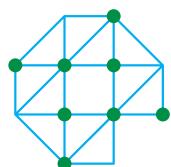


Manual

Designing and Teaching Blended Education Field Lab

Professional Development Method
for Lecturers in Higher Education



Acceleration plan
Educational innovation
with ICT



Facilitating professional
development of lecturers



Manual Designing and Teaching Blended Education Field Lab

Professional Development Method for Lecturers
in Higher Education

Acceleration Plan Educational Innovation with IT
Zone Facilitating professional development for lecturers
www.versnellingsplan.nl



Acceleration plan
Educational innovation
with ICT

With contributions from

Annemarie van den Broek, Fontys University of Applied Sciences
Carolien Kamphuis, Radboud University
Christine Kemmeren, Saxion University of Applied Sciences
Judith Vennix, Rotterdam University of Applied Sciences
Iwan Wopereis, Open University of the Netherlands
Marlies ter Beek, Acceleration Plan – Educational innovation with IT
Dorien Hopster-den Otter, Acceleration Plan – Educational innovation with IT
Egbert Neels, Acceleration Plan – Educational innovation with IT

June 2021

For the sake of readability, 'the lecturer' is used when referring to participants in this field lab. However, this can also be interpreted as the participant's role, such as 'the educational designer' or 'the IT employee'. The text also uses 'he' and 'his'. Where 'he' or 'his' is stated, one can also read 'she' or 'her'.



This release is licensed under the Creative Commons Attribution 4.0 License application. When using this work, cite the following reference: Facilitating professional development for lecturers zone (2021). Manual: Designing and teaching blended education field lab. Utrecht, the Netherlands: Acceleration Plan Educational Innovation with IT.

Contents

Background	5
Goal	5
Substantive justification	6
Target group	8
Preconditions	8
Practical design	11
Learning objectives	11
Design	12
Content and format	13
Evaluation	15
References	17
Materials	19

Background

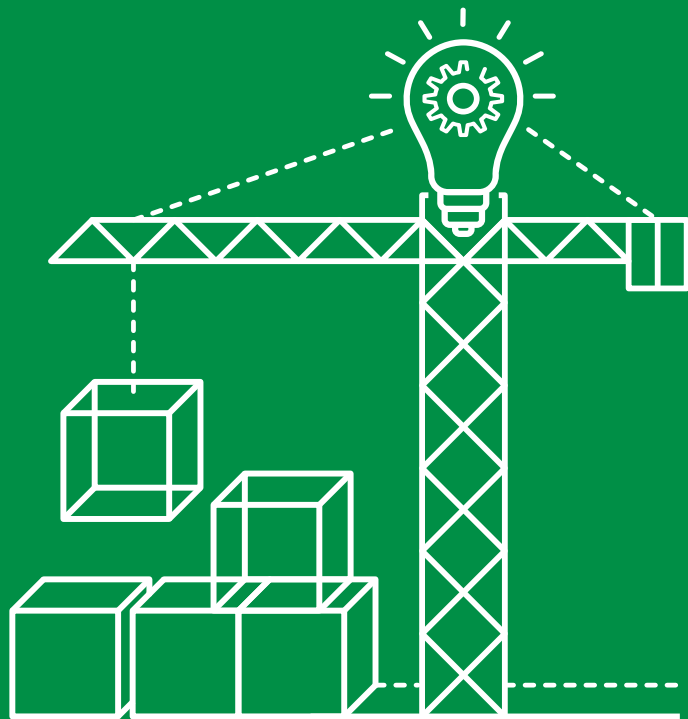
The field lab 'Designing and teaching blended education' has its genesis in the **SURF Acceleration Plan for Educational Innovation with IT**. The work of the Acceleration Plan for Educational Innovation with IT includes developing the opportunities that the digital transformation can offer higher education in the Netherlands. The mission of the Acceleration Plan is to create space within higher education institutions, and in their partnerships with other institutions in the higher education sector, to make giant leaps in the digital transformation of higher education in the Netherlands. The Acceleration Plan is a venture between the Association of Universities in the Netherlands, the Association of Universities of Applied Sciences and SURF.

The four-year programme runs from 2019 to 2022 and is based on three ambitions:

- To improve alignment with the labour market;
- To encourage more flexibility in education;
- To make better and smarter use of technology.

The **Facilitating professional development for lecturers zone** ("lecturer professional development" or "PD") is working towards finding a way for institutions to assess the extent to which they effectively facilitate and provide PD for lecturers within their organisation in relation to educational innovation using IT. Institutions may then embark on a process of improvement based on a collection of proven and effective professional development strategies. This is because acceleration actually takes place within the institutions. It is for this reason that special attention is paid to specialists who support lecturers and managers.

The 'Facilitating professional development for lecturers' zone focuses on five themes at the sectoral level, institutional level and individual level, which can be represented in a pyramid model (see Figure 1). One of those themes is Field Labs for professional development.



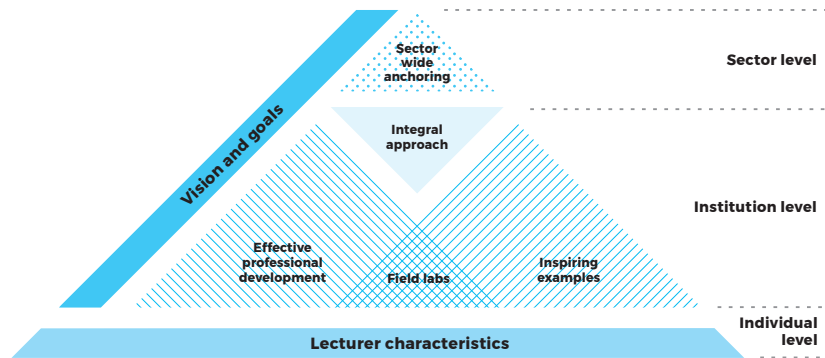


Figure 1 The pyramid model of the Facilitating Professional Development for Lecturers zone.

For the **Field Labs**, the zone combines effective building blocks for lecturer professional development with solid substantive example of educational innovation using IT in various field labs (Figure 1). These field labs will be developed, described and tested in such a way that lecturers will be imbued with inspiration and information to start designing and teaching good (thoughtfully designed) lectures, making smart use of digital technology – but only if this benefits the teaching process.

Goal

Numerous educational institutions in the Netherlands would like to offer a more flexible curriculum, engage students better in the lectures or respond better to student diversity. Blended education is a very promising form of education that helps move these ambitions forward. However, this form of education requires lecturers to gain new knowledge and skills. The field lab '*Designing and teaching blended education*' supports lecturers in the design of blended education in their own teaching practice.

Substantive justification

Blended (or hybrid) education has already become commonplace in higher education. For many institutions, it means a contemporary learning paradigm in which students learn actively and are engaged in the learning process in a meaningful way¹. The adjective 'blended' emphasises the combination of online and on-site activities that are used in the learning process^{2,3}. It is in this combination which many believe the strength of this form of education lies: the best of both worlds is combined to a whole, which certainly adds up to more than the sum of its parts. It can be readily tailored to various needs, in line with the desire and ambition of higher education to offer flexible education. This all sounds rather great, but what does a powerful combination of online and on-site learning actually look like in practice? And how can you achieve a mix that is effective, efficient

and appealing to students and lecturers alike in your own teaching practice? Both these questions and the corresponding answers lie at the heart of this field lab. They are important because research has shown that many expectations that go hand in hand with the implementation of blended education are not yet being fully realised⁴. These include aspects such as the high degree of freedom that students could be offered in designing and following their programme of learning. This means that teaching should be organised in a way that makes it possible to learn more independently of time and place, and that students should have (some degree of) control over the content, the pace, but also the blend of their studies.

