JOBM
Journal of Business Models

Activate Business Model Learning Through Flipped Classroom and Backward Design

Leandro Bitetti[1,2,*]

Abstract

The paper presents a teaching experience in a master course about business models following a pedagogical approach, which combines flipped classroom and backward design to facilitate the development of students' competencies. The results confirm this method is effective, though it requires a significant shift in both lecturers' and students' roles.

1 inno3 Competence Centre, Department of Business Economics, Health and Social Care, University of Applied Sciences and Arts of Southern Switzerland
2 Institute of Marketing and Communication Management, Faculty of Communication Sciences, Università della Svizzera italiana
* Corresponding author at: inno3 Competence Centre, Department of Business Economics, Health and Social Care, University of Applied Sciences and Arts of Southern Switzerland, Stabile Suglio, 6928 Manno, Switzerland. leandro.bitetti@supsi.ch

Introduction

This article aims to present a teaching experience based on the flipped classroom approach, integrated with backward design in a course on business models and business model innovation. The course is labelled "Advanced Strategic Management II". It consists of a course of the Master of Science in Business Administration with Major in Innovation Management at the University of Applied Sciences and Arts of Southern Switzerland (SUPSI). Developing a course about business models is not a matter of selecting the right contents only. Actually, the most critical decision for instructors is about the teaching method to implement. The educational panorama has evolved a lot, with a rise of innovative models such as MOOCs, online university programs, and blended learning. The web has increased the access to information while lowering the cost to access it (Nizet *et al.*, 2016). In the case of the business model subject, the web provides academic online courses for free or through a relatively small fee via online learning platforms like Coursera, edX, and FutureLearn among others. In the same platforms, students can enrol in full business model online programs offered by well-known universities. There is also an increase in online courses given by professionals and consulting firms. In this fiercely competing panorama, higher education may be asked to reconfigure its role from an exclusive place of knowledge transfer to a facilitator role, consistently with the competency-based learning (Burke, 1989; Tardif, 2006). Given that the information is widely distributed, lecturers may be suggested to use the time of the classroom for practical activities, while leaving out-of-class the knowledge acquisition, through videos, readings, etc. The latter is the core idea of the flipped classroom approach.

Following the competence-based perspective, the flipped classroom is an assembly of several educational practices under the approach of active learning (Akçayir and Akçayir, 2018; Bergmann and Sams, 2012; Cecchinato and Papa, 2016). Bonwell and Eison (1991: 19) define active learning as any teaching methodology, which "involves students doing things and thinking about the things they are doing". In other words, students are directly active in their learning process. Active learning fosters students' performance as the synthesis of 1'200 meta-analyses by Hattie (2015: 80) reveals. Many of the highest ranked are principles of the

flipped classroom approach, such as "classroom discussion", "reciprocal teaching", "feedback", "problem-solving teaching", "interactive video methods", and "small group learning". Six decades earlier, Dale (1954) revised its "Cone of Learning", which already showed how people remember more by practicing than by reading or by listening. The latter does not mean that educators should stop asking students to read, but a mix between theory acquisition and practice contributes solving the knowing-doing gap (Pfeffer and Sutton, 2000).

The pedagogical approach presented in this article consists in the combination of flipped classroom and the "backward design" (Wiggins and McTighe, 1998), which is a consistent method with flipped classroom (Hurtubise *et al.*, 2015). The goal of the study is to assess whether the approach is an appropriate methodology to teach and learn business models and business model innovation. The rationale behind the study is supported by the importance for entrepreneurs and managers to develop competencies related to business models. In fact, Zott and Amit (2010) explain that "business model thinking" has been an important priority that contributed to Inditex corporate success. At the same time, "thinking in terms of business model" has been reported as one major challenge when dealing with the ideation of new business models (Frankenberger *et al.*, 2013). An educational program that aims to train future managers or entrepreneurs should be aware that business model related competencies are important but difficult to build. For this reason, teaching theoretical aspects of business models and business model innovation only is not sufficient. Schneckenberg *et al.* (2017) assess business model innovation as a process where decision-makers need to deal with uncertainty.

