UNDERGRADUATE RESEARCH MODEL@ VMU Faculty of Law

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Context and Purpose

- **BLASTER** is a collaborative research group of 6 universities, aimed to expand and reinforce the best of Liberal Arts and Science Teaching through *inter alia* the development of undergraduate research (UR) guidelines for student and teacher and showcasing the best practices.
- **Meeting** of partners on October 19-20, 2016 at Leuphana Universität (Lüneburg, Germany) led to the undertaking of Vytautas Magnus University (VMU) team to find out (explain), under what conditions students would engage in UR voluntarily.
- After having presented the research proposal to VMU administration, it was slightly modified. It was broadened to prepare the model of UR, however the target group was limited down to the VMU Faculty of Law. The reason for the change was mostly the willingness to prepare an exemplary showcase of the UR for the rest of VMU.
- Therefore the **purpose** of the research was set to develop a model of undergraduate research at Vytautas Magnus University Faculty of Law, which would integrate *inter alia* the fields of student-supervisor relationship, results of the undergraduate research and university support, and which would allow students to be trained to solve problems efficiently, creatively and interdisciplinary.
- For the purpose of this research, the UR platform "Future Law Lab" has been launched to build a community of students, social partners and mentors, who are curious of how we should shape legal framework and business of law, in order to achieve the most efficient reconciliation of law and technology. This experimental UR platform enabled us to access the students, social partners and administration for qualitative data collection, and experiment on various aspects of UR management. This, in turn, enabled us to understand the stakeholders' interests, obstacles and opportunities of UR at VMU.
- From 2016 October to this date the Future Law Lab has had 3 workshops, 7 group and 30 of individual meetings with students. 12 presentations and discussions have been carried with the social partners, 6 public speeches have been given and 1 student conference has been organized. Important cooperation agreements with the Start Up Space at Kaunas University of Technology (link) is at the final stage of signing.



