singapore and Malaysia to emerging markets such as Vietnam and Cambodia. These economic differences influence the demand for skills within each country. Therefore, an effective educational approach should not address skill gaps but also anticipate future demands while aligning educational offerings, with the changing economic landscape.

The importance of education, in ASEAN countries is emphasized by the evolving technological advancements. The Fourth Industrial Revolution has brought about changes reshaping the nature of work and the skills needed. Automation, intelligence and digitalization are revolutionizing industries and job roles. As a result, individuals must continuously update their skills to remain relevant in the workforce. Educational systems should incorporate literacy, critical thinking and adaptability to prepare learners for the demands of a digital world.

The rich cultural diversity that characterizes ASEAN plays a role in shaping preferences learning styles and attitudes towards academic pursuits. An effective educational strategy should be culturally sensitive by recognizing and integrating perspectives within the region. This includes adapting curriculum content as creating an inclusive learning environment that values and celebrates the cultural heritage of each ASEAN nation.

Considering factors further emphasizes the need for education strategies in ASEAN. The geopolitical landscape is complex with alliances, historical legacies and diplomatic intricacies influencing policies, international collaborations well as student and professional mobility, across borders. To be effective an educational framework should navigate these nuances by promoting collaboration and exchange while addressing challenges arising from geopolitical tensions.

Given the challenges we face it's important to reassess how education and academic services are adapted in ASEAN. We need to rethink our curricula teaching methods and embrace technology. It's crucial that we create customized programmes that target skill gaps in each country. This can be achieved through collaboration, between institutions, government bodies and industry stakeholders. By working we can ensure that our educational offerings meet the changing demands of the job market and contribute to the overall socio-economic development of the region. In addition to this fostering a culture of learning is essential in addressing skill shortages and adapting to the evolving labour market. It's important to integrate development programmes as well as upskilling and reskilling initiatives into our educational framework. This way individuals will be empowered to navigate through changing career landscapes to achieve this paradigm shift, towards learning we need to change how we perceive education. It shouldn't be seen as a one-time endeavour but an ongoing process that accompanies individuals throughout their journey.

The role of technology, in education is incredibly important considering the changing landscape of ASEAN. E learning platforms, online courses and digital resources provide easily accessible options for learning. By integrating technology into education, we can expand its reach. Ensure that individuals from backgrounds and locations have access to high quality educational materials. Embracing literacy as a part of education equips learners with the necessary skills to navigate the digital age and utilize technology for personal and professional growth. Moreover, a comprehensive approach to education in ASEAN involves not focusing on skills but also nurturing soft skills that are crucial for success in the 21st century. Skills like thinking, effective communication, collaboration and adaptability are increasingly valued in today's changing global landscape. Educational programmes should include learning opportunities, problem solving exercises and chances, for creativity to help learners develop a rounded set of abilities.

The way education is adapted in ASEAN goes beyond the education system. It also includes training, apprenticeships and collaborations, with industries. By creating connections between institutions and industries we can make sure that the educational curricula match the practical needs of the job market. Programmes, like internships, mentorship initiatives and industry partnerships offer real life experiences that improve the chances of graduates finding employment.

In summary the need, for education in ASEAN countries is deeply intertwined with factors such as socio-economic dynamics, cultural diversity, technological advancements and geopolitical considerations. The urgency to address skill shortages requires education strategies that cater to the challenges faced by each nation. This involves understanding and navigating the landscape embracing changes respecting cultural differences and considering geopolitical factors. By promoting a culture of learning integrating technology into education and aligning programmes with the evolving job market needs ASEAN can pave the way for a future where individuals possess the necessary skills for success and the region thrives due, to its highly educated workforce.

Summary

Higher education profoundly shapes the professional identity development of individuals, concurrently fostering a lifelong learning ambition. In recent decades, this arena has undergone a noticeable evolution, reflected in the changing motivations of entering students. Success experiences and a sense of belonging are pivotal in this phase—a period often characterised by resilience testing, self-discovery, and the establishment of robust social networks. Sustainability becomes crucial within this transformative stage, as higher education serves as the cornerstone for nurturing conscious, engaged learners. The initial year is the tipping point for potential dropout, marking a significant challenge. This underscores the responsibility of establishing student support services to grasp student needs comprehensively and devise effective strategies to support their continued academic pursuit, especially in areas of any kind of science (Berens et al., 2019; Bound et al., 2010; Bowen et al., 2009). Therefore, investing in dropout prevention and exploring efficient student support

strategies is a worthwhile endeavour, especially given its significant economic implications (Bound et al., 2010). Student support services are at the outset of studies emerging as a crucial determinant in ensuring student success (e.g., Wilson et al., 2016; Bourn, 2007). Implementing proactive early interventions proves advantageous, allowing the early identification of at-risk students, thereby enabling timely support (Zhang et al., 2014). Such student support services programmes have exhibited a positive impact in retaining students (Campbell et al., 1995). This is important to advocate for procedural alterations at the institutional level, particularly to address the specific challenges and encourage sustainable student engagement and success within higher education (Takács et al., 2021b, 2022).

Understanding the specific challenges faced by various age groups within the university environment is crucial for providing effective support and guidance. Different generations of students possess unique characteristics and encounter specific hurdles during their academic journey. For instance, the distinctive traits of Generation Z are linked with an increased dependence on technology and social media (Twenge, 2017). This reliance might influence their learning habits, potentially affecting their attention span and interaction patterns within educational settings (Twenge, 2017). In contrast, Generation Y, also known as Millennials, have different experiences and expectations due to their formative years being influenced by the rise of the internet and technological advancements (Konczak et al., 2011). These generational differences contribute to varying challenges in adapting to university life, such as coping with stress, engaging with traditional teaching methods, or maintaining a work-life balance. Understanding these distinct challenges is essential for universities and mentors to tailor support systems that effectively address the diverse needs of these age groups.

The aforementioned studies showed how much these generations have evolved over the past two decades. Younger generation processes information swiftly, but they exhibit less effectiveness in the social dimension compared to the older generation. These characteristics align with the insights of positive psychology researchers like Oláh (2009), emphasising that flexibility in coping strategies enhances university students' perception of control over challenges and their ability to handle them. This chapter showed the differences between generations and the importance of strengthening flexibility in coping strategies through student support services (Takács et al., 2021b, 2022).

By adapting mentoring and teaching methodologies and integrating technology while considering the diverse needs and learning preferences of the new generation, mentors can establish a more engaging and productive academic environment. This approach not only benefits the students by promoting deeper learning but also prepares them effectively for the fast-paced, technology-driven world they live in. New-generation students favour working in groups, peer-to-peer learning, and digital collaboration tools.

The study also reveals distinct generational responses when faced with challenging life situations. The practical significance of this study lies in its implications for tailoring preventive educational programmes. It underscores the importance of monitoring and promoting the mental health of university students. Interventions should be designed to support students in enhancing self-regulation skills, thereby mitigating the adverse effects of stress in educational settings and potentially leading to improved academic performance.

In this Chapter we discussed the characteristics, challenges, and support needs of traditional and non-traditional students, including those with special education needs in higher education. It highlights the importance of understanding the diverse needs of students, to enhance their university experience. The text explores the distinctions between traditional and non-traditional students based on factors like age, employment status, enrolment time, and living situation. However, it acknowledges that these characteristics may not universally apply, and exceptions exist.

The transition to university life poses challenges for both traditional and non-traditional students, with external changes such as location, cultural shock, financial concerns, and social

adjustments. In case of people with disabilities, obstacles include physical and attitudinal barriers, financial constraints, mental health issues, lack of support, and stigma. Environmental hindering factors include information gaps, bureaucratic procedures, and architectural barriers.

Challenges for students with special needs include a higher vulnerability to school dropout and difficulties in the labour market. Key elements for successful integration include self-management skills, self-representation, confidence building, and technical support. Peer mentoring, assistive technology, and universal design approaches play crucial roles. Equality advisory services provide information, career-building skills, and support for students with disabilities.

Coping strategies and best practises for these challenges in university life are provided, emphasizing the importance of support services for all types of students. The conclusion emphasizes the significance of understanding individual student characteristics and needs for shaping an inclusive university environment. It suggests various support measures, including psychological counselling, career counselling, extracurricular activities, flexible services, online classes, and financial assistance.

Higher education institutions play a crucial role in social mobility for disadvantaged individuals, contributing to sustainable development.

The subchapter explores on-campus and off-campus influences on students' university performance, experience, and social relationships.

On-campus influences include peer relationships, academic environment, and physical environment, each contributing to the overall university experience.

Peers and social interactions play a vital role in students' adjustment and well-being, influencing factors like social support, peer pressure, collaborative learning, and extracurricular activities.

The academic environment, including teaching quality, class size, resources, technology integration, curriculum design, assessment methods, and research opportunities, significantly impacts students' learning experiences.

The physical environment, encompassing university characteristics, location, and facilities, shapes the campus atmosphere and influences students' participation and well-being.

Off-campus influences, such as family, financial status, work commitments, and external factors like legal and political situations, also impact students' ability to navigate university life.

The subchapter emphasizes the need for universities to address external challenges and reduce dropout rates through financial aid, job opportunities, counselling services, career guidance, parental support, flexible learning options, and faculty training.

Discussion questions

1. How would you describe the key characteristics of the new generation of students, particularly in terms of their attitudes, values, and preferences in comparison to previous generations?
2. In what ways do you think the experiences of growing up in a digital age have shaped the learning preferences and expectations of the new generations?
3. Given the diverse learning styles within the new generation, what teaching methods do you believe would be most effective in engaging this generation in higher education?
4. How can educators adapt traditional teaching methods to align with the preferences and needs of the new generation of students?
5. To what extent do you think integrating technology into the curriculum is essential for effectively engaging the new generation of students? What challenges might arise in this process?
6. Can you provide examples of innovative uses of technology in higher education that have proven successful in capturing and maintaining the attention of the new generation?

7. In what ways can social learning platforms and collaborative tools be incorporated into the student support service programme to foster meaningful interaction among Generation Z students?
8. The new generation is often noted for its emphasis on soft skills such as creativity, communication, and critical thinking. How can higher education institutions incorporate the development of these skills into their student support service?
9. What role do you see experiential learning and real-world applications playing in the development of the soft skills valued by the new generation?
10. The new generation is accustomed to immediate feedback in their digital interactions. How can educators provide timely and constructive feedback in higher education settings to meet the expectations of Generation Z students?
11. How do the challenges faced by non-traditional students differ from those of traditional students during the transition to university life?
12. In what ways can universities tailor their support services to meet the diverse needs of both traditional and non-traditional students?
13. Discuss the factors that non-traditional students consider when choosing a university compared to traditional students.
14. What are some effective strategies mentioned in the text for addressing challenges related to financial concerns and academic pressures for both types of students?
15. How can universities create a more inclusive environment that accommodates the diverse needs of students?
16. In what ways can peer mentoring programmes contribute to the success of students with disabilities in higher education?
17. How might the concept of universal design be implemented more widely to create inclusive environments for all students?
18. What role do support offices and services play in the overall well-being and academic success of students with special needs?
19. How can societal attitudes and awareness be improved to reduce stigma and discrimination against students with disabilities in higher education?
20. How do on-campus influences, particularly peer relationships, impact students' overall adjustment to university life?
21. In what ways does the academic environment contribute to or hinder students' learning experiences, and how can it be improved?
22. Discuss the role of the physical environment in shaping the campus atmosphere and its influence on students' well-being.
23. How can universities effectively address off-campus influences, such as family expectations, financial constraints, and external factors, to support student success?

References

- Adedoyin, O. B., & Soykan, E. (2023). Covid-19 pandemic and online learning: The challenges and opportunities. *Interactive Learning Environments*, 31(2), 863–875. <https://doi.org/10.1080/10494820.2020.1813180>
- Alnahdi, G.H. (2014). Assistive technology in special education and the universal design for learning. *The Turkish Online Journal of Educational Technology*, p.18-23.
- Ambati, N.R. (2015). Coping Strategies Used By Students with Disabilities in Managing Social and Higher Educational Experiences. *International Journal of Indian Psychology*, 2(3), 58-74. <https://doi.org/10.25215/0203.065> (Download: 11.03.2023)