We will reveal some initial insight into the central theme of this study, focusing first on the concept of blended education. You might say that the concept is a fuzzy one. This lack of acuity lies not so much in the second part of the term: 'education'. Education emphasises the fact that this field lab concerns itself with facilitating and supporting learning (teaching, instruction). However, its scope is limited to activities in the learning environment that are performed at the level of the course or the study programme⁵. Using the word 'education' in 'blended education' is better than the often-used 'blended learning', which often has the same connotation^{2,3}. We believe that the term 'blended learning' draws attention away from the importance of instruction.

It is rather the term 'blended' that is to blame for any vagueness surrounding the concept of 'blended education'. It is, of course, possible to mix anything into education, such as the venue of the activities (be it online, on-site, on-campus or virtual), the time at which the lecturers and/or students participate (synchronously or asynchronously) and the use of media to share information before and during the activities (text, audio, images, video). What's more, all kinds of combinations of the blends referred to are possible. For example, a learning situation where the focus is on the legal skill of presenting oral arguments. You could sequentially offer criminal law students 'paper' case studies of court cases (online, asynchronous, text), invite them to study video-based model examples of presenting the pleas (online, asynchronous, video), practice similar cases in groups in virtual classroom sessions (online, synchronous, video), get them to present oral arguments in a virtual courtroom (online, asynchronous) and finally test their oral argument skills in a simulated court case (onsite, synchronous). The concept of 'blended education' therefore is actually an umbrella term that requires more precise definition when used².

We already indicated that 'blended education' combines the best of onsite education and online education. While this may be true, we must not forget that the strength of a good blend always lies in a good foundation. In our case, this means a robust design of the education offering. The design will preferably be evidence-informed or, in other

words, will be the result of an application of instructional design theory. A theory is helpful when you are an educational designer to prepare a scenario or plan where you choose instruction method Y after giving due consideration to situation X. You choose a particular method because you expect that this will result in effective learning (i.e. the learning objectives are attained), efficient learning (i.e. can be organised in a specified period of time), but also learning that appeals to the lecturer and the students (i.e. it is aligned with the interests of students in a particular topic). For an instructional designer, it is important to know that instruction methods do have an impact on the effectiveness, efficiency and appeal of the instruction. The mode of instruction – the media used to support the learning process – has an impact in particular on the efficiency and appeal. Lecturers can discuss the theory during an interactive lecture on campus and subsequently invite students to apply it during a tutorial. Or you could opt to offer the theory using self-instruction ('flipped' and online) and invite students to apply this during a tutorial. In both cases, the same learning objectives will be attained (i.e. both are equally effective), but for students who like to work independently, the second option will probably be preferable because the time investment is lower (i.e. it is more efficient) and will be more appealing because the theory can be offered in the form of text, images and audio.

To achieve the right blend in a study programme, course or lesson, the first step in the (re) design process is the most relevant: the analysis of the situation in which the education will take place. This information determines what is possible and/or what must be done. The analysis of the situation involves identifying values and conditions. Values are subjective. These are opinions on what exactly should be learned, what should be preferred in view of a particular situation, which methods of learning and instruction have been found to be the most suitable (e.g. educational vision). Conditions are objective. The content (learning objectives), students (learners) and learning environment (university buildings, learning management system, teaching staff, students with limited access to the internet) will be determining factors when choosing methods. Also important will be the resources that are available to help with the (re)design of the education. Time, money and expertise will influence the choice of methods, but they will also influence the blend of teaching methods and media used to provide the instruction and facilitate (further) learning.

The more thorough the analysis, the greater the chance of a desirable educational product. The analysis produces building blocks for the design, development, implementation and evaluation of (renewed) blended education. This field lab addresses all these phases and emphasises the importance of themes such as 'constructive alignment' and 'engagement'.

Target group

This field lab is aimed at lecturers in higher education (research universities or universities of applied sciences) who want to deepen their knowledge of designing and teaching blended education. It is desirable that the lecturers have a basic teaching qualification (BKO) and relevant teaching experience. In addition, it is important that lecturers who participate all have their 'own' teaching resources that can be revised. A group size not exceeding 10 people is recommended. The open nature of the field lab offers the space to adapt the content to the needs and experiences of the lecturers.

Preconditions

In order to implement this field lab, the participating institution must provide a facilitator who is dedicated to the process throughout its lifetime. The facilitator is responsible for planning and organising the professional learning community, and works with the lecturers to prepare a programme. In addition, the facilitator provides substantive input throughout the process, making use of the sources in the starter package, but certainly also using content provided by themselves or the lecturers. In order to fulfill this role, we recommend appointing a facilitator who:

- has experience in managing a learning process of adult lecturers;
- is perfectly able to maintain the balance between deep dives and targeted work;
- is fully aware of basic principles of both teaching design and teaching practice;
- has affinity with IT in education, both in aiding the design process and in facilitating the group process of this professional learning community (PLC);
- has ample time to review the entire starter package, put together a programme and prepare and organise approximately eight sessions.

Participating lecturers will be involved in teaching and must be committed to redesigning the education while participating in this PLC. We also recommend making a physical or digital workspace available.

Practical design

Learning objectives

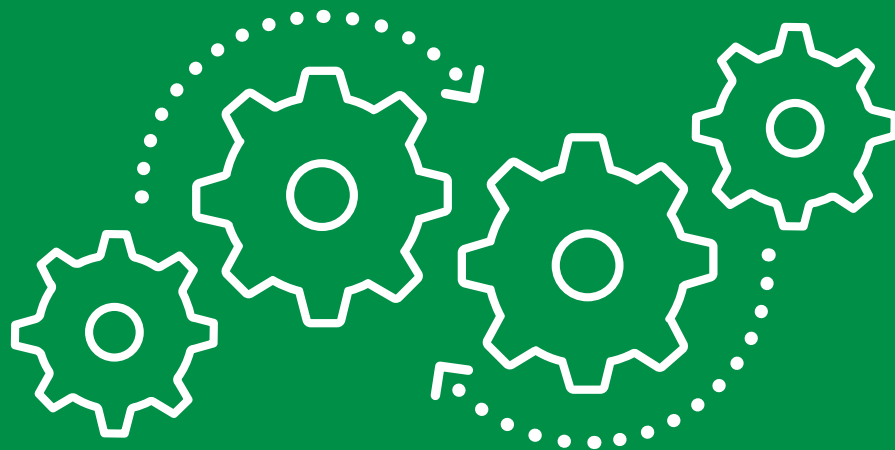
On conclusion of the field lab 'Designing and Teaching Blended Education', lecturers will be able to:

1. develop design criteria and prerequisites for blended education based on an analysis of the educational context.
2. to produce a reasoned blended instructional design and to develop associated resources, activities and work forms.
3. carry out and perform (interim) evaluations of the blended instructional design.

