



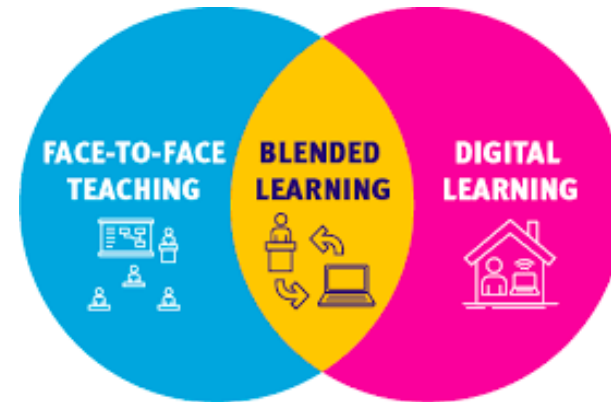
**GHENT  
UNIVERSITY**

# STRATEGIC DEVELOPMENT OF THE BLENDED LEARNING APPROACHES AT THE INSTITUTIONAL LEVEL

Prof. Dr. Tammy Schellens,  
Commissioner active learning , Ghent University

# Structure

- What is blended learning ?
- Digital transformation – ‘post’-corona
- Opportunities of implementing blended learning in institutions
- Challenges of implementing blended learning in institutions
- Examples of blended learning in institutions and effectiveness research
- Guidelines



# WHAT IS BLENDED LEARNING?

Different scholars have **different interpretations of blended learning... lacks a single definitive definition.**

- the **most common definitions refer to a combination of physical classroom learning and virtual environment** (Garnham & Kaleta, 2002; Kim, Bonk, & Oh, 2008; Mohamed-Amin et al., 2014).
- a **student-centred, self-paced, flexible and multi-modal approach** not merely supplementing a face-to-face mode with online Web-based learning (Garrison and Vaughan, 2008)
- **‘strong’ and ‘weak’ blends** in order to show a continuum across very small amounts of e-Learning to significant amount of e-Learning (Littlejohn and Pogle, 2007)

# Our Blend@UGent definition

Blend@UGent is a well thought-out and well-matched mix of online education with on-campus education. Students actively engage with the learning content, both individually, in interaction with each other and with the lecturers.

	Online	On campus
Synchronous	Livestream, hybrid lecture, lesson via zoom/ms teams, online question time/response lecture	Lectures, practicals, working lectures, supervision, discussions,
Asynchronous	Recordings, knowledge clips, learning path, online (self-)tests	

## BLENDED LEARNING...IS NOT NEW

...but is an **emerging trend** in higher education

# DIGITAL TRANSFORMATION OF HIGHER EDUCATION– ‘POST’-CORONA

## BLENDED LEARNING OR EMERGENCY SOLUTION?

- Pre-COVID
  - Growing trend in adopting Elearning/blended learning
  - Not university wide
  - Hardly programme wide
  - Baseline adoption: Learning Management System in most universities
- and then came .... COVID

### 6 Ways Universities Are Responding To Coronavirus

March 6, 2020 · 6:01 AM ET  
Herald on Morning Edition

ANYA KAPENETZ



<https://www.npr.org/2020/03/06/812462913/6-ways-universities-are-responding-to-coronavirus?t=1648641901561>



# E-LEARNING VERSUS “EMERGENCY SOLUTIONS”

- Elearning and blended learning during the COVID pandemic: rapid answer to immediate needs
- Rather emergency solution: sustainable?
- Key question (post) COVID:  
Did/do solutions **fit** the needs and demands of high quality teaching and learning in higher education?

[Nurse Educ Pract](#). 2020 Aug; 47: 102831.

Published online 2020 Jul 5. doi: [10.1016/j.nepr.2020.102831](https://doi.org/10.1016/j.nepr.2020.102831)

PMCID: PMC733541

PMID: [3294317](https://pubmed.ncbi.nlm.nih.gov/3294317/)



## The challenges of COVID-19 in nursing education: The time for faculty leadership training is *now*

[Ashley Singh\\*](#)

Chatham University, 6585 Ross Avenue, Pittsburgh, PA, 15206, USA

[Melanie Haynes](#)



Carlow University, 3:

Article

## Responding to the Initial Challenge of the COVID-19 Pandemic: Analysis of International Responses and Impact in School and Higher Education

Christian M. Stracke <sup>1,\*</sup>, Daniel Burgos <sup>2</sup>, Gema Santos-Hermosa <sup>3</sup>, Aras Bozkurt <sup>4</sup>, Ramesh Chander Sharma <sup>5</sup>, Cécile Swiatek Cassafieres <sup>6</sup>, Andreia Inamorato dos Santos <sup>7</sup>, Jon Mason <sup>8</sup>, Ebba Ossiannilsson <sup>9</sup>, Jin Gon Shon <sup>10</sup>, Marian Wan <sup>11</sup>, Jane-Frances Obiageli Agbu <sup>12</sup>, Robert Farrow <sup>13</sup>, Özlem Karakaya <sup>14</sup>, Chrissi Nerantzi <sup>15</sup>, María Soledad Ramírez-Montoya <sup>16</sup>, Grainne Conole <sup>17</sup>, Glenda Cox <sup>18</sup> and Vi Truong <sup>19</sup>

## Dental Education Challenges during the COVID-19 Pandemic Period in Italy: Undergraduate Student Feedback, Future Perspectives, and the Needs of Teaching Strategies for Professional Development

by [Giuseppe Varvara](#) <sup>1</sup>, [Sara Bernardi](#) <sup>1,2,3,\*</sup>, [Serena Bianchi](#) <sup>2</sup> and [Bruna Sinjari](#) <sup>1</sup> and [Maurizio Piattelli](#) <sup>1</sup>

<sup>1</sup> Department of Innovative Technologies in Medicine and Dentistry, University of Chieti–Pescara ‘Gabriele d’Annunzio’, via dei Vestini 11, 66100 Chieti, Italy

<sup>2</sup> Department of Life, Health and Environmental Sciences, University of L’Aquila, via Vetoio

Published: 14 April 2021

## Comparison of students’ use and acceptance of emergency online learning due to COVID-19 in the USA, Mexico, Peru, and Turkey

[Patricia Aguilera-Hermida](#), [Angélica Quiroga-Garza](#), [Sanjuana Gómez-Mendoza](#), [Carmen nalia Del Río Villanueva](#), [Beatrice Avolio Alecchi](#) & [Dilek Avci](#)

*Education and Information Technologies* **26**, 6823–6845 (2021) | [Cite this article](#)

## Challenges and Opportunities for Russian Higher Education amid COVID-19: Teachers’ Perspective

by [Nadezhda Almazova](#), [Elena Krylova](#), [Anna Rubtsova](#) and [Maria Odinkaya](#)

## The Impact of COVID 19 on University Staff and Students from Iberoamerica: Online Learning and Teaching Experience

by [Mario Jojoa](#), [Esther Lazaro](#), [Begonya Garcia-Zapirain](#) and [Marino J. Gonzalez](#) and [Elena Urizar](#)

<sup>1</sup> Engineering Faculty, Department of Computer Science, Electronics and Telecommunications University of Deusto, 48014 Bilbao, Spain

<sup>2</sup> Faculty of Health Sciences, Valencian International University, 46002 Valencia, Spain

<sup>3</sup> Unit of Public Policy, Simon Bolivar University, Caracas 89000, Venezuela

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translation, Peter the Great St. Petersburg Polytechnic  
ussia  
uld be addressed.

