

GUIDELINES FOR A HYBRID APPROACH IN TERTIARY EDUCATION



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Slovenian Quality Assurance Agency
for Higher Education

GUIDELINES FOR A HYBRID APPROACH IN TERTIARY EDUCATION

The Council of the Slovenian Quality Assurance Agency for Higher Education (hereinafter: the Agency Council), in cooperation with national and international experts in the field of innovative approaches to distance teaching and learning, drafted and adopted the Guidelines for Hybrid Approaches in Higher and Higher Vocational Education (hereinafter: Guidelines) at its 178th session by correspondence, which took place from 8 to 12 July 2022.

The Guidelines are an independent document supplementing the acts of the Agency Council (primarily the Criteria for Accreditation and External Evaluation of Higher Education Institutions and Study Programmes and the Criteria for External Evaluation of Higher Vocational Colleges), as well as other adopted documents (the Guide to External Assessments), and are aimed at defining the situation and requirements for the organisation and implementation of the study/education process at higher education institutions and higher vocational colleges (hereinafter: institution/college), and at the improvement of the internal quality assurance systems.

The content of the Guidelines is based on the experiences and needs identified in the transition to emergency remote teaching and learning during the COVID-19 pandemic, but they also aim to chart a course for the development of hybrid and blended learning, including the use of advanced technological solutions, and for the needs of the future.

During the emergency, most institutions/colleges sought technological solutions in videoconferencing platforms (Zoom, MS Teams), which were not primarily intended for education, but are in fact communication or videoconferencing tools with additional functionalities (chat, whiteboard, library, calls, breakout rooms, etc.) that extend the user experience of remote access meetings.

The Guidelines define a set of adaptations and underline the aspects that are important for creating a more personalised and appealing learning environment, combining accountability in quality assurance concepts and innovation in teaching (adapted higher education didactics) and learning using the most advanced technological solutions, maintaining the role of higher education teachers as the cornerstone of teaching and promoting student-centered education while being based on the concepts of equity, inclusion, accountability, professionalism and innovation.

The Guidelines are aimed at institutions/colleges, students and Agency experts involved in the accreditation and evaluation processes of institutions/colleges and study programmes.

In order to develop the starting points and Guidelines, the Agency worked together with various experts with experience in the fields of hybrid learning (Dr Jana Javornik), innovative teaching and learning methods (Dr Janez Vogrinc), the development of new pedagogical and andragogical approaches (Dr Marko Radovan), the Head of the Digitalisation of Education Service (Dr Igor Pesek), a student representative (Omar Smajlović), a representative of the Slovenian Rectors Conference (Dr Tanja Urbančič), a representative of the Community of Independent Higher Education Institutions (Dr Janko Žmitek), and an expert in the field of telecommunications and multimedia (Dr Janez Bešter).

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DEFINITIONS

Traditional learning – This term refers to traditionally organised studies (on-site, ex-cathedra, in-person or on-campus), where all the study process takes place physically on the premises of the institution/college or other accredited premises.

Online learning – Online learning comprises all the means of organising and carrying out the study process at a distance, where the study programme is organised and carried out exclusively in an online (virtual) format.

Blended learning – This is a form of education that combines traditional and online learning. Students have the opportunity to take part in the study process using online and information and communication technologies (ICT) and solutions, while also completing their obligations at the higher education institution in person. Unlike hybrid learning, blended learning is used as a complementary rather than an exclusive substitute for on-site, in-person teaching and learning. Blended learning is based on a linear time-based progression, where all students complete part of their course requirements in the traditional way and part of their course requirements in a virtual environment (the proportions may vary).

Hybrid learning – An innovative learning (educational) environment created by combining virtual and physical space and using digital technologies and online tools. At the same time, appropriate support and services are provided for all participants. The innovation of the hybrid concept is provided by the constantly evolving IT solutions that are changing the learning society and at the same time shaping its requirements and expectations. All the students can participate in the virtual environment, wherever they are. All the study programmes are offered to students in parallel, and they choose the way they take part. Everyone (in the classroom and online) is given the same experience, the same objectives and the same competences and learning outcomes as set out in the study programme.

Blended/hybrid learning – Both these types include online and in-person learning, but the main difference is in the way the studies are organised. While, in the hybrid model, students are present both on-site and online (students as different individuals), in the blended model the same students participate partly in person and partly online.

INTRODUCTION

The COVID-19 pandemic posed an immediate and serious challenge to the higher education space, not only for institutions/colleges, teachers, researchers and students, but also for other stakeholders who (co-)shape it (NAKVIS, the Ministry of Science and Sport, the Slovenian Student Union, employers, research organisations and institutes, social partners, etc.). Various analyses and surveys already carried out by the European Commission during the first and second waves of the 2020 pandemic, as well as by national organisations and institutions (e.g. the Slovenian Student Union), have clearly shown that the space was not ready for the transition to online learning, which happened practically overnight. In practice, the level of preparedness, competence and equipment of educational institutions and individuals in the learning process varied widely, but in most cases was merely adequate, and almost everyone agreed that the pandemic would be a turning point in the use of technology in education, training and even everyday life.

