



Blended entrepreneurial education for high growth in Life Sciences and Health (GROWTH)

Objective R2 – To collect best practices on innovative methods for entrepreneurial education – lessons learned from MBI LS&H

Best practices innovative teaching methods for entrepreneurial learning

Entrepreneurship is essential for successful commercialization and effective innovation with impact, and research confirms the high importance of entrepreneurial education. In order to raise fast growing companies in the life sciences and health sector, and to contribute to a strong sustainable European innovation community, ambitious entrepreneurs should be immersed with high level entrepreneurship education. Influences on the emergence of entrepreneurial intentions, as well as on the quality of entrepreneurial competences have been shown to increase the survival rate of new businesses and their growth.¹

Innovative teaching methods are recognized to stimulate entrepreneurial performance in the knowledge economy. As stated by the European Commission: “Education has an important role to play in improving the entrepreneurial key competence of European individuals.” (Effects and impact of entrepreneurship programmes in higher education, European Commission, *Brussels, March 2012*). In order to successfully implement entrepreneurial learning, it is necessary to choose the right methods of teaching and to adjust them to the objectives and competences that the individuals should achieve.² Many authors note that entrepreneurial learning methods should be interactive and action oriented. However, research has shown that the level of application (‘learning on the job’) is very low.³ Indeed many academic programs are still oriented towards maximal training of students towards an academic career and do too little skill mining towards industry readiness and entrepreneurial skills.

As a response, the UMCU, VIB and FlandersBio have developed a post-graduate Master of Business Innovation in Life Sciences & Health program (further: MBI LSH), which is a unique ‘on-the-job’ MBA development program for entrepreneurial growth (<http://www.mbi-lifesciencesandhealth.com>). The program is tailored to specific needs of the life sciences and health industry and aiming at acquiring and further developing entrepreneurial competences needed for the sector. MBI LSH provides participating entrepreneurs with an open learning environment allowing out-of-the-box thinking and ‘learn on the job’ methods, capabilities and skills that can be applied directly to their own business. Participants learn how to create impact in their organization, developing or strengthening the entrepreneurial mindset,

¹ Lans, T. W., Hulsink, H., Baert, and M. Mulder. 2008. Entrepreneurship education and training in the small business context: Insights from the competence-based approach. *J. of Enterprising Culture* 16 (4): 363–83.

² Valerij Dermal, Development of entrepreneurial competences, *IJEMS* | Volume 3 | 2010 | Number 1

³ European Commission, March 2012, Effects and impact of entrepreneurship programmes in higher education

improve business and innovation leadership skills, learn from and be inspired by successful serial entrepreneurs. Through the program participants have access to a vast network of experienced LSH professionals, peers and new in-depth connections all over Europe and the US. Close cooperation with other parties for the execution of the MBI LSH, had revealed a need for further international collaboration and modernization of the higher education system in this field on EU level, leading to the initiative to take on the GROWTH project.

Best Practices for entrepreneurial education

Lessons learned from the MBI LSH program **Insights from the GROWTH partners can/need to be added**

The MBI LSH program counts 42 graduates (with 23 participating ventures) from the first two runs in 2014-2015 and 2015-2016. Based on the experiences, evaluations, testimonials and recommendations from participants, faculty, coaches, and educational and advisory boards, best practices have been collected.

Target audience, peers and engagement

The program is designed with **health and life sciences ventures** in mind that **survived the start-up phase** and are now **facing a next step of growth or expansion** (e.g. next round of investment, upscale production, geographical expansion). The program can accommodate a range of acceleration phases, and a mix of ventures types (small vs corporate) or topic (devices, biotech, eHealth, pharma), but a certain level of homogeneity is desirable so that participants can relate to each other (venture, leadership or personality) and **learn from each other**. In addition, commitment from participants is demanded in order to execute a consistently top quality program with high level of engagement and added value for both participants and the MBI LSH network of experts.

