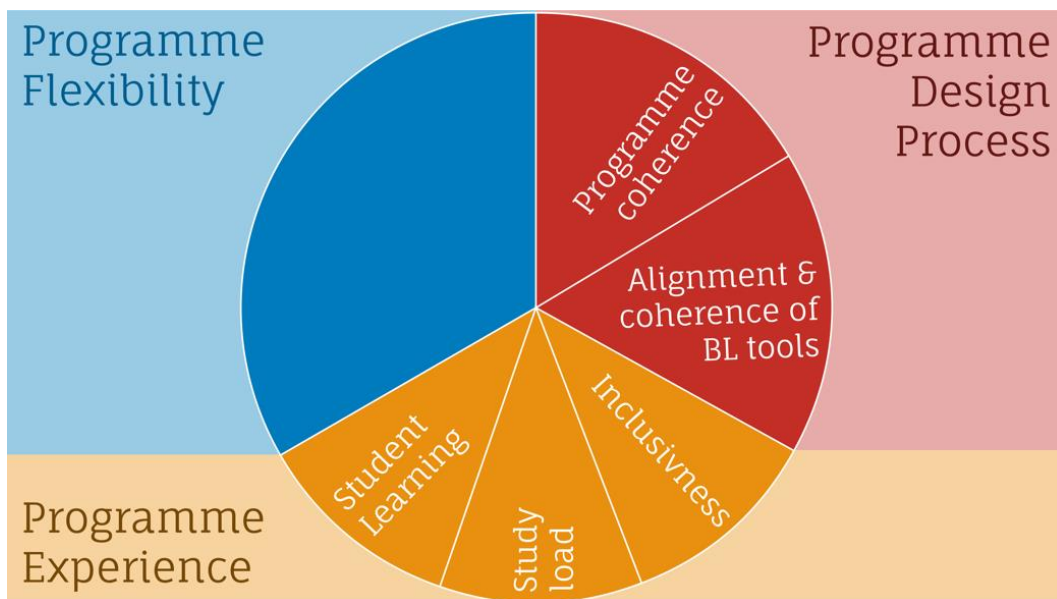# Programme Level

Programme level

The programme level refers to educational programmes or curricula. A programme is a structured series of educational courses. The stakeholders of this level are mainly teachers/educators and students, but also instructional designers, learning developers, content developers and management.

The programme level consists of the following three dimensions and corresponding subdimensions:
- Programme design process
  - Programme coherence
  - Alignment and coherence of blended learning tools
- Programme flexibility
- Programme experience
  - Student learning
  - Study load
  - Inclusiveness

PROGRAMME DESIGN PROCESS

The process of planning, designing, developing and evaluating a blended learning programme.

Programme coherence

The vertical (course-programme) and horizontal alignment (between courses) of a blended programme.

Level 1 **Ad hoc**	Level 2 **Design-based**	Level 3 **Programme cycle**
No deliberate consideration for the horizontal and vertical alignment in a blended programme design.	Deliberate consideration for the horizontal and vertical alignment in the blended programme design, based on a shared vision, and a design method or principles.	Deliberate consideration for the horizontal and vertical alignment in the blended programme design, based on a shared vision on blended learning, and a design method or principles. Continuous quality improvement is implemented in order to enhance a programme in an iterative manner.

Implementation Guidelines

During the design process of blended learning programmes, a first aspect of maturity is related to programme coherence, that is deliberately considering the horizontal and vertical alignment in a blended learning programme. There are several models, methods and guidelines which can be applied, such as the 4C/ID model (Van Merriënboer, 2019), the Curriculum Spider Web of Van den Akker (2010), O'Neill's 'Curriculum Design in Higher Education Guide' (2015), or the principles of curriculum alignment principles (Biggs, 2002 & EDULAB - Maastricht University, 2020). When designing a curriculum, it is advised to consider cross-curricular elements (the horizontal alignment), such as the support for student learning (see also programme coherence: student learning). Also, an appropriate distribution of online and face-to-face time throughout the same course is important (e.g., offer first-year students more on-campus time and fourth-year students more online time).