- Arora, et al. (2021). Examining the Impact of COVID-19 and the Shift to Online Education on Students' Anxiety and Self-Efficacy. *Interactive Technology and Smart Education*. <https://doi.org/10.1108/ITSE-08-2020-0158>
- Bailenson, J. N. (2021). Nonverbal Overload: A Theoretical Argument for the Causes of Zoom Fatigue. *Technology, Mind, and Behavior*, 2(1). <https://doi.org/10.1037/tmb0000030>
- Bates, T., & Sangrà, A. (2011). *Managing technology in higher education: Strategies for transforming teaching and learning* (1st ed). Jossey-Bass.
- Bean, JP, Metzner, BS (1985). A Conceptual Model of Nontraditional Undergraduate Student Attrition. *Rev. Educ. Res.* 55(4):485-540.
- Beer, A., & Bray, J. B. (2019). *The College-Work Balancing Act*. Washington, D.C.: Association of Community College Trustees.
- Bendixen-Noe, Mary K. and Giebelhaus, Carmen (1998) "Nontraditional Students in Higher Education: Meeting Their Needs as Learners," *Mid-Western Educational Researcher: Vol. 11: Iss. 2, Article 6*.
- Berens, J., Schneider, K., Gortz, S., Oster, S., & Burghoff, J. (2019). Early Detection of Students at Risk—Predicting Student Dropouts Using Administrative Student Data from German Universities and Machine Learning Methods. *Journal of Educational Data Mining*, 11(3), 1–41. <https://doi.org/10.5281/zenodo.3594771>
- Beukelman, D. R., Mirenda, P. (2005). *Augmentative and alternative communication*. (3rd ed.). Baltimore: Paul H. Brookes Publishing Co
- Bonwell, C. C., & Eison, J. A. (1991). *Active Learning: Creating Excitement in the Classroom*. ASHE-ERIC Higher Education Report, Washington DC: School of Education and Human Development, George Washington University.
- Bound, J., Lovenheim, M. & Turner, S. (2010). Why Have College Completion Rates Declined? An Analysis of Changing Student Preparation and Collegiate Resources. *American Economic Journal: Applied Economics*, 2, 129-157.
- Bourn, J. (2007). *Staying the course: The retention of students in higher education*. London, UK: The Stationery Office.
- Bowen, W. G., Chingos, M. M., & McPherson, M. S. (2009). *Crossing the Finish Line: Completing College at America's Public Universities*. Princeton: Princeton University Press.
- Bryant, D., Bryant, B., Smith, D. (2017). Teaching Students with Special Needs in Inclusive Classrooms.
- Burchardt, T. (2005). The education and employment of disabled young people. Jose Rowntree Foundation. The Policy Press. <https://www.jrf.org.uk/report/educationand-employment-disabled-young-people> (Download:10.06.2021)
- Burgyán, A. (2015). Felsőoktatási esélyegyenlőségi tanácsadás. In: A felsőoktatási diáktanácsadás szakmai irányelvei, szakmai protokollja. 64-68. www.feta.hu/sites/default/files/feta_felsooktatasi_diaktanacsadas_szakmai_protokollja_2015.pdf (Download:11.03.2021)
- Campbell, F. A., & Ramey, C. T. (1995). Cognitive and School Outcomes for High-Risk African-American Students at Middle Adolescence: Positive Effects of Early Intervention. *American Educational Research Journal*, 32(4), 743–772.
- Cheng, M., Pringle Barnes, G., Edwards, C., Valyrakis, M., Corduneanu, R., Koukou, M. (2023). Transition Skills and Strategies: Transition Models and how Students Experience Change. Glasgow: QAA Scotland. <https://www.enhancementthemes.ac.uk/docs/ethemes/student-transitions/transition-models-and-how-students-experience-change.pdf>
- Cheng, Z., Deng Y. (2021). The Influence of Peer Pressure on College Students and the Countermeasures. *Advances in Social Science, Education and Humanities Research*, volume 638, p.593-596.
- Chung,E., Turnbull,D., Chur-Hansen,A. (2014). Who are 'non-traditional students'? A systematic review of published definitions in research on mental health of tertiary students. *Educational*

- Cicekci, M. A., & Sadik, F. (2019). Teachers' and Students' Opinions About Students' Attention Problems During the Lesson. *Journal of Education and Learning*, 8(6), 15. <https://doi.org/10.5539/jel.v8n6p15>
- Commission staff working document: Progress Report on the implementation of the European Disability Strategy (2010 - 2020). Brussels, 2.2.2017 SWD(2017) 29 final. <http://ec.europa.eu/social/main.jsp?langId=en&catId=22>. (Download:10.06.2021)
- Delaney, M. (2016). *Special Educational Needs*. Oxford: Oxford University Press.
- Donlevy, V., van Driel, B., Horeau McGrath, C. (2019). *Education as self-fulfilment and self-satisfaction*, European Commission, Seville, JRC117548.
- Dziuban, C., Graham, C. R., Moskal, P. D., Norberg, A., & Sicilia, N. (2018). Blended learning: The new normal and emerging technologies. *International Journal of Educational Technology in Higher Education*, 15(1), 3. <https://doi.org/10.1186/s41239-017-0087-5>
- ELT Journal*, Volume 71, Issue 4, Pages 525–528.
- Erazo, S., Nicolay, G., & Esteve-González, V., & Byron, V.. (2015). *Teaching and learning in digital worlds: Strategies and issues in higher education*. Publicacions Universitat.
- Fazekas Á. S. (2019). Felsőoktatáshoz történő hozzáférés és a felsőoktatásban való részvétel vizsgálata a fogyatékossggalélő személyek vonatkozásában. Doktori Disszertáció, ELTE TÁTK, Budapest https://edit.elte.hu/xmlui/static/pdf-viewer-master/external/pdfjs-2.1.266-dist/web/viewer.html?file=https://edit.elte.hu/xmlui/bitstream/handle/10831/44521/Fazekas_Agnes_Sarolta_doktori_ertekezes.pdf?sequence=11&isAllowed=y
- Filade, B. (2019). Peer group influence on academic performance of undergraduate students in Babcock University, Ogun State. *African Educational Research Journal Vol. 7(2)*, pp. 81-87.
- Fleming, W. J. B., Howard, K., Perkins, E., Pesta, M. (2005). The college environment: Factors influencing student transition and their impact on academic advising. *The Mentor: An Academic Advising Journal*, 7(3).
- Gabrielova, K., and Buchko, A. A. (2021). Here comes Generation Z: Millennials as managers. *Business Horizons*. <https://doi.org/10.1016/j.bushor.2021.02.013>
- Gobbi, M. (2023). Student and Teacher perceptions and experiences: How do they align? *Tuning Journal for Higher Education* 10(2). <https://doi.org/10.18543/tjhe1022023>
- Hakes, Cathy J., "Off-Campus Work and Its Relationship to Students' Experiences with Faculty Using the College Student Experiences Questionnaire" (2010). USF Tampa Graduate Theses and Dissertations. <https://digitalcommons.usf.edu/etd/1654>
- Hargreaves, A., & Fullan, M. (2000). Mentoring in the New Millennium. *Theory Into Practise*, 39(1), 50–56. https://doi.org/10.1207/s15430421tip3901_8
- Hong, B. S. S. (2015). Qualitative Analysis of the Barriers College Students With 77 Disabilities Experience in Higher Education. *Journal of College Student Development*, 56(3), 209–226. <https://doi.org/10.1353/csd.2015.0032>
- Iorgulescu, M.-C. (2016). *Generation Z and its perception of work*. *Cross-Cultural Management Journal*, XVIII(01), 47–54.
- Johnson, M. L., Nussbaum, E. M. (2012). Achievement goals and coping strategies: Identifying the traditional/nontraditional students who use them. *Journal of College Student Development*, 53, 41–54.
- Johnson, M.L., Kestler, J.L. (2013). Achievement goals of traditional and nontraditional aged college students: Using the 3 × 2 achievement goal framework. *International Journal of Educational Research Volume 61, Pages 48-59*. <https://doi.org/10.1016/j.ijer.2013.03.010> (Download:10.11.2023)
- Johnson, M.L., Taasobshirazi, G., Clark, L., Howell, L., Breen, M. (2016). Motivations of Traditional and Nontraditional College Students: From Self-Determination and Attributions, to Expectancy

- and Values. *The Journal of Continuing Higher Education*, 64:1, 3-15, DOI: 10.1080/07377363.2016.1132880 (Download:10.11.2023)
- Jones, D. J., & Watson, B. C. (1990). High-Risk Students and Higher Education: Future Trends. ASHE-ERIC Higher Education Report No. 3. ASHE/ERIC Higher Education Reports, The George Washington University, One Dupont Circle, Suite 630, Washington, DC 20036-1183. Direct link: <https://files.eric.ed.gov/fulltext/ED321726.pdf>
- Kabilan, M. K., Ahmad, N., & Abidin, M. J. Z. (2010). Facebook: An online environment for learning of English in institutions of higher education? *The Internet and Higher Education*, 13(4), 179–187. <https://doi.org/10.1016/j.iheduc.2010.07.003>
- Karatzoglou, B. (2013). An in-Depth Literature Review of the Evolving Roles and Contributions of Universities to Education for Sustainable Development. *Journal of Cleaner Production*, 49, 44-53. <https://doi.org/10.1016/j.jclepro.2012.07.043> (Download:10.11.2023)
- Konczak, L. J., Smith, D. E., Brumback, G. B., Buenger, V., Craig, S. B., Fink, A., Fleenor, J. W., Jones, R. G., Levy-Leboyer, C., Macan, T., Ree, M. J., & Thayer, P. W. (2011). The Trophy Kids Grow Up: How the Millennial Generation Is Shaking Up the Workplace by Ron Alsop. *Personnel Psychology*, 64(1), 263–265. <https://doi.org/10.1111/j.1744-6570.2010.01208.1.x>
- Kovács, K. (2011). A fogyatékosággal élő hallgatók helyzete a hazai és néhány külföldi ország felsőoktatási intézményeiben. *Pedagógusképzés* 9 (38), 2011/3-4., 77-92.
- Kovács, K. (szerk.)(2019): Az ELTE szolgáltatásai speciális szükségletű hallgatók számára. Tájékoztató oktatók és egyetemi munkatársak számára. https://www.elte.hu/dstore/document/3855/oktat%C3%B3i%20t%C3%A1j%C3%A9koztat%C3%B3_SH%C3%9CtI.pdf (Download: 11.11.2023)
- Leggins, S. (2021). The 'New' Nontraditional Students. *Journal of College Admission*, 251, 34-39.
- Lozano-Rodríguez, A., Inez García-Vázquez, F., & Luis García-Cué, J. (2022). *Perspective Chapter: The Role of Learning Styles in Active Learning*. In D. Ortega-Sánchez (Ed.), *Education and Human Development* (Vol. 2). IntechOpen. <https://doi.org/10.5772/intechopen.105964>
- Malarvili, R., and Dhanapal, S. (2018). *Academic stress among university students: A quantitative study of generation Y and Z's perception*. *Pertanika Journal of Social Sciences and Humanities*, 26, 2115–2128.
- Matei, S. A. (2013). *The Shallows: What the Internet Is Doing to Our Brains*, by Nicholas Carr. New York, NY: W. W. Norton, 2010. *The Information Society*, 29(2), 130–132. <https://doi.org/10.1080/01972243.2013.758481>
- Maunder, R. (2018). Students' peer relationships and their contribution to university adjustment: The need to belong in the university community. *Journal of Further and Higher Education Vol.42* (6) 756-768.
- McCrinkle, M., & Wolfinger, E. (2018). *The ABC of XYZ: Understanding the global generations*. McCrinkle Research Pty.
- Moriña, A., Molina, V. M., & Cortés-Vega, M. D. (2018). Voices from Spanish students with disabilities: Willpower and effort to survive university. *European Journal of Special Needs Education*, 33(4), 481–494. <https://doi.org/10.1080/08856257.2017.1361138> (Download:11.03.2021)
- Murata, T., Vaichis, D. (2022). Evaluating Student Success Among Traditional and Non-Traditional Students & Strategies to Implement to Increase Retention and Academic Success. Crafton Hills Collage Reserach https://www.craftonhills.edu/about-chc/research-and-planning/documents/rnn2417_nontraditionalstudentsresearchandstrategies_final.pdf (Download:10.11.2023)
- Nagy, Á. & Kölcsey, A.(2017).Generation Alpha: Marketing

- National Endowment for Financial Education (2015). What's in a generational label? NEFE Digest. Retrieved from: <https://www.nefe.org/images/nefe-digest/2015/January-February-2015.pdf>
- Oláh, A. (2009). *Psychological immunity: a new concept of coping and resilience*. Coping & Resilience International Conference. Dubrovnik–Cavtat, Croatia. (Accessed 16th May, 2021)
- or Science. *Acta Educationis Generalis*, 7(1) 107-115. <https://doi.org/10.1515/atd-2017-0007>
- Padrón, I., Fraga, I., Vieitez, L., Montes, C., and Romero, E. (2021). *A Study on the Psychological Wound of COVID-19 in University Students*. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.589927>
- Pásztor-Nagy, A. (2021). Sikeres egyetemi teljesítmény tényezőinek vizsgálata speciális szükségletű, programtervező informatikus hallgatók körében. Szakdolgozat, ELTE PPK, Budapest
- Pilcher, J. (1994). *Mannheim's Sociology of Generations: An Undervalued Legacy*. *The British Journal of Sociology*, 45(3), 481–495. <https://doi.org/10.2307/591659>
- Prague Communiqué (2001). Towards the European Higher Education Area. Communiqué of the meeting of European Ministers in charge of Higher Education. in Prague on May 19th 2001. TOWARDS THE EUROPEAN HIGHER EDUCATION AREA (Download:11.02.2023)
- Prensky, M. (2001). Digital Natives, Digital Immigrants Part 1. *On the Horizon*, 9(5), 1–6. <https://doi.org/10.1108/10748120110424816>
- Radford, A., Cominole, M. B., Skomsvold, P. (2015). Demographic and Enrollment Characteristics of Nontraditional Undergraduates: 2011-12. Web Tables. NCES 2015-025. <https://nces.ed.gov/webtables/web-tables/data/2015-025-11> (Download:10.11.2023)
- Remenick, L. (2019). Services and support for nontraditional students in higher education: A historical literature review. *Journal of Adult and Continuing Education*, Vol. 25(1) 113–130 <https://doi.org/10.1177/147797141984288> (Download:10.11.2023)
- Richtel, M. (2010). *Growing Up Digital, Wired for Distraction*. *The New York Times*. Retrieved from: <https://www.nytimes.com/2010/11/21/technology/21brain.html>
- Rideout, V. J., Foehr, U. G., & Roberts, D. F. (2010). Generation M2: Media in the Lives of 8- to 18-Year-Olds. Henry J. Kaiser Family Foundation. Retrieved from: <https://kaiserfamilyfoundation.files.wordpress.com/2013/04/8010.pdf>
- Senter, M. S. (2023). The Impact of Social Relationships on College Student Learning during the Pandemic: Implications for Sociologists. *Teaching Sociology*, 0(0). <https://doi.org/10.1177/0092055X231178505>
- Southall, J., Wason, H., Avery, B. (2016.) Non-traditional, commuter students and their transition to Higher Education - a synthesis of recent literature to enhance understanding of their needs. *Student Engagement and Experience Journal Volume 5, Issue 1*
- Takács R. (2018). A tanácsadás sorsfordító szerepe informatikus hallgatók körében. Az ELTE Informatikai Kar Diáktámogató Központ alapítása és fejlődése. *Pszichoterápia 27. évfolyam, 4. szám, 333-338*.
- Takács, R., Csizovszky, F., Gogibedavili, A., Mihály, A., Nagy, V., Pásztor-Nagy, A., Rakovszky, D., Várnai-Iház, J., Siposné Virág, S. (2023b). *Learning Methodology: Preparation Course for Master Studies and Developing Learning Skills. Training Handbook* (1st eds). ISBN 978-963-489-637-1. Budapest: Eötvös Loránd University, Faculty of Informatics, Student Support Centre.
- Takács, R., Kárász, J. T., Takács, S., Horváth, Z., & Oláh, A. (2021b). Applying the Rasch model to analyze the effectiveness of education reform in order to decrease computer science students' dropout. *Humanities & Social Sciences Communications*, 8(1). <http://doi.org/10.1057/s41599-021-00725-w>