Approach

This section presents how the approach implemented applies these two models, after providing the theoretical background of both briefly.

The flipped classroom

The basic idea of the flipped classroom is essentially an overturning of the educational logic. Lecturers move before the class the acquisition of knowledge through readings, videos, audios, etc., while in class there is the practice of what learned at home through

discussion and complex problem-solving activities. These classroom activities are often done in small groups under the supervision of the lecturer who acts as a facilitator of the learning process (Bergmann and Sams, 2012; Cecchinato and Papa, 2016; Lage *et al.*, 2000). Bergmann and Sams (2012) argue that there are significant changes in both out-of-class and in-class activities. The activities performed at home are considered equal in terms of time spent, but different at a conceptual level. In fact, two main changes are introduced in class. The first is about the revision and the discussion of the activity performed at home. In the traditional classroom, lecturers go over the concepts taught the previous sessions, and grade in class the homework provided. In the flipped classroom, the revision activity becomes a validation for the lecturer of the knowledge acquired by the students at home. The second is about the amount of time provided to the practice, which allows to increase the complexity of the task and assist students in its fulfilment. In class, students benefit from the tutoring of the lecturer, and from the presence of peers (Hung, 2015). Concerning out-of-class resources, lecturers have to make a choice about the key concepts to focus on in the video, as the latter is shorter than the usual lecture. For this reason, it is imperative to understand the educational goals at the very beginning of the instructional design. The method of backward design provides operational guidance to lecturers interested in designing courses with the approach of the flipped classroom.

The backward design

The "backward instructional design model" has been coined by Wiggins and McTighe in 1998, who criticized the traditional approach in education design. The latter consists of the design of a curriculum by beginning with the selection of the topics and the reading list of the lectures. On the contrary, according to the backward design, once the lecturer identifies the core competencies students should develop, the design continues with the determination of the pieces of evidence the lecturer needs to collect in order to prove the achievement of the competencies aimed (Wiggins & McTighe, 1998). Lecturers need to select the different types of assessment (e.g. tests, quizzes, projects, etc.) to evaluate students' learning performance. Only after these reflections, it is possible to proceed to the planning of the contents and the teaching methodologies

most consistent to contribute to the identified competencies development.

The course planning and implementation

The module of "Advanced Strategic Management II" is offered in the second semester of the first year of the Master of Science in Business Administration at SUPSI. The master program's mission is to develop the "change agents" of tomorrow: professionals capable of managing innovation projects by understanding and answering to emerging customers' needs, in a sustainable way through a systemic approach. The master is a consecutive part-time program conceived to allow students to gain working experience. Every year the master program enrols 25-30 students only. The course of "Advanced Strategic Management II" is at its third edition. The pedagogical approach of the course has always been the flipped classroom. In these three editions, some changes occurred. First, the business model literature has exploded and continues to grow in these last years (Massa *et al.,* 2017) and this contributes to a continuous update of the contents, as well as the cases brought in class to practice. Second, some improvements were made in pedagogical terms. Students' feedback highlighted the key critical aspects of the method, such as the length of the videos and the fact that they worked in groups with low interaction within the class during and after the practical activity. For these reasons, videos have been shortened, while a course blog, moderated by the lecturer, has been implemented. The blog allows students to exchange thoughts with peers and with the lecturer also after the lecture. The blog is a tool that facilitates students' revision, by benefitting from the lecturer's feedback.