Maturity level 3 (Programme cycle) indicates that CQI mechanisms are implemented in order to assess and improve program coherence. A curriculum is regularly reviewed and improved accordingly. O'Neill (2015) posits that programme evaluation should occur comprehensively, using multiple methods and involving multiple stakeholders. She published guidelines and principles to evaluate a programme. Glatthorn, Boschee, Whitehead and Boschee (2018) also offer a wide range of guidelines, resources and checklists for programme evaluation.

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Alignment and coherence of blended learning tools

The rationale for the alignment and coherence of educational tools in blended learning programmes.

Level 1 **Ad hoc**	Level 2 **Design-based**	Level 3 **Programme cycle**
No deliberate alignment and coherence of tools used in a programme.	The alignment and coherence of the tools used in a programme are based on learning activities in courses, coordinated by the educators in the programme, and informed by evidence or experience.	The alignment and coherence of the tools used in a programme are based on learning activities in courses, coordinated by the educators in the programme, and informed by evidence or experience. This process is monitored, evaluated and changed based on quantitative and qualitative data.

Implementation Guidelines

The alignment and coherence of blended learning tools is part of the programme design process. To reach maturity level 2 (Design-based) it is important that there is a coherence between the educational tools used in a programme. This can be achieved, for example, by ensuring that students only work in one LMS, or that only one specific video conference tool is used. Switching between similar tools in a programme might have a negative effect on students' learning processes. The blended learning tools of a programme should be aligned with the tools used on the work floor, in compliance with the educational view at the programme level, and the tools offered within an institution. The latter also relates to the privacy and security issues which may arise when conforming to legislation, for example, the General Data Protection Regulation (European Commision, 2017). Institutions may offer support by providing a clear overview of vetted tools and a process to vet new blended learning tools. An example is the Advisory Committee Educational Tooling of Delft University of Technology (2020). The coordination of the coherence and alignment of the blended learning tools is a shared responsibility of both the instructors and the programme manager or coordinator.

Maturity level 3 (Programme cycle) is attained when the alignment and coherence of blended learning tools is monitored, evaluated and modified based on quantitative and qualitative data. Instruments, like the Rubric for eLearning tool evaluation (Anstey & Watson, 2018), can be used to evaluate blended learning tools. Statistics and tool usage reports, next to surveys and interviews with lecturers and students can be employed to assess the alignment and coherence of blended learning tools.

References

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PROGRAMME FLEXIBILITY

Opportunities for learners to adapt particular features of the blended learning programme. This includes features like the selection of courses/tracks, the mode of delivery (blended course, online course, traditional course), workload (full time/part time), pace (institution paced/self-paced), progress in a programme, and the possibility to follow courses at other institutions.

Level 1 **No flexibility**	Level 2 **Flexible**	Level 3 **Adaptive flexible**
No deliberate programme flexibility.	The flexibility in a programme is deliberately designed. Learners have some opportunities to adapt particular features of the blended learning programme. This process is informed by evidence or experience.	The flexibility in a programme is deliberately designed. Learners have many opportunities to adapt particular features of the blended learning programme and receive advice on their options. The offering of flexibility is based on evidence or experience. Flexibility is monitored, evaluated and changed based on quantitative and qualitative data.

Implementation Guidelines

This dimension refers to the extent that learners can adapt particular features of a blended learning programme. This includes features like the selection of courses/tracks, the mode of delivery, workload, pace, progress in a programme, and the possibility to follow parts of the programme in other institutions. At the second maturity level, the flexibility of a programme is deliberately designed. In 'The Zone Flexible Education' (2019) from the SURF Acceleration Plan four paths for flexibilization are described: (1) At your own pace, (2) Off the beaten track, (3) MyDiploma and (4) modular learning. This publication may be inspirational for decision makers at the programme level. Also, the report 'Flexible learning: The current state of play in UK Higher Education' (Universities UK, 2018) gives an interesting overview of opportunities for programme flexibility.

To reach the third level (Adaptive flexible), the flexibility is monitored, evaluated and changed based on several quantitative and qualitative data sources and tools. Surveys and interviews, with both students, instructors, programme directors, and management give insights in the quality and processes related to flexibility. Also, techniques like process mining add to the understanding about student navigation in a flexible programme. Both an article by Nirmal Patel (2020) and a paper by Cairns, Gueni, Assu, Joubert and Khelifa (2015) provide some interesting examples on how process mining.

