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Rethinking the Syllabus: Blended Learning Models for Innovative and Flexible Teaching

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Abstract

This study explores the role of the syllabus in blended learning environments, focusing on its design as an active pedagogical element that enhances learning autonomy and engagement. The research investigates how a visually structured and student-centered syllabus can support learners in navigating blended courses, reducing cognitive overload, and fostering self-regulated learning. The research is grounded in a pilot case study conducted at the university level. Quantitative and qualitative data were gathered using a validated syllabus perception scale and qualitative insights from student responses. Findings indicate that students perceive the syllabus as well-organized, clear, and highly readable, with visual elements significantly improving usability and time management. The syllabus also enhances motivation and engagement, with students appreciating its structured guidance and welcoming tone. However, while it is considered an effective reference tool, students do not yet perceive it as an interactive learning resource. This flexible and modular structure not only enhances the dynamism and accessibility of the learning experience but also encourages students to take an active and conscious role in their education, positioning them as central agents in the learning process.

Keywords: Blended Learning, Syllabus Design, Student-Centered Learning, Adaptive Teaching Model, Higher Education

1. Introduction[1]

Blended learning has emerged as a flexible and dynamic educational model that integrates digital environments and face-to-face activities to enhance teaching effectiveness. Within this framework, the syllabus has evolved from a simple administrative document into a crucial pedagogical tool that structures learning and supports student engagement. A well-designed syllabus in blended learning goes beyond outlining course content and objectives; it provides

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clear guidance, helping students navigate their learning path while clarifying the instructor's expectations. Shifting from a transmission-based approach to a student-centered model requires rethinking the syllabus structure and function. It must not only make objectives and methodologies explicit but also foster self-regulated learning by offering clear directions that support autonomy and engagement.

The literature highlights that an effective syllabus should be not only well-structured and clear but also welcoming and motivating, reducing student uncertainties, and enhancing engagement. The syllabus examined in this study was designed specifically for a blended learning context, integrating multimodal elements and a visually structured layout to facilitate accessibility and improve student experience. This research explores the impact of this syllabus, assessing students' perceptions of its organization, clarity, motivational impact, and role in managing cognitive load. By analyzing student responses, the study seeks to understand how a blended learning syllabus can enhance autonomy and engagement while also identifying areas requiring further refinement to optimize self-regulated and effective learning.

1.1. Blended Learning

In recent decades, education has undergone a profound transformation with the integration of digital technologies into teaching and learning processes. Blended learning has emerged as one of the most effective responses to contemporary educational needs, combining traditional face-to-face instruction with online learning activities in both synchronous and asynchronous formats (Graham, 2006). This approach leverages multiple learning environments and tools, offering advantages over exclusively face-to-face or entirely online models (Singh, 2003). The literature emphasizes that designing effective blended courses requires a well-defined pedagogical structure that balances direct student–teacher interaction with the autonomy of individual study mediated by technology (Ligorio, Cacciamani, & Cesareni, 2006).

The adoption of blended learning aims to meet the demand for greater flexibility in managing time and learning spaces while enabling personalized learning paths tailored to student needs (Aravind, 2024). This model is not rigid but rather adaptable, allowing the proportion of online and face-to-face activities to vary according to instructional goals and learner characteristics. Picciano (2017) highlights how blended learning maximizes the potential of digital technologies by improving access to educational resources, fostering interaction, and facilitating collaborative knowledge construction. Similarly, Bonk and Graham (2012) stress that multimedia content and interactive materials enhance student engagement and contribute to better learning outcomes.

Given its reliance on self-regulated learning (Zimmerman, 2002) and the cognitive demands for alternating between in-person and online activities (Sweller, 1988), blended learning necessitates a more structured approach to syllabus design. Technology enables the diversification of teaching strategies, increasing adaptability, and often supporting online tutoring, which aids in managing group projects and promoting independent learning (Means et al., 2013).

The analysis of the fundamental components of blended learning leads to the identification of three key variables that influence the success of this teaching model:

1. Situation (Environment): This includes the learning context (synchronous or asynchronous), the actors involved (teachers, students, experts, peer-to-peer learning), and the teaching tools used (digital materials, videos, educational applications, interactive modules, etc.) (Smith & Hill, 2019).

2. Actions (Strategies): These represent the teaching tactics and methodologies adopted by the teacher to integrate the different learning methods effectively (Vaughan, Cleveland-Innes, & Garrison, 2013).
3. Teaching (Outcomes): This includes didactic and pedagogical outcomes, focusing on diversifying educational approaches to meet students' needs (Vo, Zhu, & Diep, 2020).

The effectiveness of blended learning is closely tied to the quality of instructional design. For this blended model to be hugely beneficial, several pedagogical implications must be considered (Rivoltella, 2021). Spatiotemporal flexibility allows students to access content without rigid schedules, enabling them to organize their studies according to their individual needs. Engagement is enhanced using interactive and multimedia materials, making learning more stimulating and encouraging active participation. Blended learning also strengthens relationships by fostering a collaborative environment where students can interact with teachers and peers in a more dynamic and continuous way.

Additionally, it supports the personalization of learning paths, as the integration of different teaching methods allows each student to progress at their own pace and according to their preferred learning style (Rovai & Jordan, 2004).

A fundamental aspect of blended learning is its learner-centered approach, which promotes personalized, self-directed, and active learning (Hrastinski, 2019). This approach fosters greater autonomy in the organization of study, allowing students to advance along the educational path according to their own pace and interests.

1.2. Student-Centered Learning and the Constructive Alignment Model

Student-centered learning is a pedagogical paradigm that contrasts with the transmission model, emphasizing the active role of the learner in the construction of knowledge. This approach is rooted in constructivism, according to which knowledge is not transmitted passively but constructed through interaction with the environment, context, and individual experiences (Brown et al., 1989). Student-centered learning environments are designed to address individual needs, offering opportunities for exploration, experimentation, and the active construction of knowledge. Hannafin and Land (1997) emphasize that these environments should include interactive and complementary activities that can satisfy the unique interests and learning needs of each student.