[doi.org/10.3390/educsci10120368](https://doi.org/10.3390/educsci10120368)

- Some institutions have used the pandemic as an opportunity to rethink their operations
- But many institutions and leaders have not had the time to innovate.
- The Difference Between Emergency Remote Teaching and Online Learning (Hodges, Moore, Lockee, Trust & Bond)
  - The design process and the careful consideration of different design decisions have an impact on the quality of the instruction. And it is this careful design process that will be absent in most cases in these emergency shifts.

Where are we now and, more importantly, where do we want to go?



- Some things now seem to have been acquired without any pedagogical debate whatsoever.
  - For example online recordings and streaming
- Little or no reference to research concerning this topics
- Little or no reference to educational vision

# DIGITAL TRANSFORMATION OF THE HIGHER EDUCATION – ‘POST’-CORONA



Traditional way of teaching & learning  
Face to face

**blended** active teaching & learning

Completely **online** teaching & learning

AJ 20-21 universities Go **Blended**

AJ 21-22 “Year of transition”

How can we make this accelerated digital transformation **sustainable**?

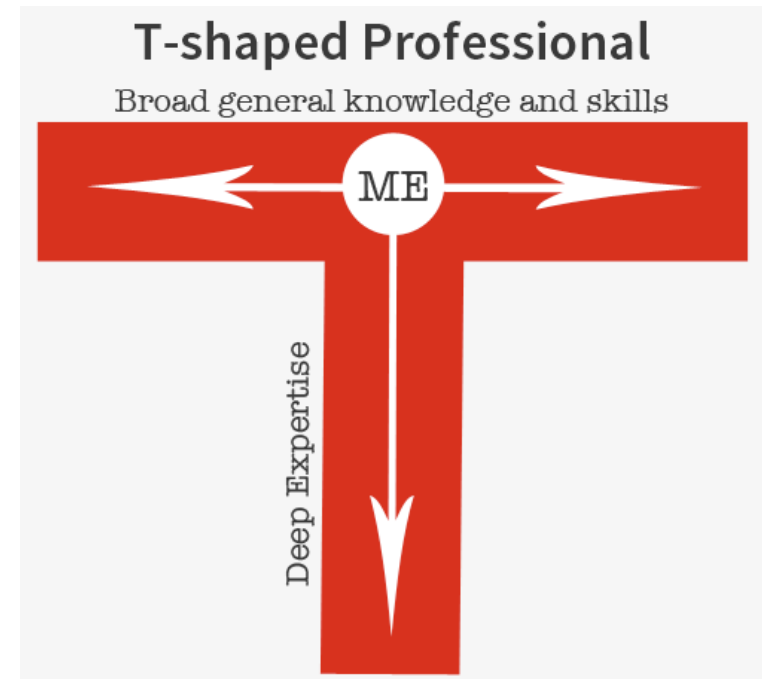
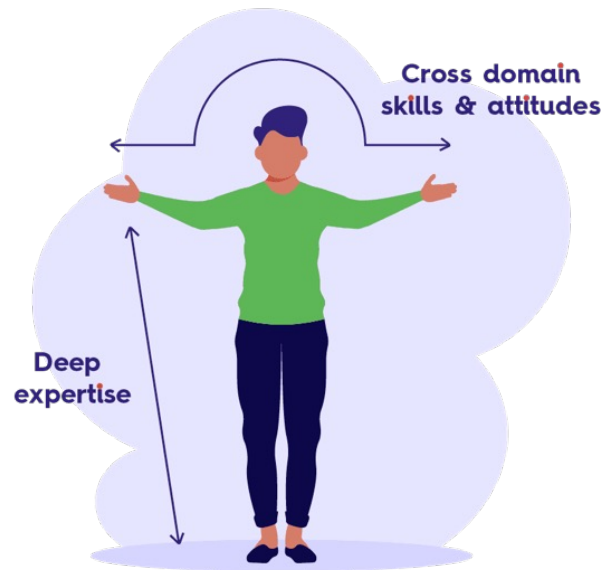
How can we **benefit** from this acceleration?  
What do we want to keep, improve or quit doing?  
What actions are supported by using a blend?

# EDUCATIONAL VISION - FUTURE PROOF EDUCATION @UGENT

focuses on 5 criteria:

- The acquisition of **generic** competencies, in addition to the important **discipline-specific competencies** ('T-shaped professional')
- Gradual acquisition of **international and intercultural competencies** ('stepping stone principle')
- An **inter-/multi-/transdisciplinary** interpretation of the curriculum
- **Social embedding** of curricula with opportunities for challenge-based education, social engagement, ...
- **Student-centered**: active, flexible, with attention to self-direction and guidance

# T-SHAPED PROFESSIONAL





# OPPORTUNITIES OF IMPLEMENTING BLENDED LEARNING IN INSTITUTIONS

## BENEFITS OF BLENDED LEARNING (MASADEH, 2021)

- positively affects learners' **study achievement**
  - learners actively **cooperate** and share knowledge with their peers
  - a switch from passive learning to **active learning**
  - enhances individualization, **personalization** and relevance
  - provides **easier access** to the teaching-learning materials
  - encourages **self-paced learning**

- Blended learning can contribute substantially to **better**, more **attractive**, more **flexible**, more **efficient** and **differentiated** education.
- **Facilitating** existing forms of education and **creating new** ones
- Opportunities to meet the challenges of a rapidly changing, **globalised and connected world**

# EXAMPLES OF BLENDED LEARNING IN INSTITUTIONS AND EFFECTIVENESS RESEARCH

- A lot of research and examples on micro level
- On the meso level there are few examples to be found where impact or effect was measured
  - But lessons can be learned about preconditions on the meso level

## SOME RESEARCH FLANKED EXAMPLES @GHENT UNIVERSITY

1. Dentistry: flipped classroom
2. Biology: flipped classroom
3. Educational sciences: online collaboration
4. Veterinary sciences: online mastery learning in view of skillslab and surgery room
5. Medical education: online clinical simulations
6. Teacher education: complete online course with tasks and peer feedback
7. Bio engineers: CNC module
8. Global engagement module

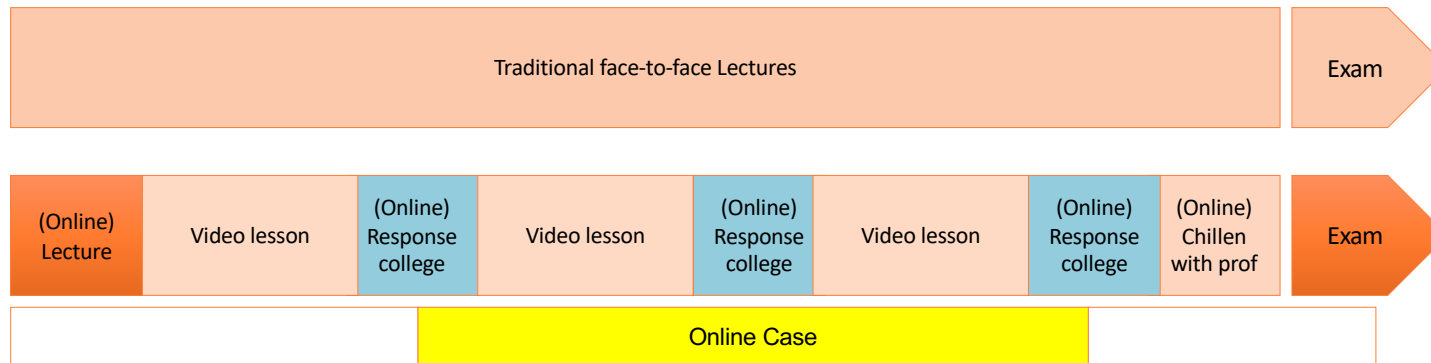
## KEY QUESTIONS RELATED TO EACH EXAMPLE?