The following success criteria have been formulated for each learning objective.

It is important to note that not all success criteria need to be applied in every design.

1. The lecturer will be able to develop design criteria and prerequisites for blended education based on an analysis of the educational context⁷.
 - The lecturer will bring together the theory of and good examples of blended instructional design.
 - The lecturer will identify why there is a need for blended education among various stakeholders (lecturers, students, management, etc.) in the institution.
 - The lecturer will describe the environment based on relevant factors⁸:
 - Lecturers: preferences, needs, experiences, motivation, autonomy, self-efficiency, professional identity, teacher beliefs
 - Students: preferences, needs, experiences
 - Existing curricula which blended education will be integrated into
 - IT infrastructure: software, hardware, education support and IT support
 - Facilities: lecture theatres and classrooms
 - Institution: vision and policies
 - National system: government and study programmes at other institutions.
 - The lecturer will formulate design criteria and prerequisites that the blended instructional design must fulfil.
2. The lecturer will be able to produce a reasoned blended instructional design and to develop associated resources, activities and work forms.
 - The lecturer will align the assessment and learning activities of the blended instructional design with the intended learning objectives (constructive alignment).
 - The lecturer will make reasoned choices about the venue of the activities (online, on-site, on-campus, virtual), the time at which the lecturers and/or students participate



(synchronously or asynchronously) and the use of media to share information before and during the activities (text, audio, images, video).

- The lecturer will translate key findings on the motivation and engagement of students into the curriculum design.
 - The lecturer will choose teaching methods, work forms and activities appropriate to the learning objectives of the education to be designed.
3. The lecturer will be able to carry out and perform (interim) evaluations of the blended instructional design.
- The lecturer will evaluate the blended instructional design on the basis of relevant quality assurance criteria.
 - The lecturer will evaluate the blended instructional design using an appropriate methodology.
 - The lecturer will engage in a dialogue with his or her peers and students about their experiences with the (redesigned) education.
 - The lecturer will propose improvements in the blended instructional design.

Design

This field lab uses the professional learning community (PLC) as its form of professional development. In professional learning communities, educational professionals learn with each other and from each other in a group. This promotes the emergence of a group identity, linked to a shared teaching practice, shared goals and a shared repertoire⁹. This supports the ambition to practice sustainable professional development which has a real impact on the teaching practice.

Working in a PLC has at least three key characteristics¹⁰: 1) the situational nature in which professionals discuss and develop their own practice, 2) the fact that lecturers are actors in the education process they develop and practice, and 3) the cyclical nature of the development process which focuses on analysis, development, research, implementation, reflection and consolidation. This form of professional development creates opportunities to choose one's own level and perspectives, in line with the interests and the benchmark situation of the lecturers.

The following building blocks relating to the characteristics of professional development have been used for this field lab¹¹:

- Active learning: All individual phases (analysis, design/development, and implementation/evaluation) require the active participation of lecturers.
- Clearly defined goals: Formulating objectives is part of Phase 0.
- Evidence-informed approach: much is already known about the effectiveness of PLCs in

higher education and literature on blended education is used in the sessions.

- IT literacy: In the sessions, lecturers learn to make reasoned choices regarding the use of blended education.
- Duration and intensity: the PLC consists of several sessions spread over an extended period of time. Between sessions, there will be time to apply what you have learned in your own teaching practice.
- Relating to lecturers' own practice: The PLC is aimed at lecturers who are seeking to redesign their own practice (in Phase 3: Implementation and evaluation).
- Collaborative learning: Lecturers work together in this learning community and engage in a dialogue about their practical experiences in Session E.

The following building blocks relating to lecturer characteristics have been used in this field lab¹¹:

- Experienced autonomy: during Phase 0, lecturers work together to shape their own professional development and adapt their own teaching.
- Individual needs and interests: This field lab offers the opportunity to select themes in line with lecturers' needs and interests.
- Prior knowledge: the field lab offers the opportunity to hold several sessions on topics that lecturers want to broaden their knowledge of.

Content and format

In the PLC, lecturers will work together to (re)design their own teaching. Instructional design requires skill and benefits from a chronological approach and a degree of structure. However, this structure does not always correspond to the specific needs of lecturers or groups of lecturers dealing with redesign issues. These lecturers will benefit from correct sequencing, backgrounds and design models that are in line with their specific situation, experience and personal preferences.

This programme therefore aims to do justice to the fixed structure that characterises strong educational design but also to offer themes that members of the learning community can deal with as and when they see fit. The programme consists of *phases* which have a chronological order, and which must all be completed. Within Phases 2 and 3, there are various *themes* (A to F) from which a choice can be made, and which can be used in any order. Choices can be made, and emphasis placed based on the interests and needs of the lecturers and the contexts in which they find themselves.

Phase 0 – Launch session

During the launch session, the facilitator and lecturers will work to develop a shared definition of the concept of blended education. They will obtain insight into the learning needs within the group. Based on these learning needs, they will work together to produce a programme and corresponding working methods. Completing this session is absolutely essential before moving on to the following phases and session.

Phase 1 – Analysis phase

Phase 1 focuses on discovery of the context. Questions addressed include: Is there a need for blended education within the institution? What do our existing curricula and IT infrastructure offer? What design criteria and prerequisites can we formulate?

Phase 2 – Design and development phase

Phase 2 addresses the various themes that are important in the design and development of the blended instructional design. The themes support lecturers in achieving a sound instructional design, making reasoned assessments of the possibilities offered by blended education and actively motivating students.

Theme A – Constructive alignment

Theme B – How do you create the best blend?

Theme C – Engagement 1: Motivation and engagement of students

Theme D – Engagement 2: Work forms and learning activities

Phase 3: Implementation & evaluation

Phase 3 focuses on evaluating the implemented curriculum design. Theme E focuses on the lecturers' own experiences, as well as those of their peers and students, through a process of dialogue. Theme F deals with evaluating the quality of the instructional design based on relevant quality assurance criteria.

Theme E – How does it work out in practice?

Theme F – Quality of education and evaluation

During the programme, the facilitator will monitor the progress and provide substantive input to support the benefits from the sessions. For this purpose, he or she may use the articles and videos selected for each theme and offered by zone members of the Acceleration Plan for Educational Innovation with IT. The content and added value of the design process is described for each source. The sources can be found as appendices to this field lab at www.versnellingsplan.nl/english. The facilitator is, of course, free to add selected sources of their own.

Evaluation

The Facilitating professional development for lecturers zone of the Acceleration Plan would like to hear about your experiences, and we are therefore asking lecturers participating in the field lab to fill in a questionnaire. We use the results to improve the field lab and to help inspire other higher education institutions. The results of the evaluation will be shared on our website at www.versnellingsplan.nl/english. These results will be regularly updated as soon as new data is available.

Who?

There are three different questionnaires:

1. A questionnaire for the educationalist/trainer(s)
2. A questionnaire for the lecturers
3. A questionnaire for the relevant students who have already gained experience with blended education through their lecturer.

When?

Educationalists and lecturers should complete the questionnaire during the final (wrap up) session. Lecturers may send the questionnaire to their students either before or after the final session.

How?

The questionnaire can be completed online. The links and QR codes are shown below.