Prior to the introduction of the course presented in this article, business models and business model innovation have been taught within the traditional classroom approach by other lecturers, always during the first year of the master program. When students arrived at the second year, they followed a practice-oriented course about innovation management. The lecturer acknowledged a lack of prerequisite competencies in terms of business modeling. Given the uncertain and complex nature of innovation projects, the present course was redesigned in order to implement a mixed approach between theory and practice. In fact, entrepreneurship education claims that theory and practice have to be
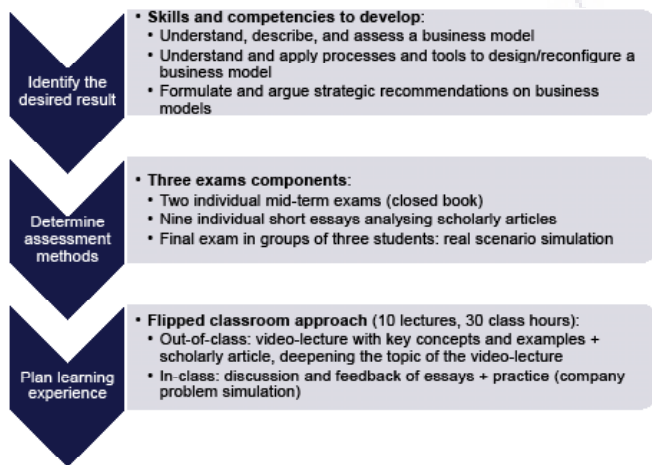
Figure 1: Backward design of the course "Advanced Strategic Management II"

seen as a continuum (Neck *et al.*, 2014). The flipped classroom has been a natural choice to allows both theory acquisition and competencies development.

The presented approach concerns the latest edition of the course. Figure 1 illustrates the three key steps of the course's backward design following the process described by Wiggins and McTighe (1998).

The desired result of the course is to develop a holistic approach to understand the strategic issues of an organization, and to design a structured process to solve these issues. To achieve this goal consistently, "business model" is used as the unit of analysis along the entire module, as it provides a "systemic view" on firms (Massa *et al.*, 2017). In terms of business model and business model related competencies, the course aims at developing the understanding, the description and the assessment of a business model, and the understanding and the application of processes and tools for business model innovation. The ultimate goal of the course is to train students to formulate and argue strategic recommendations on business models.

Once identified the students' competencies to develop through the course, three various types of assessment have been determined. The first is a traditional written individual exam to test the knowledge of students. In fact, in order to express a competence, a student needs to consolidate its knowledge (Abeysekera and Dawson 2015; Tardiff, 2006). As a second summative assessment, students have been asked to prepare a weekly individual short essay concerning a brief discussion of the theoretical concepts. To achieve the course's goals in terms of competencies, students need to understand theoretical concepts, but most importantly they need to interpret the practical implications of these concepts. The questions asked for the essays could be summed up with: "what does this theory mean in practice?". The translation from theory to practice is not so easy to achieve. For this reason, the assessment is performed weekly, also to monitor the students' improvement due to lecturer's feedbacks, the feedbacks from classmates, and the practice done in class. The operationalization of this kind of assessment within the course consists of the writing of an essay of 100 words to be posted on the course's blog at least one day before the lecture. Prior to the lecture, the lecturer comments each post with personal feedback. The third and most important assessment is about a simulation of a strategy workshop on business models. Tardif (2006) asserts that a realistic task is considered the ideal context to assess students' competencies. This edition's final exam is the result of a continuing fine-tuning process, involving colleagues, education experts and "business model" lecturers, also met at The Business Model Conference in 2018. Actually, a competency-based assessment is particularly challenging to design (Tardif, 2006). The first edition of the course involved a simulation in group about four competing companies that dealt with the necessity to innovate their business model. In the second edition, the exam consisted of an open-book case study performed individually, where students were asked to criticize a strategic report written by a consultant for a company. For this edition, a more "in-action" assessment has been experimented to simulate a real scenario even closer. In practice, students have been provided with a realistic situation of a company's actual business model with some additional information (competitive analysis, innovation goals, perceived threats, etc.), and they were asked in groups of three to prepare a strategy workshop. Students had to interpret the challenge provided to them and design an activity that lasted 30 minutes. The day of the final exam the same groups of students performed their designed activities to a team of faculty members, who acted as company members. The lecturer role was to assess how students conducted the workshop. In detail, the consistency of the activity proposed and their ability to manage the activity, by applying tools learned in class, have been assessed. This assessment is

Figure 2: Structure of the course "Advanced Strategic Management II"

a sort of a big match for students, where students have to mobilize all the resources they developed along the course. In order to allow students to play a good match, a meticulous training program has to be designed.