- What was the problem/opportunity looking for a solution?
  - What “actions” needed support in this specific setting?
- Did it work: producing evidence?
- What were key conditions that promoted/influence implementation?

## EXAMPLE : (DENTISTRY) PARADONTOLOGY

- What was the problem?
  - Students need to master knowledge base of last three years
  - Students need to apply this knowledge base in real life cases (discussion groups)
  - 200 students – 1 teacher
  - Base for internships
- Why an online/elearning solution?
  - Efficiency (200 students)
  - Monitoring student work
- Did it work?
  - Flipped classroom approach is non-inferior
  - The right balanced blend is important





- **1 lecture** (*structure course and rules*)
- **Video lessons** (*fragments 10 minutes, structured*)
- **3 response colleges** (*questions, clarifications, link practice*)
- **Online case discussion** (*groups in LMS, 2 x week, “anamnesis, clinical picture, parostatus and medical imaging*)
- **“Chillen with the prof”** (*online forum prior to exam*)
- **Exam**

Prof. dr. Hugo De Bruyn - Parodontale therapie - item 1 inleiding

Share Shortcuts

# Parodontale therapie

Videos Prof De Bruyn Item 1

## Chirurgie: Gingivectomie

*Indicatiestelling*

Prof. dr. Hugo De Bruyn  
Hugo.debruyne@ugent.be

00:02:04 of 00:08:38

View: ☐ Comments ☐ Viewing Statistics

Example video lesson

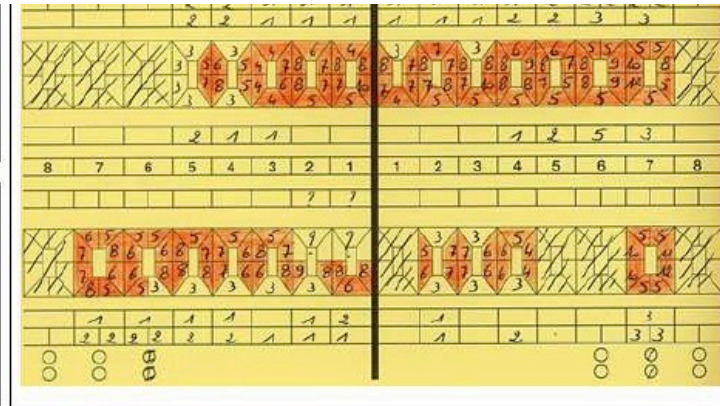
ASA II

Medication: Amlor, Sotalex

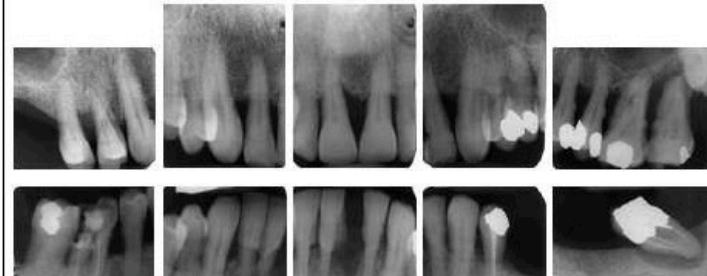
Smoker (2 cigars a day)

No financial restrictions

### B. Clinical Images



### D. Radiological Status



Example online case discussion

# Journal of Dental Education

HOME | ARCHIVE | SEARCH

Institution: Universiteitsbibliotheek Gent

## USE OF TECHNOLOGY IN DENTAL EDUCATION

### Exploring the Relation Between Online Case-Based Discussions and Learning Outcomes in Dental Education

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Jan Cosyn, D.D.S., M.Sc., Ph.D. and Hugo De Bruyn, D.D.S., M.Sc., Ph.D.

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Received February 17, 2014.

Accepted April 7, 2014.

#### Abstract

Online case-based discussions, parallel to theoretical dental education, have been highly valued by students and supervisors. This study investigated the relation between variables of online group discussions and learning outcomes. At Ghent University in Belgium, undergraduate dental students (years two and three) are required to participate in online case-based discussion groups (five students/group) in conjunction with two theoretical courses on basic periodontics and related therapy. Each week, a patient case is discussed under supervision of a periodontist, who authored the case and performed the treatment. Each case includes treatment history and demand, intra- and extraoral images, and full diagnostic information with periodontal radiographic status. For this retrospective study, data were obtained for all

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#### This Article

Journal of Dental Education  
November 1, 2014 vol. 78 no. 11 1552-1557

#### » Abstract

Full Text  
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## Using online periodontal case-based discussions to synchronize theoretical and clinical undergraduate dental education

S. Koole<sup>1</sup>, B. De Wever<sup>2</sup>, L. Aper<sup>1</sup>, S. Vervaeke<sup>3</sup>, A. Derese<sup>1</sup> and H. De Bruyn<sup>3,4</sup>

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#### Keywords

discussion groups; undergraduate dental education; case-based learning; periodontology.

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#### Abstract

**Background:** Clinical experience is important in undergraduate dental education, but (suitable) patients to learn from are often lacking. Online case-based discussions were introduced to overcome patient dependency and to synchronize theoretical with clinical education.

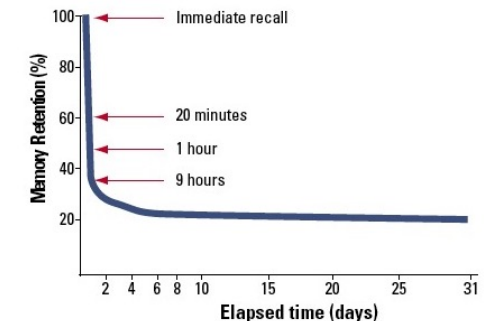
**Materials and methods:** Undergraduate dental students in groups of 5–7 discussed online clinical case reports presenting either minor (2nd year) or complex periodontal pathology (3rd year). Each case consisted of a brief patient history, extra- and intra-oral clinical pictures, periodontal chart, peri-apical and/or orthopantomographic radiographs. Students had to discuss diagnosis and treatment planning. Questionnaires assessed students' and supervisors' general appreciation (score on 20), time investment and opinions about organisation, relation case/course content, future planning, learning effect and online environment (5-point Likert scale). A crossover design with three tests (pre-test, test in between and post-test) was used to investigate whether the frequency of case introduction (one case per week vs. one case element per week) had an effect on learning. Data was analysed with descriptive statistics (questionnaires) and repeated measures ANOVA (crossover design).

Flipped classroom is non-inferior  
"Online case-based discussions, in conjunction with a theoretical course, are valuable additions to the dental curriculum, especially to reinforce the transition from theory to clinical practice." (ibid, p. 52)  
"Student online case contributions are related to outcomes"

# EXAMPLE : BIOLOGY FOUNDATION COURSE

- What was the problem?
  - Students seem not to process traditional lecture content
  - Procrastination: no rehearsing, organisation of knowledge
- Why an online/elearning solution?
  - Guarantee that each individual student is active
  - Individual follow up en individual feedback
  - Pacing of student work
- Did it work?
  - Flipped classroom approach is superior

**FIGURE 1.**  
**The forgetting curve**



The "forgetting curve" was developed by Hermann Ebbinghaus in 1885. Ebbinghaus memorized a series of nonsense syllables and then tested his memory of them at various periods ranging from 20 minutes to 31 days. This simple but landmark research project was the first to demonstrate that there is an exponential loss of memory unless information is reinforced.

Stahl SM, Davis RL, Kim D, et al. *CNS Spectr*. Vol 15, No 8. 2010.