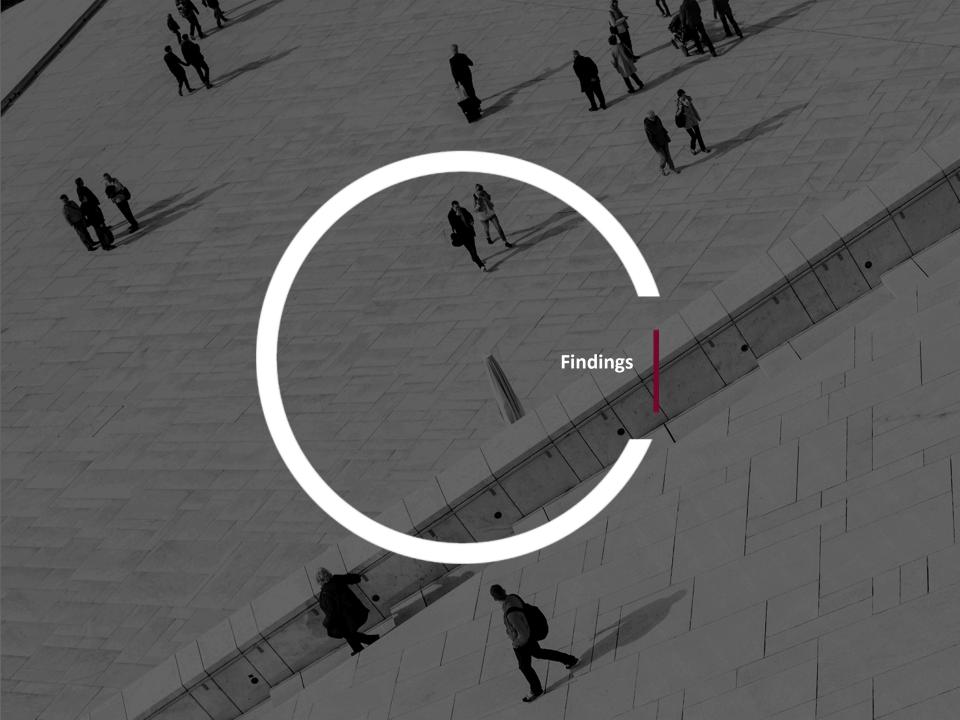
Methodology

- Within the Future Law Lab activities, two qualitative data collection events were performed with undergraduates, PhD students and social partners to explore the issues of student supervisor relationship, results of the UR and university support:
 - the **brainstorming** session, held on 2017 Feb 04 at VMU was very helpful to generate key words. Three fields of issues were given for randomly selected groups, for their brainstorm, presentation and consequent discussion:
 - Should the supervisor of UR project be a formally strict expert in the field, or informal manager of UR process, or any mix in between?
 - Should there be a requirement to publish the results of UR, or should it be solely within the free choice of the student, or any mix in between?
 - Should the university be active and full supporter of all UR project needs, or should it passively ensure an open access to the infrastructure and network of university, or any mix in between?
 - the focus group interview, held on 2017 May 16 at VMU was helpful to share the different points of view without any pressure to reach a consensus, at the same time enabling trends and patterns to be identified. To ensure continuity of the research and to use the brainstorming session take-outs, three follow up questions were given for discussion:
 - When should student and his UR supervisor start their relationship, so that they would be able know each other enough to form an individualized and most effective supervising style and rules?
 - Should students have any exemptions or privileges regarding the formal scientific requirements of a research, with the special UR journals to publish the results of their UR projects?
 - Will the university be properly performing its support of UR duties, if instead of direct financing, university stimulated commercialization of the UR results, ensuring the access to start-up or spin-off ecosystems, open public and private partnership networks, etc.
- Data collected has been presented and recommendations has been discussed with the VMU vice rector for science and with the dean of VMU Faculty of Law, therefore the conceptual model, presented herein, has been validated and accepted for further testing and implementation.



Limitations

- The data was collected mostly from volunteering students, administration and social partners with positive attitudes towards voluntary UR. Opinions of students who hadn't been engaged in the experiment and discussions, or other sceptics, were not collected. Therefore the data may be one-sided. Although the data is sufficient for general modeling purposes, in further development of specific UR tolls, the skeptical or otherwise negative opinions have to be analyzed.
- The UR platform (Future Law Lab) management experiments performed with the 3rd- and 4th-year law students will be continued in the future and final results of their participation will be seen only within 1-2 years as they will present their final master theses. Therefore it is impossible to compare students who have / have not participated in voluntary UR activities. The 5th-year students started their research activities at the same time as all other students started writing their master thesis, therefore these students are also difficult to compare to assess the impact of voluntary UR activities.
- X The model developed is of a conceptual nature and it is general. It requires real life testing, technical specifications and support for student progress assessment.





Students and Supervisors

Brainstorming session generated key words, describing the pros and cons of different styles of supervising. Presentation and discussion of opinions revealed a strong trend towards Quality the individualized style and rules of supervising, depending on the Precise re schedule / deadlines Stress character and needs of a student. Constructive Authority of expertise Farsighted Formally strict expert Discipline Control Critique / Humiliation Respectful for schedule / deadlines Dutifulness Authority of trust Pushing of own opinion Students and Supervisors Trial and Error Flexible and adaptive Comfort In between strict and informal Informal communication Academic freedom / innovations Motivator (inspiring sage) Relationship of Trust Compromising Fearless atmosphere Compassionate and understanding Informal manager of UR process Risk of Mistakes / Missmanagement Equal negotiations Carelessness Supportive

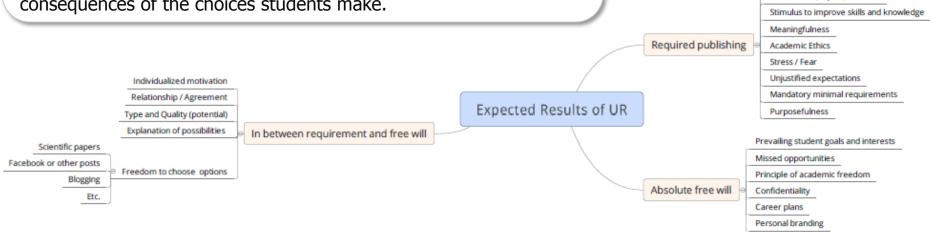
The follow-up focus group generally agreed that in order to form an individualized and most effective supervising style and rules, the relationship between student and supervisor should start as soon as possible (at least in the \sim 3rd or 4th year of studies).