According to Estes (2004), although learning objectives can be set externally, the student has a significant role in determining the strategies to achieve them. This implies greater autonomy in planning the educational path based on the generation and verification of one's own beliefs. This emphasizes the importance of outlining design methods that support personal sense-making through problematic contexts enriched by technological tools, resources, and didactic scaffolds. Furthermore, Weimer (2002) highlights how student-centered environments favor direct or self-directed learning, allowing students to face open and complex problems authentically aligned with the culture, practices, and processes of a specific domain.

Student-centered learning is strongly influenced by the theory of situated learning (McLellan, 1996), according to which knowledge is inextricably linked to the context and social practices in which it is developed. This implies the need to create learning environments that reflect the complexity of real situations, promoting meaningful and contextualized learning.

The concept of constructive alignment, proposed by Biggs (1996), represents one of the most effective models for integrating teaching, learning, and assessment coherently. This model is particularly effective in promoting meaningful learning, as it ensures that students not only acquire knowledge but also apply it in practical and real-life contexts (Buckley et al., 2021).

According to this model for instructional design, based on the alignment between Learning Activities, Learning Objectives and Assessment:

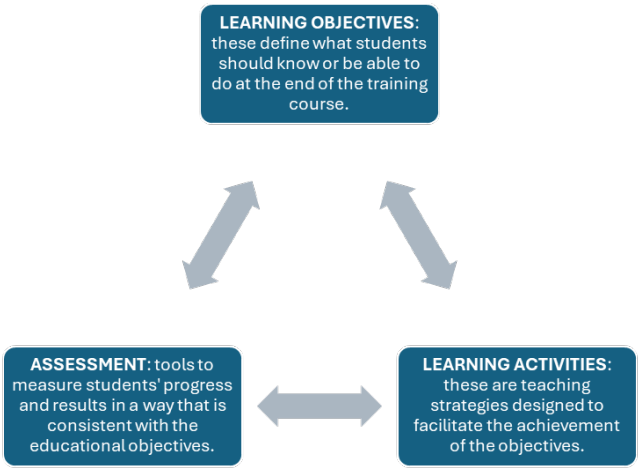


Figure 1. Constructive Alignment (Biggs, 1996)

According to Biggs (1996), effective instructional design is characterized by a student-centered and active approach, where the learner takes an active role in their own learning journey. Learning objectives are structured according to the SMART (Specific, Measurable, Attainable, Relevant, and Time-bound) model, ensuring a well-organized and effective learning process. The focus is placed on the learning process itself rather than merely transmitting content, striking a balance between individual and collaborative learning, with an emphasis on cooperative and peer-to-peer dynamics (Zadravec & Kocar, 2023). Additionally, authentic, and real-life contexts are integrated to enhance students' motivation and active engagement (Jaiswal, 2019).

Adopting a student-centered approach based on constructive alignment has several significant educational implications (Grion & Doria, 2022). It allows for greater personalization of learning, enabling each student to progress at their own pace and according to their specific needs, aligning with the concept of self-directed learning. The integration of digital tools and learning scaffolds enhances the creation of richer and more interactive learning environments. Furthermore, this approach fosters the development of critical thinking and metacognition, encouraging students to reflect on their learning strategies and adapt them based on their outcomes (Geng & Su, 2025). The assessment process is also designed to be both authentic and formative, evaluating not only results but also the learning journey itself through appropriately integrated assessments within the learning context.

According to Biggs' model, effective instructional design must be consistent with the principles of active and collaborative learning, avoiding a simple transmission of information and favoring the construction of knowledge in an autonomous and participatory way. Given that blended learning requires a high degree of student autonomy, the syllabus plays a crucial role in scaffolding self-directed learning.

1.3. The Role of the Syllabus in Higher Education

The syllabus is a fundamental tool in academic teaching, serving as an essential document that outlines the key elements of a course (O'Brien, Millis, & Cohen, 2008). In its evolution, the syllabus has transitioned from a simple list of contents to a dynamic resource for supporting active and self-regulated learning (Sullivan et al., 2024). According to Fink (2013), a well-designed syllabus not only clarifies what will be studied but also explains the how and why of

learning, promoting greater student empowerment. The definition and organization of a syllabus can follow two main models:

1. Teacher-centered syllabus: The focus is on the content to be covered and the transmission of knowledge, with little emphasis on learning strategies.
2. Student-centered syllabus: It emphasizes student involvement in the learning process, encouraging active participation and the construction of meaning (Littlefield, 1999).

Watts (2024) emphasizes the importance of presenting the syllabus in a language that conveys confidence and encouragement, motivating students to set realistic and achievable goals.

Adopting a learner-centered syllabus encourages greater student participation and empowerment, making the course more engaging and meaningful (Gannon, 2018). According to Fulmer et al. (2015), an effective syllabus must be designed based on principles of clarity and consistency, ensuring alignment between learning objectives, teaching activities, and assessment (constructive alignment; Biggs, 1996). Its structure should include the following:

- Clear and measurable learning objectives: These must be formulated according to the SMART model to ensure their effectiveness (Eberly, Newton, & Wiggins, 2001).
- Diversified evaluation tasks: The use of formative evaluation methods allows monitoring student progress and providing constructive feedback.
- Self-assessment and metacognition: The design of the syllabus should encourage students to self-assess and develop metacognitive skills for a more personalized learning path.
- Clarity of expectations: Clearly explain what students should learn and what strategies to adopt for studying (Pastrino, 1999).

In a learner-centered teaching approach, the syllabus plays a significant role in orienting students toward learning objectives and explaining the teaching strategies necessary to achieve them. Its design must therefore consider the principles of clarity, transparency, and alignment between objectives, teaching methods, and assessment tools. According to Luke et al. (2013), a learner-centered syllabus guides students toward not only the content to be learned but also how to learn, providing guidance on study strategies, time management, and ways of interacting with teachers and peers.

Bain (2004) introduces the concept of a promising syllabus, which emphasizes the need to establish a training pact between teachers and students, highlighting the value of the proposed activities, the skills that students will develop, and the importance of their active participation in the learning process.