If you have any questions, please send an e-mail to the researchers of the Facilitating Professional Development for Lecturers zone:

Dorien Hopster-den Otter, d.denotter@utwente.nl

Marlies ter Beek, m.terbeek@utwente.nl

Questionnaire facilitator

in Dutch

The Dutch questionnaire for the facilitator can be found [here](#).

Or use this QR code:



Questionnaire lecturers

in Dutch

The Dutch questionnaire for the lecturers can be found [here](#).

Or use this QR code:



Questionnaire students

in Dutch

The Dutch questionnaire for the students can be found [here](#).

Or use this QR code:



Questionnaire facilitator

in English

The English questionnaire for the facilitator can be found [here](#).

Or use this QR code:



Questionnaire lecturers

in English

The English questionnaire for the lecturers can be found [here](#).

Or use this QR code:



Questionnaire students

in English

The English questionnaire for the students can be found [here](#).

Or use this QR code:



References

- Graham, C. R. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds.), *Handbook of blended learning: Global perspectives, local designs* (pp. 3–21). San Francisco, CA: Pfeiffer.
- Hrastinski, S. (2019). What do we mean by blended learning? *TechTrends*, *63*, 564-569. doi.org/10.1007/s11528-019-00375-5
- The Quality Assurance Agency for Higher Education (2020). *Building a taxonomy for digital learning*. Via www.qaa.ac.uk/docs/qaa/guidance/building-a-taxonomy-for-digital-learning.pdf
- Boelens, R., De Wever, B., & Voet, M. (2017). Four key challenges to the design of blended learning: A systematic literature review. *Educational Research Review*, *22*, 1-18. doi.org/10.1016/j.edurev.2017.06.001
- Van Valkenburg, W.F., Dijkstra, W.P., De los Arcos, B., Goeman, K., Van Rompaey, V., & Poelmans, S. (2020) *European Maturity Model for Blended Education*. Via embed.eadtu.eu
- Van den Berg, E., & Kouwenhoven, W. (2008). Ontwerponderzoek in vogelvlucht. *Tijdschrift voor lerarenopleiders*, *29*(4), 20-26. Via research.utwente.nl/en/publications/ontwerponderzoek-in-vogelvlucht
- Smith, P. L., & Ragan, T. J. (2005) *Instructional design* (3rd ed.). Hoboken, NJ: Wiley & Sons.
- Admiraal, W., Lockhorst, D., & van der Pol, J. (2012). An expert study of a descriptive model of teacher communities. *Learning Environments Research*, *15*(3), 345-361. doi.org/10.1007/s10984-012-9117-3
- Voogt, J., Laferrière, T., Breuleux, A., Itow, R. C., Hickey, D. T., & McKenney, S. (2015). Collaborative design as a form of professional development. *Instructional Science*, *43*, 259-282. doi.org/10.1007/s11251-014-9340-7
- Schildkamp, K., Hopster-den Otter, D., Ter Beek, M., Uerz, D., & Horvers, A. (2021). *Building blocks for effective professional development for lecturers in higher education aimed at educational innovation with IT. Version 2.0*. Utrecht: SURF Acceleration Plan Educational Innovation with IT.

Materials

Designing and teaching blended education field lab



Phase 0: Launch session

Objectives

During the launch session, the facilitator and lecturers will work to develop a shared definition of the concept of blended education. They will obtain insight into the learning needs within the group. Based on these learning needs, they will work together to produce a programme and corresponding working methods.

Content

At this launch meeting, the lecturers and facilitator will get to know each other and will engage in a conversation about their own educational vision, their own educational setting and the issues that they wish to introduce to the professional learning community (PLC). They will also discuss their motivation for participating in this PLC. The purpose of this conversation is to ensure that the lecturers are fully informed about each other's situations and, based on this knowledge, can work together to establish the programme and the corresponding working methods. They will need to agree on:

1. What themes are relevant to them within this programme;
2. What activities they will undertake; and
3. How they will work together.

The facilitator's job is to join the dots between the learning needs of the lecturers and the concept of blended education. This will make it possible to further decide what topics the lecturers will immerse themselves in through the PLC. At this meeting, we advise facilitators to focus on identifying and describing the learning needs of the lecturers and, based on these, to establish an outline programme for the entire PLC. There is a lot of scope within this to decide what themes might be relevant for the PLC based on a variety of learning needs.

Sources relating to the form of professional development: PLC

The following sources may provide inspiration and support for your PLC journey:



Video | [Professional Learning Communities: PLCs](#)

This video sets out in 3 minutes what a PLC is about, and offers background information for the facilitator and for the lecturers participating in the PLC.



Book | [Professionele leergemeenschappen: Een inleiding | Verbiest](#) (in Dutch)

This book discusses important elements to consider when establishing a professional learning community. Three identifying characteristics are key here:

personal, interpersonal and organisational capacities. Together, these three characteristics will determine how effective a professional learning community will be. We advise the facilitator to study the first three chapters closely. The book focuses on the primary and secondary school settings; it will be up to the facilitator to extrapolate the information to a higher education setting.



Manual | [Connecting the DOTs](#) | Floor Binkhorst and Cindy Poortman

This manual provides a description of teacher development teams (here referred to by their Dutch abbreviation: DOTs) and the factors that are at play in successful collaborations. DOTs are a form of professional development in which teams of lecturers (from various institutions) work together to develop innovative education. This practical manual offers insight into how the DOTs operate and highlights a step-by-step approach to the DOT process. The manual will hopefully provide inspiration for successful collaboration between lecturers.

Sources relating to professional development content: blended education



Article | [What do we mean by blended learning?](#) | Stefan Hrastinski

This article focuses on the content: blended learning. What is it?



Report | [Building a taxonomy for digital learning](#) | The Quality Assurance Agency for Higher Education

This report clarifies a number of terms used within the subject of digital learning. For instance, it explains the difference between blended learning and hybrid learning. The report presents a taxonomy for digital learning.



Report | [European maturity model for blended education](#) | EMBED

This recent publication contains a framework for blended education at the level of modules, the curriculum and the institution. The website also includes a link to the MOOC 'Making blended education work', which is freely accessible.

Phase 1: Analysis phase

Objectives

The lecturer will be able to develop design criteria and prerequisites for blended education based on an analysis of the educational context¹.

- The lecturer will bring together the theory of and good examples of blended education design.
- The lecturer will identify why there is a need for blended education among various stakeholders (lecturers, students, management, etc.) in the institution.
- The lecturer will describe the educational setting based on relevant factors²:
 - Lecturers: preferences, needs, experiences, motivation, autonomy, self-efficiency, professional identity, teacher beliefs
 - Students: preferences, needs, experiences
 - Existing curricula which blended education will be integrated into
 - IT infrastructure: software, hardware, education support and IT support
 - Facilities: lecture theatres and classrooms
 - Institution: vision and policies
 - National system: government and study programmes at other institutions.
- The lecturer will formulate design criteria and prerequisites that the blended education design must fulfil.

Content

Before you start designing or redesigning your blended education, it is important to first give some thought to the desires and opportunities for blended learning within your own institution. Why do we want to design blended learning? Is this in line with our educational vision and our policies? Do we already have the required facilities? What are the views of lecturers and students about blended learning? The answers to these questions will help you clarify your design. You will be asking questions in two types of analysis: a needs analysis and a context analysis.