- Takács, R., Kárász, J. T., Takács, S., Horváth, Z., & Oláh, A. (2022). Successful Steps in Higher Education to Stop Computer Science Students from Attrition. *Interchange*, 53(2), 1–16. <http://doi.org/10.1007/s10780-022-09476-2>
- Takács, R., Takács, S., Kárász, J. T., Oláh, A., & Horváth, Z. (2023a). The impact of the first wave of COVID-19 on students' attainment, analysed by IRT modelling method. *Humanities & Social Sciences Communications*, 10(1). <http://doi.org/10.1057/s41599-023-01613-1>
- Takács, R., Takács, S., Kárász, J., Horváth, Z., & Oláh, A. (2021a). Exploring Coping Strategies of Different Generations of Students Starting University. *Frontiers in Psychology*, 12, 1–10. <http://doi.org/10.3389/fpsyg.2021.740569>.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89–125.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89–125.
- Tinto, V. (2012). *Completing College: Rethinking Institutional Action* (1 edition). Chicago ; London: University Of Chicago Press.
- Truta, C., Parv, L., Topala, I. (2018). Academic Engagement and Intention to Drop Out: Levers for Sustainability in Higher Education. *Sustainability*, 10(12), 4637; <https://doi.org/10.3390/su10124637> (Download:10.11.2023)
- Turcsányi-Szabó, M. (2020). *e-Learning tips* [PowerPoint slides]. ELTE University, Faculty of Informatics.
- Turner, A. (2015). *Generation Z: Technology and Social Interest. The Journal of Individual Psychology*, 71, 103–113. doi:10.1353/jip.2015.0021
- Twenge, J. M. (2017). *iGen: Why Today's Super-Connected Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy – and Completely Unprepared for Adulthood*. Atria Books.
- United Nations (2007). *Convention on the Rights of Persons with Disabilities*. <https://www.coe.int/en/web/compass/convention-on-the-rights-of-persons-with-disabilities>
- United Nations Educational, Scientific and Cultural Organization (2015). *Incheon Declaration and Framework for Action*. https://uis.unesco.org/sites/default/files/documents/education-2030-incheon-framework-for-action-implementation-of-sdg4-2016-en_2.pdf (Download:10.11.2023)
- United Nations Educational, Scientific and Cultural Organization (2017). *Education for Sustainable Development Goals: learning objectives*. UNESCO Digital Library. ISBN:978-92-3-100209-0 <https://unesdoc.unesco.org/ark:/48223/pf0000247444> (Download:10.11.2023)
- United Nations Educational, Scientific and Cultural Organization (2017). *Education for Sustainable Development Goals: learning objectives*. UNESCO Digital Library. ISBN:978-92-3-100209-0 <https://unesdoc.unesco.org/ark:/48223/pf0000247444> (Download:10.11.2023)
- University of Waterloo Centre for Teaching Excellence. (2000). *Class activities and assessment in the flipped classroom*. Centre for Teaching Excellence. Retrieved from: <https://uwaterloo.ca/centre-for-teaching-excellence/catalogs/tip-sheets/class-activities-and-assessment-flipped-classroom>
- Virág, K. (2017). Felsőoktatási tanulmányok egyéni és társas tényezőinek vizsgálata fogyatékos/sajátos nevelési igényű egyetemisták körében. Szakdolgozat, ELTE PPK, Budapest
- Wessel, R. D., Jones, J. A., Markle, L., Westfall, C. (2009). Retention and Graduation of Students with Disabilities: Facilitating Student Success. *Journal of Postsecondary Education and Disability* 21 (3): 116–125. <https://eric.ed.gov/?id=EJ831430> (Download: 11.04.2021)
- Wilson, K. L., Murphy, K. A., Pearson, A. G., Wallace, B. M., Reher, V. G. S., & Buys, N. (2016). Understanding the early transition needs of diverse commencing university students in a health faculty: Informing effective intervention practises. *Studies in Higher Education*, 41(6), 1023–1040. <https://doi.org/10.1080/03075079.2014.966070>

- Wisniewski, B., Zierer, K., & Hattie, J. (2020). The Power of Feedback Revisited: A Meta-Analysis of Educational Feedback Research. *Frontiers in Psychology, 10*, 3087. <https://doi.org/10.3389/fpsyg.2019.03087>
- World Health Organization (WHO) (2013). Disability. SIXTY-SIXTH WORLD HEALTH ASSEMBLY https://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_12-en.pdf (Download: 11.11.2023)
- Wulz, J., Gasteiger, M., Ruland, J. (2018). The Role of Student Counselling for Widening Participation of Underrepresented Groups in Higher Education. In Curaj, A., Deca, L., & Pricopie, R. (2018). *European Higher Education Area: The 82 Impact of Past and Future Policies*. 203-218. Springer International Publishing. <https://doi.org/10.1007/978-3-319-77407-7> (Download: 11.03.2021)
- Zhang, Y., Fei, Q., Quddus, M. & Davis, C. (2014). An Examination of the Impact of Early Intervention on Learning Outcomes of At-Risk Students. *Research in Higher Education Journal, 26*, 1-12.

CHAPTER 5: ADAPTABILITY, ONLINE MENTORING AND FOLLOW-UP

The chapter on one hand discusses the impact of the COVID-19 pandemic on education, particularly the widespread adoption of online and hybrid learning formats. It explores the challenges and opportunities in mentoring within this context, emphasizing the importance of interpersonal aspects, communication, and adapting to new digital norms. The Student Support Centre at Eötvös Loránd University successfully navigated the challenges, transforming its services to accommodate online and hybrid methodologies. Based on these experiences the chapter provides practical tips for effective online and hybrid mentoring, focusing on mindset, accessibility, communication, and the utilization of various digital tools. Additionally, it highlights the positive outcomes of embracing online resources and technologies in higher education, suggesting specific platforms and tools for optimized mentorship experiences.

On the other hand the chapter would like to give an insight on the importance of community building and sustainability in dropout-prevention. University dropout prevention has a widespread literature identifying key factors that play a role in student retention and student attrition. Community building is one of them. Dropout prevention needs a holistic approach, a sustainable student supporting ecosystem standing on several pillars. In this chapter we will also have a look what are those pillars that ensure longevity, and align with sustainability.

5.1 Mentoring in online and hybrid settings

During the COVID 19 pandemic there was a shift, towards emergency teaching and learning which disrupted the previously gradual growth of online education. The pandemic forced us to adapt and innovate in our teaching methods. It also made it difficult to follow the usual preparation and training processes. While we had to experiment and try approaches during this time, we also learned lessons that will help students succeed in future educational situations.

In the stages of the educational institutions were faced with the need to quickly invest in technology and improve support systems, for both faculty and students. Despite their efforts they encountered challenges due to the overwhelming demand for immediate assistance. This unique set of circumstances forced institutions to adapt and address needs as they arose. Mentoring has long been a part of academia aimed at helping individuals who're new to academic institutions or programmes or, at a nascent stage of their careers. The traditional concept of mentoring involves establishing a relationship where one person takes on the role of a guide offering guidance demonstrating behaviours or approaches sharing information and providing motivation to others.

In the world of education mentoring relationships are often depicted as involving a senior member of the community providing guidance to a younger or less experienced mentee. However there has been an increase, in the use of peer mentoring, among both faculty and students. This approach builds on the idea of creating a group of faculty members and fostering a community of students, commonly known as a "learning community."

The meticulous supervision and delivery of counselling services to students serve as integral strategies aimed at mitigating attrition rates and strengthening the academic community within the university environment. The contrasting approaches between online and blended modalities can be elucidated as follows:

Online Counselling

The use of platforms, like Zoom, Microsoft Teams or Google Meet allows for access to counselling services for both students and faculty removing the need for, in person meetings. This approach allows students to easily seek support and share their concerns through channels.

Group Therapy: When it comes to counselling whether it's done on a basis or, in groups there are chances to share valuable skills and offer advice that caters to students, with similar needs. Moreover, arranging events or workshops helps foster a sense of community within the setting.

Recording and follow up: Easily recording counselling sessions improves the effectiveness of tracking student progress. Faculty members can carefully review the type and effectiveness of the support given to students allowing for improvements and evaluations, for counselling sessions.

Blended Counselling

The combination of offline counselling methods promotes flexibility and inclusivity. This approach caters, to students who may prefer, in person interactions or other communication channels of solely relying on platforms.

Coordinating activities plays a role, in creating an environment where students and faculty can build meaningful connections. These activities also offer an opportunity, for engagement allowing participants to acquire and enhance essential skills.

Promoting Community Development: The combination of counselling approaches plays a role, in fostering a sense of community among both students and faculty members. Creating an collaborative atmosphere has an impact, on students and improves the overall effectiveness of the university setting.

Ensuring monitoring and offering counselling services, in both blended formats are essential steps, in creating a successful university community. These measures provide support to students as they strive for personal achievements.

The COVID-19 pandemic caused a sudden shift to remote instruction in education, affecting over 1.6 billion students and 100 million teachers globally (Guppy et al., 2022). Colleges and universities worldwide adapted to remote learning, and the widespread use of educational technology emerged as a new normal. According to Murphy (2020), this pivot is not just an emergency response but a pathway to a new digitised academy. Guppy et al. (2022) found that people taking part in higher education anticipate that the most significant growth in educational technology will take place in blended/hybrid courses following the COVID-19 pandemic while a considerable percentage of educators and students who were asked believe that learners and instructors will take or teach more fully online courses post-pandemic.

A similar tendency was also observable in the domains of counselling and student services. The social distancing required to combat the coronavirus worldwide had a major impact on the mental health system: services are provided online with the help of apps, online platforms and so-called e-health interfaces (Wind et al., 2020). Professionals in the field of psychology have had to master those techniques quickly, to continue to support their clients in the digital world as well. This impacted the counselling of students in HEIs as well (Takács et al., 2020; Füleki & Puskás-Vajda, 2020.; Szlamka et al., 2021.).

The shift to online interactions due to the pandemic have resulted in an increase in online graduate student mentoring, in which the challenges, strategies, and outcomes are crucial for individuals in mentoring dyads as well as universities offering online or blended graduate education (Pollard & Kumar, 2021). Pollard & Kumar's (2021) findings emphasized the importance of fostering interpersonal aspects of the mentoring relationship, clarity of expectations and communication, and a heightened focus on the importance of the mentoring relationship that serves as the link to an otherwise absent experience of academia for the online student.

The Student Support Centre of the Faculty of Informatics at Eötvös Loránd University was also quick to adjust to the challenges of remote education in the wake of the pandemic and implement online versions or equivalents of the ongoing services. Student services lead by mental

health professionals, counselling psychologist such as individual counselling, ad hoc trainings and workshops took place in platforms best suited for online video calls. With the gradual return of in person education the online services became an optional format with the addition of hybrid format as well. On top of the transformation of the psychological work, in the years following the 2020 pandemic the Student Support Centre coordinated the adaptation of the online and later hybrid methodology on all 3 levels of services (basic mentoring, multi-level mentoring and centralized mentoring). This included holding and facilitating online one-on-one guidance, follow-up and mentoring of students and all members of the mentoring system (including psychologist trainers, mentors, senior students, peer support groups, professors and administrative staff of the faculty), leading and overseeing online and hybrid group trainings within and outside of the framework of our courses, and an overall adjustment of every aspect of the supportive and coordinating work to an online environment.

It's worth mentioning that even though adapting to the online and hybrid way of working has had its challenges, it has also come with additional benefits to the overall mentoring system by opening doors to new perspectives and tools, providing flexibility, and yielding channels of connectivity with more potential collaborators. As an example, as the faculty is present in two different campuses in two different cities of the country, it has been difficult if not impossible to fully commit to a collaborative project between campuses. However, with the introduction of online education and the skills acquired and routinely used by educators in everyday online and hybrid work it has become possible to announce and realize a faculty-wide elective course each academic year, where students of both campuses have a chance to connect, collaborate and develop together in an online setting. Furthermore, the application of knowledge, devices and tools of online education and mentoring in a real-life classroom in hybrid setting has made it possible to include students in every lesson and student service from day one of a semester even if an international student's physical presence is not an option due to delays in navigating the process of arrival into the country. Additionally, while adapting to the online and hybrid mode of working in counselling, education, training and mentoring the team of the Student Support Centre has developed countless digital instruments such as e-learning platforms, questionnaires, digitally fillable workbooks, diagrams and illustrations that have contributed to an inventory of tools that aid our work in the upcoming years of predicted shift towards the frequent inclusion on online education in HEIs.

In the following two subsections we will share our guidelines, best practises, and suggestions for online and hybrid mentoring based on the experiences of the last few years in the hopes that they show an insight into the mindset that we ourselves at the Student Support Centre also strive to continuously implement, improve, share and facilitate amongst our colleagues.