According to Parkes and Harris (2002), the syllabus has three main functions, making it a central element in educational planning, promoting consistency between the several aspects of the course and improving the learning experience:

1. The syllabus as an educational contract: The syllabus serves as an educational contract, establishing mutual rules and responsibilities between teachers and students. Specifically, it defines course regulations, such as participation, attendance, and modes of interaction both in the classroom and online. It also sets assessment standards, including criteria, methods, and timelines for evaluation. Additionally, it clarifies behavioral expectations by outlining acceptable practices and ethical standards and specifies the detailed schedule of lessons and deadlines. This contractual function is particularly relevant in higher education courses, where clear rules can prevent conflicts and misunderstandings, ensuring a fair and structured learning environment (Svinicki & McKeachie, 2011).

2. The syllabus also acts as a reference document: Beyond its role as a contract, the syllabus serves as a reference document that supports the traceability of teaching activities and institutional accreditation. Among its primary functions, it acts as a course memory, documenting the content covered, the activities conducted, and the teaching methodologies employed. It is also a tool for evaluating teaching quality, enabling course monitoring and improvement through structured feedback. Furthermore, it provides evidence of academic activities for credit recognition, facilitating student mobility, and plays a crucial role in institutional accreditation and the assessment of teaching quality. According to Nilson (2016), the syllabus is a key document for transparency and the reporting of learning experiences, helping to evaluate the long-term educational impact.
3. An effective syllabus is not just an informative document, but a real tool to facilitate active learning: it helps students plan their studies and understand the connections between different course units, ensuring coherence between activities and learning objectives. It explains teaching strategies, such as lectures, interactive activities, and peer learning, while fostering the development of transversal skills, including time management, autonomy, and self-regulation. Additionally, it encourages students to reflect on their role in the learning process, promoting active engagement. This function is particularly emphasized in the learner-centered approach, which encourages students to take a proactive role in their own educational journey (Fink, 2013).

An effective syllabus integrates formative assessment strategies, which allow students to receive continuous feedback and improve their learning (Black & Wiliam, 1998). Serbati et al. (2022) propose a balanced approach between formative and summative assessment, which includes:

- Assessment for Learning (AfL), an approach that allows students to receive ongoing feedback on their progress.
- Assessment rubrics, which provide clear and transparent criteria for self-assessment of results.
- Asynchronous and synchronous feedback tools, such as quizzes, peer reviews and minute papers.

Watts (2024) emphasizes the importance of transparent assessment, which helps students better understand their learning path and develop metacognitive self-regulation skills.

A syllabus should promote a learning environment that is fair and accessible, considering the diversity of students (Burgstahler, 2015). An inclusive syllabus is characterized by:

- Accessibility: use of clear language and digital support for students with special educational needs.
- Motivating and participatory tone, encouraging active involvement.
- Interdisciplinarity, for a holistic approach to knowledge.

Adopting these strategies reduces barriers to learning, promoting a more equitable and personalized education.

1.3.1 Visual Representation of the Syllabus and Its Functions

Based on the three functions presented regarding the syllabus in higher education, we have visually represented each function through images that illustrate its symbolic meaning.

1. The Syllabus as an Educational Contract: The syllabus, as a contract, defines the rules of the course, establishes standards of evaluation, and clarifies behavioral expectations. To represent this function, the following images have been chosen:

- Train tracks: symbolize the structured and regulated path that the syllabus imposes to guarantee order and clarity in the learning process. Just as tracks guide a train to a particular destination, the syllabus establishes a clear itinerary for students.
- Compass: represents the orientation that the syllabus offers students, providing clear guidelines to navigate the course and respect the evaluation criteria.
- Map: symbolizes the detailed planning of the course, with well-defined deadlines, contents, and expectations, ensuring that everyone has access to the same information to avoid misunderstandings.
- Twisted rope knot: symbolizes the bond between students and teachers, a pact of mutual responsibility in which both parties are bound to respect rules and commitments for the good progress of the training course.

2. The Syllabus as a Reference Document: Besides its contractual function, the syllabus serves as a record of the course, documenting content, activities conducted, and teaching strategies. It is a fundamental tool for monitoring the quality of teaching and for academic accreditation. The images that represent this function are as follows:

- Encyclopedia: represents the syllabus as an archive of knowledge and activities conducted during the course, a reference document that testifies to the teaching and its academic value.
- Open book on a table with leaves: symbolizes the syllabus as a written record of the training course, a document that preserves the memory of the methodologies and topics covered in the course.
- External hard disk: evokes the idea of conservation and archiving, indicating the syllabus as a tool that allows the recording and retrieval of information essential for evaluating the quality of teaching.
- Labyrinth: represents the complexity of learning and the importance of the syllabus as a guide to avoid getting lost and confused along the educational path. The syllabus acts as a compass in this labyrinth, offering students a clear structure to orient themselves.

3. The Syllabus as an Active Learning Tool: Finally, the syllabus is not just an informative document but a real tool that facilitates active learning. It helps students understand the connections between course content, develop autonomy, and take a more proactive role in their own educational path. The images representing this function are as follows:

- Bright sun: symbolizes the clarity and illumination that the syllabus provides students, facilitating the understanding of learning objectives and teaching strategies.
- Lighted bulb: represents active learning, with students taking a significant role, stimulated to think critically and develop innovative ideas.
- Lit lantern: evokes the role of the syllabus in guiding students on their learning journey, fostering reflection and autonomy.
- Bright star in the night sky: depicts the syllabus as a source of inspiration and guidance, especially in a student-centered teaching model, where learning is a journey of discovery and personal growth.

Figure 2. Metaphors of the Syllabus Functions

2. Materials and Methods

2.1 Designing a Blended Learning Syllabus

A well-designed blended learning curriculum must meet basic motivational needs: The curriculum should be welcoming and clear, explicitly communicating the value of the course and instilling confidence in students. This aspect is crucial in promoting a positive and inclusive environment. A syllabus created according to the constructive alignment approach includes the following (De Rossi & Fedeli, 2022):

1. Definition of learning outcomes (ILOs) with observable and measurable verbs, in line with the taxonomy of Anderson & Krathwohl (2002)
2. Design of teaching learning activities (TLAs) to support active learning and facilitate the achievement of objectives. These can include guided discussions, project-based learning, simulations, and collaborative online activities.
3. Clear assessment criteria (assessment tasks – ATs) to ensure transparency in the verification processes and measure the effective acquisition of the skills stated in the ILOs through diversified tools such as rubrics, portfolios, presentations, and peer assessment.
4. Consistency between the components of the course, avoiding discrepancies between teaching and assessment.