In terms of contents, both in-class and out-of-class education have been organized, over ten lectures. The first five lectures cover basic concepts of business models and business model innovation, while the last five lecturers deal with most advanced and in-depth topics. As represented in Figure 2, out-of-class activities consist of a weekly video-lecture to be watched and a scholarly article to be read and discussed before the class day. In-class activities entail the discussion of the essays written by the students about the scholarly article read, and a simulation, a role play or a real case resolution. These practical activities are often co-developed and co-conducted with local companies the author collaborates with in research projects.

All the out-of-class activities are available at the beginning of the course to students via the course platform. The video-lecture has almost always been a screencast of a personal presentation recorded personally (i.e. a record of a slides-based presentation and the lecturer's voice in background). More increasingly, videos prepared by other lecturers all over the world have been selected, through the educational platforms like Coursera, edX, FutureLearn, and other websites[1]. Besides the authoritativeness of the lecturers and the higher quality of videos, this tactic also allows differentiating the point of views on the topic of "business models".

In addition to the video, a scholarly article is provided to deepen their knowledge of the week's specific topic.

When students arrive in class, the lecture begins with the discussion of the essays. In this activity, the lecturer is less active. The lecturer's primary role is to assess how students argue their essays and actively co-consolidate the knowledge they acquired through the out-of-class activity. Voluntary students initiate the discussion by sharing their thoughts about the article and the topic in general. Then, some students are asked by the lecturer to share a particular subject of their essays, which will be useful for the following case. In fact, the goal of this section of the lecture is to deepen the theoretical basis in order to facilitate the execution of the practical activity. Then, a real case, a simulation, or a role play is launched by the lecturer or by a local firm. For example, the lecture about "Value Proposition Design" debates the "Jobs to be done theory" (see Christensen *et al.*, 2016) and the "Value Proposition Canvas" tool (Osterwalder *et al.*, 2014). In class, students dealt with a local entrepreneur who had challenges in terms of its value proposition. Students played a role-play to develop an improving value proposition, after having applied the jobs to be done theory through the value proposition canvas.

After the activity, groups are asked to prepare and publish their results on the blog. The last minutes of the lecture there is a very important wrap up conducted by the lecturer in order to clearly explain the linkages between out-of-class and in-class activities. This is an extremely useful moment for students, that allows them to never miss the entire course overview and the link between theory and practice as structured in the course program as presented in Table 1.

---

[1] In the latest edition of the module many resources have been selected by www.businessmakeover.eu

Lecture	Topic of the lecture	Goal of the lecture	Practical activity description
1	Introduction to innovation strategy	Understand the different forms and typologies of innovations	Discussion on innovation typologies and examples
2	Introduction on Business Models (BM)	Describe and assess a BM	Local company BM description and evaluation of key trends impact
3 - 5	Introduction on business model innovation (BMI) – basic concepts	Understand the meaning and the process of BMI	Case study on reconstructing the BMI process followed by a local company Case study to understand the BMI feasibility, sustainability, and viability
6	The complexity and uncertainty of BMI	Understand the role of BM components and architecture in BMI, its antecedents and its consequences	Case study of local companies that engaged in modular vs architectural BMI
7	Enablers and barriers of BMI	Understand key moderators of the BMI	Case study to understand how different phenomena affected the (in)success of BMI
8	Value proposition design (VPD)	Understand customers' jobs-to-be-done and design an innovative value proposition	Simulation of a focus group with consumers and VPD of a local startup (role play)
9	Digital BM	Understand how digital BM create, deliver, and capture value, and disrupt the traditional industry logics	Case study of a local multi-sided platform to understand and assess its BM and industry implications
10	Strategic responses to digital disruptors for incumbents	Understand how incumbents could react in response to the emergence of digital disruptive BM	Simulation of a decision-making process of an incumbent to react to a digital BM