The challenges that were observed during the emergency (online) teaching and learning touched on all aspects of education, from material conditions and equipment, digital literacy, management and governance systems at institutions/colleges, support and advisory services, accessibility of resources, security issues, to the lack of relevant knowledge, skills, competences and, last but not least, experience.

Just like other stakeholders, the Agency faced such challenges, which subsequently changed the way we operate and have empowered the Agency with new and advanced technological solutions (digitalisation of operations and management, implementation of procedures online, working from home). Even though the transition to remote access was relatively easy (thanks to the technological and IT support and mechanisms that we started to implement more intensively in 2018), we also had to adapt our external quality assurance system to the Slovenian higher education area. To this end, we developed the [Guidelines for Conducting a Distance Site Visit](#).

Enriched by the experience of the pandemic and the transition to emergency teaching and learning, we charted a future direction for development and included sustainability as one of our strategic goals, while also promoting digitalisation and inclusion. In line with the vision for the future of higher education as presented by the European Commission as part of Europe's recovery after the pandemic, we are committed to high-quality higher education and its green and digital transition to Society 5.0.

We are aware that the entire educational landscape is undergoing a transformation, not only due to the introduction of new paradigms and approaches to teaching and learning, new ways and channels of communication and interaction, but also due to the need for higher education institutions to be adequately prepared for new challenges (pandemics or natural disasters, improved governance and management of resources, and teaching expectations and demands). In particular, it is important that new models such as hybrid learning help to make higher education more accessible to a wider range of learners (employees who want to complete or upgrade their qualifications, all those who want to improve their competences, international students who do not want to (or cannot) move or take part in physical mobility, etc.).

It is worth noting that, despite the changes, our primary mission remains the same. As the guardian of quality in higher education, the Agency took the initiative to develop these guidelines for a hybrid approach in tertiary education in cooperation with external experts (national and international) in the field of innovative approaches in teaching and learning.

We would like to point out that the concept of hybrid learning is a new concept, which has only started to take off in earnest in 2021 in response to the above-mentioned emergency situation in education during and especially after the COVID-19 pandemic. The concept should not be equated with hybrid concepts which have been discussed by various experts in the past (e.g. Christensen, Horn and Staker, 2013¹) and which represent a hybrid as an intermediate stage of development and a link between traditional (physical) learning and fully online learning. Unlike the new hybrid learning (2021), the old concept combined old and new technologies, considered only existing users and participants (not new ones), and advocated the idea that it would provide users with an experience at least comparable to the traditional model, while at the same time interfering to a limited extent with the habits of the participants, in order to make the transition as unperceivable and smooth as possible.

The concept of hybrid learning follows some of the key principles that should underpin other forms of blended learning:

- creates a more personalised and appealing learning environment,
- responsibly combines quality and innovation in teaching and learning with the use of advanced technological solutions (taking into account the specificities of different scientific disciplines and learning environments),
- combines advanced technology with high-quality (personalised) higher education didactics, preserving the role of higher education teachers as the cornerstone of teaching and education, while promoting the introduction of student-centered education,
- is based on the concepts of fairness, inclusion, professional qualifications and the creation of a suitable infrastructure.

The basis for the development of the Guidelines for a Hybrid Approach in Tertiary Education is a study by Dr Jana Javornik prepared for the Agency in February 2022, which is based on a systematic review and meta-analysis of 47 studies of hybrid approaches in higher education by Raes, Detienne, Windey and Depaepe (2020); a review of the grey literature; a review of the activities of supranational institutions (OECD, European Commission, Council of Europe, UNESCO); and on the basis of the Agency's own experience of the development and deployment of a number of hybrid models at the University of Leeds (UK). It is worth noting that the hybrid concept is a relatively new approach in higher education, research is scarce, primarily qualitative and does not include Slovenia (Javornik, 2022), so the study focuses on the synchronous hybrid model while the Guidelines address different forms of the hybrid approach.

¹ Christensen, C.M., Horn, M.B. and Staker, H. (2013). Is K-12 Blended Learning Disruptive? An introduction to the theory of hybrids. The Clayton Christensen Institute. Available at: <https://www.christenseninstitute.org/wp-content/uploads/2013/05/Is-K-12-Blended-Learning-Disruptive.pdf>

THE CONCEPT OF A HYBRID LEARNING ENVIRONMENT

The period of the COVID-19 pandemic, which forced education to move to remote access (online or blended) literally overnight, and the time after the pandemic will be shaped by new forms and ways of organising and implementing education, characterised by the predominant use of technological and online solutions. The study published by the [Deloitte Center for Higher Education Excellence \(2022²\)](#) examines how institutions/colleges that adopted a hybrid model (a mix between traditional – in-person and online) of teaching and learning in the last two years can transfer this model to other services and activities provided by the institution/college as part of its activities. The characteristics identified will become permanent (at least to some extent) and will transform institutions/colleges. The key findings related to the hybrid concept of education are that:

- it goes beyond our current notion of blended learning towards the development of a more holistic vision that enables the academic community to benefit from all the services and activities provided by the institution/college (teaching, research, collaboration, also career guidance);
- it makes education more accessible to a wider and more diverse range of students;
- it enables better results and better sense of belonging, regardless of where students come from;
- it enables the management of the institution/college to better manage both financial resources and teaching requirements by individualising the experience in this way;
- it encourages innovation in teaching and learning;
- it monitors and promotes the analytics of the institution's/college's study programmes and support and advisory services.