The integration of these elements promotes more engaging and meaningful learning, emphasizing the active role of the student in the educational process (Hartfield, 2010).

The syllabus proposed in the blended learning case study is configured as a training agreement between the teacher and student, acting as a structured guide for the development of the learning path. It specifies the general and specific objectives, the teaching methods, the study content, the evaluation methods, and the expected skills.

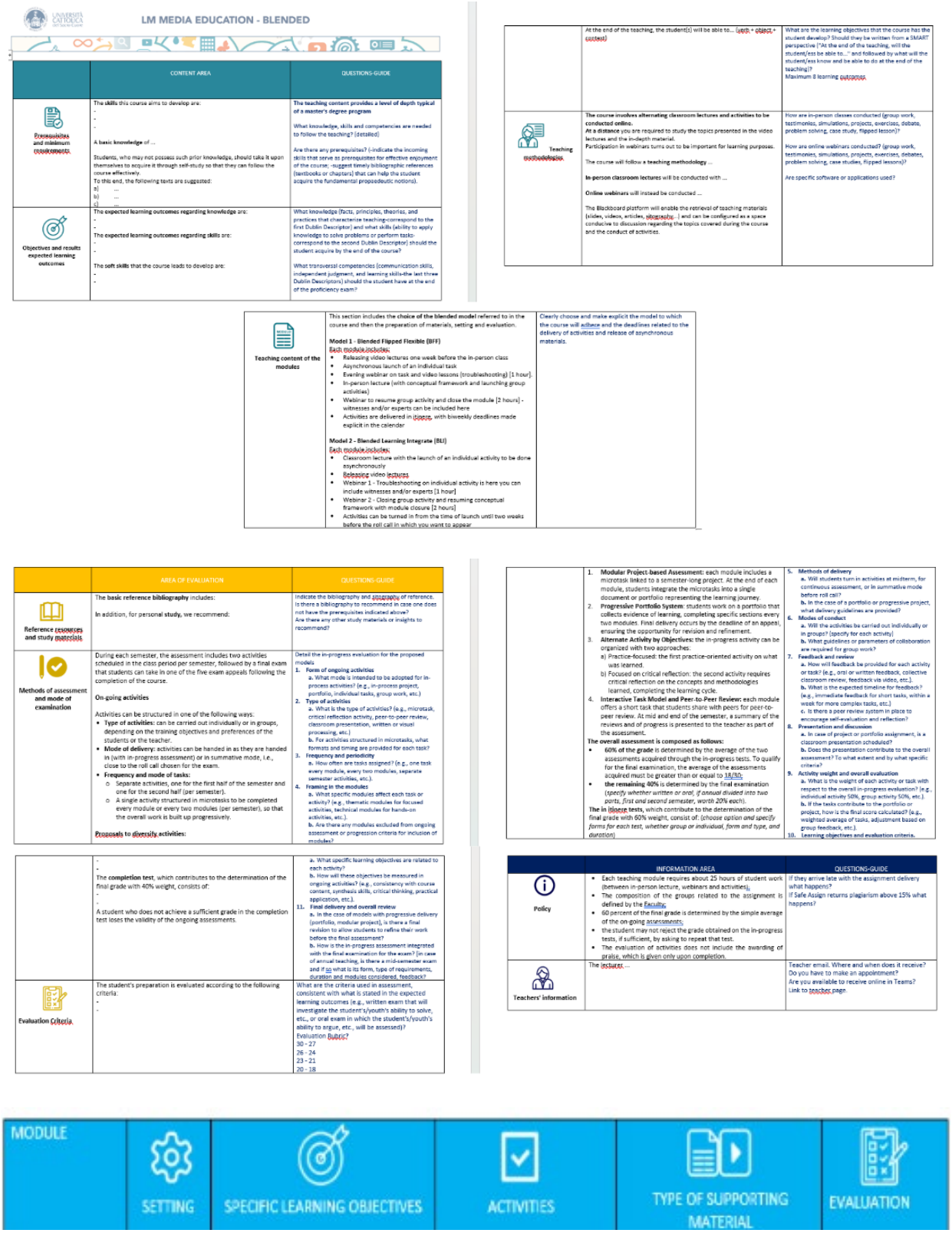


Figure 3. Blended Syllabus Template

A particularly innovative element of this research concerns the analysis of the use of visual icons in the syllabus, considered a potentially effective tool for reducing cognitive overload and facilitating the organization of study. Literature suggests that well-calibrated visual strategies can support students in processing information more efficiently, improving their understanding and memorization of content (Arnold et al., 2023). The use of graphics is therefore part of a teaching approach based on cognitive load theory (Mayer, 2014), according to which clear and intuitive organization of information reduces extraneous cognitive load, promoting more effective learning.

In the section on prerequisites and entry-level skills, the syllabus clearly specifies the skills required for effective participation in the course, distinguishing between basic skills, which students must possess upon entry, and minimum skills, to be acquired independently through self-study before the start of the course (Calhoon et al., 2013).

In the section on learning objectives and expected results, the learning objectives are divided according to theoretical knowledge, covering principles, models, and disciplinary frameworks; practical skills, i.e., the application of theory in problem-solving or activities; and soft skills, such as critical thinking, communication, and autonomy.

This subdivision follows the Dublin Descriptors[2]—the five European descriptors for higher education, ensuring alignment with internationally recognized academic assessment practices (European Higher Education Area, 2005). The objectives are formulated according to the SMART framework (Doran, 1981).

In the section on teaching methods, the teaching follows a blended learning model, which alternates between face-to-face lessons and online activities, making learning more flexible and interactive. The use of the Blackboard [3] platform allows access to teaching resources, discussion forums, and synchronous and asynchronous activities.