In the needs analysis, you will sketch the desired situation after blended education has been successfully introduced. You will set out what is now missing in the current situation. And you will explain how the various stakeholders stand to benefit from blended education and how it will lead to improvements in educational quality. The needs analysis will help you to reach certain design criteria.

In a context analysis, the focus is on the setting, such as the study programme, the module or the institution where the blended education will be deployed. The setting is a factor that affects the possibilities and expectations that lecturers might have of their rede-

sign. Within your own setting, you will assess the institution's educational visions, its policies, the software and hardware available, and other facilities. The context analysis will result in a set of prerequisites that will constrain the design. This will help ensure that you avoid making a design that is entirely unrealistic in the setting in which it will be deployed.

Finally, you can also immerse yourself in the theory of blended learning and find inspiration in the good practice examples from other institutions. You can also start thinking about a design methodology.

There is already a broad range of design methodologies. For example: ADDIE3, Holistic 4D, Carpe Diem4, the ABC method⁵ and the Shuffle method⁶. The choice of a design methodology is an important one to make at this stage.

Sources

The following sources may offer inspiration and support throughout this theme:



Article | [A framework for institutional adoption and implementation of blended learning in higher education](#) | Charles R. Graham, Wendy Woodfield & J. Buck Harisson

The model in this article offers an interesting framework for analysing an institution in terms of the presence of a strategy, structure and support for the implementation of blended learning. The model, which is structured as a rubric, can be used to establish the development stage in which an institution finds itself, but can also provide inspiration for future development trajectories.



Article | [Ontwerponderzoek in vogelvlucht](#) | Ellen van den Berg and Wim Kouwenhoven (in Dutch)

The article in Dutch sketches an overview of the various phases of the design study, and describes the various components of the analysis phase: (1) the needs analysis (2) the context analysis (3) the literature study and (4) the study of good practices.



Book | [Instructional design \(3rd edition\)](#) | Patricia L. Smith, Tillman J. Ragan
This book is a classic in the field of instructional design. Chapters 3 and 5 are particularly interesting for this analysis stage, which is concerned with analysing the target group, the setting and the task.



Book | [Merging the instructional design process with learner-centered theory: The holistic 4D model](#) | Charles M. Reigeluth, Yunjo An
Blended education is the outcome of a systematic design and development process. The book offers a contemporary framework for a holistic approach to instructional design (or redesign).



Document | [Educational vision](#) | Own institution
We advise lecturers to study the educational vision of their own institution.



Tool | [Integrated IT Motion Sensor](#) | Acceleration Plan Educational Innovation with IT

Although this tool was originally developed with a view to the broader subject of 'educational innovation using IT', it can also be used specifically to analyse the blended education of your own institution. The package includes a talkboard, discussion cards and reflection cards. Within this, there are four central themes (known as the 'key concepts'): (1) the institution's vision and policies (2) the role of leadership, (3) professional development and (4) IT infrastructure. Lecturers will use this tool to determine the 'starting point' of their blended education journey.

Phase 2: Design & development phase

Theme A | Constructive Alignment

Objectives

The lecturer will be able to produce a reasoned blended education design and to develop associated resources, activities and work forms.

- The lecturer will align the assessment and learning activities of the blended education design with the intended learning objectives (constructive alignment).

Content

The principle behind *constructive alignment*⁷ plays a key role in education during the development of modules and curricula. Within constructive alignment, the intended learning outcomes form the starting point for the instructional design. Based on these learning outcomes, appropriate teaching and assessment activities can be designed using a process of *backwards design*; they invite students to follow deep learning strategies. For instance, this methodology offers a distinct structure to design new instruction in which teaching and assessment activities are coherent and in line with the intended learning outcomes.

Even though constructive alignment is not specifically aimed at blended education, use of this methodology is in such widespread use that it can be considered to be a requisite for high-quality instructional design⁸. Even within the programme of this professional learning community, constructive alignment has a key role to play. It is recommended that this theme be included in the design stage from the outset to act as a framework for the subsequent design activities.

Sources

The following sources may offer inspiration and support throughout this theme:



Film | Teaching Teaching & Understanding Understanding | Claus Braband, Aarhus University, 2006

In this classic short film, Claus Braband examines the concept of constructive alignment in its broadest sense and illustrates it using the example of the protagonists, Robert and Susan. 'Roberts' & 'Susans', and their respective tendencies towards deep learning & surface learning, are a known quantity in

the world of higher education. The film explains how the teaching is organised and the perceptions of lecturers can lead to students following certain learning strategies. The film also emphasises the need to activate students.

The film is particularly suited to obtaining a broad overview of deep learning and the impact that constructive alignment has had on it. It also provides a good starting point for discussion of the topic. The video is made up of three parts that can be found on YouTube: [Part 1](#), [part 2](#) and [part 3](#).



Website | [Constructive Alignment](#) | Maastricht University

This website by Maastricht University offers a comprehensive yet manageable overview of information about constructive alignment, and introducing it within your courses, study programmes and the institution as a whole. The website is suitable as a sound information resource for lecturers who want to get to grips with constructive alignment in their specific practical situation.



Webinar | [CCCS Online course \(re\)design](#) | Oscar van den Wijngaard, Maastricht University

This webinar offers a solid foundation for evidence-based instructional design built on the principles of constructive alignment and in the context of online teaching. The video discusses the intended learning outcomes in great detail, as well as how these can be translated into teaching and assessment activities. It also offers a variety of relevant sources. The video is highly suitable for lecturers who want to study constructive alignment materials in a specific context. As the authors themselves say, the video can be used as a 'refresher'.

Theme B | How do you create the best blend?

Objectives

The lecturer will be able to produce a reasoned blended education design and to develop associated resources, activities and work forms.

- The lecturer will make reasoned choices about the venue of the activities (online, on-site, on-campus, virtual), the time at which the students and/or students participate (synchronously or asynchronously) and the use of media to share information before and during the activities (text, audio, images, video).

Content

The perfect blend is something of a holy grail: it doesn't actually exist. Despite this, a thorough needs analysis and context analysis can be used to prepare a valuable blueprint for teaching that focuses on creating a responsible blend of online and on-site teaching activities. A blueprint may be focused on a specific learning activity, a lesson, a course, module or even an entire study programme. The nature of the learning objectives (i.e. the content), the type of student (e.g. part-time, remote learner, university and living in student accommodation), the learning environment (e.g. on-campus teaching, advanced learning management system set up to allow project-based teaching) and available resources (funding for educational innovation, budgets for IT, available expertise) will determine what can be achieved when and where. But the visions of individuals and the organisation on teaching, learning and the use of media will also have an impact on the blend. For instance, the institution's vision on teaching (e.g. standardisation of IT facilities) may be at odds with an individual's vision on this (e.g. 'I want to decide for myself what tools I use in the classroom').

An educational blueprint will give the content of the blend a sense of direction. If a blueprint focuses on learning a complex skill, time for demonstration and practice will also be needed, for instance. Demonstrations can be arranged either on-site or online. However, for reasons of efficiency and appeal, it might be preferable to arrange things using multimedia and online (e.g. video-based modelling examples). Exercises that follow on from the demonstrations could be performed part online, part on-campus and part on-site at a potential future workplace. The theory that is needed to perform a skill could be offered asynchronously online and discussed in the relevant discussion groups. The nature of the content (or in this case, the skill) will determine how the blend will be composed. However, available resources and expertise are factors that have a greater impact on the final blend that you create.