5.2 Practical tips for online and hybrid mentoring

Mindset for online and hybrid mentoring

1. Deciding on online or hybrid format

There may be many reasons for offering mentoring in an online or hybrid format. It might be a decision influenced by circumstances and limited options or it could be an entirely conscious choice due to its benefits of increased accessibility, flexibility, or the utilization of technology for more dynamic interactions. However, before deciding on any type of interaction with mentees, it is important to weigh the options and resources available. The technological and infrastructural preparedness of an institution and the mentors needs to be addressed when preparing for a continuous mentoring process or mentoring event online whether it be a singular online videocall or a multi-session event. Additionally, we recommend weighing the pros and cons of the digital or hybrid implementation of each service or event based on the resources available, number of participants, location of the event in case of a hybrid format, aim of the event, initial relationship

with the mentees, preliminary skills, knowledge and digital literacy of all parties and any further specific aspect related to the occasion.

2. Accessibility of services and events

In case of an institution-wide policy on online or hybrid format of education, services and mentoring we recommend finding ways to transfer all services, events, and mentoring formats into the digital world. In case of mentoring, it is important to count all interactions that need to be substituted for including group activities, predetermined one-on-one consultations, quick check-ins, but even the informal run-ins in the hallways of the campus or the additional information that trickles in about the mentee in question by talking to other students or colleagues.

As these latter examples suggest it is not possible to translate everything into the online atmosphere, however in these cases it is recommended that the mentors come up with alternative means to achieve similar goals to the original plan. As an example, an informal check in could be replicated by using less formal platforms from time to time to communicate with the mentees such as group chats, forums or using simple questions to which the mentees might need to only reply to via chat reactions to gain an insight into their general well-being or status.

Introducing new ideas and events tailored specifically to the online world might also help with combating the absence of spontaneous in-person community building. For example, at the beginning of the pandemic the Student Support Centre launched a daily morning video call for students of the faculty to watch called *Morning faces* in which members of the Student Support Centre discussed interesting topics to bridge the gap that was left by the sudden loss of everyday face-to-face interactions.

As a routine of using the advantages of the online format emerges it might become easier to keep in mind the option for an online version of events even in situation where in-person events and mentoring sessions are possible. We recommend for mentors to consciously remind themselves of the option of hybrid and to strive to provide an option of both online and in person attendance when possible and suits the profile of the programme as the accessibility of joining online might help the sustainability and continuity of the mentoring relationship.

3. Set expectations

Clearly communicate expectations regarding communication frequency and establish platforms of connection. Deciding together on what platform to use for different types of issues depending on topic, urgency and access helps build the cooperative relationship that is essential for mentoring while also providing transparent guidelines for each participant. Scheduling regular check-ins and encouraging openness and transparency helps in building a strong rapport and ensures that both parties stay engaged. Setting explicit and understandable goals and agreeing on the milestones and deliverables of the also contributes to the success of a mentoring process.

4. Staying flexible

Recognize that both mentors and mentees may have busy schedules. We recommend staying flexible with meeting times and methods to accommodate various time zones and preferences. While developing a structured mentoring plan with a timeline is key to tracking progress and ensures that both parties stay on course, being adaptable and flexible with regards to time and expectations is especially important in online or hybrid setting where the lack of personal contact makes it difficult to ensure mutual commitment to the process.

5. Share Resources

Online or hybrid education might also affect the mentee's readiness regarding administrative tasks and information related to their academic progress. In these alternative ways of education the mentor becomes the first and foremost source of information and connection to the institution. It is highly recommended that you not only curate and share relevant resources such as articles, books, course material to support the mentee's learning and development, but also include the most important information regarding their academic administrative duties and serve as a link between the mentee and the staff of the institution. Within the level 3 centralized mentoring system of the

Student Support Centre of the Faculty of Informatics we always create online forums for each mentoring group as a first line of communication and platform for quick and efficient information sharing.

6. New technologies and their adaptation in everyday work

Smooth adaptation to an online and hybrid mentoring format requires an open mindset to the everchanging landscape of innovations, technological advancements and the tools and platforms that they produce. This is true for any student service and must be considered when preparing for the implementation of any new aid or support system.

Our recommendation is to take advantage of any and all digital platforms and technologies the institution offers and gather information on any additional options. The implementation of new tools can come from the surge of something new that might improve on already existing and used platforms or devices or it can also come from a need for a new function or the digitalization of an offline process.

For example at the Student Support Centre of ELTE Faculty of Informatics the latter situation arose, when after years of tracking the students' academic progress, the team sought out a new student success monitoring system that was a plug-in for a platform that was already used on a daily bases. The team has since implemented the use of the system into the mentoring programme as one of their primary methods of tracking the mentees' academic success by learning the system, training the mentors and facilitating the educators of the faculty, the mentors and the mentees on the frequent administration and use of the system. While there may be challenges along the way of the learning curve of introducing a new platform into the repertoire of the mentoring network, the introduction of new technologies can increase the effectiveness of the mentoring, reduce the time of administration and communication and help highlight new perspectives that might not have been available otherwise.

In addition to the application of new technologies in the background work of mentoring we also recommend utilizing innovations in direct teaching and mentoring scenarios as well. As the digital native generations' habits and preferences for communication and learning platforms change so should we, by integrating new technologies into higher education institutions to boost engagement and support.

We suggest utilizing new technologies withing the classroom as well, by integrating them into the style of teaching and mentoring as well as the specific tools ad techniques used to facilitate creativity and intrinsic motivation. One way to do that is to introduce gamification elements into courses to make learning more enjoyable and interactive. Incorporate badges, leaderboards, and rewards to motivate students and foster healthy competition. Gamification not only enhances engagement but also encourages collaboration and critical thinking skills. It has also become a staple of our trainers and mentors to combat the excessive use of smart phones for personal issues in classrooms by consciously incorporating them into the learning process and using them for activities, group learning, sharing resources, discussion forums, and interactive quizzes. Mobile learning ensures that students can stay connected and engaged in a comfortable environment.

Practical tips for online and hybrid mentoring

1. Encourage two-way communication

Two-way communication is fundamental to the success of online mentoring as it fosters a more personal connection, allowing mentors and mentees to build rapport and a sense of mutual understanding. This trust forms the foundation for an effective and collaborative mentorship. In an online setting it is particularly important to give space for the mentee to express themselves and for the mentor to facilitate this by providing the opportunity for ongoing conversation. Engaging in a dialogue ensures that both mentors and mentees have a clear understanding of expectations, goals, and objectives.

2. Strive for video based communication

Video calls provide a more intimate and authentic connection, closely resembling face-to-face interactions. Non-verbal cues become more apparent, fostering a deeper understanding between mentors and mentees. This is true for one-on-one consultations and group settings as well. Based on our experiences at the Student Support Centre in one-on-one situations as well as group setting, it makes a big difference in engagement, mutual understanding, and the level of commitment to the cause when the mentor and mentee(s) have a chance to express themselves fully.

3. Creating and promoting a safe space

One of the main concerns of online mentoring is the lack of control over the working environment and location of the meetings. As mentors it is crucial to create a safe space for open communication and it is particularly challenging when the mentors cannot be physically present with their mentees. Providing guidelines and suggestion to mentee on how to ensure this safe environment for themselves can help this process along. We noticed an immediate impact on the quality of online cooperations after introducing and establishing rules and guidelines for online video interactions such as ensuring a stable internet connection, using working cameras and microphones, implementing video call protocols for the usage of these devices, and utilizing the features of the platform.

4. Facilitate and organize group activities

When the online format is an institutional decision, and not only a supplementary method next to in-person meetings then the bigger picture of the overall well-being and potential social isolation of mentees needs to be considered and addressed. We found that facilitating and organizing group activities even in an online setting can be beneficial in providing a space for academic and social connections and community building. Engaging in collective endeavours enhances the overall learning experience and allows mentees to benefit from diverse perspectives. These group activities can be in-person or online, might be organized by the mentor or the mentees themselves, or even events outside of the organization that the mentees attend as a group. Based on our experience it always helps to guide the mentees and aid them with the logistics of the organization and provide helpful information on options.

5. Create online and shareable versions of your everyday tools and documents

Accessibility is key in online mentoring. Shareable documents and tools facilitate seamless collaboration, allowing both mentors and mentees to contribute, edit, and access resources in real-time. For an efficient collaborative process in mentoring we suggest investing your time and effort into developing online and shareable versions of tools that are usually part of the mentoring as they can be used in individual consultations and group settings as well and make the follow-up of any project transparent and creative. At the Student Support Centre we routinely share worksheets, diagrams and questionnaires with the mentees as a way of bringing variety to the collaborative process.

6. Utilize different tools, online platforms and features

Variety in tools and platforms caters to diverse learning preferences and supports an engaging mentoring atmosphere in an otherwise lonely experience of online education. Breakout rooms, for instance, enable smaller group discussions, fostering more intimate and focused interactions within larger mentorship programmes. Whiteboard functions different video conferencing platforms help online group activities in the collaborative workflow and downloading the fruit of the teamwork creates a ready-to-use note, reminder, and study plan. Reaction features, raising a virtual hand and interactive camera backgrounds give way to creative ways of interaction between mentors and mentees which can be used in playful activities, discussions and learning opportunities.

7. Switch between different modalities and formats

Adapting to different group sizes and formats accommodates various learning styles and preferences, ensuring that mentorship activities remain engaging and effective. When mentoring

online in a group setting the members of the Student Support Centre aim to build a flow of the session where different people can interact in different compositions of smaller groups. We use activities where students can either work alone and reflect on their own habits and progress or talk in pair or smaller groups using breakout room functions of the video conferencing platform. Other than the composition of groups we also strive to mix and match different modalities of learning by bringing visual aids, videos, podcasts, interactive documents and games into the mentoring process.

8. Lead by example

As a mentor leading by example is a fundamental mindset to work in and we find that it needs to translate into the process of socializing into the digital world of education as well. We suggest that as a starting point you implement the aforementioned guidelines into your own work and online presence so that the mentees have a point of reference.

9. The specifics of hybrid mentoring

By the definition that we followed throughout this chapter, the hybrid format means any interaction, lesson, group activity or event, that takes place in person but also provides opportunity for participants to join online. By this description hybrid mentoring can only be interpreted in groups situations such as lectures or information sharing, small meetings, training sessions or other interactive group activities. Even though it is a good idea to try and follow the guidelines related to online mentoring whenever a hybrid format is used, it is not sufficient on its own, as there are specific aspects to look out for. For example, it might be challenging to balance engagement in both in-person and online components to keep participants actively involved. Based on our experiences we suggest designing interactive and dynamic online content, incorporate multimedia elements, encourage regular participation through discussions, and leverage collaborative tools. Foster a sense of community through virtual and in-person interactions. Additionally, establishing clear communication protocols, designating channels for different types of communication, and using technology that facilitates seamless interaction can aid in bridging the gap in communication between in-person and online parties.

5.3 Taking advantage of the online world

In the dynamic landscape of higher education, embracing online resources and technologies is pivotal for enhancing the mentorship experience. This shift toward digital platforms is not merely about adapting to modernity but strategically optimizing the mentorship process. From video conferencing platforms that add a personal touch to collaborative document tools and online learning platforms, each facet contributes to a more dynamic, accessible, and impactful mentorship experience. Implementing effective online mentoring in higher education requires careful consideration of specific online tools and platforms to optimize the mentorship process. The internet offers a plethora of resources and technologies that can enhance communication, collaboration, and the overall mentorship experience.

1. Video Conferencing Platforms

Incorporating video conferencing platforms such as Zoom, Microsoft Teams, or Google Meet can add a personal touch to online mentoring. Video calls allow for face-to-face interactions, enabling mentors and mentees to build a stronger connection and facilitating more nuanced communication. Regular video meetings can simulate the in-person mentorship experience, fostering a sense of mentorship that goes beyond textual exchanges.

2. Mentoring Platforms

Dedicated online mentoring platforms, like MentorCity, Chronus, or MentorCloud, are designed specifically to facilitate mentorship programmes. These platforms often include features such as progress tracking, and resource sharing. They provide a centralized space for mentors and mentees to communicate, set goals, and access relevant resources, streamlining the entire mentoring process.

3. Collaborative Document Tools

Platforms like Google Workspace (formerly G Suite) or Microsoft 365 provide collaborative document tools that enable mentors and mentees to work together on shared documents. This can be particularly useful for collaborative projects, goal-setting, and document review. Real-time editing and commenting features enhance the collaborative nature of the mentorship relationship and can be efficiently utilized in group mentoring situations as well.

4. Online Learning Platforms

Leveraging online learning platforms, such as Coursera, edX, or Khan Academy, can supplement the academic aspect of mentorship. Mentors can recommend relevant courses to mentees based on their academic and career goals, providing a structured and self-paced learning experience. This not only enhances the mentee's knowledge but also encourages a proactive approach to professional development.

5. Communication Tools

Beyond email, using instant messaging and chat applications like Slack or Microsoft Teams can facilitate quick and informal communication between mentors and mentees. These tools can be valuable for addressing immediate questions, sharing brief updates, and maintaining an ongoing dialogue.

6. Webinars and Virtual Events

Encouraging participation in webinars, virtual conferences, and online events relevant to the mentee's field of study or career aspirations can broaden their perspective. Platforms like Eventbrite and Meetup offer a wide range of virtual events, allowing mentees to connect with industry professionals, attend workshops, and stay updated on industry trends.

While adopting these tools, it's essential to consider the preferences and comfort levels of both mentors and mentees. Moreover, digital literacy and technological proficiency are essential for both mentors and mentees to fully leverage online platforms. Providing training and support to ensure that participants are proficient in using these technologies can contribute to a smoother and more effective online mentoring experience. Institutions should also establish clear guidelines for online etiquette, communication expectations, and the use of digital resources to foster a positive and productive mentorship environment in the online world.

The widespread move, towards education often referred to as the "normal" has become a prominent characteristic in the post COVID 19 era. Educational institutions worldwide are experiencing a change incorporating online learning tools as a part of the educational framework. This shift not represents an adaptation to circumstances but also indicates a broader transformation, in how we perceive education itself.