Two structures are proposed:

Model 1 – Blended Flipped Flexible (BFF)

- Video lessons released prior to the face-to-face lesson
- Asynchronous individual task
- Evening webinar for support (troubleshooting)
- Face-to-face lesson with group activities
- Closing webinar with experts

Model 2 – Blended Learning Integrate (BLI)

- Face-to-face lesson with the initiation of an individual activity
- Release of video lessons
- Troubleshooting webinar
- Final webinar with a review of the theoretical framework

The course is divided into thematic modules, each with specific learning objectives and supporting materials. The modules follow a progressive approach that allows the student to develop the required skills gradually. This approach is consistent with the principles of active learning, which involves participatory activities and the use of technologies for knowledge construction (Bonwell & Eison, 1991).

In the section on evaluation methods, the assessment system is structured and progressive, combining distinct phases and types of tests, as shown in the image:

[2] For more details: https://ehea.info/cid102059/wg-frameworks-qualification-2003-2005.html
[3] On Internet: URL www.blackboard.com

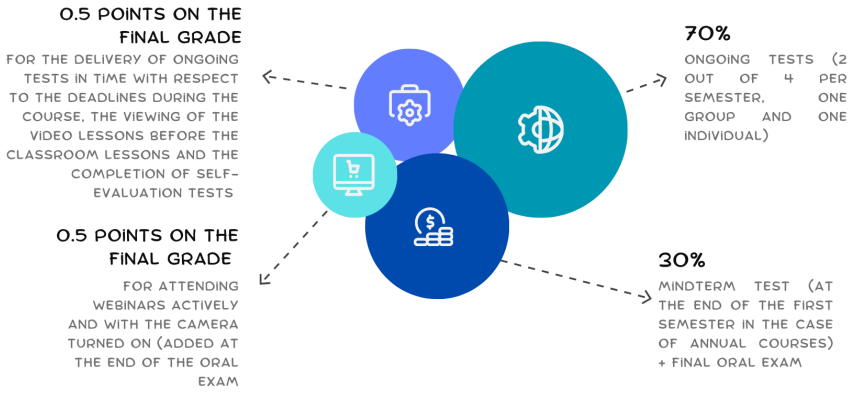


Figure 4. Assessment System for Blended Course

In blended learning, the need for constant monitoring of the learning path requires iterative and personalized assessment tools, which allow students to understand their progress and adapt their study strategies independently (Stanny et al., 2015). The integration of periodic tests, self-assessment activities, and active participation aims to encourage regulative and metacognitive learning, stimulating students to reflect on their progress and develop effective study strategies (Bowers-Campbell, 2015). Additionally, Anderson and Krathwohl's (2002) framework is employed to explicitly structure learning and assessment processes, ensuring that cognitive objectives align with measurable outcomes. Clear and well-defined evaluation criteria are established for both individual challenges and formal assessments, promoting transparency and consistency in grading (Rocha, 2020). In the section on course policies and regulations, the syllabus establishes clear rules on the following:

- Hours of study required per module (~25 hours)
- Submission of assignments (explicit deadlines)
- Plagiarism and originality (use of SafeAssign to verify similarity rate)
- Rejection of grades in ongoing assessments

These policies guarantee transparency and fairness, and fundamental principles in university teaching. In conclusion, to facilitate effective planning and time management, a Gantt chart provides a comprehensive visual representation of key milestones, including deadlines, scheduled lessons, interactive webinars, and assigned activities. The structured use of visual cues, such as the Gantt chart, also supports students in regulating their workload and tracking deadlines, ensuring a clearer organization of tasks and assessments throughout the course.

2.2 The Pilot Case Study in Master's Degree Blended

The pilot case study (Yin, 2018) presented here is that of the Master's Degree Course in Media Education, activated at the Milan campus of the Università Cattolica del Sacro Cuore, part of LM-93 (Theories and Methodologies of E-Learning and Media Education).

The courses are delivered according to a blended model: 50% of the training activities are face-to-face, and 50% are online (between synchronous and asynchronous). The educational program is implemented by integrating classroom lessons with distance learning (online), using distributive teaching (video lessons, self-learning, e-tivity, etc.) and interactive teaching (exercises, case studies, simulations, webinars, video chats, etc.). The degree course is aimed at working students who wish to combine knowledge, skills, and university competence

development courses with the experience and responsibilities of working activities, thanks to the teaching provided in a blended learning model.

The face-to-face lesson involves moments of discussion among the students and/or review of the work done. The approach adopted balances moments of content exposure with moments of practice and discussion, facilitating learning based on exploration and error correction and promoting an orientation toward problem-solving. The classroom approach, therefore, offers an interactive environment where students can experiment and face challenges and receive advice from the teacher and classmates, helping to make the learning experience more engaging and applicable (Bonaiuti, 2014). The aim of the classroom lesson is to provide concrete examples and links to real problems with future professionals.

Asynchronous activities (e.g., video lessons, reading, performing structured and self-assessment activities, participating in discussion forums, etc.) can take place at the most appropriate time and day chosen by the student, while synchronous activities, such as webinars, are scheduled at times that are compatible with the students' work activities and are therefore scheduled in the late afternoon.

The LMS (Learning Management System) platform used by the university is Blackboard, which allows the retrieval of teaching materials (slides, videos, articles, websites, etc.) and the delivery of synchronous moments (webinars) and is configured as a suitable space for the discussion of the topics covered in the course and for ongoing assessment.

The evaluation, based on skills, has a widespread system (Boud & Falchikov, 2007), with ongoing evaluation consisting of individual and group activities that have a weighting of 40% and a final oral interview that has a weighting of 60%. The activities subject to evaluation, for each semester course (4 for annual courses), include one (or two) group activity and one (or two) individual activity. The activities cannot be submitted more than once, and the grade cannot be refused. For each activity handed in, the student receives qualitative feedback from the teacher, with an evaluation rubric, and a numerical evaluation out of thirty.

2.3 Research Questions and Instruments

The research focuses on three main objectives:

1. Analysis of the perception of clarity and readability of the syllabus: A well-structured syllabus facilitates the understanding of learning expectations and objectives.
2. Evaluation of the impact on motivation and engagement: The syllabus can function as a regulatory element in learning, favoring the autonomy of the student and their active involvement in the course.
3. Effectiveness of the use of visual icons: We investigated whether icons help students organize their learning and reduce cognitive overload.