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PROGRAMME EXPERIENCE

The extent to which a programme enhances students' learning and eliminates any obstacles that stand in the way of learning.

Student learning

The use of blended programme features which facilitate students' self-regulated learning (orienting and planning, monitoring, adjusting and evaluating).

Level 1 Standard	Level 2 Advanced	Level 3 Comprehensive
No deliberate consideration for student learning at the programme level.	Students are guided and supported throughout the blended programme on self-regulating their learning. Students and teaching staff are made aware of the blended nature of the programme, and what this means for both learning and teaching.	Students are guided and supported throughout the blended programme on self-regulating their learning. The blended aspect of the programme is internalized in all processes for the students and teaching staff. These processes are monitored, evaluated and adjusted based on quantitative and qualitative data.

Implementation Guidelines

The second maturity level (Student learning) implies that the self-regulated learning (SRL) of students is facilitated throughout the blended learning programme. The first step is to make students and lecturers aware of what SRL entails. Resources like Quigley, Muijs and Stinger (2018) can be used to facilitate this process. The next step is to design and incorporate SRL activities in a programme. SRL activities can be incorporated in existing courses or facilitated in another way. Reducing the amount of scaffolding and feedback throughout the programme is something which needs to be considered when incorporating SRL activities in programmes (this is also closely linked with the dimension Programme design process: programme coherence). The 'Self-Regulation Empowerment Program', described by Cleary and Zimmerman (2004) is an example of how this can be executed in practice. Besides the awareness of SRL, students and teachers should also be knowledgeable about the blended nature of a programme. The expectations, deadlines, and organisation of courses are key information which enables students to plan their own learning. Guidelines, tips, best practices, study groups and checklists about 'how to study in a blended programme' can support students and staff.

To reach maturity level 3 (Comprehensive) a programme must actively offer support and guidance for students to develop and improve their SRL skills. This implies that SRL-related activities are incorporated in every course of a programme. Level 3 also describes that the blended aspect of a programme is internalised in all processes for students and teaching staff. All students and staff should be trained in SRL. These processes are monitored, evaluated and adjusted based on data. Both qualitative (e.g., surveys, observations, interviews) and quantitative data (e.g., from learning platforms, student information systems, or other applications). Also, monitoring the SRL skills of students is done on a regular basis. This data can be used to evaluate the SRL activities in a course. Both Winne & Perry (2012) and González-Torres & Torrano (2008) describe methods and instruments to measure self-regulated learning.

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Study load

The match between the intended and achieved study load of a programme (distribution across courses and correctness).

Level 1 **Standard**	Level 2 **Advanced**	Level 3 **Comprehensive**
No deliberate alignment of study load between courses in a blended programme.	The study load, including deadlines, of a course is aligned to that of other courses in a blended programme.	The study load, including deadlines, of different courses in a blended programme are aligned, monitored, evaluated and adjusted.

Implementation Guidelines

The second maturity level in the dimension 'Programme experience: study load' requires that study load between courses is deliberately aligned. In an ideal world, the study load of a course is equally divided for each week (e.g., a 10-week course of 7.5 ECTS should have a study load of approximately 21 hours per week). Usually this is not the case. Deadlines (i.e. assignments, exams, etc.) in a course can cause peak study loads. This does not cause a problem *per se*, unless the study load of different courses in a programme is not taken into consideration at the same time.