Table 1: Description of the lectures' goals and relative practical activities

Key Insights

After three editions of the course, results indicate that the flipped classroom approach combined with the backward design is an effective approach to develop business model related competencies. The final assessment proved that students mastered competencies to design a business model innovation workshop, consistently with the specific situation of the case provided to them. The study assesses that these results could have been possible thanks to the pedagogical approach used. In the context of the present study, the topic of business model is quite new for students and it is also complex from a conceptual point of view. Moving before the class all the acquisition of theoretical concepts through videos and giving students the time to absorb the theory allowed them to develop business model related competencies with the right pace. In particular, students had time to understand and deepen the theory behind the business model construct. Then, in class, students

realized the complexity of a business model. Instead of "filling the boxes" of the business model of a fake company, bringing to them a real situation made them develop a critical attitude towards a company's business model. This outcome is more difficult to achieve also through only practice-oriented programs. In fact, balancing theory and practice by giving the right timing for both is essential. The flipped classroom methodology was crucial to develop an understanding of the barriers to business model innovation. Showing to the students some cognitive challenges (as in Frankenberger *et al.*, 2013) has been an important prerequisite to interview an entrepreneur and understand in practice some barriers he faced during the business model innovation process. Students understood concretely how to solve some cognitive challenges that prevent business model innovation. The study shows the same results with the value proposition design lecture. Besides knowing technically how to describe a job to be done, students understood how difficult

is that task in reality. In all this, the lecturer plays the delicate role of keeping the silver thread all along the course.

The study reports the same positive outcomes with other flipped classroom experimentations. Consistently with Akçayir and Akçayir (2018), the impact on students' performance in the assessments is particularly positive. Both knowledge-based and competency-based exams report low rates of failures (i.e. one student per year) and lasting results as confirmed by other lecturers in the subsequent courses. In terms of engagement and motivation students actively participate and engage with positive energy. When the lecture takes place, nonattendances are very rare and even the shyest students are delighted to discuss with peers. The flipped classroom environment makes the student feel comfortable to share their point of view with peers and with the lecturer (Akçayir and Akçayir, 2018).

Moreover, students' perceptions confirm the effectiveness of the approach. Every year a focus group is conducted with some voluntary students to ask them some suggestions to improve the course and specific insights about their satisfaction, in a very open and honest environment, once grades have already been communicated to them. Students feel more competent after the course. They appreciate the fact that the approach taught them a mindset and a process to be able to understand and solve complex business problems. The yearly anonymous course evaluations confirm these perceptions. In the first two editions, students gave positive feedback to the course (a mean of 3.8/4 the first year, and of 3.9/4 the second year, while the evaluation of the third year is ongoing). Further comments of the course evaluations show that students were surprised about the workload that did not increase compared to other traditional classes. Additionally, students confirmed that the flipped classroom approach constrained them to study every week. This allowed them to perform and learn better in class. Thus, they spent less time preparing for the written exams and the final assessment.

One last key insight is about lecturer personal satisfaction. This approach revolutionized how teaching activity is conceived: it is challenging but much more rewarding and stimulating.

Discussion and Conclusion

As the competitive landscape has changed, it is lecturers' responsibility to guide students to develop significant managerial competencies about business models to help companies to stay competitive (Zott and Amit, 2010), and to facilitate business model innovation processes (Frankenberger et al., 2013). The flipped classroom combined with the backward design is a mindset that allows business model lecturers to enhance students' competencies. Even if it is not a brand-new approach and some convergence about advantages and pitfalls is reported in the literature, it is still difficult to warrant generalizability (Akçayir and Akçayir, 2018; Hung, 2015). Both literature and the author's experience highlight some potential issues in implementing this approach. These challenges are both in general and in the specific context of a course on business models. Here, the article discusses the main obstacles and possible solutions.