The research questions outline three fundamental areas of investigation:

- RQ1: How do students perceive the clarity and structure of the curriculum, particularly in terms of readability and organization, which are fundamental elements of effective educational communication?
- RQ2: To what extent does the syllabus influence students' motivation and involvement in the learning process?
- RQ3: How can icons support cognitive load management according to the principles of cognitive load theory?

Several methodological tools were used to answer the research questions. First, the syllabus was validated by five experts in the field, using a structured teaching rubric based on the work

of Palmer, Bach, and Streifer (University of Virginia)[4], with the aim of ensuring greater reliability and appropriateness of the proposed system and comparing it with consolidated standards in the field of syllabus design.

Then, a validated syllabus perception scale (Wheeler, Palmer, & Aneece, 2019) was used, based on a rating system from 1 to 6, which allowed collecting quantitative data on students' opinions regarding the clarity, structure, consistency, and readability of the syllabus.

Meanwhile, some images were selected from the three ways of using the syllabus, which allowed for a qualitative exploration of students' perceptions regarding the role of the syllabus in the educational pathway and a deeper analysis of the mental representations of the syllabus and its educational function. The open-ended responses were analysed using a thematic content analysis approach, focusing on the ways in which students justified their choices and the meanings they attached to each metaphor. The coding process was carried out independently by two researchers and any discrepancies were discussed and resolved collaboratively, ensuring agreement between coders and strengthening the reliability of the interpretation.

The sample group for the teaching of Didactics and Media Education consisted of 20 students, 5 of whom were male and 15 were female. The majority of students were in the under 30 age group (45% between 20 and 25 years old and 35% between 26 and 30 years old), and there was a small minority aged 30 and over (20% of students).

Within the sample of 20 students, 12 were found to be workers (60%), while only 8 were non-workers (40%). Among the workers, their main employment was noted as seen in the graph: 5 of them were full-time workers (41.7%), 4 of them were part-time workers (33.3%), and only 3 of them had a casual job (25%).

3 Results

The dataset reveals an important level of student satisfaction with the syllabus, particularly in terms of its structure, clarity, and usability. Responses, based on a Likert scale from 1 to 6 (1 = minimum value "not at all"; 6 = maximum value "completely"), highlight that the syllabus is well-organized, with an average score of 4.8, suggesting that students find it easy to navigate. Readability is another strong point, as indicated by the highest-rated item, "The syllabus is easy to read," which scored 5.3, demonstrating that the layout and text are accessible and user-friendly. Additionally, the syllabus effectively defines expectations, with a score of 5.05, reinforcing the idea that it successfully communicates course objectives, assessment criteria, and necessary prerequisites.

Engagement and accessibility were also key areas of evaluation. A low rating of 2.5 for the statement "The syllabus is difficult to follow" suggests that only a small number of students encountered challenges with comprehension, while the statement "The syllabus is boring" received a low score of 1.95, further confirming that students found it engaging. The general perception was that the syllabus is interesting and effectively maintains student attention.

The impact of visual elements, particularly the use of icons, was another aspect of interest. The addition of icons was well-received, with a score of 4.6, as students found them attractive, intuitive, and beneficial in enhancing usability. Similarly, the use of a Gantt chart, which helped clarify deadlines, was rated positively, receiving a score of 5.05. These results suggest that the inclusion of graphical elements in syllabus design aids in cognitive processing and time management.

[4]On Internet: URL https://teaching.virginia.edu/resources/syllabus-rubric

Another critical dimension assessed was the instructor's role in shaping student perceptions. The syllabus tone was described as positive, respectful, and inviting (score of 5.05), representing an instructor who is genuinely invested in student learning. Students also acknowledged that the syllabus conveys a sense of care and support, aligning with pedagogical approaches that emphasize student-centered learning.

Table 1. Evaluation Scale of the Syllabus

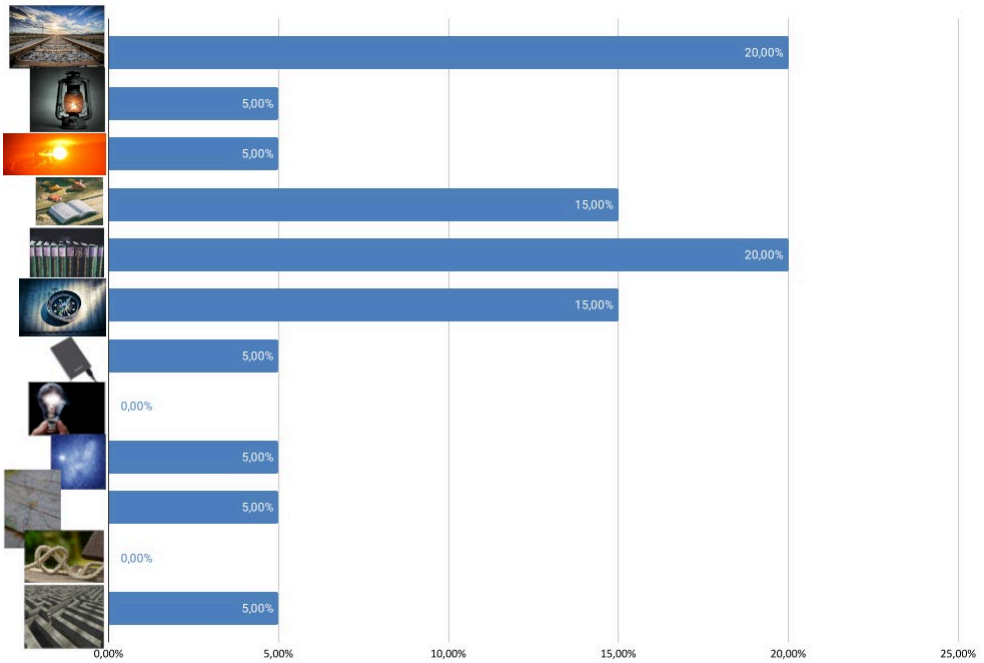
Scale	***1***	***2***	***3***	***4***	***5***	***6***	***Average***	***Standard Dev.***
The syllabus is well organized.	*0.00%*	*0.00%*	*0.00%*	*30.00%*	***60.00%***	*10.00%*	*4.8*	*0.62*
The syllabus clearly defines the expectations of the course.	*0.00%*	*0.00%*	*0.00%*	*15.00%*	***65.00%***		*5.05*	*0.6*
There is sufficient detail in the syllabus to understand the expectations of the course.	*0.00%*	*0.00%*	*0.00%*	*20.00%*	***55.00%***	*25.00%*	*5.05*	*0.69*
The objectives and prerequisites of the course are clear and complete in the syllabus.	*0.00%*	*0.00%*	*0.00%*	*25.00%*	***40.00%***	*35.00%*	*5.1*	*0.79*
The syllabus is easily readable.	*0.00%*	*0.00%*	*0.00%*	*10.00%*	***50.00%***	*40.00%*	*5.3*	*0.66*
The syllabus is difficult to follow.	***40.00%***	*30.00%*	*5.00%*	*5.00%*	*5.00%*	*15.00%*	*2.5*	*1.85*