Evidence based design elements (Hattie, 2009):

- Add structure to learning content
- Online lecture (5 minutes)
- Guiding questions
- Feedback (immediate-delayed)

Comparing :

- Combination online – face-to-face
- Differences in direct or feedback

TL – Traditional learning	EL – E-learning	Blended learning conditions	
		BL – Blended Learning	FC – Flipped Classroom
Printed textbook	Printed textbook	Printed textbook	Printed textbook
<i>F2F Lecture</i> (classroom)	<i>Web Based lecture</i> (online)	<i>F2F Lecture</i> (classroom)	<i>Web Based lecture</i> (online)
Guiding questions (classroom)	Guiding questions (online)	Guiding questions (online)	Guiding questions (classroom)
<i>Immediate feedback in class</i>	<i>Delayed feedback</i> (online)	<i>Delayed feedback</i> (online)	<i>Immediate feedback in class</i>

# DOES IT WORK?

Computers & Education 107 (2017) 113–126



Contents lists available at ScienceDirect

Computers & Education

journal homepage: [www.elsevier.com/locate/compedu](http://www.elsevier.com/locate/compedu)



## The impact of a flipped classroom design on learning performance in higher education: Looking for the best “blend” of lectures and guiding questions with feedback



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### ARTICLE INFO

**Article history:**  
Received 5 May 2016  
Received in revised form 28 November 2016  
Accepted 4 January 2017  
Available online 5 January 2017

**Keywords:**  
Flipped classroom  
Blended learning  
E-learning  
Traditional learning  
Web based lecture  
Learning performance

### ABSTRACT

The present study examines the differential impact of studying in a Flipped Classroom (FC) setting, as compared to a Blended Learning (BL), a Traditional Learning (TL), and an E-Learning (EL) setting on learning performance, self-efficacy beliefs, intrinsic motivation, and perceived flexibility. Participants were second year undergraduate students ( $N = 90$ ), enrolled in the “Invertebrates” course in Can Tho University (Vietnam). Participants were randomly assigned to one of the four experimental conditions (TL  $n = 22$ , BL  $n = 22$ , FC  $n = 23$ , EL  $n = 23$ ). Two instructional elements - (1) lectures and (2) guiding questions - were presented through two different modes (online and face-to-face). In the blended conditions (BL and FC) the mode of these elements were altered. The results show that learning performance was superior in the FC setting as compared to other learning settings TL ( $Cohens' d = 1.58$ ), EL ( $Cohens' d = 1.01$ ) and BL ( $Cohens' d = 0.71$ ). Students in the BL setting had a higher learning performance as compared to the EL setting. In addition, we observed that studying in a FC setting had a positive effect on self-efficacy beliefs and intrinsic motivation, but not on perceived flexibility. These findings suggest that the FC setting could be a promising way of enhancing students' learning performance.

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Received: 31 May 2017 | Revised: 22 December 2019 | Accepted: 29 December 2019  
DOI: 10.1111/jcal.12423

### ARTICLE

Journal of Computer Assisted Learning WILEY

## Face-to-face, blended, flipped, or online learning environment? Impact on learning performance and student cognitions

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Email: [ngocthuy.thai@ugent.be](mailto:ngocthuy.thai@ugent.be)

### Funding information

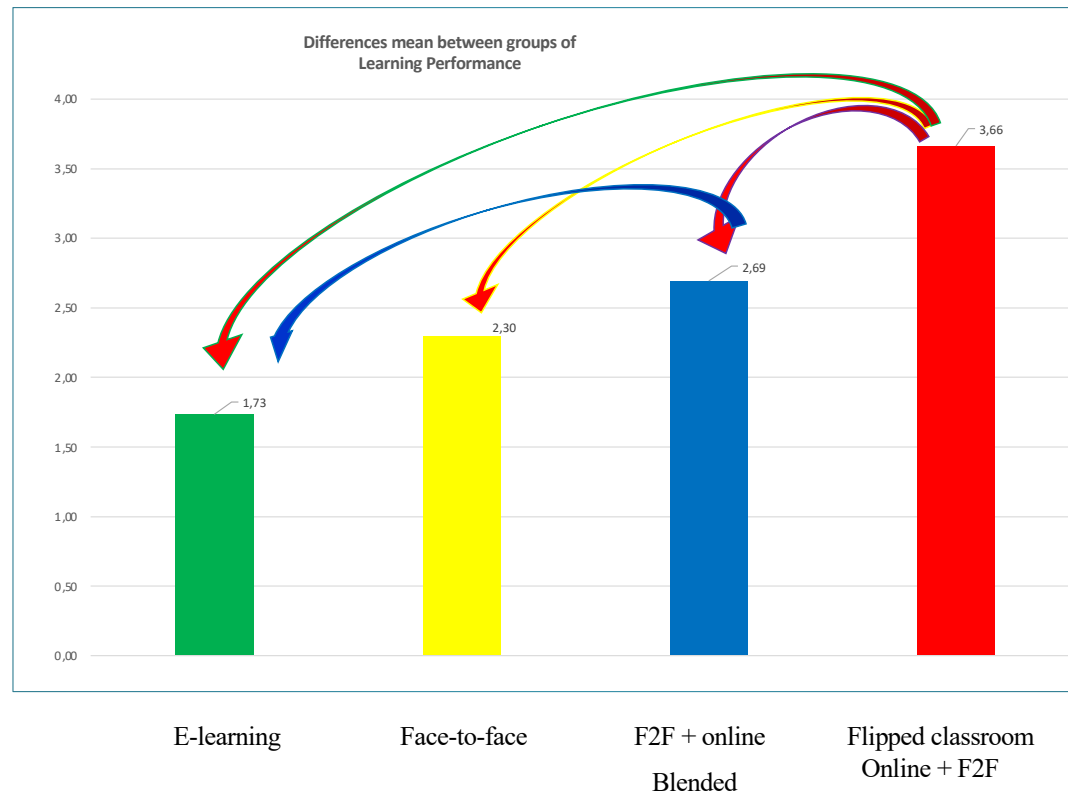
Vietnamese Government, Project 911, Grant/Award Number: No. 911/QD-TTg

### Peer Review

The peer review history for this article is available at <https://publons.com/publon/10.1111/jcal.12423>.

### Abstract

This study compares four learning environments: face-to-face learning (F2F), fully e-learning (EL), blended learning (BL), and flipped classroom (FC) with respect to students' learning performance. Moreover, this present research studies changes in perceived flexibility, intrinsic motivation, self-efficacy beliefs of students, and the interaction effects in these student variables on learning performance. Two learning environment design elements: (1) lectures (2) group discussions building on guiding questions, were manipulated to create the four learning environments. Third-year undergraduate students ( $n = 106$ ), enrolled in the “Animal and Human Physiology” course at CanTho University (Vietnam), were randomly assigned to one of the four learning environments. The results suggest a significant positive differential effect on learning performance when studying in a FC and BL setting. No significant interaction



Superior learning effects and higher autonomous motivation in the blended condition and especially in the flipped classroom condition. Assumptions about strength of cognitive activation