Positive Attributes of Online Education

1. Flexibility and accessibility are advantages of education as they provide individuals, with diverse schedules and commitments the freedom to access educational materials at their own pace and, from any location.

2. Learning resources, on platforms offer a range of multimedia materials, interactive content and various learning materials. This enriches the learning experience and caters to learning styles.

3. Online education has the power to break down barriers of distance allowing students to access courses and programmes from institutions, over the world. This global reach creates possibilities, for collaboration and cultural exchange.

4. Students are afforded the freedom to learn at their pace providing them with the chance to revisit the material whenever it is needed. This allows for accommodating learning speeds and preferences resulting in an adaptable learning experience.

5. Cost effectiveness; Online education provides a cost solution, for both institutions and students by reducing expenses associated with travel, physical facilities and, in some cases textbooks.

Challenges Inherent in Online Education

1. Technical obstacles pose a challenge for students to fully engage in learning. Having access, to technology and a reliable internet connection is crucial for participation, in virtual classes and accessing learning materials. Students who face difficulties may encounter barriers that hinder their ability to actively participate in education or access the necessary resources.

2. Reduced In Person Communication; The lack of classrooms reduces the opportunity for students and instructors to engage in face, to face interaction, which could potentially affect socialization, collaborative learning and the immediate resolution of questions.

3. The shift, to learning requires students to have a sense of self discipline and motivation. Some students might face difficulties, with managing their time and staying focused without the environment that traditional classrooms provide.

4. Maintaining the quality of assessments in an environment can be challenging. Academic institutions need to establish systems to prevent plagiarism and maintain the credibility of evaluations.

5. The heavy reliance, on technology in the education system makes it vulnerable, to issues, server problems or cyber-attacks. These challenges have the potential to disrupt the flow of the learning process.

Educational institutions must have a grasp of these elements to enhance online learning experiences. By tackling challenges and making the most of the benefits of education institutions can improve their approaches guaranteeing a smooth and effective learning journey, for students, in this ever-changing educational environment.

Presently, technology assumes a pivotal role in virtually all facets of human existence. Its application in education, employment, communication, and scientific and technological advancements significantly influences our societal dynamics. The ensuing discourse delineates certain prevailing trends and pivotal scenarios associated with contemporary technological utilization:

1. Education and Learning: Pedagogical methodologies and learning paradigms have experienced profound evolution. Academic institutions have introduced online instructional modalities, e-learning platforms, and the infusion of technology into traditional classrooms to augment the educational delivery process.

2. Remote Work: The prevalence of remote work has undergone substantial escalation, necessitating the reliance on technology for online communication, collaborative work applications, and sophisticated task management tools.

3. Communication: The indispensability of technology in communication is underscored, with messaging applications, video conferencing, and social media assuming critical roles in facilitating efficient and expeditious communication.

4. Scientific and Technological Development: The imperative of innovation in science and technology is underscored by the emergence of cutting-edge technologies, including 5G, artificial intelligence, and the Internet of Things (IoT), which exert considerable influence on complex problem-solving and advancements across diverse domains.

5. Entertainment and Leisure: Technology is extensively harnessed for recreational pursuits, encompassing video streaming, gaming, and the pervasive utilization of social media platforms as integral components of relaxation and leisure.

6. Economic Development: Technology plays a pivotal role in bolstering economic development, facilitating endeavours such as e-commerce, online marketing, and expediting market access for nascent enterprises.

All things considered technology has become a part of our lives and it is expected to continue making a significant impact, in the future. Online student services go beyond a way for educational institutions to connect with students quickly; they create a space where information can be exchanged freely. In this era of online learning these services offer teaching methods and quick

support for students who have questions or concerns. Educational institutions have the power to enhance the learning experience for all students. By using platforms for communication both students and academic staff can better understand each other fostering communication and building strong relationships. Students can easily access information ask for help or give feedback through channels promoting collaboration and progress. Ultimately online student services play a role in developing adaptability to learning and essential skills needed to navigate technology in real life situations. Moreover, these services are adept, at managing change. Efficiently handling information and technological resources within institutions.

Analysis of Service Delivery through the LINE Application in Thailand as example

The LINE app is designed to facilitate communication, across devices such, as smartphones, computers and tablets. It provides users with a platform to exchange text messages effortlessly. One of the features that sets LINE apart from messaging apps is the inclusion of "Stickers." These expressive symbols allow users to convey a range of emotions and sentiments. The stickers include expressions, festive and occasion specific designs representations of popular brands and well-known cartoon characters.

Despite the growing number of users, LINE which was introduced in 2011 is still considered new in the world of smartphone applications. The reason why LINE continues to be popular and relevant, among its users is because it constantly evolves to meet their changing needs and behaviours. In this discussion we will explore the origins of LINE, how it connects users, its unique features and a comprehensive analysis of its strengths and limitations. Our main goal is to provide insights for LINE users on how to enhance their experience while overcoming any challenges they may encounter.

The history of LINE can be traced back to its development in 2011 by NHN Japan, a company specializing in internet services, games and search engine systems. Collaborative efforts with Naver Japan Corporation and livedoor have since contributed to improvements in the applications user interface and functionalities.

The name "LINE" originated after the Tohoku Earthquake in 2011 which caused communication disruptions throughout Japan. It symbolizes individuals waiting in line for telephones equipped with automated programmes highlighting the applications usefulness during emergencies that require communication, across affected regions. The LINE Official Account, denoted as LINE OA, is specifically designed for commercial purposes within the LINE application. Although its fundamental functionalities align with personal LINE accounts, facilitating chat, image, and video exchanges with followers, LINE OA introduces additional features catering to business-oriented communication. These include broadcast capabilities for messages, images, and videos to multiple recipients simultaneously, alongside provisions for disseminating general information, engaging in sales and marketing activities, and promoting special offers. The LINE OA is further equipped with tools for efficient message, image, and video management through the LINE Official Account Manager, thereby enhancing content control and customization.

In the business world the LINE Official Account provides benefits that enhance efficiency and customer communication. Notable advantages include the ability to have a number of followers, which allows businesses to connect with users collectively and individually without any restrictions. Other benefits include message transmission, various options, for message sharing, automated welcome and response features direct interaction with customers the ability to share images within chats, convenient, on-screen shortcuts, full screen video capabilities, discount coupons and survey functionalities.

In the cultural context of Thailand, the LINE app has gone beyond being a means of communication. It has become a tool, for communication across all age groups. Not does it enable conversations but it also allows people to share images, videos and express themselves using stickers. LINEs immense popularity in Thailand makes it a vital platform, for both business communication.

LINE plays a role, in the business sector of Thailand not for private communication but also as a way for businesses to connect with customers. Through LINE Official Accounts businesses can effectively share information with their target audience by sending messages, images and videos. This has become a part of marketing and business promotions showcasing how versatile the LINE application is in both economic aspects. Given its usage among Thai citizens in their lives many universities have adopted LINE as their primary communication channel, with students. This trend extends beyond Thailand's borders since different communication channels are chosen based on social conventions allowing for convenient student communication regardless of location.

5.4 Role of community building in drop-out prevention

Role of parents and community

Currently the issue of students leaving school prematurely is of importance, in the field of education. This phenomenon, known as dropout rates has consequences for students as it deprives them of knowledge and skills necessary for their lives. It also leads to an attitude towards learning a lack of self-confidence and missed opportunities for growth. Governments invest in education with the expectation of benefits from a educated population. However, the high prevalence of dropouts necessitates resources to support those who are unable to sustain themselves. This represents missed opportunities for both individuals who miss out on personal development prospects and society which loses out on contributions from talented individuals. Moreover, these repercussions extend beyond individuals as they can lead to unrest when former dropout students become adults lacking the skills for self-sufficiency placing a heavy burden, on society.

Furthermore, the issue of students leaving school prematurely indicates inefficiencies, in institutions. Therefore, it is crucial to address the problem of dropouts promptly from the perspective of educational establishments. There are factors that contribute to dropout rates. It is important to focus on reducing educational wastage by giving it the necessary attention. According to data provided by the Office of the Vocational Education Commission for the year 2018 out of a total of 1,003,109 students enrolled in vocational and diploma programmes 92,835 students chose to discontinue their studies. This accounts for 9.25% of all students. The main reasons behind these dropouts include family conflicts, parental divorce, financial difficulties within families, academic struggles, substance abuse issues absences from school, association with peer groups, teenage pregnancies, conflicts within families regarding education choices and timings for registration deadlines being missed. It is also worth noting that some students face challenges in selecting majors while others experience a lack of support, from their parents regarding the importance of education. (Toumtab, 2020)

The factors and antecedents underpinning student dropout can be categorized into three primary domains.

1. Factors and Causes, to the Students Themselves; Some students may lack an inclination towards learning, which can make them more prone to dropping out. When students become disinterested in classroom activities their motivation to engage diminishes. Additionally, if they find the academic content uninteresting, they may feel bored and lose interest leading them to skip classes. Furthermore, when students lag behind their peers in terms of progress it can create a sense of isolation. Undermine their confidence, in their own abilities.

2. Various factors and reasons arising from family, community and environmental circumstances can influence outcomes. Economic hardships, within families may push students to prioritize work over education in order to support their families. When families experience fragmentation or breakdown it can create an environment lacking support and encouragement which may contribute to dropout rates. Additionally challenges like substance abuse, migration for employment reasons and seasonal relocations can hinder children's access, to institutions.

3. Factors and causes present, in the school environment; Insufficient resources within schools, such, as facilities, overcrowded classrooms and deteriorating infrastructure conditions can create learning environments that do not support students effectively. Ineffective teaching methods, strained teacher student relationships and an artificial educational atmosphere can also contribute to students' inclination to drop out. To effectively address the issue of school dropouts it is crucial to examine the factors that stem from the students themselves their family backgrounds and the overall academic setting. This examination will help in formulating targeted interventions that're efficient and focused.

Parents and the community have a role to play in preventing and addressing the issue of students dropping out of school. Their active involvement and support are vital, for creating an nurturing environment that encourages achievement and reduces the likelihood of students leaving school prematurely. When parents actively participate in their child's journey it has an impact on their motivation, self-esteem and overall academic performance. To support their children's parents can create a supportive home atmosphere set expectations for their education and participate in school activities. By maintaining lines of communication with teachers and school staff parents can stay informed, about their child's progress and proactively address any issues.

Furthermore, when the community and educational institutions collaborate, they can provide support and resources to students who're, at risk of leaving school. Local leaders, businesses and community organizations can team up with schools to offer mentorship programmes after school activities, opportunities for career exploration and access to services. These partnerships not improve the experience but also foster a sense of belonging and purpose among students. This ultimately reduces the chances of disengagement from school. It is vital to prevent departure from school for both individuals and society as a whole. From a standpoint dropping out can have effects on a student's self-perception and confidence creating a cycle of self-doubt and fear of failure. Socially academic failure can lead to stigmatization, labelling and marginalization which may have long term consequences, on employment prospects and overall well-being.

Ensuring that students stay in school should be a concern, for the education system. With the factors contributing to dropout rates, such as shifts in society the economy, culture and career opportunities it is crucial to devise approaches that involve parents, the community and other key stakeholders. By focusing on prevention, intervention and offering support systems we can create an environment that empowers students breaks free from disadvantageous patterns and secures a brighter future, for everyone involved. (Varthana, 2023)

Building a knit community among students is incredibly important, for shaping their journey. When students have a supportive community throughout every stage of their education it greatly enhances their learning experience. Moreover, a supportive community ensures that students feel connected to an environment brimming with resources and opportunities that can help them develop skills in life. By fostering a knit community, we create a space that is crucial for students as they navigate the diverse range of knowledge and experiences, in education ultimately contributing to the long-term growth of their personalities.

Engagement of Parents in Education

Active parental involvement plays a role, in supporting a child's journey and reducing the chances of them dropping out of school. It is important for parents to establish consistent lines of communication with their child's teachers. Attending parent teacher conferences, meetings and keeping in touch through email or other means helps parents understand their child's progress academically their behaviour patterns and any challenges they may face. It is essential for parents to stay well informed about their child's school activities, curriculum and important updates by reading newsletters exploring school websites and building connections, within the school community.

Creating a learning environment at home involves setting aside a space where children can focus on their studies. Parents can further assist their children by helping them with homework offering guidance and encouraging study habits. Instilling a love, for reading can be achieved by

making books easily accessible visiting libraries regularly and enjoying shared reading experiences together. Reading not improves language skills. Also fosters critical thinking abilities, which are crucial for overall academic success. If parents notice any concerns or challenges their children face in the setting it is important to communicate with teachers, counsellors or school administrators. By advocating for their children's needs parents ensure that appropriate support and interventions are provided. Setting expectations, for their children's education and emphasizing the importance of achievements are key. Parents can help their children set goals celebrate milestones along the way and provide unwavering support and encouragement throughout their journey.

Collaboration, between parents and schools is crucial for a child's education. Getting involved in parent teacher associations volunteering in school activities or participating in committees are all ways for parents to actively engage. When parents become a part of the school community, they contribute to creating a positive and supportive learning environment. Communities also have a role to play in ensuring that students have access to resources. This can involve providing assistance, scholarships or mentorship programmes for students who may be at risk. Additionally, community organizations can offer, after school initiatives, tutoring services and extracurricular activities that enhance student engagement and help prevent dropouts.

Early Intervention and Assistance

The proactive initiation of support holds paramount importance in averting school dropout. Collaborative endeavours involving parents, the community, and schools can effectively pinpoint students at risk and extend the necessary assistance to overcome their challenges. The implementation of early intervention and support can be realized through the following measures:

Educational institutions have the ability to implement warning systems that aim to identify students who might be facing social or emotional difficulties. These systems can involve monitoring attendance records, academic performance, behaviour patterns and other indicators that suggest students may be, at risk of dropping out. Parents can actively participate by providing information and staying alert for any signs of concern. Schools can provide access to counselling services or mentorship programmes to support students who are facing challenges. Trained counsellors can work one on one or in groups with students to address any social or emotional hurdles they may encounter. Community mentors also play a role in offering guidance, motivation and serving as role models for students who are at higher risk. To assist struggling students tutoring programmes or additional academic resources can be made available. Parents and members of the community can volunteer their help in tutoring or collaborate with schools to provide resources or funding, for initiatives.