To attain level 2 (Advanced), the study load and peaks of parallel courses in a programme are taken into consideration. For example, Figure 2 shows a graph of the study load in two courses (both 7.5 ECTS courses). The peak loads are distributed over several weeks and are proportionally distributed across courses in the same programme. Creating such overview is useful to align the study loads and peak loads in a programme.
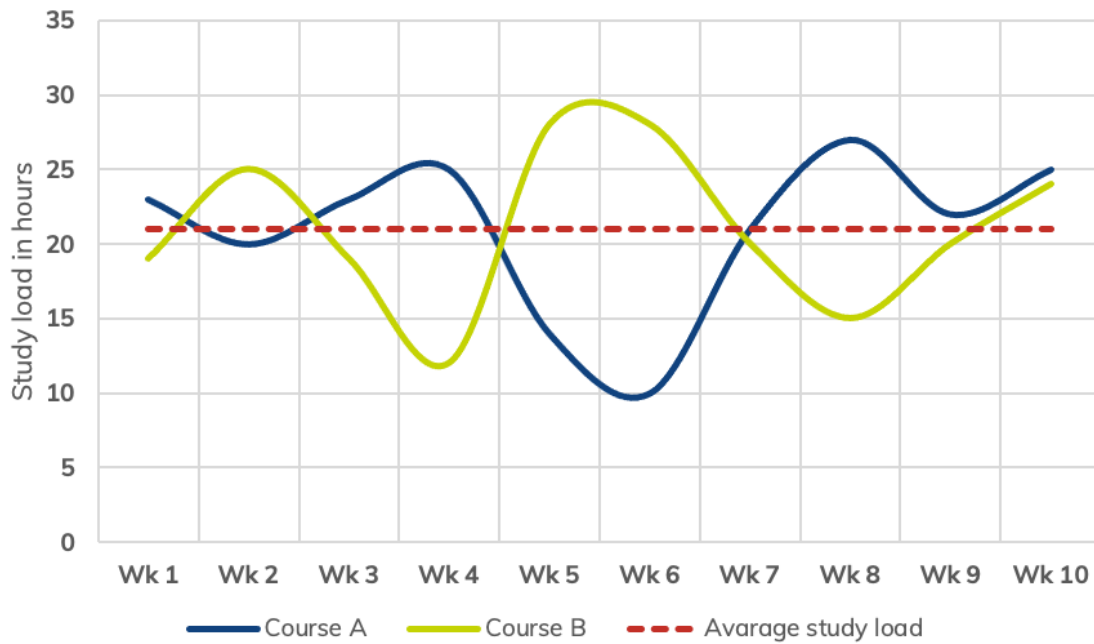
Image 2: example of a study load alignment graph.

Deliberately proportioning study loads in a programme does not mean that two or more courses cannot have the same deadlines (and corresponding peak loads). It means that this should be a deliberate decision. When peak loads coincide, it is important that students are equipped with the necessary SRL skills to manage and plan their learning. Senior-year students are usually better at studying with non-aligned deadlines than freshmen.

Level 3 (Comprehensive) describes that the study load in a programme must be monitored, evaluated and adjusted. The tools and instruments described in 'Course Experience: Study load' can also be used at the programme level. It is advised to gather data for the programme level and the alignment between courses. This can be done by adding questions to student surveys or using study load alignment chart(s).

Inclusiveness

The consideration of the diverse needs and backgrounds of students in order to create a programme where all students feel valued, safe, have a sense of belonging, and where all students have equal access to the online and face-to-face environments of the blended learning programme.

Level 1 Standard	Level 2 Advanced	Level 3 Comprehensive
No deliberate consideration for inclusiveness between courses.	Initial attempts to align inclusiveness in a collection of courses. Special attention is paid to social belonging and identity in the online environment of the programme. This process is informed by evidence or experience.	Inclusiveness is aligned in all of a programme's courses. Students feel valued, safe, and have a sense of belonging. The realization of inclusiveness is based on evidence or experience. Continuous quality improvement is deliberately embedded in order to improve inclusiveness in the programme.

Implementation Guidelines

Level 2 of the inclusiveness dimension refers to initial attempts undertaken to create a series of inclusive courses in a programme, especially with regard to social belonging and identity in the online part of the programme. This process is informed by evidence or experience. To facilitate such process, the EQUiiP (2020) user guide may be a useful resource. It specifically focuses on designing and teaching inclusive international programmes. The 'Universal Design Principles' (Cast, 2018) also offers an array of possibilities to design and develop an inclusive programme. Finally, the report 'Diversity, equity and inclusion in European higher education institutions'' (Claeys-Kulik, Jørgensen & Stöber, 2019) reviews inclusion in European HE.

Maturity level 3 (Comprehensive) describes that inclusiveness is incorporated in all courses of the same programme. Also, CQI procedures are implemented which concentrate on inclusiveness. Tools like the 'Measurement Including Tool' (Alberta Urban Municipalities Association, 2017) or the tool developed by Kielblock (2018) facilitate processes of evaluation. Surveys, interviews and focus groups can be organised to gain additional data and insights.

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