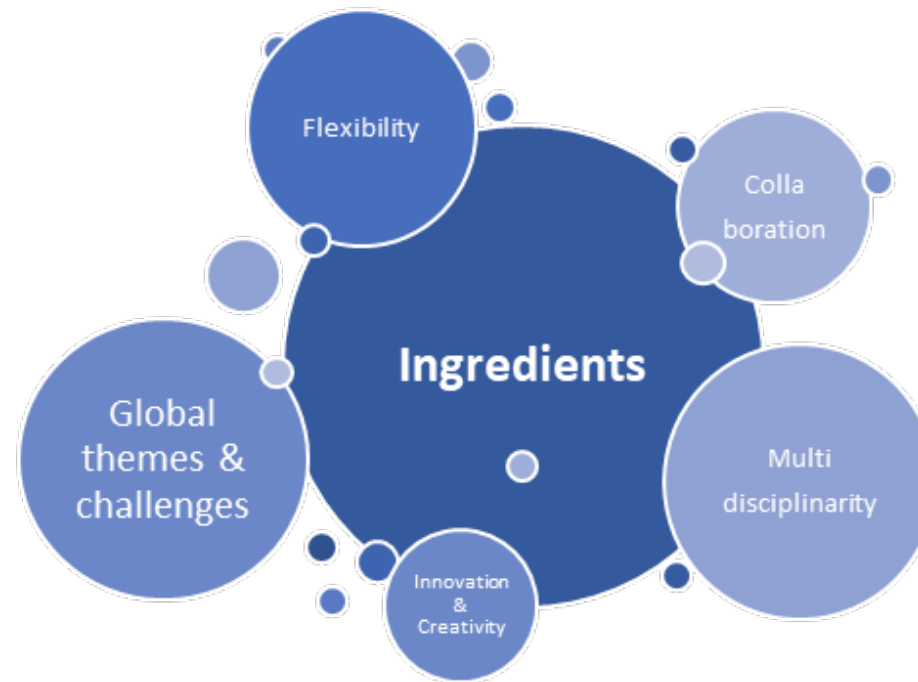


# EXAMPLE : ENLIGHT GLOBAL ENGAGEMENT MODULE

- What was the opportunity?
  - International collaboration: students from 9 different universities learn and develop competences together
  - Multidisciplinary work
- Why an online/elearning solution?
  - Students from 9 universities
  - Solution to work together
- Did it work?
  - Students were very satisfied
  - But also some challenges

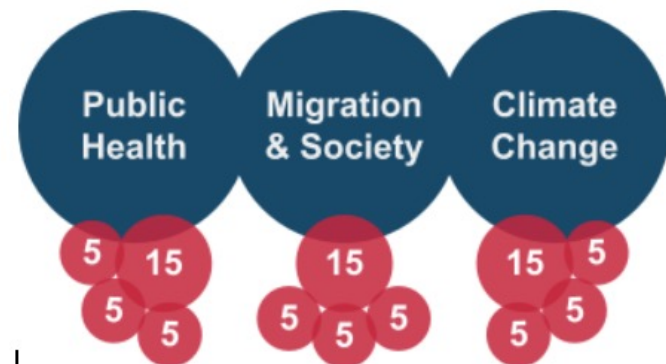


# EDUCATIONAL CONCEPT GEM: CBE



spread over 9 weeks 7 weeks of online activities and 2 weeks on-site at the three different host universities.

- Online introduction
- Online groupwork about a specific challenge
- On campus weeks on 3 different locations
- Online closure



## DOES IT WORK

Very positive results but also some challenges:

- Streamline Guidance - How to coach ?
- workload
  - Strong commitment to peer tutoring ?
- How to embed in the curriculum
- Different academic calendars
- What LMS?

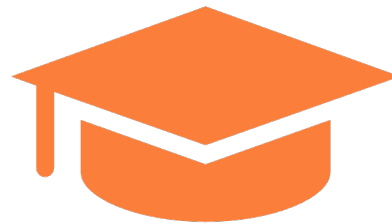
# CHALLENGES OF IMPLEMENTING BLENDED LEARNING IN INSTITUTIONS



Institutions



Instructors

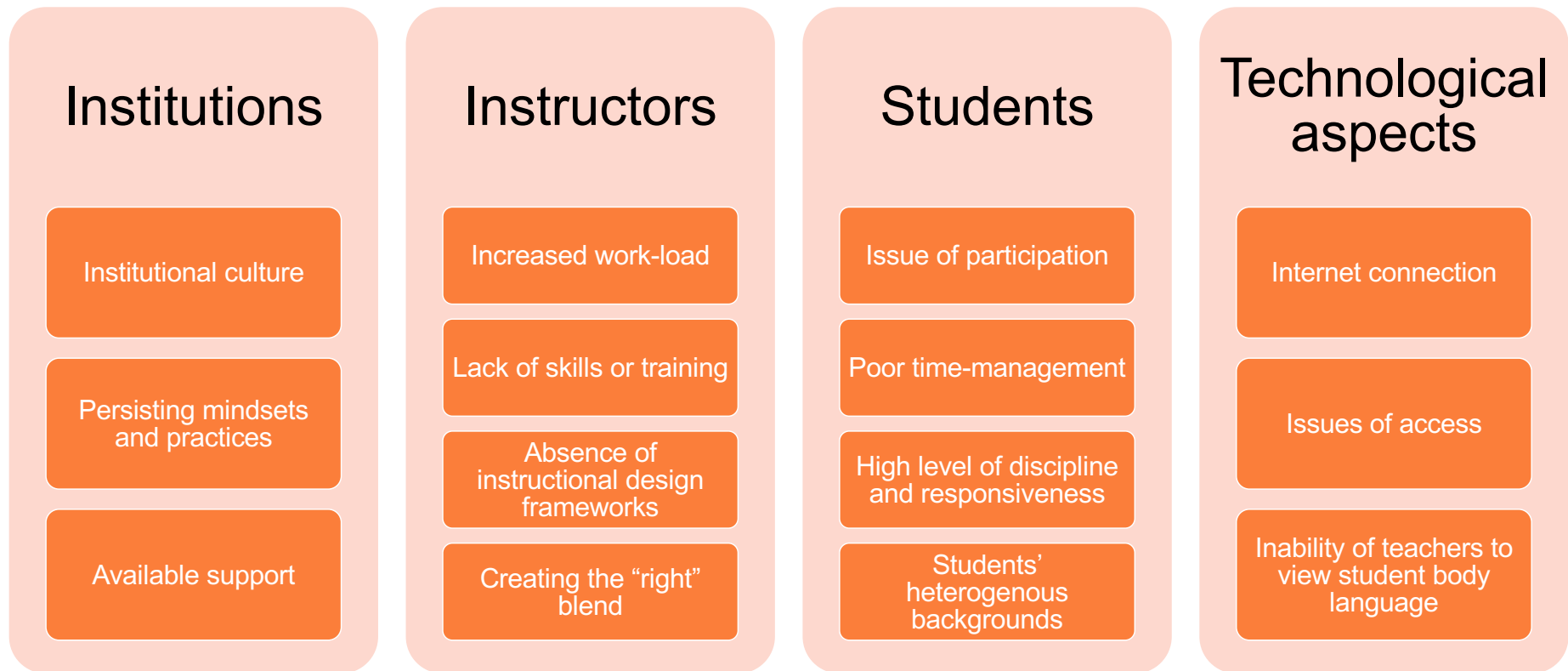


Students



Technological  
aspects

# CHALLENGES (MAAROP & EMBI, 2016)



# Institutions

Institutional culture

Persisting mindsets  
and practices

Available support



# ORGANISATIONAL READINESS

- Rules and regulations: what kind of instructional practices and evaluation approaches can be implemented? (institutional culture)

## EDUCATION AND EXAMINATION CODE

Academic Year 2021-2022



### SECTION I

#### GLOSSARY OF TEACHING METHODS

##### CLINIC (KLINIEK)

Interactive learning situation in which students – under the supervision of a clinician – acquire knowledge and competencies by discussing and examining actual patients (cases) from clinical practice and by determining and/or conducting the appropriate treatment(s) for these patients, next to analysing their progress. In clinics, the patients are actually present; this is not the case in clinical seminars. The supervisor encourages students to think actively, cooperate and become involved. S/he allows students to speak, anticipates students' prior knowledge in a differentiated and individual manner, and provides support when students still lack particular knowledge or competencies. In view of the intensity of these coaching efforts, only a limited number of students are allowed to sit in on clinics.