Many choices that you make while designing the blend will be determined by the content (learning objectives) and what is available given the constraints. Your vision and the vision of the institution where you work will also have an impact on the blend: in other words, what you and the institution consider to constitute high-quality education and what it needs to offer and how.

Yet there are differences in approach that make it possible to structure your search for good blends. For instance, Garrison and Vaughan⁹ describe the creation of a Community of Inquiry as a way to provide good guidance when designing blended education. They argue that when instructional design is based simply on the idea that online and offline educational activities must be accomplished, the emphasis will be placed on verbal activities (talking and listening) and text-based activities (reading and writing). To produce richer blends that do justice to the learning needs of students, they advocate that the focus during the design phase should be on *social presence*, *cognitive presence* and *teaching presence*.

In *social presence*, the emphasis is on designing educational activities that ensure that students are free to express themselves and feel comfortable doing so, and that enable them to build a rapport with lecturers and fellow students. *Cognitive presence* is a frame for activities relating to generating questions and new understanding, as well as for creating and testing new knowledge concepts. *Teaching presence* describes teaching activities in which the lecturer plays an (active) role, and which supports and facilitates the processes referred to above.

In this way, the Community of Inquiry framework offers a solid starting point for lecturers taking part in this field lab, and can be regarded as the starting point of the puzzle to develop the best blend.

Sources

The following sources may offer inspiration and support throughout this theme:



Book | Blended learning in higher education: Framework, principles, and guidelines| Garrison & Vaughan (2008)

This book, which was also referred to in the introductory text of this phase, offers a cogent description of the Community of Inquiry framework. The book can be regarded as normative, and it offers a sound basis for lecturers who want to get to grips with instructional design for blended education.



Article | [Understanding cognitive presence in an online and blended community of inquiry: Assessing outcomes and processes for deep approaches to learning](#) | Akyol & Vaughan

In this article, Akyol and Vaughan (2011) discuss the element of *cognitive presence* at length, going on to describe strategies to help achieve deep and significant learning activities. They present the results of a study into two different courses, and describe the way in which the various elements of cognitive presence have been operationalised, and how they were experienced by students. Finally, it also offers a *Community of inquiry questionnaire* that can be used to analyse your own teaching environment.



Website | [Blended Learning Models](#) | blendedlearning.org

The website offers a beautifully designed overview of seven different models that can be used to create blended education activities. Although the website focuses on primary education, the texts, videos and infographics still provide sufficient inspiration for lecturers in higher education who are looking for accessible information about the choices they can make regarding the design or organisation of blends within their teaching practice. In this [blog post](#) Wilfred Rubens discusses these models.



Website | [Ontwerpcriteria bij de vormgeving van blended learning](#) | Wilfred Rubens (in Dutch)

This blog, written by Wilfred Rubens, addresses a wide range of design criteria that you could consider when you engage in instructional design for blended education. The blog guides you through relevant themes, such as the extent of online education, the right amount of self-direction that students should possess and whether you prefer synchronous or asynchronous education.



Book | [E-learning and the science of instruction](#) | Clarke & Mayer (2016)

This book spells out some evidence-based guidelines for the design and development of the online ingredient of blended learning. It provides information about creating (asynchronous) self-instruction and (synchronous) applications of the virtual classroom.

Theme C | Engagement 1: Motivation and engagement of students

Objectives

The lecturer will be able to produce a reasoned blended education design and to develop associated resources, activities and work forms.

- The lecturer will translate key findings on the motivation and engagement of students into the curriculum design.

Content

Theme B on constructive alignment showed that the active engagement of students in their education is an important prerequisite for the learning process. While this active engagement in the theme of constructive alignment was approached from the perspective of instructional design, this theme addresses factors that motivate students to actively participate in their education. The extent to which a student actively participates in teaching activities can be described as *engagement*¹⁰.

This theme deals specifically with the sub-topic of motivation. Student motivation is a broad topic that can be approached from a number of angles. In recent decades, various theories, such as *Expectancy-Value Theory*¹¹ and *Flow theory*¹², have contributed to our understanding of how students are motivated or become motivated to learn. In higher education, *Self-Determination Theory*¹³ has played an especially important role as an explanatory model of motivation. The principles of the basic needs theory, which is a sub-component of this, will be familiar to many lecturers as the prerequisites for the intrinsic motivation of students: autonomy, competence and social connection.

Sources

In this theme, lecturers are invited to reflect on motivational factors within their own instructional design. The following sources may offer inspiration and support throughout this theme:



Article | [A Self-determination Theory Perspective on Student Engagement](#) | Reeve

This article establishes a link between engagement and self-determination theory. In its entirety, it provides a solid basis for both concepts, and offers a final chapter that sets out clear *implications for teachers*.

Due to its broad basis, the article is particularly suitable for lecturers who are less familiar with the subject, and can in many ways be seen as a starting point for further reading on this subject.



Webinar | [Peer-feedback en Online binding](#) | SURF (in Dutch)

In this webinar by SURF, various speakers, including Renée Filius, Rianne Poot and Karlijn Gielen, discuss peer feedback and online student engagement. Renée Filius discusses the findings of her dissertation *Peer feedback to promote deep learning in online education; unraveling the process*¹⁴ (2019), providing valuable tools for setting up peer feedback assignments. Rianne Poot continues with an overview of the project *Diep leren door Online Peerfeedback* that was carried out at Utrecht University, and talks about the implementation, the *lessons learned* and the resources used. Finally, Karlijn Gielen describes the use of peer feedback within her course and discusses valuable tips and experiences she gained throughout the process.

The webinar provides a broad overview for lecturers who want to get to grips with online engagement, specifically using peer feedback as an aid to achieve this.



Website | [Ontwerp van online onderwijs](#) | Rotterdam University of Applied Sciences (in Dutch)

This website of Rotterdam University of Applied Sciences offers valuable starting points for lecturers working on instructional design within an online context. Altogether, it offers good tips and practical examples. Specifically interesting for this theme is the example of the SLC/PI Lesson Plan – engagement, autonomy and competence, in the chapter on 'The role of the SLC member in online education'. The website is suitable for lecturers who want to operationalise motivating factors in their instructional design, and need examples to help them get started.

Theme D | Engagement 2: Work forms and learning activities

Objectives

The lecturer will be able to produce a reasoned blended education design and to develop associated resources, activities and work forms.

- The lecturer will choose teaching methods, work forms and activities appropriate to the learning objectives of the education to be designed.

Content

Digital technology is increasingly being used to transfer knowledge, to allow students to interact with each other, or to enable learning outside the physical setting of the classroom. In practice, however, it often proves to be a challenge to actively involve students in these digital learning environments. Their engagement is of great importance because research has shown that this strongly correlates to learning performance, perseverance, satisfaction and a sense of community among students¹⁵. Blended education offers opportunities to increase student engagement, both online and offline, provided it is deployed effectively when designing a course¹⁶.