The focus of the syllabus is learning.	*0.00%*	*0.00%*	*0.00%*	*35.00%*	***45.00%***	*20.00%*	*4.85*	*0.75*
The syllabus provides a complete overview of the evaluation methods and related criteria (for both the ongoing and final evaluations).	*0.00%*	*0.00%*	*0.00%*	*40.00%*	***60.00%***	*0.00%*	*4.6*	*0.5*
The focus of the syllabus is the content and/or policies.	*0.00%*	*0.00%*	*0.00%*	***60.00%***	*35.00%*	*5.00%*	*4.45*	*0.6*
The teaching policies were appropriate to the course.	*0.00%*	*0.00%*	*0.00%*	*45.00%*	***50.00%***	*5.00%*	*4.6*	*0.6*
The teaching policies were written in a clear and understandable way.	*0.00%*	*0.00%*	*0.00%*	*40.00%*	***45.00%***	*15.00%*	*4.75*	*0.72*
I have accepted the teaching policies.	*0.00%*	*0.00%*	*0.00%*	*15.00%*	*40.00%*	***45.00%***	*5.3*	*0.73*
I found myself in agreement with the teaching policies.	*0.00%*	*0.00%*	*0.00%*	*30.00%*	***60.00%***	*10.00%*	*4.8*	*0.62*
I only had to refer to the syllabus before the course.	*15.00%*	*20.00%*	*10.00%*	*10.00%*	***35.00%***	*10.00%*	*3.6*	*1.73*

I had to refer to the syllabus throughout the course.	*15.00%*	*20.00%*	*15.00%*	*5.00%*	***25.00%***	*20.00%*	*3.65*	*1.84*
I had to refer to the syllabus just to prepare for the exam.	*15.00%*	*30.00%*	*10.00%*	*10.00%*	***25.00%***	*10.00%*	*3.3*	*1.72*
The tone of the syllabus is positive, respectful, and inviting.	*0.00%*	*0.00%*	*0.00%*	*25.00%*	***45.00%***	*30.00%*	*5.05*	*0.76*
The syllabus projects the feeling that the teacher cares about me and my learning.	*0.00%*	*0.00%*	*0.00%*	*25.00%*	***45.00%***	*30.00%*	*5.05*	*0.76*
The syllabus communicates elevated expectations.	*0.00%*	*0.00%*	*0.00%*	*25.00%*	***40.00%***	*35.00%*	*5.1*	*0.79*
The syllabus projects confidence that students can meet expectations through work.	*0.00%*	*0.00%*	*0.00%*	*10.00%*	***60.00%***	*30.00%*	*5.2*	*0.62*
The presence of the time diagram in the syllabus allowed me to have clearer teaching deadlines.	*0.00%*	*0.00%*	*0.00%*	*15.00%*	***55.00%***	*30.00%*	*5.15*	*0.67*
The syllabus is boring.	***40.00%***	*30.00%*	*25.00%*	*5.00%*	*0.00%*	*0.00%*	*1.95*	*0.94*

The syllabus is interesting.	*0.00%*	*0.00%*	*15.00%*	***45.00%***	*25.00%*	*15.00%*	*4.4*	*0.83*
The icons are attractive and intuitive.	*0.00%*	*0.00%*	*0.00%*	***35.00%***	***35.00%***	*30.00%*	*4.95*	*0.81*
The addition of icons has improved the look and feel of the syllabus.	*0.00%*	*0.00%*	*0.00%*	***40.00%***	*35.00%*	*25.00%*	*4.85*	*0.32*

This graph illustrates the answers to the question: "Thinking about the syllabus, which image is more representative of your way of using it?" The objective of the analysis is to investigate how students perceive and use the syllabus in relation to the three functions identified by Parkes and Harris (2002): the syllabus as an educational contract, a reference document, and an active learning tool.



Graph 1. Trend of the Metaphors in the Syllabus

The data show that the most representative images for students were those of train tracks and the encyclopedia, both chosen by 20% of the respondents. The former represents a defined and regulated path, consistent with the function of the syllabus as an educational contract, which establishes rules, responsibilities, and evaluation criteria. The second emphasizes the syllabus as a reference document, a tool for traceability and course memory. The open book (15%) and the compass (15%) also reinforce this dual perception. The open book, like the encyclopedia, depicts the syllabus as a resource that can be consulted over time, while the compass emphasizes its function as a guide and that helps with orientation in the training path. The images associated with the function of the syllabus as a facilitator of active learning, such as the sun, the lantern, and the bright star, saw a low percentage of selection (5%). This suggests that students do not consider the syllabus a tool that directly promotes reflection or autonomy; rather, they consider it a structured resource to consult to follow the course in a regulated manner. Some images, such as the labyrinth and rope knot, were not selected in a significant way, indicating that students do not perceive the syllabus as a tool that generates confusion or imposes strict constraints in teacher–student relationships. This confirms a view of the syllabus as being oriented toward clarity and regulation, rather than as a device that requires negotiation or interpretative mediation.