First, besides the technicalities of the backward design and of the flipped classroom, lecturers should be aware that this approach requires a shift in both lecturer's and students' roles. Along the course, it is imperative to provide frequent feedback to inform students about their development (Bergmann and Sams, 2012). The use of a blog, as in the present study, facilitates the continuous feedback process. Moreover, flipped teachers have to verify if students performed the activities expected in preparation of the lecture and if they understood the concepts. Scholarly literature provides many examples such as online quizzes, clickers, Q&A, discussion boards, etc. (Abeysekera and Dawson, 2015; Lage et al., 2000; Vaughan, 2014). For those who are inspired by the present approach, but worried about the time needed, Hurtubise et al. (2015) suggest that the flipped classroom could be implemented also in a small educational unit as a single lecture. Technically speaking, this is possible but pay attention to the fact that students need to become gradually familiar with the approach to benefit from its advantages. In fact, students are not always used to active approaches in learning. Most lectures are still "talk and chalk" and when students shift courses and encounter a flipped lecture, confusion may arise as both lecturer's and students' roles change. Moreover, the most frequently cited pedagogical challenge reported by Akçayir and Akçayir (2018) is a poor students' preparation prior to

the lecture. For this reason, the most important task to perform at the beginning of a flipped classroom course is to explain the "rules" and the value of the approach and to be clear on its implications. A useful tactic to use is to bring other students' feedbacks and perceptions about the approach to lower the preconceptions such as the fact that flipped classroom means increased workload.

Second, there is a general worry about the application of the flipped classroom approach in large class sizes. The master's in business administration at SUPSI is characterized by a small number of participants. Of course, this facilitates the implementation and conduction of active learning approaches. Nevertheless, there are different effective flipped classroom experiences in courses with a high number of participants (Butt, 2014; Davies *et al.*, 2013; Hung, 2015). In these cases, it is important to carefully determine the in-class activities in order to ensure active tutoring (e.g. more lecturers in class, increased peer work, use of digital technologies, and virtual coaching). As it is easy to imagine, large class sizes increase the complexity of flipped classroom management, also because of infrastructure requirements (Akçayir and Akçayir, 2018).

Third, business model and business model innovation are complex topics. In the flipped classroom approach,

theoretical concepts are acquired by students alone. Even if the classroom activity will complement students' knowledge, it is important for instructors to carefully select or produce the conceptual resources (e.g. videos, articles, etc.). Students claim they would benefit from more guidance at home in the flipped classroom approach (Akçayir and Akçayir, 2018). The model works if the lecturer is able to build a consistent program. In the present case, the course has been split in two: basic concepts on business model and business model innovation (i.e. lectures from 1 to 5), and advanced concepts (i.e. lectures from 6 to 10). Even if some advanced concepts would be useful to come before in time, the first lectures aimed at developing some basic skills and understanding of the topic.

To conclude, this article explains in detail an innovative teaching approach, by presenting the process followed, the adjustments done, the assessment methods, and the contents of the course. Business model instructors can adapt the approach according to their own necessities and design an effective and engaging educational program. In fact, replication of the method is possible. The article contributes to the innovation management education literature, by shedding lights on how the right mix and allocation of time between theory acquisition and practice activity fosters the development of students' competencies.

References

Abeysekera, L. & Dawson, P. (2015), Motivation and cognitive load in the flipped classroom: definition, rationale and a call for research, *Higher Education Research & Development*, Vol. 34, No. 1, pp. 1-14.

Akçayir, G. & Akçayir, M. (2018), The flipped classroom: A review of its advantages and challenges, *Computers & Education*, Vol. 126, pp. 334-345.

Bergmann, A. & Sams, J. (2012), *Flip your Classroom: Reach every Student in every Class every Day*, International society for technology in education, New York.

Bonwell, C. C. and Eison, J. A. (1991), *Active Learning: Creating Excitement in the Classroom*. 1991 ASHE-ERIC Higher Education Reports. ERIC Clearinghouse on Higher Education, The George Washington University, One Dupont Circle, Suite 630, Washington, DC 20036-1183.

Burke, J.W. (1989), *Competence-based education and training*, Falmer, London.

Butt, A. (2014), Student views on the use of a flipped classroom approach: Evidence from Australia, *Business Education & Accreditation*, Vol. 6, No. 1, 33-43.

Cecchinato, G. and Papa, R. (2016), *Flipped Classroom: un nuovo modo di insegnare e apprendere*, De Agostini, Novara.