Student engagement can be expressed in a variety of ways¹⁷. There are certain behavioural characteristics that demonstrate engagement: students focus, concentrate better, are better engaged and their time on task increases. Emotional engagement among students can be expressed in the form of interest, curiosity and enthusiasm. Cognitive engagement is achieved through the use of learning strategies, targeted questioning and self-regulating strategies (such as planning). Finally, there is also *agentic engagement*: a form of engagement in which students contribute proactively and constructively to a (joint) learning activity, for example by providing input, making suggestions, or actively asking questions. Agentic commitment in particular is highly relevant to blended education. This form of engagement can be stimulated by using activating work forms.

This theme focuses primarily on the digital aspect of blended education and guides lecturers through the various tools and opportunities available to them to increase the active engagement of their students (already discussed in theme D).

Sources

The following sources may offer inspiration and support throughout this theme:



Video's | [ExCEL-leer in afstandonderwijs](#) | Expertisecentrum voor effectief leren (Thomas More University of Applied Sciences, Belgium) (in Dutch)

This website offers a number of webinars (also called 'knowledge clips') focusing on activating teaching methods. These knowledge clips are about activating relevant prior knowledge, integrating examples of good practice, checking whether everyone in the class is progressing at the same pace, and giving feedback that makes students think. The content of the knowledge clips is based on the book 'Wijze lessen: 12 bouwstenen voor effectieve didactiek' (in Dutch), but focuses specifically on distance learning.



Website | [Today's Teaching Tools](#) | Irene van der Spoel

This website offers a convenient summary of inspiration for various work forms and learning activities in online education. These are aimed at online interaction, collaborative learning, and maintaining energy during online learning, for example. The various cards offer suggestions for reflection on the instructional design, but can also be used to kick off a dialogue. What's more, the website includes an extensive list of (free) tools that can be used for various online work forms, such as quizzes, presentations, videos, brainstorming sessions, or collaboration with other students.



Publication | [Het digitale werkvormenboek](#) | Utrecht University (in Dutch)

This compendium of work forms, produced by students of the master's degree programme in Social, Health and Organisational Psychology at Utrecht University, offers many starting points for online instructional design. The five 'digital challenges' at its core relate to activating teaching methods and deal with (1) generating energy (2) actively acquiring knowledge (3) conducting group discussions (4) establishing personal contact and (5) forming subgroups. The book discusses fifteen different work forms linked to these challenges. It also provides a convenient summary of tools that can help you to implement these work forms. Please note: this workbook focuses primarily on the digital aspects of blended education.



Sample literature | Hoe kan studentbetrokkenheid vergroot worden? (In Dutch)

The article below illustrates how student engagement can be effectively stimulated through blended education design. This article intends to inspire lecturers interested in student engagement and in discovering examples from international educational settings.

- Serrano, D. R., Dea-Ayuela, M. A., Gonzalez-Burgos, E., Serrano-Gil, A., & Lalatsa, A. (2019). [Technology-enhanced learning in higher education: How to enhance student engagement through blended learning](#). *European Journal of Education*, 54(2), 273-286.

Phase 3: Implementation & evaluation

It is highly desirable that the lecturers participating in the PLC have tested their instructional design (or at least parts of it) in practice prior to embarking on Theme E.

Theme E | How does it work out in practice?

Objectives

The lecturer will be able to carry out and perform (interim) evaluations of the blended education design.

- The lecturer will evaluate the blended education design using an appropriate methodology.
- The lecturer will engage in a dialogue with his or her peers and students about their experiences with the designed or redesigned education.
- The lecturer will propose improvements in the blended education design.

Content

The implementation and evaluation represent an important step in the cyclical teaching design. Once initial experiences have been gained in practice, phase 3 discusses how you are doing in practice. This theme focuses on the experiences of lecturers, their colleagues and students. This can be studied by holding a dialogue. It is important that lecturers are open to this. This calls for¹⁷: willingness to listen and ask questions, to hold off making judgments and assumptions, to investigate assumptions and ideas, not to focus on solutions and to take your time and allow others to take their time too¹⁸.

This theme suggests engaging in the dialogue using the Appreciative Inquiry¹⁹ methodology because this method can give lecturers insight into what they consider important when designing and teaching blended education, what they want to retain in their future design and what they want to redesign. However, suggestions for other methodologies are also provided in the sources. [this website](#) offers a very brief description of the work form; additional information can be found in the sources.

Apart from this dialogue, it is also interesting to study the impact of the education designed on the standard of quality achieved. The focus would then be less on the experiences of lecturers and students, more on the outcomes. Theme G delves deeper into this topic.

Sources

The following sources may offer inspiration and support throughout this theme:



Online reader | [Verfrissende ontmoetingen, hoe je meer kunt halen uit gesprekken op school](#) | Ruud de Moor Centrum – Open University of the Netherlands (in Dutch)

This reader offers background information on the importance of dialogue in education. It answers the questions of why, how and what relating to the dialogue and offers good guides for conducting conversations using a number of tools.



Website | [Appreciative inquiry](#) | David Cooperrider



Interview | [Appreciative inquiry](#) | David Cooperrider



Manual | Cooperrider, D.L., Whitney, D., Stavros, J, M. (2008) Appreciative inquiry handbook for leaders in change. San Francisco, CA: Berrett-Koehler.

The website offers information about appreciative inquiry in relation to organisational development. It provides basic information about the methodology and offers an explanation for each phase of the process. In the interview, David Cooperrider explains what lies at the heart of the methodology. The handbook discusses the methodology of appreciative inquiry in more detail.



Book | Steeneveld, M. (2020) Appreciative Inquiry, Waarderende werkvormen voor trainers, teamcoaches en veranderaars (in Dutch). Amsterdam: Boom Uitgevers. The first part of the book explains the methodology in great detail. The second part provides a description of 39 work forms that can be used in practice.



Website | [Socratische gespreksvoering](#) | Marlou van Paridon (in Dutch)

This website offers information about another interesting methodology for engaging in a dialogue with colleagues about experiences with instructional design. This is an open form of conversation in which lecturers work together to study what is going on, clarify this and refine their thinking. The website also includes a convenient checklist for a conversation.



Website | [Peer review methods](#) | Kessels and Smit

If the above forms don't appeal to you, this source offers six alternative methods of peer review to kick-start a dialogue with colleagues.

Theme F | Quality of education and evaluation

Objectives

The lecturer will be able to carry out and perform (interim) evaluations of the blended education design.

- The lecturer will evaluate the blended education design on the basis of relevant quality assurance criteria.
- The lecturer will evaluate the blended education design using an appropriate methodology.
- The lecturer will propose improvements in the blended education design.

Content

How will we know if we have produced the right blend? How can we offer assurances of the quality of education? This theme concerns how we evaluate the quality of blended education. Evaluation is used to assess the quality of the blended education and to improve it in a later design iteration. You evaluate using relevant quality criteria, such as:

- Relevance: the instructional design meets the needs and is founded on recent understanding
- Consistency: the instructional design is logical and there is constructive alignment
- Usability: the instructional design can be used in the situation which it was intended for
- Effectiveness: use of the instructional design leads to desirable outcomes.

The theme of educational quality and evaluation has been presented last, but evaluation is important throughout the entire design process. For instance, the emphasis at the start will be on increasing relevance and consistency. Later, the emphasis will shift to increasing usability and effectiveness. Depending on the relevance of the quality criteria, you will choose one or more of the available evaluation methods. These may include use of a screening or focus groups, for instance. For each of these evaluation methods, different tools will be appropriate, such as a questionnaire, observation or interview.