Based on the three functions associated with the curriculum in higher education (contractual, documentary and pedagogical), the students' responses to the open-ended questions were thematically analysed to see how they interpreted the symbolic role of the curriculum in a blended learning environment. Their reflections were linked to predetermined metaphors and images that helped to categorise the meanings attributed to the curriculum:

1. The syllabus as an educational contract: this function emerged strongly in the students' written responses, particularly in relation to the syllabus as a tool that clarifies rules, expectations and assessment criteria. Several students emphasised the importance of the syllabus in avoiding misunderstandings, keeping the course on track and maintaining a sense of direction.
2. The syllabus as a reference document: many students perceived the syllabus as a stable and comprehensive document that recorded the logic of the course. Students valued the syllabus as a source of reliable information and as a tool for reviewing content and strategies.
3. The syllabus as an active learning tool: a small number of responses went beyond the descriptive and contractual functions of the syllabus and focused instead on its role in promoting engagement, autonomy and motivation to learn. Students described it as a starting point for independent learning and decision making.

These qualitative findings confirm that students perceive the curriculum as a multifaceted tool that, when designed with clarity and intentionality, plays a central role in their blended learning experience. While some students emphasised its structure and guidance, others appreciated its motivational and relational dimensions, highlighting the importance of integrating all three functions in an inclusive and student-centred curriculum.

4 Discussion

The findings of this study highlight the syllabus as a key tool for regulating learning in blended education, particularly in student-centered models. Blended learning environments benefit from a well-structured syllabus that bridges face-to-face and digital activities, promoting student autonomy and cognitive load management (Gurley, 2018). No longer a static document, the syllabus has become a dynamic guide that enhances self-regulation and facilitates transitions between learning modes.

A key insight is the value of a multimodal, visually organized structure in managing study time. Icons, diagrams, and Gantt charts were particularly effective in helping students plan their workload, aligning with cognitive load theory (Mayer, 2014). Additionally, blended learning requires tools that foster independent study management, a crucial factor in academic success (Broadbent & Poon, 2015).

The syllabus' clarity plays a significant role in student engagement, reducing uncertainties and providing explicit guidelines on expectations and assessments. Transparency in educational communication supports self-regulated learning and enhances students' sense of self-efficacy (Zimmerman & Schunk, 2011). A well-structured syllabus also facilitates personalized learning paths, crucial in flexible teaching models.

Another key element is the syllabus' tone, which was perceived as positive and motivating. Research suggests that a syllabus conveying trust and support can boost motivation and foster a sense of belonging (Harnish & Bridges, 2011). Bain's (2004) concept of a "promising syllabus" emphasizes that beyond outlining rules and content, it should inspire and guide students. This is particularly relevant in blended learning, where independent workload management can be challenging (Shea & Bidjerano, 2010).

Regarding assessment, a transparent syllabus that integrates formative tools and personalized feedback encourages deeper learning and engagement (Afros & Schryer, 2009). Blended courses require ongoing monitoring and adaptive evaluation strategies to help students track progress and refine study approaches.

Finally, collected data suggests that students primarily view the syllabus as a structured reference tool rather than as a driver of engagement or reflection. This aligns with prior studies showing that syllabi are often treated as normative documents rather than pedagogical instruments for active learning. However, in blended contexts, a more interactive syllabus could be expected, raising the need for further research into enhancing its role in fostering engagement.

The integration of flexibility, personalization, and visual aids has proven effective in helping students manage the complexities of blended learning, where structuring time and activities is more challenging than in fully face-to-face settings.

The results of this study have relevant implications for teaching practice, particularly in the context of blended learning. Teachers are encouraged to design syllabi that incorporate structured visual elements, such as icons and Gantt charts, which have been shown to be useful in supporting students' time and task management. These tools not only improve clarity and accessibility but also help to reduce cognitive overload by providing a visual roadmap of the course structure. In addition, a supportive and motivational tone helps to create a welcoming environment that encourages engagement and a sense of belonging. The syllabus should therefore be seen not only as an informative document, but also as a pedagogical tool that promotes autonomy, inclusion and active participation. Institutions and educators can apply these findings by incorporating multimodal design principles and aligning curricula more closely with the principles of student-centred learning.

5 Conclusion

The study confirms that a syllabus designed for blended learning, with a student-centered approach, enhances learning by structuring engagement and self-regulation. The integration of visual aids, such as icons and a Gantt chart, significantly improved time, and task management, aligning with research on self-regulated learning in digital and blended environments. Rather

than serving solely as an informational document, the syllabus functioned as an active support tool, increasing student motivation and involvement.

A key finding is the role of visual structure in making the syllabus more navigable and accessible. The intuitive design reduced cognitive load and increased usability, reinforcing that visual elements can optimize instructional design. In blended learning contexts, where students must transition between digital content and in-person activities, a clear, structured syllabus is essential for fostering independent and effective learning.

From a pedagogical perspective, the syllabus should be redefined as an interactive tool that promotes engagement rather than merely outlining course logistics. Its motivating and inclusive tone contributes to a welcoming and stimulating learning environment, consistent with active learning and competency-based teaching models.

Future research should examine the impact of syllabus design on academic success, exploring its influence on student persistence and self-efficacy. A qualitative approach, including interviews and focus groups, could provide deeper insights into students' cognitive and emotional interactions with the syllabus, complementing quantitative findings. Analyzing student narratives and metaphors may further clarify how they perceive and internalize course structures. Moreover, expanding the study across different institutions and disciplines would also help validate and refine the proposed model.

An exciting direction involves developing adaptive, AI-driven syllabi that personalize learning pathways. Artificial intelligence could enable tailored content, reminders, and individualized learning support, fostering a more flexible and responsive educational experience. This approach would align with adaptive learning paradigms, ensuring that syllabi evolve alongside student needs.

This study underscores the need for ongoing innovation in syllabus design. Beyond being structured reference, a syllabus should serve as a dynamic, interactive tool that supports diverse learning needs. Ensuring it remains engaging, intuitive, and aligned with pedagogical advancements will be crucial in maximizing its effectiveness within blended learning environments.

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