Key assets of the entrepreneurial education delivered by the MBI LSH program are (not in any particular order):

- working on own venture: all delivered content is intended to be applied in or applicable to own business
- interaction with other ventures (peers)
- quality time for executive team (monthly retreat)
- time for implementation (i.e. not a pressure cooker time frame)
- access to a great international network of experts and customized matchmaking (site visits, networking events)
- Multidisciplinary curriculum aimed at getting entrepreneurs ready to speed up their promising health care innovations
- Effective mix of in-depth academic learning, skill development, coaching sessions, workshops/labs to apply knowledge and skills to own business, networking events
- Content delivered by academic professionals or professional trainers
- Use of experts in the field (serial entrepreneurs, VCs, regulatory experts, insurance companies etc) for inspirational keynotes, assessment panel experts or coaching sessions.
- US tour with opportunities to pitch for business and funding opportunities
- Inspirational: site visits are highly valued by participants

Considerations, based on evaluations and feedback

- Program sessions would benefit from a modular structure (consistency in format, time, content build)
- Training days should allow for more/scheduled time for interaction with peer entrepreneurs, reflection on own business, preparation for coaching
- Blended learning: balance between time investment (scheduled training days vs online in own time) and meeting people
- Desirable to increase content on financial knowledge and skills

Best practices driving MBI LSH program adjustments

Above insights have been used to adapt the MBI LSH program, with the 2017-2018 curriculum currently being executed. The current curriculum is structured in modular training days consisting of four learning tracks in which the content will be delivered. These tracks are: foundations (to provide theory, principles and context); implementation labs (to apply foundations to own venture); skills (development of entrepreneurial and business skills) and mix & match ecosystem networking (for building and expanding networks).

The table below shows an overview of topics covered in the updated curriculum. This is consistent with the entrepreneurial knowledge, skills and attitudes (listed in R1) that are considered important to drive accelerated growth of a LSH venture for accelerated growth venture.

MBI LSH 2017-2018 Topics

- Foundations and context (incl. health ecosystem; value proposition; IP; product-market strategy; team)
- LSH Ecosystem and payer perspective (payer perspective and market access; market positioning & differentiation; patient journey; patient perspective; pricing)
- Inside out: Business modelling (Scale-up; planning; partnering & collaboration; life cycle management & marketing)
- Leadership
- Funding (critical assumption planning; how VC's look at opportunities; corporate funds; boards)
- Finance and financial control (Financial planning; milestone planning; fund & fundraising)
- Driving strategic growth (Term sheet; negotiation and deal making)
- US showcase tour (pitching, site visits)
- Successful strategy execution (strategy implementation; change management & course correction; implementation planning; roadmap)
- Capabilities & capability mapping (personal branding; personal effectiveness; coaching and delegating; networking)

Best practices as input for GROWTH

Best practices as identified through the MBI LSH program will also be used in the GROWTH project to further develop and implement educational building blocks:

- 1) Online Modules (SPOCs); to give the participants a deeper understanding on the entrepreneurial business functions, process and challenges. The modules provide them with state-of-the-art knowledge in the specific areas as identified.
- 2) Entrepreneurial Labs with coaching; to show the participants how to use these management entrepreneurial knowledge and help them to apply this to their own venture. The coaching and mentor system from a diverse network of LSH experts, serial entrepreneurs and passionate peers in program share industry, venture knowledge and leadership experiences that enable them to learn-on-the-job in a free and open way. This system helps venture leaders to grow on a fast track from technically trained managers to company leaders in new emerging health industries.
- 3) Simulation Games; to model performance, test assumptions and practice strategic skills in complex setting to learn how to make strategic choices and how to be decisive in different situations.
- 4) Mix & Match Events; provide a platform to stimulate entrepreneurial success while creating a collaborative global ecosystem to build positive change in the LSH industry. The events offer the participants the opportunity to develop and work their global network either to provide them with opportunities for mirroring their case, to find strategic partners, investors, a window to the market, inspiring mentors, refreshing ideas or inspiration on their venture journey.

Together, these educational building blocks represent an innovative interactive, action-oriented blended learning methodology. To provide a well build integrated program many considerations regarding program content, logistics, contribution of experts, involvement of partners, cost and such, have to be taken into account. The overall set-up of the blended learning methodology needs to provide coherence and synergy between program topics. Consistency will be further enhanced by use and development of tools to enable the participants to implement learnings into their ventures and to monitor progress over time.