Creating a nurturing and inclusive school environment is crucial, for the well-being of students. Schools can incorporate programmes that focus on emotional learning teaching skills like empathy, conflict resolution and self-control. Parents and the community can actively participate in these programmes. Contribute resources and expertise to help implement them. Schools can also develop support plans for students who may be at risk of dropping out. These plans could involve collaboration between teachers, counsellors, parents and community members to address needs, set goals and provide support to ensure the students success, in the long run.

Establishing Diverse Educational Avenues

Recognizing the limitations of conventional educational routes for every student is pivotal in tackling the issue of school dropout. Alternative pathways offer valuable prospects for students to explore their interests and talents within unconventional academic settings. The following outlines how the community can contribute to the development of alternative educational initiatives:

1. Collaboration for Vocational Training: Partnering with vocational training institutions, community colleges, or local businesses, the community can aid in the creation of vocational training programmes. These programmes can impart practical skills and certifications in diverse trades and industries, enhancing students' career-oriented capabilities.

2. **Facilitating Apprenticeship and Internship Programmes:** By forming partnerships with local businesses and organizations, the community can facilitate apprenticeship and internship programmes. These initiatives provide students with hands-on experience in specific fields of interest, offering real-world exposure, mentorship, and pathways to future employment.

3. **Supporting Specialized Career Programmes:** Communities can support the integration of specialized career-oriented programmes within schools, focusing on areas like technology, arts, entrepreneurship, healthcare, or environmental studies. These programmes provide students with comprehensive knowledge and skills in their chosen fields.

4. **Flexible Learning Options:** Acknowledging the diverse learning needs of students, the community can advocate for flexible learning options, including online education, blended learning, or personalized learning programmes. These alternatives allow students to progress at their own pace, catering to individual strengths and interests.

5. **Mentorship Programmes:** Introducing mentorship programmes where professionals from various fields volunteer their time to guide and support students considering alternative pathways. Mentors can share experiences, offer advice, and assist students in navigating their career choices.

6. **Establishing Transition Pathways:** Collaborating with colleges, universities, and trade schools, the community can establish pathways for seamless transitions from alternative educational programmes to higher education or specialized training. This ensures that students have a clear trajectory beyond alternative education, should they choose to pursue further academic endeavours.

In summary, parental involvement and community engagement are pivotal in preventing and addressing school dropouts. Through active participation, collaboration with educational institutions, timely support, and the promotion of diverse educational pathways, we can cultivate an environment conducive to academic success, mitigating the risk of premature school departures. By uniting our efforts, we empower students, disrupt cycles of disadvantage, and ensure a more promising future for all. (Varthana, 2023)

Best practises

Student attrition has a negative impact not only the students, university but on a larger scale on the society and the economy as well. (Realinho et. Al, 2022).

Tinto (1993) utilized the rite of passage as an analogy in his research to describe the three stages that students go through when they transition to college. Students separate from their old communities in the first step of entering higher education, then learn the norms and behaviours of their new environment in the second step, and finally become integrated into the rules of the new community in the final step. (Takács, 2023). The university has a great impact, a non-neglectable role in facilitating new students' integration in the university, thus adding this protective factor against student attrition. Braxton et al. (2000) highlighted the need for on campus communities as a tool for social integration and building relationships among students. Researches have shown that dropout starts in most cases at the beginning of the academic path (e.g. Czakó, 2017; Wilson et al., 2016- Takács, 2023), therefore a special attention is needed on the social integration of the freshmen. The connections formed between students during their higher education time is evaluated by them also as social capital (Engler, 2012- in Takács, 2023). Muraskin and Wilner (2004) found a link between the number of programmes implemented at an institution and the number of graduates, and Biggers et al (2008) made suggestions to promote community development at all levels, by facilitating student-student, teacher-student interactions, advocating peer mentoring programmes, different student groups and organisations (Takács, 2023).

Beyond mentoring, in the best practise of the ELTE Student Support Centre there are community building initiatives that are implemented from the beginning of the academic journey for freshmen students.

These are:

- Soft skills developing trainings

- These trainings for freshmen students start at the beginning of the academic year, in a group setting (max. 20 student per group), where as part of the curriculum there is an emphasis on team building, group formation, group identity strengthening. These trainings are carried out by psychologist trainers. For domestic students this 30 hours of group training takes place right before the study period starts. This helps student to form connections with each other before they start attending the classes. With international students the same timing is not feasible as because of the visa procedures they have a lengthened period to arrive to the university after the study period has started. Therefore their soft skills development and team building training is happening in the study period. It is advised though to have a more intense period of the training at the beginning of the study period after all students have arrived.

- Fixed groups setting

- This means that students at the beginning of starting their studies get organized in fixed groups of 16-18 people, and they are going to participate on the classes in this fixed group arrangement throughout their academic journey. This helps them to develop a study community, to feel the belonging to a students group, be part of it, and not to alone struggle through all challenges that the academic journey exposes to them. They can support each other in different ways, including material sharing, tutoring each other, studying together or to organize common recreational activities. This way students are part of a bigger network from the beginning on of their studies, before they would proactively engage in any further networking and socializing activities.

- Peer Mentor Groups

- Peer mentor groups form usually voluntarily with the active initiative of some students to engage in certain activities on a regular basis. Peer mentor groups can organize extra-curricular activities to students, like clubs, events etc. They can operate on their own, but they can be also under the guidance of other mentors, coordinators of the mentoring system. New students can join and become peer mentors themselves independently of which year they are at the university.

- Peer Tutoring

- The institute can make peer tutoring student contracts available, which means that in those critical subjects where several students would need extra tutoring based on their performances, student tutors can provide this service with a student contract. In a certain subject where tutoring could be beneficial, students who have already completed the subject with a good grade can apply to become student tutors. The professor responsible for the subject has to approve the application. Based on the contract agreement the tutor student provides the tutoring activity throughout the semester in certain hours. This way we can facilitate institutionally the student community, and students who would be shy to ask an other student's help get encouraged to use this possibility.

- Community building events

- Community building events like different thematic nights, and cafes, which are organized by students have also a very positive modelling role in student community building. The institution can offer student contracts and if possible provide some minimal financial contribution for the organization of bigger volume events. E.g. Intercultural Night can be a good initiative to support students from different backgrounds and cultures to mingle with each other and the domestic students. Often the curriculum does not provide a possibility for interaction between domestic and international students as they attend the courses announced in different languages, therefore community event initiatives have an important role to fill this gap. In the case of international students it is important to emphasize additional stressors at the beginning of their studies, which can make the transition, adaptation last longer (cultural shock, distance from the previous social network and family, homesickness etc.).

5.5 The role of sustainability in drop-out prevention

The pursuit of sustainability in higher education extends beyond environmental concerns and encompasses the creation of resilient, inclusive, and supportive systems. One crucial aspect of this sustainability is its role in preventing dropout rates at universities. Dropout prevention goes beyond academic strategies; it involves building a holistic and enduring framework that addresses diverse challenges faced by students. Sustainable measures play a pivotal role in creating an environment that fosters student success, satisfaction, and the completion of their studies.

Why is it important to have a sustainable approach in dropout prevention?

Student support services that focus on student Well-Being

Sustainable dropout prevention strategies prioritize the well-being and commitment of students.

By offering comprehensive support services, including academic, socio-cultural integration aiming, mental-emotional, career-identity and financial assistance, universities create an environment that addresses the diverse needs of students. It requires a holistic approach that promotes students' mental health, strengthens their resilience on an individual, social and structural level, fosters a sense of belonging, ultimately enhancing their overall well-being, commitment, and career goals. A sustainable student supporting ecosystem ensures the longevity and effectiveness of this preventive measures.

Strengthening Students' Resilience

Resilience- and risk factors on an individual, social, and structural level have an impact on study satisfaction during the university, and on dropout intention. Student engagement increases access to resources and strengthens resilience capacity. Educational systems can foster and promote students' resilience through multisystem interactions. (Masten et.al, 2022) We can group resilience resources into 3 different categories according to on which level they appear (Hofmann et. al, 2021): psychological/mental resilience resources; social resilience resources; structural resilience resources. Individual resilience resources are those resources that can be strengthened in the individuals, psychological characteristics, coping strategies, like among others: growth- mindset, self- regulation- emotional regulation, attitude to fail forward, self-efficacy etc. Social resilience resources are those which are supporting the individual through social connectedness with other, and finally structural resources that an institution can provide which can aim directly on the individual level or affects through the social level. In particular, the institutional establishment of supportive social connections, like mentoring, learning groups, tutoring, community building initiatives can have a favourable impact on students' perceived social support and hence be resilience-boosting. On the other hand structural initiatives that directly aim the individual are among others skill developing training courses, workshops, student counselling- psychological counselling, career counselling etc. (Falk & Marschall, 2019).

Maximizing human potential

Every student represents unrealized potential and talent. A sustainable approach to dropout prevention ensures that all students, regardless of background or challenges, have the opportunity to fulfil their academic potential. By minimizing dropout rates, universities contribute to the development of a highly skilled and educated workforce, positively impacting local and global communities.

Social Equity

Sustainable dropout prevention promotes social equity by ensuring that all students have equal access to educational opportunities. Inclusive practises that consider the needs of diverse student populations contribute to a fair and just society. This approach aligns with the principles of social justice, striving to eliminate disparities in educational outcomes based on socioeconomic

status, ethnicity, or other factors like disabilities or special needs. This also means inclusions and accessibility.

Inclusion, accessibility, representation

Inclusive practises aim to create environments that accommodate and embrace diversity, including individuals with disabilities and special needs. This involves designing policies, structures, and services to be accessible to everyone, fostering a sense of belonging and participation. Accessible infrastructure and technology are crucial components of it. This includes features such as ramps, elevators, braille signage, captioning, and assistive technologies that enhance accessibility. On an institutional level it is important to have a department devoted to the students with disabilities and special needs. In the best practise of the ELTE Student Support Centre the special needs centres offer a wide variety of services for students with special needs. It includes services for students among others with visual impairment, hearing impairment, mobility impairment, speech and language impairment, learning disabilities, autism-spectrum disorder, attention deficit disorder.

Long-Term Institutional Resilience

Universities that adopt sustainable practises in dropout prevention are better positioned for long-term resilience. This involves adapting to changing student demographics, technological advancements, and societal needs. Sustainable institutions prioritize ongoing improvements, interventions based on research, and flexible learning models that can endure challenges and changes in the educational landscape.

This means a sustainable learning environment and a sustainable support system.

Sustainable learning environment

Sustainable learning environments provide an educational setting that is designed and operated in a way that promotes environmental, social, and economic sustainability. Such environments prioritize the well-being and maximizing the human potential of current and future generations by integrating principles of sustainability into various aspects of the learning experience.

Sustainable Curriculum Integration

It means a continuous feedback loop, updating the curricula, and aligning them to sustainability challenges and sustainability goals. This needs the following perspectives: emphasizing lifelong learning, integrating interdisciplinary perspectives, promoting innovation, adapting to changing realities and stakeholders' expectations. It includes sustainability study programmes, and course that offer sustainability education. Curriculums should equip students not only with subject-related hard skills, but also with professional transversal skills and match the 21st centuries competencies like: critical thinking, problem solving, project management, media/digital literacy, datal literacy, creativity, team and collaborative work, entrepreneurship, pitching etc. Experimental learning provides hands-on, real-world experiences that connect theoretical knowledge with practical applications.

Technological Innovation

Technological innovation includes digital learning solutions, that utilize technology to enhance learning experiences, reduce paper usage, and promote digital resources to minimise the environmental impact. Innovation labs can create spaces for students to explore and develop innovative solutions to sustainability challenges, fostering creativity and critical thinking.

Community Partnerships

Engaging with local businesses, government agencies, and community organizations create a network of support and resources for sustainable initiatives, where sharing resources within the community, such as libraries, community gardens, and collaborative learning spaces promote resource efficiency.

Civic Engagement and Responsibility

Encouraging students to develop a sense of social responsibility and engage in projects that contribute to the well-being of the community and the planet. Fostering an understanding of global issues and encouraging students to think critically about their roles as global citizens.

Continuous Improvement and Monitoring

Implementing mechanisms to assess the sustainability performance of the learning environment, allowing for continuous improvement and the identification of areas for enhancement. Designing learning programmes that can adapt to changing circumstances, technologies, and sustainability best practises.

Environmental Responsibility

Implementing energy-efficient technologies, utilizing renewable energy sources, and minimizing energy consumption to reduce the environmental impact. Managing waste through recycling, composting, and reducing overall waste generation to minimise the ecological footprint. Constructing or retrofitting buildings with sustainable materials, energy-efficient systems, and eco-friendly designs to enhance resource efficiency.

Economic Impact

High dropout rates can have a significant economic impact on individuals and society. Students who do not complete their education may face limited career opportunities and earning potential. On a broader scale, a well-educated workforce contributes to economic growth, innovation, and competitiveness. Sustainable dropout prevention supports economic development by fostering a highly skilled and adaptable workforce.

5.6 Follow-up and feedback to the university

In this chapter we have gained insights into the importance of implementing frameworks and closely monitoring outcomes in the field of educational services. This is crucial because there is always uncertainty, about whether students will receive the support that precisely meets their needs. Additionally, we need to address the concern of how satisfied students with the educational services provided by institutions. Therefore, it becomes indispensable to apply frameworks and diligently monitor outcomes.