Institutions/colleges that already had at least a basic set of digital tools in place before the COVID-19 pandemic to engage students (both those physically present in the classroom and those participating remotely) on an equal footing were better able to cope with the transition to a hybrid or fully online environment, as they understood how to meet the needs and expectations of students and teachers in both in-person (traditional) and remote modes.

Higher and higher vocational education has a very long tradition of formally and informally shaping students' social skills by enabling physical interaction between professors and students, researchers and other staff, as well as between mentors and peers. In contrast to such a physical experience, the hybrid concept of education offers an altered way of living and working in a technological world where stakeholders work, collaborate, research and communicate. It is not just blended learning, but a hybrid, comprehensive and digital-living concept that combines traditional and online learning spaces. The objectives and outcomes of in-person and hybrid learning are therefore not significantly different.

² Selingo, J. (2022). The Hybrid Campus: Three major shifts for the post- COVID university. The Deloitte Center for Higher Education Excellence. Available at: https://www2.deloitte.com/content/dam/insights/articles/6756_CGI-Higher-ed-COVID/DI_CGI-Higher-ed-COVID.pdf

What is crucial for institutions/colleges in this regard is not only the use and choice of appropriate web and technology tools and solutions, but a change in the culture of quality, in the understanding of all those involved and in their (co-)operation.

At the Slovenian level (ANDI – Action Plan for Digital Education), as well as at the EU level (React-EU and Digital Education Action Plan 2021-2027), activities and measures are being designed and incentives are being planned to ensure digital learning capacities across the entire vertical axis.

Defining the concept of hybrid higher education

As Dr Jana Javornik (2022) mentions in her study, hybrid learning is an innovative learning (educational) environment created by combining virtual and physical space with the help of digital technologies and online tools. At the same time, appropriate support and services are provided for all participants. The innovation of the hybrid concept is provided by the constantly evolving IT solutions that are changing the learning society and at the same time shaping its requirements and expectations.

The concept of hybrid learning extends the full range of educational activities into the digital environment, while providing the support and services that are typical of the physical environment.

But it is not only the transition to a new hybrid way of learning that dictates change. The paradigm shift in teaching and learning needs to be considered in a broader context. It is also accompanied by a paradigm shift in research and development and, ultimately, in much of society. Despite unpredictable technological developments, it is essential to establish the basic frameworks for such potential, while defining and consistently respecting the core values for monitoring the introduction of advances in education, in order to raise general awareness in the academic and research spheres. These values include: openness, inclusion, academic and research integrity, sustainability, innovation and creating active citizenship.

The synchronous hybrid learning model (Javornik, 2022) is a hybrid classroom/environment where students participate simultaneously in person and online, managing a digital platform from a physical classroom. By combining two learning environments, online and physical, with the help of ICT, a new format of teaching and learning is created – the hybrid model. Studies of the model (Raes, Detienne, Windey and Depaepe, 2020) conclude that the hybrid approach creates a more personalised and appealing learning environment compared to established virtual (distance/online) and in-person teaching, but also poses a number of challenges. However, it certainly offers a more diverse and inclusive higher education space for all stakeholders.

The asynchronous model of hybrid learning, on the other hand, is a model that is aimed at students in virtual classrooms, but differs significantly from the synchronous model. It is not delivered simultaneously, but offers access to pedagogical content (quizzes, simulations, forum discussions, etc.) at any time and from anywhere, and does not necessarily involve real-time participation in the teaching process. The asynchronous model allows students to learn at their own pace, but within a generally defined timeframe. Its main advantage is the flexibility in terms of time, space and content (in line with the



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curriculum), as the students are free to manage their own time, space and, to a certain extent, the content of their studies. This does not mean that their progress is not regularly monitored, but it does mean that students have more responsibility and freedom to organise their studies on their own or in a group, in order to complete the requirements set out in the study programme in a timely and high-quality manner, and to achieve the learning outcomes and competences. At the same time, all the support (teaching, technical, IT and personal) is provided.

Both models have in common that learners can join the study process from anywhere, as there are no space constraints (only time constraints); real-time communication with teachers, networking and collaboration with other learners (students). The differences are mainly seen in the time component and the use of a range of teaching methods (e.g. immediate response to candidate performance after the quiz is completed/taken – asynchronous model vs. participation in a live discussion, regardless of whether students are in a lecture hall or an online classroom – synchronous model).