Christensen, C. M., Hall, T., Dillon, K., & Duncan, D. S. (2016), *Competing Against Luck: The Story of Innovation and Customer Choice*. Harper Collins Publishers, New York.

Dale, E. (1954), *Cone of learning, Audio-Visual Methods in Teaching* (revised), Holt, Rinehart & Winston, New York.

Davies, R.S., Dean, D.L. and Ball, N. (2013), Flipping the classroom and instructional technology integration in a college-level information systems spreadsheet course, *Educational Technology Research and Development*, Vol. 61, No. 4, pp. 563-580.

Frankenberger, K., Weiblen, T., Csik, M. and Gassmann, O. (2013), The 4I-framework of business model innovation: A structured view on process phases and challenges, *International journal of product development*, Vol.18, No. 3/4, pp. 249-273.

Hattie, J. (2015), The applicability of Visible Learning to higher education. *Scholarship of Teaching and Learning in Psychology,* Vol. 1, No. 1, pp. 79-91.

Hurtubise, L., Hall, E., Sheridan, L. and Han, H. (2015), The flipped classroom in medical education: engaging students to build competency, *Journal of Medical Education and Curricular Development*, Vol. 2, pp. 35-43.

Hung, H. T. (2015), Flipping the classroom for English language learners to foster active learning, *Computer Assisted Language Learning*, Vol. 28, No. 1, pp. 81-96.

Lage, M.J., Platt, G. J. and Treglia, M. (2000), Inverting the classroom: A gateway to creating an inclusive learning environment, *The Journal of Economic Education*, Vol. 31, No. 1, pp. 30-43.

Massa, L., Tucci, C. L. and Afuah, A. (2017), A critical assessment of business model research, *Academy of Management Annals*, Vol. 11, No. 1, pp. 73-104.

Neck, H. M. Greene, O. G., Brush, C.G. (2014), Practice-based entrepreneurship education using actionable theory. In M.H. Morris (Ed.), *Annals of Entrepreneurship Education Pedagogy*, Edward Elger Publishing, Northampton, MA, pp. 3-20.

Nizet, I., Galiano, O. and Meyer, F. (2016), Vers un cadrage théorique pour comprendre la classe inversée, in Dumont, A. and Berthiaume, D. (Eds.), *La pédagogie inversée*, De Boeck Supérieur, Louvain-la-Neuve, Belgium, pp. 39-50.

Osterwalder, A., Pigneur, Y., Bernarda, G., Smith, A., (2014), *Value proposition design. How to create products and services customers want*. Wiley, Hoboken.

Pfeffer J. and Sutton, R. I. (2000), *The knowing-doing gap: How smart companies turn knowledge into action*, Harvard Business School Press, Boston.

Schneckenberg, D., Velamuri, V. K., Comberg, C., and Spieth, P. (2017), Business model innovation and decision making: uncovering mechanisms for coping with uncertainty. *R&D Management,* Vol. 47, No. 3, pp. 404-419.

Tardif, J. (2006), *L'évaluation des compétences*, La Chenelière, Montréal.

Vaughan, M. (2014), Flipping the learning: An investigation into the use of the flipped classroom model in an introductory teaching course, *Education Research and Perspectives*, Vol. 41, No. 1, pp. 25-41.

Wiggins, G. and McTighe, J. (1998), What is backward design? in *Understanding by Design*, Merrill Prentice Hall, Upper Saddle River, NJ, pp. 7–19.

Zott, C. and Amit, R. (2010), Business model design: an activity system perspective. *Long range planning*, Vol. 43, No. 2/3, pp. 216-226.

About the Authors

Leandro Bitetti is a lecturer and researcher at the inno3 Competence Centre at the Department of Business Economics, Health and Social Care of the University of Applied Sciences and Arts of Southern Switzerland (SUPSI), and a PhD student in the topic of Business Model Innovation at the Faculty of Communication Sciences at the Università della Svizzera italiana, in Lugano. He holds a Master of Science in Management with a specialisation in Organizational Behavior from the University of Lausanne. His main responsibilities concern education, research and consulting activities in the field of innovation management, in particular in the area of innovation strategy and business model design.