##### DEMONSTRATION (DEMONSTRATIE)

Collective learning situation in which the lecturer demonstrates particular techniques to a group of students. The students' activity chiefly consists of listening, taking notes and possibly imitating the techniques demonstrated. The interaction, which is chiefly from the lecturer to the students, is aimed at supporting the transfer of knowledge. The lecturer can only check to a small extent whether all students have acquired the new knowledge, and follow-up and coaching

acquired knowledge.

Therefore, it is crucial that the lecturer or other experts provide personalized coaching and feedback on the way in which they apply the acquired knowledge and intervene when necessary.

##### GROUP WORK (GROEPSWERK)

Independent and co-operative learning situation in which students conduct a series of activities as a group, without constant supervision. These activities are intended to produce a final product which is to be submitted for final evaluation. This final evaluation consists of a final mark (per student and/or per group) and/or a collective follow-up discussion. The supervisor's duties are to devise the assignment and to appraise the final product (paper) as well as the process (approach, group processes, etc.). If, during the training period, (groups of) students have but a limited understanding of the positive and negative elements of the final product that they have submitted or the process that they have experienced, they are given feedback and further suggestions for improvement.

##### GUIDED SELF-STUDY (BEGELEIDE ZELFSTUDIE)

A set of guided sessions and independent learning situations in which students acquire and/or process knowledge for (a part of) a course on an individual basis. In the case of self-study, adapted learning materials are provided with built-in coaching

### SECTION II

#### GLOSSARY OF EVALUATION METHODS

##### ASSIGNMENT (WERKSTUK)

Related terms: report, project report, log, paper, group work, writing assignment, dissertation, essay, scale-model, design or draft, record, project assignment.

The evaluation of the end result created by an individual student or a group of students after a specific question or assignment from the lecturer(s). The end result can take on a variety of different forms: reports, papers, scale-models, designs, video productions, etc. The aim of these assignments is to develop and test competencies such as the ability to critically and thoroughly analyse specific cases or issues, to apply knowledge in an integrated manner, or to independently develop new knowledge, methods, understanding and/or scientific writing abilities. As these competencies are usually of a more complex nature, it is important that evaluation criteria are formulated. Such guidelines are to offer sufficient support to both students in the execution of their assignment and lecturers and assistants in reviewing and evaluating students' products.

the students may be people at the place of work, the trainee supervisor and/or the university student counsellor. The advantage in using people from the shop floor to evaluate the students is that these people get to see the students over longer periods of time at work in an operational setting, which prevents the evaluation from amounting to little more than just a snapshot. This form of evaluation is often part of the overall evaluation of the work placement.

##### OPEN BOOK EXAMINATION (OPENBOEKEXAMEN)

Variations: Problem based learning (PBL) assignments, Over All Tests. A written examination in which students can consult sources of information to answer the questions, assignments or cases that are presented to them. Examples of such sources include (sections from) the textbook or syllabus, articles, students' own notes, PowerPoint slides, formula tables, legal texts, the Internet, maps, drawings, or databases. Examinations in which the use of tools such as dictionaries, pocket calculators or drawing materials is permitted are considered "regular" written examinations with open or closed questions instead of open book examinations. For open book examinations, students are not expected to be able to reproduce any information. The aim is to establish to what extent students are capable of employing the available sources in order to establish links, analyse problems, substantiate possible solutions and evaluate the solutions/decisions of a case or issue. Variations of open book examinations are PBL assignments and Over All Tests.

- Developing blended learning in higher education is an innovation that must be **integrated into an existing system** with a well-defined social function, existing traditions, roles, expectations, regulations, organisational, governance and funding models.
- The **complexity** of the existing higher education system with its different policy levels, stakeholders, actors and pressure groups makes it very resistant to change.

# ORGANISATIONAL/INSTITUTIONAL READINESS

- Acknowledgement of ‘new’ ways of dealing with L&I (persisting mindsets and practices)

LEARNING, MEDIA AND TECHNOLOGY  
2020, VOL. 45, NO. 2, 107-114  
<https://doi.org/10.1080/17439884.2020.1761641>



## **Pandemic politics, pedagogies and practices: digital technologies and distance education during the coronavirus emergency**

Ben Williamson<sup>a</sup>, Rebecca Eynon<sup>b</sup>, and John Potter<sup>c</sup>

<sup>a</sup> University of Edinburgh <sup>b</sup> University of Oxford <sup>c</sup> Institute of Education, University College London

The first special issue of *Learning, Media and Technology* of 2020, entitled 'Education and technology into the 2020s: speculative futures', presented a series of papers looking to the future of critical research on educational technologies. As we write, just a few months later, with the coronavirus pandemic sweeping around the world, the future appears more uncertain than ever. Global infection and illness, population lockdowns, and mass closures of educational institutions have engulfed countries across the

Regular Article | Published: 23 May 2021

## **EFL Teachers' Online Assessment Practices During the COVID-19 Pandemic: Changes and Mediating Factors**

[Cong Zhang](#), [Xun Yan](#) & [Junju Wang](#)

[The Asia-Pacific Education Researcher](#) 30, 499–507 (2021) | [Cite this article](#)

2609 Accesses | 5 Citations | 3 Altmetric | [Metrics](#)



Article

## **The Effect of COVID-19 in University Tutoring Models**

David Pérez-Jorge <sup>1,\*</sup> , María del Carmen Rodríguez-Jiménez <sup>1</sup>, Eva Ariño-Mateo <sup>2</sup> and Fernando Barragán-Medero <sup>1</sup>

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<sup>2</sup> Department of Psychology, LIGS University, 17000 Praha, Czechia; [eva.mateo@ligsuniversity.com](mailto:eva.mateo@ligsuniversity.com)

\* Correspondence: [dpjorge@ull.edu.es](mailto:dpjorge@ull.edu.es); Tel.: +34-618-812-433

# Instructors

Increased work-load

Lack of skills or training

Absence of  
instructional design  
frameworks

Creating the “right”  
blend

# TEACHER READINESS?

- Institutional policy: professional development
  - Lack of skills, training



Article

## Responding to the Initial Challenge of the COVID-19 Pandemic: Analysis of International Responses and Impact in School and Higher Education

Christian M. Stracke <sup>1,\*</sup>, Daniel Burgos <sup>2</sup>, Gema Santos-Hermosa <sup>3</sup>, Aras Bozkurt <sup>4</sup>, Ramesh Chander Sharma <sup>5</sup>, Cécile Swiatek Cassafieres <sup>6</sup>, Andreia Inamorato dos Santos <sup>7</sup>, Jon Mason <sup>8</sup>, Ebba Ossiannilsson <sup>9</sup>, Jin Gon Shon <sup>10</sup>, Marian Wan <sup>11</sup>, Jane-Frances Obiageli Agbu <sup>12</sup>, Robert Farrow <sup>13</sup>, Özlem Karakaya <sup>14</sup>, Chrissi Nerantzi <sup>15</sup>, María Soledad Ramírez-Montoya <sup>16</sup>, Grainne Conole <sup>17</sup>, Glenda Cox <sup>18</sup> and Vi Truong <sup>19</sup>

*Nurse Educ Pract.* 2020 Aug; 47: 102831.  
Published online 2020 Jul 5. doi: [10.1016/j.nepr.2020.102831](https://doi.org/10.1016/j.nepr.2020.102831)

PMCID: PMC7335415  
PMID: [32943174](https://pubmed.ncbi.nlm.nih.gov/32943174/)