GUIDELINES

The basic ideas of these Guidelines can also be applied *mutatis mutandis* to other forms of blended or online learning.

1. APPROPRIATE USE OF ICT, ONLINE TOOLS AND SUPPORT

Given the constant evolution of information technology and online tools, it is of utmost importance that ICT and online tools used for hybrid education are neither prescribed nor restricted. It is important to plan thoughtfully, to keep up-to-date with innovations and to be flexible according to the specificities of the learning environment, participants, discipline, situation and resources. Technology will be considered in a very broad sense, in terms of hardware, software, web resources, as well as support services for the implementation of these tools. The use of ICT in the educational process, namely, requires a high level of digital literacy, competence and organisation of education providers and participants (Javornik, 2022). It is important to stress that technology is constantly changing and developing, so any restriction or prescription on the use or tools is both pointless and impossible. It should be noted that technology alone does not, of course, imply a successful implementation of the hybrid model, but is merely a tool or system that enables its implementation, where the issue of security should not be neglected (Bates, 2019³).

Prerequisites for the successful implementation of a hybrid approach in education:

- Adapting workflow to better understand the expectations, requirements and capabilities of the institution/college, which can help to optimise human potential, improve service activities and support both the institution/college and the staff.
- Selection (or development) of an appropriate and stable technological infrastructure to support the management and monitoring of the teaching process, hybrid and virtual interaction, and enable collaboration, communication, exchange, simulation environment and virtual private networking.
- Adapting the working environment through the use of ICT and online tools that goes beyond the constraints of physical space, and setting up a network to provide appropriate support and advisory services for students and teachers.
- Broadband internet access for all involved in the education process, both in institutions/colleges and where different stakeholders access these tools.

³ Bates, A.W. (2015) Teaching in a Digital Age: Guidelines for Designing Teaching and Learning Vancouver BC: Tony Bates Associates.

HARDWARE

The basic definition of technology usually refers to the hardware used in the study process. This primarily refers to the computer or mobile phone/tablet, and in the future also to virtual and augmented reality devices and, of course, the internet that connects these devices. This is the basis for the successful implementation of the hybrid model in education, which also raises the issue of access and inequality, and is discussed in more detail below. Most of the communication in the synchronous hybrid model takes place via videoconferencing environments, so it is important that all participants have the appropriate support equipment such as microphones, headsets and cameras. The institution/college shall allow teachers and students to use appropriate hardware to participate in the study process if they are unable to provide it themselves.

SOFTWARE

“Live” online teaching is considered to be the best approximation to traditional teaching (see Makovec Radovan and Radovan, 2021⁴), which is facilitated by various videoconferencing applications (e.g. Zoom, MS Teams, Webex, etc.); it should be pointed out at this point that these applications are not yet educational tools in themselves. Most institutions/colleges have already implemented Learning Management Systems (LMS), which, with the recent general digital revolution in education, have become the basis for effective interactive integration of teachers, students and study content. The most widespread in Slovenia is the open-source Moodle platform, while some institutions/colleges have even developed their own solutions (e.g. based on the MiTeam platform, which the MiTeam authors, in agreement with the institutions, have adapted to the specific needs of their online and hybrid learning and other processes). The most sophisticated systems of this kind, at least in theory, offer a complete solution for organising hybrid learning, combining all the necessary digital tools for remote collaboration and monitoring of the study process in a single system, including everything from databases, forums, online classrooms to integrated videoconferencing applications. The institution/college shall provide access to licensed or open-source software for all participants in the study process, subject to specific software requirements.

SOLUTION ARCHITECTURE (HARDWARE AND SOFTWARE TECHNOLOGY INFRASTRUCTURE)

The range of different hardware and software used by higher education teachers, staff and students should provide a unified user experience when using different ICT. To avoid a sense of fragmentation in its use, it is necessary to think towards providing an infrastructure solution that effectively connects and integrates the various ICTs that are frequently used among teachers. It is recommended that hardware and software are interconnected, that users access them with the same username and unique

⁴ Makovec Radovan, D. in Radovan, M. (2020). Smernice za izvajanje poklicnega in strokovnega izobraževanja v kombinirani obliki. Center za strokovno in poklicno izobraževanje. Available at: <https://cpi.si/wp-content/uploads/2020/11/cpi-smernice-ku.pdf>

authentication, and that they are linked to back-office administrative systems (e.g. student information systems).

For the efficient operation and integration of the various hardware and software mentioned above, a **common** production server infrastructure (web servers, application servers, databases, peak-load redundancy, backup hardware, etc.) as well as hardware and software to enable the integration or interconnection of the various solutions in use at the institutions/colleges must be provided.