Strategically applying frameworks is an aspect of organizing educational operations. This involves defining goals and developing strategies that align with principles. It is essential to establish a framework that can accommodate and adapt to these constructs. This includes refining and innovating methodologies, evaluation processes and various student services. The meticulous tracking and evaluation of outcomes play a role, in assessing the effectiveness of implementing these frameworks. It requires data collection, outcome measurement and a encompassing assessment of project success.

The paths, to improvement and development depend on the insights gained from tracking outcomes. Universities are therefore encouraged to adjust and improve processes to meet the changing needs of students and enhance the quality of education based on this evaluative information. The continuous collection of data acts as a gauge that reflects how effective policies and initiatives are, which's crucial in making decisions for future improvements. By following these guidelines universities gain the flexibility they need to navigate changes in the education landscape. Providing tailored services that address student needs not creates an ideal learning environment but also strengthens students' skills and knowledge in a thoughtful and relevant way. This includes mentorship in blended formats utilizing resources building supportive communities to reduce dropout rates implementing follow up procedures providing feedback to academic institutions and ensuring quality assurance measures are, in place.

According to literature sources and student satisfaction surveys, like the National Student Survey (NSS) carried out by the Office for Students in 2019 and the Postgraduate Taught Experience Survey (PTES) by Advance HE, in 2019 there has been an expression of dissatisfaction regarding feedback. The main concerns revolve around when feedback is given the quality of feedback provided and how effectively students are able to use that feedback. These findings have revealed a number of challenges related to feedback.

The rise of education, in countries has led to the emergence of large class sizes with around 700 students. Dialogic feedback, which is known for its open to discussion nature helps students shape their learning progress. However, providing tailored feedback in classes requires more resources. In these situations, the time it takes to receive feedback can exceed four weeks making it less relevant for students who have moved on to assessments. While alternative approaches like feedback and peer assessment could potentially reduce turnaround times students may not find them sufficient, for addressing their needs. (McConlogue, 2020)

The ability to make decisions, about the quality of ones work and that of others, known as judgment goes beyond just rendering judgments. It also involves providing justifications engaging in arguments considering alternative perspectives attentively and determining if a judgment needs adjustment. Peer learning methods like self and peer assessment as collaborative analysis of sample assignments can help foster the development of evaluative judgment. Unfortunately, in education settings students often have limited exposure to examples of their peer's work. This hampers their understanding of standards, within their programme. Makes it challenging for them to evaluate the quality of their own work. By distinguishing between what students know and can do (capabilities) and what they're learning to be (ontological capabilities) it is argued that evaluative judgment is an epistemic capability used by students to navigate through dynamically changing situations.

While the idea of judgment is not ground-breaking, its use, as a guiding principle in designing learning and assessment has gained attention. Of positioning students as recipients in assessment practises evaluative judgment places them at the forefront involving them in both the design and evaluation aspects of assessments. To effectively fulfil this role students, need to possess an understanding of standards within their programme and be able to distinguish what constitutes high quality work. Research on literacies highlights the discipline epistemologically rooted nature of quality expectations in student work, which emphasizes the importance for students to develop an understanding of quality within their specific discipline(s). Evaluative judgment aligns with the concept of assessment, by providing students with an opportunity to cultivate a skill that extends beyond tasks.

To develop their judgment students, need opportunities to make judgments compare them with others and assess information, from sources to determine quality. This process of calibration relies on inputs such as feedback from peers and teachers. In education it is crucial to redefine the concept of feedback so that students are participants in the feedback process. A proposed approach distinguishes between two types of feedback; mark one. Mark two. Mark, one involves teachers guiding students development while mark two empowers learners to actively seek and utilize feedback to enhance their learning. By integrating feedback into assessment practises this approach promotes assessment within universities. Prepares students, for professional settings beyond higher education.

Receiving input from peers and teachers that we ask for plays a role, in developing our ability to make judgments. This external feedback helps us refine our judgment by considering and analysing the evaluations of others. By seeking feedback, we become better at making judgments about our work. The feedback provider challenges our judgment, which fosters objectivity when assessing ourselves. However, it can be difficult for learners to initiate the feedback process so its important to have structures, in place. Additionally, learners need guidance on how to use the feedback they receive to improve. This should influence programme design by including tasks that allow students to develop skills gain knowledge and regularly engage with receiving and applying feedback. (McConlogue, 2020)

"Feedback," which refers to the act of reflecting on one's progress is widely recognized as an aspect of teaching. It plays a role, in facilitating learning and personal growth among students as they work towards their predetermined objectives. Moreover, it strengthens the bond between educators

and learners by promoting communication. This exchange of knowledge creates opportunities, for utilizing feedback to encourage development and foster genuine learning experiences.

In the realm of education different approaches have been used to enhance learning experiences and achieve desired outcomes. Teachers play a role, in guiding students by setting objectives for providing feedback and helping them improve and grow. To effectively manage teaching and create experiences, for students it is important for educators to embrace the eight teaching principles integrated into the learning management plan. These principles include reviewing a teacher's strategies to assess whether students have truly grasped the material if it has fostered their skills and if it has contributed to the teacher's effectiveness. This assessment is based on observing students learning behaviours through their work or performances.

When it comes to providing feedback to support students learning progress it's crucial to consider how they receive and make use of that feedback. It involves creating scenarios and expectations to help students gain experiences. If their current thinking model is not accurate exposing them systematically to experiences can assist them in developing a precise perspective. This aligns, with the eight teaching principles, which encourage learning activities and the use of questioning techniques to enhance critical thinking skills. Understanding how students think enables teachers to realize that changes in their learning stem from the way teaching and assessment are designed, then relying on their existing knowledge or experiences. This underscores the significance of assessing students' performance with a focus on their thought processes throughout the learning journey. Assessment is categorized into three types; Assessment of Learning (AoL) Assessment for Learning (AfL) and Assessment, as Learning (AaL).

When it comes to teaching management there are techniques used to apply knowledge. One used technique is Blooms taxonomy, which involves questioning students. However, there are approaches, like the Depth of Knowledge (DOK) or the Structure of Observed Learning Outcomes (SOLO) models. In this context we have chosen to use the SOLO Taxonomy as a way to understand how students think and develop their learning further. The SOLO model categorizes learning into five levels; Pre Uni-Structural, Multi Structural, Relational and Extended Abstract Level. This model is valuable, for creating teaching methods and assessments that align with how students learn and behave in their studies.

In the context of school teaching management, the implementation of a method known as SOLO has been applied across four levels; Confused, Partial Understanding, Understands to Apply and Thinks Critically. To illustrate this let's consider a science activity that focuses on colour substances. In this activity teachers aim to guide students, in producing work that demonstrates their ability to think critically. Students are encouraged to interpret information and apply reasoning to describe phenomena. The learning management plan involves steps such as reviewing perceptions conducting experiments using mobile lab equipment for data collection reinforcing vocabulary knowledge through the Quizlet app and summarizing findings. By analysing each of these four levels of thinking students can better understand their learning progress while teachers gain insights into student's cognitive processes at each stage. This allows teachers to provide support during activities and develop teaching strategies tailored to individual student needs. It is crucial for teachers to have teaching goals and understand how students think in order to provide feedback and foster systematic connections, between different areas of knowledge. This approach creates a learning experience that promotes the development of thinking skills and encourages interdisciplinary collaboration among educators who can reflect on potential shortcomings in teaching methods when students struggle with certain concepts. It's crucial to listen to feedback and consistently learn about teaching management in order to effectively enhance student learning in a manner. (Chimphalee, 2022)

When we receive information, about the challenges or needs of students it's important for the curriculum or the relevant faculty to develop an approach to address these issues at their core. However, when the matter relates to policy or has implications for the curriculum it becomes

necessary to inform and alert the university. Reporting policy related problems to the university is a step, in informing higher level administrators about matters that have consequences and require policy level solutions. This report should focus on explaining the nature of the problem its impact. Suggesting possible policy driven solutions or improvements.

The curriculum department and faculty are expected to provide suggestions or insights that can help improve the identified problem or support progress. This report should be clear and comprehensive supported by relevant information. Additionally, it has the potential to guide efforts, in policy making and tasks.

Quality assurance

Higher education plays a role, in setting the foundation for developing a workforce and driving economic growth in a country. It is essential for educational institutions to align their management practises with strategies, long term plans, economic and social development goals, national education plans and education reform initiatives. This alignment is expected to contribute to both progress and social well-being. Consequently, there is a need to enhance the effectiveness of management within educational institutions. This optimization is vital to ensure that educational administration and talent development in the country meet standards align, with benchmarks and have the ability to fulfil the nations need while competing successfully on a global scale.

Quality assurance (QA), in education is a multi-faceted concept that goes beyond a simple understanding of academic quality. Recognizing the needs and expectations of stakeholders ensuring quality in higher education involves multiple dimensions. The ASEAN University Network (AUN) acknowledges the importance of quality in education. Understands the need to establish a comprehensive system for quality assurance. This system aims to enhance standards and promote excellence in education, research and service among its member universities. In 1998 the network introduced the AUN QA Network, which led to the development of assessment models for ensuring quality. Since then, the network has actively. Implemented based practises, for quality assurance, which involve testing, evaluation, improvement and dissemination.

The assessment models, for education in the AUN QA encompass dimensions, including strategic, systemic and functional aspects. Both internal and external assessments play a role, in ensuring quality assurance. Internal quality assurance focuses on establishing policies and mechanisms within an institution, system or programme to ensure that objectives and standards are met. On the hand external quality assurance involves assessments conducted by organizations or individuals. These assessors evaluate how an institution, system or programme operates to determine if it aligns with agreed upon standards.

To begin quality assurance, it's important to have an understanding of the stakeholders' requirements. These requirements are then translated into the university's vision, mission, goals and objectives. This means that the process of quality assurance and assessment starts with the mission and goals leading to achievements and outcomes that meet the stakeholders needs.

The issue of quality has always been important, in education especially when it comes to accrediting institutions throughout the century. However, with the growth and globalization of education, in the past four decades the concept of quality has evolved and diversified to adapt to the changing landscape. Researchers have focused on understanding this terrain by studying the methods used by organizations to define and implement assessment criteria while grappling with the challenge of measurement.

Although having an understanding of quality can be helpful, in situations like programme evaluations, classroom assessments or faculty reviews the current landscape of widespread higher education requires more precise measurements. With the increasing number of institutions, students and complex programmes it is necessary to have metrics. The challenge of education is further complicated by the need for benchmarks and measures that can be used across different contexts. This includes institutions with missions' sizes, complexities and even those operating in national or global environments. According to Simon Marginson higher education has become commoditized in

both global markets, which means there is a need, for a way to assess the value of degrees or certifications compared to others. Therefore, efforts are being made to develop benchmarks and measures that allow for comparisons.

The following discussion presents a framework, for exploring perspectives on quality in education across the Asia Pacific region. The goal is to encourage readers to examine aspects or dimensions of quality within their institutions, countries or international contexts. While acknowledging that this exercise may not capture all aspects comprehensively the framework aims to inspire efforts to incorporate insights and innovative understandings, about how quality's defined, evaluated and measured in various institutional settings and historical backgrounds.(Neubauer & Gomes, 2017)

The process of quality assurance involves a methodology that is carefully designed to oversee and maintain the quality of education and services with a specific focus, on ensuring efficient services for students throughout their academic journey in a university or educational institution. This procedural framework emphasizes the examination and improvement of all processes that impact the quality of education teaching methods and services provided to students. It guarantees the implementation of measures to meet the standards of quality mentioned earlier. The process of educational quality assurance often includes evaluation procedures, critical assessment and strategic interventions for improvement. It places importance on gathering feedback, from students and relevant stakeholders to facilitate refinement and address changes.

Through the implementation of a robust quality assurance process, a university or educational institution can foster a sense of assurance that students are afforded a superlative educational experience and requisite support conducive to their academic and institutional journey.

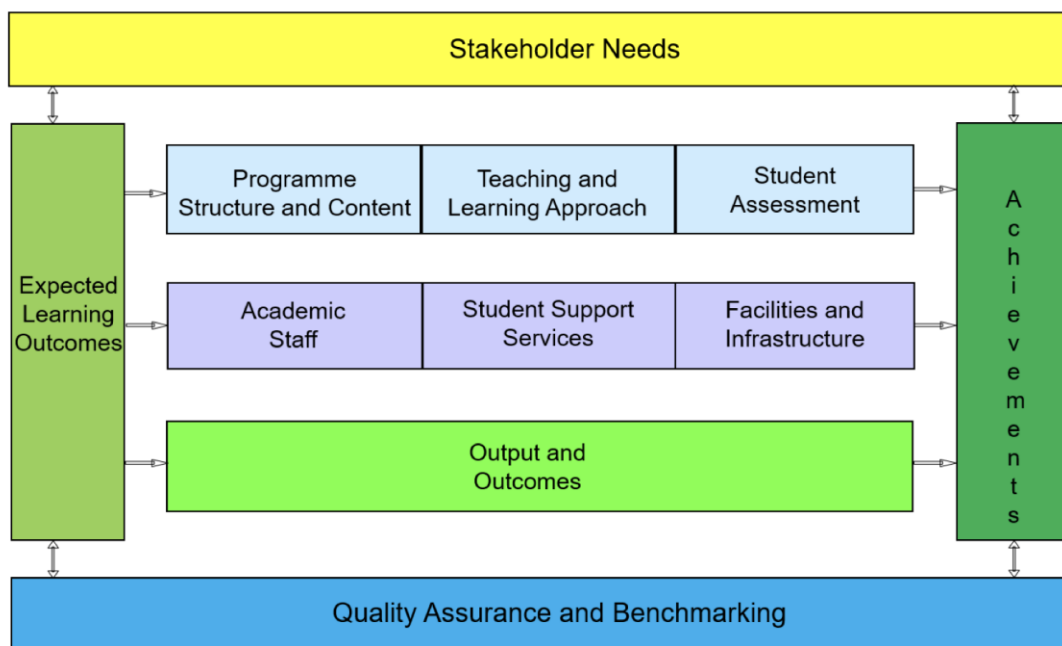


Figure 5.1 AUN-QA Assessment Model at the Programme Level (version 4.0)

The conceptual framework commences with a thorough comprehension of the requisites articulated by both internal and external stakeholders of an academic programme. These requisites are subsequently translated into anticipated learning outcomes, constituting the foundational impetus steering the programme's overarching objectives.