The challenges of COVID-19 in nursing education: The time for faculty leadership training is *now*

[Ashley Singh\\*](#)

Chatham University, 6585 Penn Avenue, Pittsburgh, PA, 15206, USA

[Melanie Haynes](#)

Carlow University, 3333 Fifth Avenue, Pittsburgh, PA, 15213, USA



Published: 14 April 2021

Comparison of students' use and acceptance of emergency online learning due to COVID-19 in the USA, Mexico, Peru, and Turkey

[A. Patricia Aguilera-Hermida](#), [Angélica Quiroga-Garza](#), [Sanjuana Gómez-Mendoza](#), [Carmen](#)

[Ilanueva](#), [Beatrice Avolio Alecci](#) & [Dilek Avcı](#)



*formation Technologies* **26**, 6823–6845 (2021) | [Cite this article](#)

## Dental Education Challenges during the COVID-19 Pandemic Period in Italy: Undergraduate Student Feedback, Future Perspectives, and the Needs of Teaching Strategies for Professional Development

by [Giuseppe Varvara](#) <sup>1</sup>, [Sara Bernardi](#) <sup>1,2,3,\*</sup>, [Serena Bianchi](#) <sup>2</sup>, [Bruna Sinjari](#) <sup>1</sup> and [Maurizio Piattelli](#) <sup>1</sup>

<sup>1</sup> Department of Innovative Technologies in Medicine and Dentistry, University of Chieti–Pescara 'Gabriele d'Annunzio', via dei Vestini 11, 66100 Chieti, Italy

<sup>2</sup> Department of Life, Health and Environmental Sciences, University of L'Aquila, via Vetoio Coppito 2, 67100 L'Aquila, Italy

<sup>3</sup> Center of Microscopy, University of L'Aquila, via Vetoio Coppito 1, 67100 L'Aquila, Italy

## Challenges and Opportunities for Russian Higher Education amid COVID-19: Teachers' Perspective

by [Nadezhda Almazova](#), [Elena Krylova](#), [Anna Rubtsova](#) and [Maria Odinkaya](#) \*

Higher School of Linguodidactics and Translation, Peter the Great St. Petersburg Polytechnic University, Saint-Petersburg 195251, Russia

\* Author to whom correspondence should be addressed.

*Educ. Sci.* **2020**, *10*(12), 368; <https://doi.org/10.3390/educsci10120368>

## The Impact of COVID 19 on University Staff and Students from Iberoamerica: Online Learning and Teaching Experience

by [Mario Jojoa](#) <sup>1</sup>, [Esther Lazaro](#) <sup>2,\*</sup>, [Begonya Garcia-Zapirain](#) <sup>1</sup>, [Marino J. Gonzalez](#) <sup>3</sup> and [Elena Urizar](#) <sup>4</sup>

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<sup>3</sup> Unit of Public Policy, Simon Bolivar University, Caracas 89000, Venezuela

<sup>4</sup> Deusto Business School Health, University of Deusto, 48014 Bilbao, Spain

# TEACHER READINESS?

- Teaching & Learning: widening, enriching, upscaling, ... the approaches to teaching, learning, assessment, instructional organisation, scheduling
- Emphasis on programme level discussions – university wide discussions

WMU Journal of Maritime Affairs (2021) 20:151–172  
<https://doi.org/10.1007/s13437-021-00239-x>



## ARTICLE



**Building a resilient university: ensuring academic continuity—transition from face-to-face to online in the COVID-19 pandemic**

Inga Bartusevičienė<sup>1</sup>  • Anne Pazaver<sup>1</sup> • Momoko Kitada<sup>1</sup>

# Students

Issue of participation

Poor time-management

High level of discipline  
and responsiveness

Students'  
heterogenous  
backgrounds



# STUDENT READINESS?

— Themes now on the table that cannot be neglected:

Open Access Article

## Psychological Wellbeing and Academic Experience of University Students in Australia during COVID-19

by Rachael H. Dodd<sup>1,\*</sup>, Kevin Dadaczynski<sup>2,3</sup>, Orkan Okan<sup>4</sup>, Kirsten J. McCaffery<sup>1</sup> and Kristen Pickles<sup>1</sup>

<sup>1</sup> Faculty of Medicine and Health, School of Public Health, The University of Sydney, Sydney 2006, Australia  
<sup>2</sup> Department of Nursing and Health Science, Fudan University of Applied Sciences, 36037 Fudan, Germany  
<sup>3</sup> Centre for Applied Health Science, Leuphana University Lüneburg, 21335 Lüneburg, Germany  
<sup>4</sup> Interdisciplinary Centre for Health Literacy Research, Bielefeld University, 33615 Bielefeld, Germany  
\* Author to whom correspondence should be addressed.

Int. J. Environ. Res. Public Health 2021, 18(3), 866; <https://doi.org/10.3390/ijerph18030866>

ORIGINAL ARTICLE PEER-REVIEWED

## Involvement of Medical Students During the Coronavirus Disease 2019 Pandemic: A Cross-Sectional Survey Study

Richard Drexler<sup>1</sup>, Jan M. Hambrecht, Karl J. Oldhafer

Published: August 30, 2020 (see history)

DOI: 10.7759/cureus.10147

Cite this article as: Drexler R, Hambrecht J M, Oldhafer K J (August 30, 2020) Involvement of Medical Students During the Coronavirus Disease 2019 Pandemic: A Cross-Sectional Survey Study. Cureus 12(8): e10147. doi:10.7759/cureus.10147

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## A multi-level examination of nursing students' resilience in the face of the COVID-19 outbreak: A cross-sectional design

Anat Drach-Zahavy✉, Hadass Goldblatt, Hanna Admi, Ayala Blau, Irit Ohana, Michal Itzhaki



## Annals of Medicine and Surgery

Volume 60, December 2020, Pages 271–279

Cross-sectional Study

## Stress and behavioral changes with remote E-exams during the Covid-19 pandemic: A cross-sectional study among undergraduates of medical sciences

Lina Elsalem<sup>a,\*</sup>, Nosayba Al-Azzam<sup>b</sup>, Ahmad A. Jum'ah<sup>c</sup>, Nail Obaidat<sup>d</sup>, Amer Mahmoud Sindiani<sup>d</sup>, Khalid A. Kheirallah<sup>e</sup>

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## The Covid-19 pandemic and the dissolution of the university campus: implications for student support practice

Rille Raaper and Chris Brown  
School of Education, Durham University, Durham, UK

The Covid-19 pandemic

343

Received 7 June 2020  
Revised 9 June 2020  
Accepted 13 June 2020

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## Online learning readiness during the Covid-19 pandemic

Widodo<sup>1</sup>, YE Wibowo<sup>1</sup> and W Wagiran<sup>1</sup>

Published under licence by IOP Publishing Ltd

Journal of Physics: Conference Series, Volume 1700, 3rd International

Conference on Mechanical and Automotive Technology (ICoVEMAT) 2020, 5 October

2020, IOP Publishing Ltd, doi:10.1088/1742-6596/1700/1/012033

## Annals of Internal Medicine®

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Ideas and Opinions | 2 June 2020

## Communication Skills in the Age of COVID-19

Anthony Back, MD, James A. Tulsky, MD, Robert M. Arnold, MD

Author, Article and Disclosure Information

<https://doi.org/10.7326/M20-1376>

Sections

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ORIGINAL RESEARCH article

Front. Psychol., 22 June 2021 | <https://doi.org/10.3389/fpsyg.2021.646145>

## What Type of Social Support Is Important for Student Resilience During COVID-19? A Latent Profile Analysis

Yingping Mai<sup>1</sup>, Yenchun Jim Wu<sup>2,3\*</sup> and Yanni Huang<sup>4</sup>