The diagram shows the conceptual design of such a solution called Integrated Learning Environment (ILE) based on the example of the University of Ljubljana, which comprehensively addresses the support of the implementation of hybrid teaching (and other ICT-supported forms of teaching and learning) with the envisaged integration of:

- online classrooms (or the teaching management systems described above);
- an application environment for capturing multimedia content (e.g. classroom lectures, short video clips, capture from personal equipment, etc.);
- an educational repository for structured multimedia content depositing;
- video portal and other forms of multimedia display and playback;
- dedicated web-based applications for creating interactive presentations, collaborative creation of materials, formative monitoring of students' knowledge and progress (e.g. Mentimeter, Formative, Kahoot, IORAD, iSpring, Trello, Nearpod, Padlet, etc.).
- and others.

TRAINING

A common criticism of the above-mentioned education systems is that they are complex and unmanageable. The use of new technological solutions in the study process requires great flexibility and, above all, the competence of all those involved. It is therefore essential for institutions/colleges to provide technical support and ongoing training for staff and students in the use of new ICT tools. It should be reiterated that the mere inclusion of a new technology in the study process does not presuppose its effective application without considering its actual usability, support services and teaching challenges, and familiarising oneself with the potential challenges that the new technology brings.

LIBRARY AND SUPPORT SERVICES

Where an institution/college organises and implements hybrid (or blended) learning, it is advisable to have a clear strategy for the development of its library and support services. The strategy should include solutions for additional training on classification systems, the use of different quotation methods and reference management.

The strategic orientations for the development of the library should include:

- an material resource adequacy plan;
- a plan to empower higher education libraries as a vehicle for sharing knowledge in the academic and research/professional community;



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- help with the provision, use and management of open access resources;
- strengthening cooperation between teachers, researchers and the library;
- the library's educational activities (the library as a space for digital literacy and addressing academic integrity, an environment for transferring good practices of networking and collaboration, empowering the tutoring system – the possibility of introducing virtual tutoring systems);
- creating new spaces (physical and virtual) where communities of learners are formed;
- supporting technologies for students with special needs, - alternative and compensatory tools.

Hybrid learning does not mean the death of the library, but its reactivation. An example of good practice is the University of Leeds Library, which has been organised in a hybrid model for over a decade, with comprehensive access to e-services and support for students at all levels and for staff – helping the latter to select and plan their use of digital resources, to acquire and create new digital resources, and to manage, secure and share digital resources.

Larger university environments are setting up specific support services to support the use of ICT in the teaching process. The range of support activities required for the implementation of hybrid learning, as well as other forms of ICT-supported teaching process, is relatively extensive and highly multidisciplinary. It ranges from empowering teachers and students, through didactic and technical training, didactic and technical consultancy, provision of hardware and software infrastructure, and above all the often neglected development (of innovative didactic approaches and technological solutions), to networking with other stakeholders who are responsible for business processes, compliance and quality assurance of the teaching process in the educational environment.

A good example of organisation of such a support service is e.g. KU Leuven Learning Lab (<https://www.kuleuven.be/english/education/leuvenlearninglab/team/about-us>), while examples from Slovenia include those from the University of Ljubljana, Centre for the use of ICT in pedagogical process (<https://digitalna.uni-lj.si/>) or from the University of Maribor, Teaching support centre (<https://didakt.um.si/Strani/Vstopna.aspx>).

SECURITY

An area that is often neglected, even in the face of the urgent shift to online learning, is ensuring security, privacy and rules for managing new resources and sensitive digital content. The correct use of privacy and copyright rules, understanding of use and granting of rights for open licences and open educational resources, including terms of use, should be ensured. It is important to critically assess the credibility and reliability of digital resources and to consider potential restrictions on the use or re-use of digital resources (e.g. copyright, file type, technical requirements, legal provisions, accessibility) (Javornik, 2022).

Solutions that store data in the cloud must comply with EU directives.

2. ADAPTED AND INNOVATIVE TEACHING APPROACHES IN HYBRID LEARNING

In all forms and modes of hybrid learning (including blended), mechanisms and approaches for a continuously learning community of teachers at the institution/college need to be put in place, while at the same time adapting the student-centred focus. The hybrid concept deals with a heterogeneous group of students and therefore places particular emphasis on equal integration and inclusion and cohesiveness of the group; at the same time, it requires teachers and those responsible for the implementation of the study process to be attentive and to interact smoothly and to prevent or successfully overcome possible setbacks and interruptions in the interaction.

Timely and thorough planning of hybrid learning is an important element that influences the success of its organisation and implementation. It must ensure equal involvement (and education) of diverse groups, as it allows access from anywhere as well as the involvement of external stakeholders and experts regardless of their location, which facilitates contacts and exchanges with external stakeholders. The objectives of the programme should therefore be defined in a timely manner and adapted to the learning environment, the programme and the needs of students and teachers while monitoring their implementation on an ongoing basis. In doing so, the institution/college should provide support and advice to teaching staff and students to improve digital and pedagogical practice (in the form of ongoing didactic and technical support, workshops and training, etc.).