In the section of the model consisting of three parts the first part focuses on programme structure and content. This includes how courses are organized within the degree programme the teaching methods used and how students are assessed. The second part explores the resources for running the programme, such, as staff considerations (promotions, performance management,

research oversight) support services, for students (staff assistance, library facilities, clinics, social spaces) and infrastructure components (classrooms, IT facilities, recreational amenities). The third part deals with the outcomes of the programme including the quality of graduates, employment rates, research output, stakeholder satisfaction and other important factors.

The last column focuses on achieving the intended learning outcomes and overall objectives of the programme. The model also considers meeting stakeholder needs improving the quality assurance system and adopting practises through benchmarking. In version 4.0 there is an integration of quality improvement requirements, into the evaluation criteria themselves. For example, ensuring that students achieve the expected learning outcomes by graduation is an aspect of enhancing quality in criterion 1. Similarly in criterion 2 which deals with programme structure and content regularly reviewing the curriculum to keep it up to date and aligned with industry requirements is essential, for quality enhancement.

The need, for quality enhancement serves as a way to gather feedback and assess progress. It involves a process that includes planning, execution, verifying against predefined benchmarks and making adjustments, for iterations of improvement. This follows the Plan Do Check Act (PDCA) concept, which is integrated into all eight criteria.

The quality of a programme depends heavily on the interaction, between faculty members and students. However, for the academic staff to effectively carry out their duties it is crucial that they receive top notch support from the staff. These individuals play a role, in managing libraries, labs, computer facilities and other student services.

Summary

The COVID-19 pandemic prompted educational institutions to swiftly adopt emergency teaching, necessitating investments in technology and support systems. Mentorship and peer mentoring played a crucial role in adapting to blended learning, with virtual counselling sessions fostering a sense of community. While the shift offered advantages like flexibility and global accessibility, challenges included issues and reduced face-to-face interaction. Technology, exemplified by the LINE application in Thai universities, played a pivotal role in communication. Addressing high school dropout rates requires collaborative efforts involving parents and communities. Effective feedback in education faces challenges, emphasizing the shift towards student-guided assessment practises. Maintaining quality assurance involves aligning with strategies and diverse assessment methods, as emphasized by the AUN QA Network's focus on improvement through external assessments.

The chapter discusses the significant impact of the sudden transition to remote learning and explores the widespread adoption of educational technology and the anticipation of continued growth in hybrid and online education. The shift to online interactions has also influenced mentoring in higher education, with a focus on fostering interpersonal relationships and adapting to the challenges and benefits of digital platforms. The Student Support Centre at Eötvös Loránd University exemplifies successful adaptation to remote education, sharing practical tips and best practises for online and hybrid mentoring. The chapter concludes by highlighting the importance of embracing online resources and technologies to optimize the mentorship experience in higher education.

Student social-integration and engagement are foundational to promote the completion of studies and graduation. Relationships and connections enrich students' connections to university, aid successful academic performance and promote the completion of their studies. Research suggests that many youth who drop out of university had gone through a process of disengagement from university. This process is increasingly recognized as central to understanding dropout, both in theoretical and empirical work. Sustainability in university dropout prevention is instrumental in creating enduring, supportive, and inclusive educational environments. Sustainable practises not only address the immediate needs of students but also contribute to the long-term resilience and success

of higher education institutions. By adopting and prioritizing sustainability in various aspects of university life, we can build a foundation for student success, satisfaction, and completion.

Discussion questions

1. How has the COVID-19 pandemic impacted education, especially in terms of the shift to remote instruction?
2. What are some benefits and challenges mentioned in the chapter regarding the adaptation to online and hybrid mentoring at the university?
3. What factors should be considered when deciding whether to offer mentoring in an online or hybrid format?
4. How can mentors ensure accessibility of services and events in an online or hybrid setting?
5. Why is two-way communication considered fundamental to the success of online mentoring?
6. How can mentors facilitate open communication in an online setting, and what challenges might they face?
7. What are the advantages of video-based communication in online mentoring?
8. How can mentors create a safe space for open communication in the absence of physical presence?
9. How can mentors leverage video conferencing platforms to enhance the mentorship experience?
10. In what ways can institutions continue to improve and innovate in online and hybrid mentoring practises?.
11. What kinds of community building activities do exist currently at your institution? What activities could you add?
12. What kinds of community building activities initiated by students could you support on an institutional level, and how?
13. How do you ensure sustainable learning environment in your institution?
14. What kind of student support services are available at your institution?
15. How can you strengthen resilience of the students on the structural level by aiming individual, social resilience?
16. How do you ensure inclusion in your institution?
17. How do you include sustainability in your curriculum?

References

- ASEAN Secretariat. (2021). *ASEAN Policy Brief on Safe School Reopening, Learning Recovery and Continuity*. Retrieved from
- ASEAN Secretariat. (2022). *ASEAN Youth Development Index – ASEAN Youth Development Index 2022*. Retrieved from
- Biggers, M., Brauer, A., & Yilmaz, T. (2008). Student Perceptions of Computer Science: A Retention Study Comparing Graduating Seniors vs. CS Leavers. 5. SIGCSE'08, Portland: Oregon.
- Brace, I. (2008). *Questionnaire Design: How to Plan, Structure and Write Survey Material for Effective Market Research*: Kogan Page.
- Braxton, J. M., Milem, J. F., & Sullivan, A. S. (2000). The Influence of Active Learning on the College Student Departure Process: Toward a Revision of Tinto's Theory. *The Journal of Higher Education*, 71(5), 569–590. <https://doi.org/10.1080/00221546.2000.11778853>

- Cesco, S., Zara, Z., De Toni, A., Auhli, P., Betta, G., Evancs, A., & Orzes, G. (2021). Higher education in the first year of COVID-19: Thoughts and perspectives for the future. *International Journal of Higher Education*, 10(1), 285–294. <https://doi.org/10.5430/ijhe.v10n3.p285>
- Chimphalee, K. (2022). How to feedback? How to reflect the results, truly develop students? Retrieved from <https://www.starfishlabz.com/blog/744-how-to-feedback-สะท้อนผลยังใจ-พัฒนานักเรียนอย่างแท้จริง>
- Czakó, A. (2017). A felsőoktatási lemorzsolodási intenciók pszichológiai háttértenyezői. Doktori disszertáció. Eotvos Lorand Tudományegyetem Pszichológia Doktori Iskola. Elerhető: <https://doi.org/10.15476/ELTE.2017.188>.
- Dam, R. F. (2022). Design Thinking. Retrieved from <https://www.interaction-design.org/literature/topics/design-thinking#:~:text=Design%20thinking%20is%20a%20non,solutions%20to%20prototype%20and%20test.>
- Dam, R. F. (2023). The 5 Stages in the Design Thinking Process. Retrieved from <https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process>
- Engler, A. (2012b). A felnőttkori tanulás közösségi hozadéka. In.: Juhasz, E. & Chrappan, M. (Szerk.) Tanulás és művelődés, pp. 238–243., Debrecen.
- Falk, S. & Marschall, M. (2019). Studienabbruch – Was können Hochschulen tun? Forschungsstand und Interventionsmöglichkeiten. *Qualität in der Wissenschaft*, 13(1), 23–27.
- Füleki, B., Puskás-Vajda Zs. (2020). Online tanácsadás a felsőoktatásban a Covid19-járvány idején. ISSN 1788-9863, ISBN 978-615-80732-4-0 Budapest. Felsőoktatási Tanácsadási Egyesület
- Guppy, N., Verpoorten, D., Boud, D., Lin, L., Tai, J., & Bartolic, S. (2022). The post-COVID-19 future of digital learning in higher education: Views from educators, students, and other professionals in six countries. *British Journal of Educational Technology*, 53(6), 1750-1765.
- Hofmann, Y., Müller-Hotop, R., Högl, M., Datzler, D. & Razinskas, S. (2021). Resilienz stärken: Interventionsmöglichkeiten für Hochschulen zur Förderung der akademischen Resilienz ihrer Studierenden; Ein Leitfaden (2. Aufl.). Bayerisches Staatsinstitut für Hochschulforschung und Hochschulplanung (IHF).
- Masten, A.S., Nelson, K.M., Gillespie, S. (2022). Resilience and Student Engagement: Promotive and Protective Processes in Schools. In: Reschly, A.L., Christenson, S.L. (eds) *Handbook of Research on Student Engagement*. Springer, Cham. https://doi.org/10.1007/978-3-031-07853-8_12.
- McConlogue, T. (2020). Giving Good Quality Feedback. In *Assessment and Feedback in Higher Education* (pp. 118-134): UCL Press.
- Miguel Antonio Lim, e. a. (2023). *The State of Higher Education in Southeast Asia*. Retrieved from https://asean.org/wp-content/uploads/2023/08/The-State-of-Higher-Education-in-Southeast-Asia_11.2022.pdf
- Muraskin, L., & Wilner, A. (2004). *What We Know About Institutional Influences on Retention*. Washington, DC: JBL Associates.
- Murphy, M. (2020). COVID-19 and emergency eLearning: Consequences of the securitization of higher education for post-pandemic pedagogy. *Contemporary Security Policy*, 41(3), 492–505. <https://doi.org/10.1080/13523260.2020.1761749>
- Neubauer, D. E., & Gomes, C. (2017). *Quality Assurance in Asia-Pacific Universities: Implementing Massification in Higher Education*: Springer International Publishing.
- OECD Southeast Asia. (2021). *Adapting to changing skill needs in Southeast Asia*. Retrieved from
- Poedjiastutie, D., & Oliver, R. (2017). Exploring Students' Learning Needs: Expectation and Challenges. *English Language Teaching*, 10, 124. doi:10.5539/elt.v10n10p124

- Pollard, R. & Kumar, S. (2021). Mentoring Graduate Students Online: Strategies and Challenges. *International Review of Research in Open and Distributed Learning*, 22(2), 267–284. <https://doi.org/10.19173/irrodl.v22i2.5093>
- Realinho, V., Machado, J., Baptista, L., & Martins, M. (2022). Predicting Student Dropout and Academic Success. *Data*, 7, 146. <https://doi.org/10.3390/data7110146>.
- Sava, S. (2012). Fields of needs analysis in the educational context. In *Needs Analysis and Programmeme Planning in Adult Education* (1 ed., pp. 45-58): Verlag Barbara Budrich.
- Szlamka, Z., Kiss, M., Bernáth, S., Kámán, P., Lubani, A., Karner, O., & Demetrovics, Z. (2021). Mental health support in the time of crisis: Are we prepared? Experiences with the COVID-19 counselling programmeme in Hungary. *Frontiers in psychiatry*, 12, 655211.
- Tague, N. R. (2005). *The Quality Toolbox*: ASQ Quality Press.
- Takács R., Oláh A., & Horváth Z. (2020). Lemorzsolódás vizsgálata a Covid19-járvány következtében távolléti oktatásra váltott intézményben. Online tanácsadás a felsőoktatásban a Covid19-járvány idején, 63. ISSN 1788-9863, ISBN 978-615-80732-4-0
- Takács, R. (2023) Dissertation. Eötvös Loránd university, Doctoral School of Pedagogy and Psychology
- Tinto, V. (1993). *Leaving College: Rethinking the Causes and Cures of Student Attrition* (2nd edition). Chicago; London: University of Chicago Press.
- Toumtab, T. (2020). *Guidelines on School Dropout Risk Prevention of Students A Case Study: Uttaradit Technical College*. (Master of Education Programme (Educational Administration)). Uttaradit Rajabhat University, Retrieved from <http://202.29.52.112/dspace/bitstream/123456789/63/1/62551140118.pdf>
- Varthana, T. (2023). Role of parents and community in preventing and addressing school dropouts. Retrieved from <https://varthana.com/school/role-of-parents-and-community-in-preventing-and-addressing-school-dropouts/>
- Wilson, K. L., Murphy, K. A., Pearson, A. G., Wallace, B. M., Reher, V. G. S., & Buys, N. (2016). Understanding the early transition needs of diverse commencing university students in a health faculty: Informing effective intervention practises. *Studies in Higher Education*, 41(6), 1023–1040. <https://doi.org/10.1080/03075079.2014.966070>
- Wind, T. R., Rijkeboer, M., Andersson, G., & Riper, H. (2020). The COVID-19 pandemic: The ‘black swan’ for mental health care and a turning point for e-health. *Internet Interventions*, 20.

Suggested reading

- Crawley, A. (2012). *Supporting online students: A practical guide to planning, implementing, and evaluating services*. John Wiley & Sons.
- Guppy, N., Verpoorten, D., Boud, D., Lin, L., Tai, J., & Bartolic, S. (2022). The post-COVID-19 future of digital learning in higher education: Views from educators, students, and other professionals in six countries. *British Journal of Educational Technology*, 53(6), 1750-1765.
- Pollard, R. & Kumar, S. (2021). Mentoring Graduate Students Online: Strategies and Challenges. *International Review of Research in Open and Distributed Learning*, 22(2), 267–284. <https://doi.org/10.19173/irrodl.v22i2.5093>
- Silver, B.R. Major transitions: how college students interpret the process of changing fields of study. *High Educ* (2023). <https://doi.org/10.1007/s10734-023-01050-8>
- Stoeger, H., Debatin, T., Heilemann, M., & Ziegler, A. (2019). Online mentoring for talented girls in STEM: The role of relationship quality and changes in learning environments in explaining mentoring success. *New Directions for Child and Adolescent Development*, 2019(168), 75-99.