<sup>1</sup>Business School, Huaqiao University, Quanzhou, China

<sup>2</sup>Graduate Institute of Global Business and Strategy, National Taiwan Normal University, Taipei, Taiwan

<sup>3</sup>Leisure and Recreation Administration Department, Ming Chuan University, Taipei, Taiwan

<sup>4</sup>Department of Psychology and Education, School of Shantou Polytechnic, Shantou, China



# STUDENT READINESS?

– Know your student (issues of participation)

**Table 4.** Learning sources, attendance rate, study duration, and learning environment during the lockdown.

During the COVID-19 Lockdown		Number of Students (out of 463)	Percentage (%)
Learning sources	Studying the specified textbook and attending online classes	185	39.9
	Attending online classes only	278	60.1
Attendance rate	You have attended less than 30%	86	18.6
	You have attended between 30% to 50%	113	24.4
	You have attended more than 50%	198	42.8
	You just attended the exams	66	14.2
Study duration	Less than normal situation	231	49.9
	Almost like a normal situation	145	31.3
	More than a normal situation	87	18.8
You have a separate room for study	Yes	154	33.3
	No	309	66.7

## Technological aspects

Internet connection

Issues of access

Inability of teachers to  
view student body  
language

# IT AND INFRASTRUCTURE READINESS

- Internet and software
- Is there a shortage of (certain types) of rooms?
- Do teachers use a recording studio or video editing unit?
- Overview of used tools



online en blended leren: het nieuwe normaal?

# GUIDELINES

## CONDITIONS

- Student readiness
- Teacher readiness
- Organisational readiness
- IT-readiness

## RECOMMENDATIONS FOR ENHANCEMENTS OF BLENDED LEARNING (MAAROP & EMBI, 2016)

- A **proper needs analysis** to be conducted prior to designing and implementing blended solutions:
  - Analysing the institutional deliverables
  - Understanding existing support mechanism
  - Circumstances and contexts of students, teachers, support staff
  - Technology provision and access
- **Importance of staff training**
- **Teaching assistance**
- **Creating platforms for instructors to network and share know-how**

## IMPORTANT PRINCIPLES ON THE MICRO LEVEL

teachers/Training/faculties

- Thoughtful blend
- Activating and motivating
- Structure
- Transparent and clear
- Guidance
- Feedback and evaluation
- Warm learning environment
- Shared responsibility







## THOUGHTFUL AND COORDINATED BLEND ON THE MESO LEVEL

Gradual and balanced

Goal-oriented (for specific competencies, curricular or policy choices of the program)

Harmonized at the program level

Carried agreements within the program

# GRADUALLY AND BALANCED

Guideline percentages

UGent

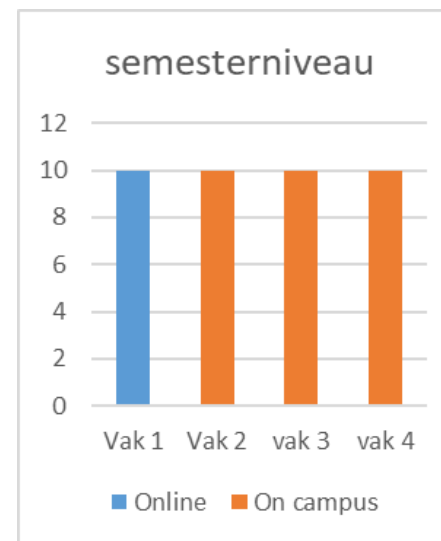
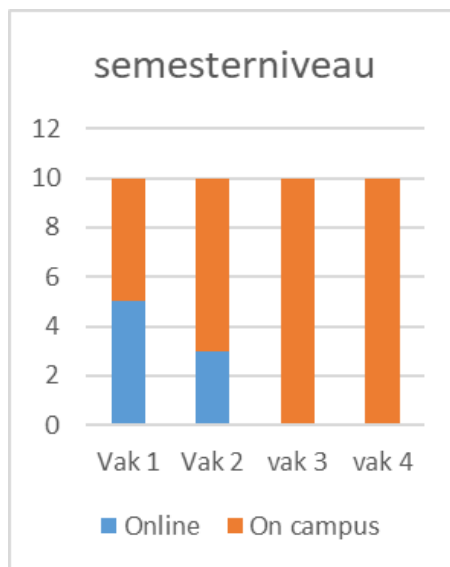
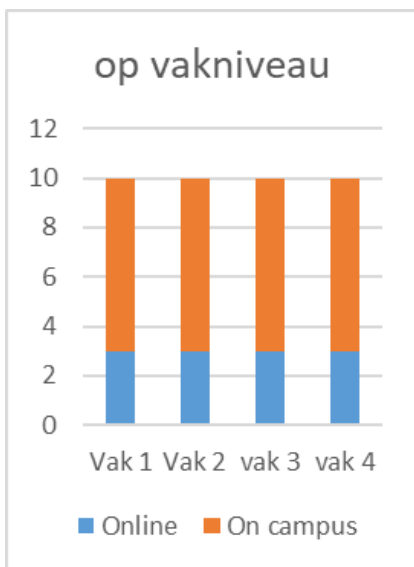
- 1st year: min 70% on campus
- 2nd year: min 60 %
- 3rd year: min 50 %
- 4th & 5th year: min 30%

What is the desired balance between online and on campus?

Base your approach on the guideline percentages.

Are these guideline percentages applicable in the program?

Does this match the current reality? Data possible?



## EVOLUTION TOWARD AN OPTIMAL BLEND OF ONLINE AND ON CAMPUS EDUCATION

- The relationship between online and on campus activities is dynamic and always depends on **content-didactic, socio-psychological, practical and technological** factors
  - such as the competencies you want to achieve, the composition of the student group, the safety measures, the room capacity or the available technology.
- In blended education, as a teacher you can use a multitude of teaching, learning and evaluation activities, **always in function of the intended competencies** (cf. constructive alignment).

## OPTIMAL BLEND – PROGRAM LEVEL

Online and on campus activities form a **whole and mutually reinforce each other**

The program:

- Determine for which course competencies on campus activities remain necessary (e.g.: labs, labs, undergraduate or graduate thesis research) and add value to the students (e.g.: discussion, collaboration, community building).
  - Ensure a balance between synchronous and asynchronous activities.
  - Take into account the workload.
  - Align the use of educational technologies at the course level.
- Ensure alignment of "blends of course units" within a model course year, both in the curriculum and across course years.

## OPTIMAL BLEND TEACHER

- A **well-considered design of blended learning** is necessary to have a positive effect on student learning.
- Principles of good teaching and learning design that apply in a context of physical contact teaching are more prominent in a blended learning environment.
- Designing online learning activities **requires technical domain-specific and didactic knowledge** of teachers (**TPACK model**).
- The online and F2F components in a blended learning environment must be designed in **conjunction** with one another.
- Learning from **fellow subject teachers** is an accessible and effective form of internal professionalisation for teachers.

TO END WITH....



- implementation of a successful blended learning program requires alignment of institutional, faculty, teacher and student goals.
- Continuous evaluation can effectively track the impact of blended learning on students, faculty, and the institution.

## BLENDED LEARNING: A DANGEROUS IDEA? (MOSKAL ET AL., 2013)

- no singular best blended learning model or formula for implementing BL in institutions.
- The mode of delivery in itself has no strong statistical correlation with student success or persistence.
- No “one size fits all”: Instead, set of **institutional variables** are proposed as critical success factors.
  - These variables are drawn from institutions that have achieved success in the online environment over more than a decade of practice.

Thank you!

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