The provision of support, advice and timely feedback enables the ongoing and flexible development of digital teaching practice and practice of the education community. It is important that digital and online technologies enable collaboration between different groups, different teachers, where the exchange of knowledge and experience leads to joint innovation and more effective transfer of teaching practices. Teaching practices should include modified or complemented teaching and didactic approaches adapted to the educational context, learning objectives and competences, and to different approaches and groups of students.

Support from additional staff (tutors, assistants, consultants – professionals with interdisciplinary and multidisciplinary competences), additional education and training in the use of new approaches, technical and substantive assistance, and lifelong pedagogical training and keeping abreast of pedagogical trends must be provided.

The use of digital technologies and services takes place both inside and outside the learning unit/study programme, so support is needed to test and develop new forms and formats to provide guidance and support on the one hand and to reproduce and update resources, obtain permissions, provide access and effectively secure sensitive digital content on the other.

When organising the study process, it is advisable to structure lessons in such a way that the various digital and virtual activities are geared towards strengthening learning objectives and competences.

The evaluation and assessment of the knowledge, competences and skills acquired as well as the appropriateness of ICT and online approaches must be carefully planned and, in addition to questions about how to evaluate knowledge, must also take into account the

integrity of the individual, their privacy and inviolability, especially where the use of ICT and online tools could severely interfere with them.

The concern that recorded lectures would cause staff to lose their jobs is redundant in a hybrid approach, as the role of the teacher has become even more demanding and empowered. Hybrid learning does not mean watching recorded lectures – these can be just one of the tools/accessories in the work concept. Moreover, the synchronous hybrid approach requires additional staff if it is to be of good quality. Teachers are required to simultaneously lecture and communicate with students in real time in a physical space. Other adaptations (asynchronous and combined) can be done in different ways, e.g. by simultaneously playing pre-recorded content or using podcasts/vlogs that are (easily) available with a time limit. It is important to enable students to use digital technologies as part of collaborative tasks, as a means to improve communication, collaboration, joint knowledge creation and interactivity and to make materials dynamic, which requires the broadening of teaching and didactic tools or the integration of external didactic e-services.

The main characteristics of learning communities (wherever they are formed) are therefore trust, knowledge creation, information sharing, a sense of connectedness, shared goals and the belief that the needs of students will be met in these communities.

Key points:

- digitally competent education and training staff enjoying ongoing organisational and implementation support (institutional);
- adequate IT support (infrastructure); accessibility, connectivity and quality digital equipment; services, licences and the means to update and maintain them, comprehensively supporting the student cycle from registration through enrolment, study and residence to graduation;
- high quality and relevant learning content and resources tailored to the students and the learning environment; the updates include technical and support staff involved in the organisation and implementation of the programme;
- established mechanisms for co-creating learning content and collecting and analysing student and learner feedback on an ongoing basis;
- different levels of assessment that do not always tend towards numerical marking. Adaptation of requirements in view of the group/work already done, greater flexibility for achieving competences;
- critical assessment of the credibility and reliability of digital resources: considering potential restrictions on the use or re-use of digital resources (e.g. copyright, file type, technical requirements, legal provisions, accessibility);
- user-friendly and accessible environments, tools and secure platforms that respect digital privacy rules and ethical standards; and
- effective institutional planning and development of digital capacities, including modern organisational capacities and leadership.

Coordination between students in the classroom and those who follow the lecture via electronic devices is about creating an environment that enables working and learning suited to everyone's needs. The successful integration of the two groups of students (those

in the classroom – in-person and those in remote access) is technically supported by ICT. The responsibility for appropriate pedagogical integration lies with the teacher, who is aware of what the technology enables and of the appropriate teaching approach.

The teaching dimension is the factor that in many ways combines social and cognitive elements and ensures a (co-)functioning learning community of students and teachers. Three elements to consider when designing hybrid learning:

1. Planning and organisation of learning refers to the activities that are usually carried out by teachers themselves before the beginning of learning activities. It is therefore about preparing the learning environment, such as materials, activities, instructions, etc.
2. Encouraging discussion – includes activities in which students can participate alongside the teacher.
3. Teaching, traditionally the central role of a teacher and the one for which they have been best trained in the course of their education. Teaching and facilitating learning in a virtual learning environment is a particularly challenging task for the teacher, who has to simultaneously take into account and attend to the characteristics of both the social and the cognitive dimensions of learning, to ensure the development of a supportive atmosphere, and to coordinate various individual or group activities of the students.

In addition to achieving the learning objectives, the purpose of encouraging discussion is to keep students interested, motivated and engaged. The importance of the teacher's influence on the outcomes of learning activities and student achievement in virtual learning environments has been empirically confirmed in many studies (Fiock, 2020⁵), while the teacher has been shown to be a key factor in generating and encouraging and developing a sense of belonging to these communities (Makovec Radovan and Radovan, 2021).