Sources

The following sources may offer inspiration and support throughout this theme:



Website | [Curriculum evaluation](#) | Stichting Leerplan Ontwikkeling (SLO)

This Dutch-language website describes four evaluation criteria (relevance, consistency, usefulness and effectiveness) and a variety of evaluation methods. The [video](#) (1.47 minutes) provides a brief overview. Further reading and examples of evaluation methods are available from the '[instruments](#)' menu. The website is suitable for lecturers who want to know more about how to evaluate their (blended) instructional design in an accessible way.



Task assistance | [Curriculum evaluation](#) | Stichting Leerplan Ontwikkeling (SLO)

This task assistance offers help with all steps of the evaluation process: planning, implementing, assessing and setting out follow-up steps. You will find sample tools (such as questionnaires and observation schedules) and an explanation of how to carry out evaluation activities (interviewing, observing, keeping a log, etc.).

The website is suitable for lecturers who want to quickly get started with specific steps to evaluate their blended instructional design.



Book | Evaluation 2nd edition | Carol H. Weiss

This English-language book offers an overview of everything relating to evaluation. This includes definitions, evaluation objectives, drawing up schedules, possible roles of evaluators, the development of tools, the collection, analysis and reporting of data and ethical aspects.

This book is suitable for lecturers with experience in evaluations, but also those who are less experienced, and who want to obtain a more complete picture of the theme in a readily accessible way.



Sample literature | Evaluation of blended education design

The articles below illustrate how the evaluation of a blended education design was devised and reported. The articles are intended to inspire lecturers interested in evaluation tools and methods specifically for blended education design.

- Harding, A., Kaczynski, D., Wood, L. (2005). [Evaluation of blended learning: analysis of qualitative data](#).
- Hubackova, S., & Semradova, I. (2016). [Evaluation of blended learning](#). *Procedia - Social and Behavioral Sciences*, 217, 551-557.

References

1. Van den Berg, E., & Kouwenhoven, W. (2008). Ontwerponderzoek in vogelvlucht. *Tijdschrift voor lerarenopleiders*, 29(4), 20-26. Via research.utwente.nl/en/publications/ontwerponderzoek-in-vogelvlucht
2. Smith, P. L., & Ragan, T. J. (2005). *Instructional design* (3rd ed.). Hoboken, NJ: Wiley.
3. Branch, R. M. (2009). *Instructional design: The ADDIE approach* (Vol. 722). New York, NY: Springer.
4. Salmon, G., & Wright, P. (2014). Transforming future teaching through 'Carpe Diem' learning design. *Education Sciences*, 4(1), 52-63. doi.org/10.3390/educsci4010052
5. Young, C., & Perović, N. (2016). Rapid and creative course design: as easy as ABC. *Procedia-Social and Behavioral Sciences*, 228, 390-395. doi.org/10.1016/j.sbspro.2016.07.058
6. Saxion ICT&O (n.d.). *Shuffle Onderwijs-ontwerp methodiek*. Via: www.saxion.nl/binaries/content/assets/over-saxion/organisatie/icto/shuffle-v3.0_saxion-ictpdf
7. Biggs, J. (1996). Enhancing teaching through constructive alignment. *Higher Education*, 32(3), 347-364. doi.org/10.1007/BF00138871
8. Biggs, J. (2014). Constructive alignment in university teaching. *HERDSA Review of Higher Education*, 1, 5-22. www.herdsa.org.au/herdsa-review-higher-education-vol-1/5-22
9. Garrison, D. R., & Vaughan, N. D. (2008). *Blended learning in higher education: Framework, principles, and guidelines*. San Francisco, CA: Wiley.
10. Reeve, J. (2012). A self-determination theory perspective on student engagement. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 149-172). Boston, MA: Springer.
11. Wigfield, A., & Eccles, J. S. (2000). Expectancy-value theory of achievement motivation. *Contemporary Educational Psychology*, 25(1), 68-81. doi.org/10.1006/ceps.1999.1015
12. Csikszentmihalyi, M., & Rathunde, K. (1993). The measurement of flow in everyday life: Toward a theory of emergent motivation. In J. E. Jacobs (Ed.), *Nebraska Symposium on Motivation* (pp. 57-97). Lincoln, NE: University of Nebraska Press.
13. Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macro-theory of human motivation, development, and health. *Canadian Psychology/Psychologie canadienne*, 49, 182-185. doi.org/10.1037/a0012801
14. Filius, R. M. (2019). *Peer feedback to promote deep learning in online education: Unraveling the process* (Doctoral dissertation). Utrecht: Utrecht University.
15. Halverson, L. R., & Graham, C. R. (2019). Learner engagement in blended learning environments: A conceptual framework. *Online Learning*, 23(2), 145-178. doi.org/10.24059/olj.v23i2.1481
16. Serrano, D. R., Dea-Ayuela, M. A., Gonzalez-Burgos, E., Serrano-Gil, A., & Lalatsa, A. (2019). Technology-enhanced learning in higher education; How to enhance student engagement through blended learning. *European Journal of Education*, 54(2), 273-286. doi.org/10.1111/ejed.12330
17. Kessels, J., Boers, E., & Mostert, P. (2002). *Vrije ruimte: Filosofen in organisaties*. Amsterdam, Nederland: Boom.
18. Spruyt, M., Verdonschot, S., & Dresen, M. (2011). *Verfrissende ontmoetingen Hoe je meer kunt halen uit gesprekken op school*. Heerlen: Ruud de Moor Centrum, Open Universiteit.
19. Cooperrider, D.L., Whitney, D., Stavros, J, M. (2008). *Appreciative inquiry handbook for leaders in change*. San Francisco, CA: Berrett-Koehler.
20. Reigeluth, C. M., & An, Y. (2021). *Merging the instructional design process with learner-centered theory: The holistic 4D model*. New York, NY: Routledge.
21. Steeneveld, M. (2020). *Appreciative inquiry. Waarderende werkvormen voor trainers, teamcoaches en veranderaars*. Amsterdam: Boom.
22. Harding, A., Kaczynski, D., & Wood, L. (2005). *Evaluation of blended learning: analysis of qualitative data*. openjournals.library.sydney.edu.au/index.php/IISME/article/view/6436
23. Hubackova, S., & Semradova, I. (2016). Evaluation of blended learning. *Procedia - Social and Behavioral Sciences*, 217(5), 551-557. doi.org/10.1016/j.sbspro.2016.02.044
24. Clarke, R. C., & Mayer, R. E. (2016). *E-learning and the science of instruction. Proven guidelines for consumers and designers of multimedia learning* (4th ed.). Hoboken, NJ: Wiley.



The Acceleration Plan for Educational Innovation with ICT is a four-year programme focused on bringing initiatives, knowledge, and experiences for digitalisation together. The programme is an initiative of SURF, the Netherlands Association of Universities of Applied Sciences, and the Association of Universities, and is organised in eight acceleration zones. In the zone Facilitating professional development for lecturers, 18 institutions are working on improving the professional development of lecturers in Dutch higher education.



For more information and our publications, visit
www.versnellingsplan.nl