3. STUDENTS

Of course, participants themselves have to take an essential part of the responsibility for their own learning. They must be able to create good conditions for their studies and plan their time and activities accordingly. The individual's abilities and time management skills, as well as motivation, are important. Lack of physical presence and involvement at the institution/college can create various feelings of exclusion, disconnectedness or disengagement, which can have very serious consequences over time; this is why the support and counselling provided by the institution/college, and in particular the ongoing and prompt identification of such conditions and immediate action, is crucial to maintain an adequate level of motivation, participation and progression. Learning analytics can also play a crucial role in this by monitoring student activity, responsiveness and progress in real time.

Students' passivity, lack of motivation and feelings of exclusion can also be a response to inappropriate teaching practices, which is why teaching processes need to be brought closer to the student in order to facilitate their inclusion and engagement. In addition to

⁵ Fiock, H. (2020). Designing a Community of Inquiry in Online Courses. *The International Review of Research in Open and Distributed Learning*, 21(1), 135-153. <https://doi.org/10.19173/irrodl.v20i5.3985>.

teachers, a key role is played by tutors (student tutors, teacher tutors and teaching assistants), who help, advise and guide students in their study process. It is important to stress that the number of participants per tutor should not be too high.

A hybrid approach to education provides students with greater access and convenience (independence from the place of study), which can improve learning, reduce (or adjust) costs, make it easier to balance commitments, allow flexibility and even personalise study.

The areas that should be included in the strategic documents of the institution/college and taken into account when planning the internal quality system are the following:

- information and media literacy;
- efficient and responsible use of digital technologies for life;
- cognitive activation and improved communication in relation to alienation and communication difficulties;
- monitoring and self-organisation of learning, combined with appropriate skills in application, learning and digital problem-solving and collaboration;
- balancing study and family/work life in terms of time and organisation;
- inclusive education (in the broadest sense of the word: all those from deprived backgrounds, people with disabilities, people from other linguistic backgrounds, migrants, refugees, to name but a few examples) and time management;
- limitations (access to technologies, internet etc.).

4. ACADEMIC INTEGRITY

Academic integrity is more than a moral code or an ethical policy, more than an academic standard and benchmark. It is a way of living, thinking, behaving and acting; it represents the state of mind of individuals and is embedded in the collective mind of both communities and institutions/colleges at different levels. It brings together the principles and values of the academic society, of teachers, institution/college management and students alike, and is the moral compass of an institution.

Although the ZViS does not mention academic integrity in its provisions, it is important from the point of view of the quality assurance system that the topic of academic integrity is addressed in the self-evaluation procedures and that the elements of monitoring and improvement are included in the internal quality assurance system of the institution/college.

[The International Center for Academic Integrity](#) defines 6 fundamental values of academic integrity:

1. **Honesty:** an academic community with a high level of integrity is committed to the pursuit of truth and knowledge with intellectual and personal honesty in learning, teaching, research and services.
2. **Trust:** an academic community with a high degree of integrity fosters and builds relationships on mutual trust. A climate of trust encourages and supports the free exchange of ideas, allowing scientific research and education to reach its maximum potential.



n·a·k·v·i·s

Nacionalna agencija Republike Slovenije
za kakovost v visokem šolstvu

s·q·a·a

Slovenian Quality Assurance Agency
for Higher Education

3. **Responsibility and accountability:** an academic community with a high degree of integrity is based on the personal responsibility of individuals and communities to act by setting an example in all circumstances and challenges, to uphold mutually agreed standards and rules, and to take action when they encounter misconduct.
4. **Respect:** an academic community with a high degree of integrity respects the interactive, collaborative, participatory nature of learning. It respects, appreciates and takes into account different opinions and ideas.
5. **Fairness:** an academic community with a high degree of integrity establishes clear and transparent expectations, standards and practices for fairness in interactions between students, teachers and the institution/college.
6. **Courage:** developing and sustaining a community with a high degree of integrity requires more than just believing in core values. Translating values from paper into action, often in the face of pressure and distress, requires determination, commitment and courage.

Discussions on academic integrity usually end with plagiarism; they less often point out other deviant acts such as cheating, dishonesty, bullying and other forms of academic misconduct, and how best to prevent them. A more productive approach involves focusing on the promotion of positive values: honesty, trust, fairness, respect, responsibility and courage as intrinsic motivators for ethical academic practice. Academic integrity is much more than a "student issue" and requires the commitment of all stakeholders in the academic community, including students, teachers, established researchers, management, policy makers and support staff.

In a broader sense, academic integrity is the cornerstone of university life and of academic and scientific communities, and should be continuously strengthened and promoted.

The development of (innovative) technological solutions and their wider availability has also given rise to new, hitherto less well-known abuses designed exclusively to promote breaches of academic integrity. They arise in the preparation of students' independent work, in remote access examinations, in group work and even in research and projects. Contract cheating providers have recently become particularly accessible and flexible according to market conditions and demand, offering ready-made analyses, assignments, expert and other opinions, questionnaires and even theses against payment.

Another form is cheating and unfair practices in examinations taken online, where we can see identity fraud (someone else taking an exam instead of the registered student), copying (various gadgets and devices that allow cheating during exams) and more.

These are just the tip of the iceberg, and it is important to adequately inform and raise awareness of actions that affect the principles of academic integrity, to encourage honest behaviour, to set an example and to communicate openly and proactively, as well as to detect breaches of academic integrity on a continuous and consistent basis and to have zero tolerance for such actions.

5. QUALITY ASSURANCE

The group of experts assesses quality against the quality standards set out in the Criteria for the Accreditation and External Evaluation of Higher Education Institutions and Study Programmes (the "Accreditation Criteria") and the Criteria for the External Evaluation of Higher Vocational Colleges (the "Higher Vocational Colleges Criteria"), in which the assessment of compliance with the standards should be supplemented with the specificities of hybrid (or blended) learning.

The guidelines are applied *mutatis mutandis* on the assessment of blended learning.

The structure and content of a study programme must ensure that the content and the horizontal and vertical coherence of the learning units of the programme are the same in the case of hybrid learning as in the case of a traditional learning. If a transition (change) to a new form of education or study implementation is being considered, it should be examined how it will affect the completeness of the programme content. The assessment of study programme change and updating should focus on both the content and the source of change (self-evaluation) and the introduction of new methods, the use of appropriate ICT and web-based solutions, the provision of relevant digital competences, the change of teaching approaches and the provision of accessibility. The structure and content of the study programme should also be assessed in terms of its design, the teaching approaches planned and used, the revised/improved curricula and the internal quality assurance system.

In the design and implementation of the study, the emphasis is on a clear plan and actual implementation, the degree of flexibility, the qualifications of the staff for the new way of teaching (adapted higher education didactics) and the material conditions presented in the previous chapters. The hybrid implementation format brings many challenges, especially in the part of the "traditional" learning that is, in principle, implemented only physically, e.g. the implementation of (laboratory and clinical) exercises, practical training, oral defences of theses, written exams, etc. The justification and appropriateness of the hybrid implementation shall be assessed in relation to the discipline, cycle and type of study programme and other requirements and specificities (e.g. clinical work, scientific, research and artistic work, practical training, etc.).

Although learning may be personalised, it should still ensure consistency of learning and equal delivery of competences. Student-centred learning can be compatible with greater individuality and freedom in study, but only with appropriate guidance, the use of study-appropriate approaches and regular monitoring of individual students' progress, and awareness of their roles and responsibilities. The way in which students and others involved in the study process (teachers, researchers, external collaborators) are monitored and provided with appropriate support, counselling services and rights is assessed. It should be borne in mind that the experience of all those participating in a hybrid learning process (those on-site and those in the virtual environment) changes as everyone participates in the virtual learning process.

In addition to the adequacy and competence of staff in accordance with Article 13 of the Accreditation Criteria and Article 7 of the Criteria for Higher Vocational Colleges, it is important that academic staff and students are adequately trained for the new way of teaching and learning, as well as that there is adequate (additional) technical and

administrative support and staffing available. The use of modern technological and teaching approaches suitable for hybrid learning is assessed, as well as their diversity, usefulness and appropriateness. The role of tutors or mentors also needs to be reasonably integrated into hybrid implementation.

In addition to Article 15 of the Accreditation Criteria and Article 9 of the Criteria for Higher Vocational Colleges, the assessment of material conditions should address: how the virtual environment complements or replaces the physical environment, the accessibility of the material to students, the variety of formats of the material, the integration of different online databases, the facilitation of real-time communication, equal interaction between students and group work, the role of the library, etc. It is important to ensure the relevance of contact hours and not simply replace them with other resources in the digital form (such as recordings of lectures); the latter are an additional option for students to better understand the content and organise their notes through multiple viewings, but not a substitute for in-person lectures.

The self-evaluation of hybrid learning must be clearly planned in the Quality Manual of the higher education institution and must address the specifics of the organisation and implementation of studies, the provision of study materials and accessibility of learning resources, the protection of the rights of all participants, and the participation (involvement) of relevant stakeholders, material conditions and the provision of appropriate support and counselling services, the collection and analysis of feedback and other relevant information (potential major perceived differences between students' experiences, potential challenges and how to address them, the removal of barriers, the ongoing monitoring of students' progress and engagement). The higher education institution should treat the feedback received on an equal footing and ensure that the quality loop is closed; a comprehensive assessment of the study is important.

In order to protect the rights of stakeholders, in accordance with Standard 7 of Article 12 of the Accreditation Criteria and Article 10 of the Criteria for Higher Vocational Colleges, it is necessary to focus on the specificities related to hybrid learning before enrolment (e.g. the required pre-existing ICT equipment and skills for successful participation, the timetable, the mode of implementation), during and at the end of learning (conditions for taking examinations, the method of assessment, the accessibility of the higher institution teaching staff and associates). Another important element is the responsible use of the online environment – protecting personal data and respecting the values of academic integrity.