Expected Results of UR

Brainstorming session generated key words, describing the pros and cons of pushing towards the publication of UR results.

Presentation and discussion of opinions revealed a strong trend towards the absolute academic freedom and choice, however with the active role of supervisor in explaining the opportunities and consequences of the choices students make.



Practice

Quality

Investment (impact) to future

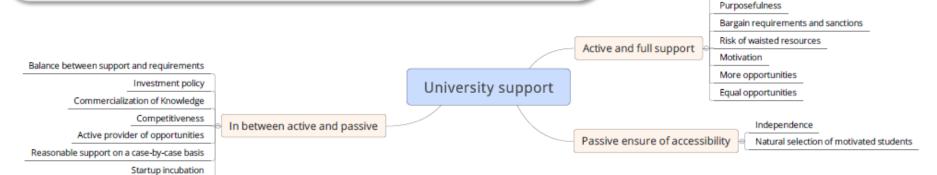
The follow-up focus group generally agreed that there should not be any exemptions or privileges for students regarding the formal scientific requirements of a research, if (and only if) student freely choose to publish his/her UR results in regular scientific journals. However, in order to have more options for dissemination of UR results and opinions, students should also have special UR journals and conferences.



University support

Brainstorming session generated key words, describing the pros and cons of active and passive (or in between) university support.

Presentation and discussion of opinions revealed a strong trend towards the balanced approach, basically agreeing that university should be an active supporter of UR projects that are carefully selected based on scientific or practical potential.



The follow-up focus group generally agreed that the major sources of support are the funds, infrastructure and network of university, EU and national funds for research projects and private scholarships. The group agreed that university provides enough access and tools, however students are too passive in exploiting the opportunities. While discussing the major factors of such phenomena, the most frequent opinion was about a lack of information, time and/or motivation.





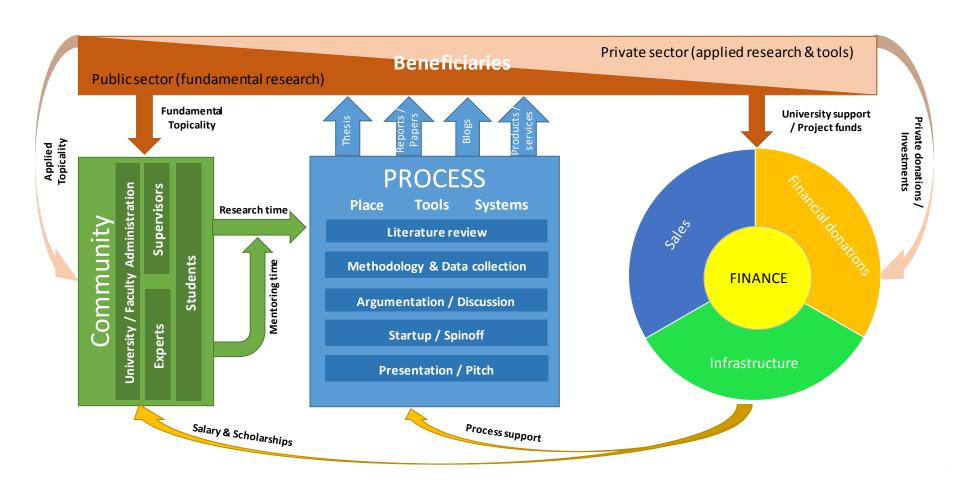
Principles and Assumptions

The (i) experimental practice of Future Law Lab; (ii) discussions with the social partners and VMU administration; (iii) findings of the research on the issues of student - supervisor relationship, UR results and university support; allows us summarizing and drawing up the following principles and assumptions for undergraduate research model for VMU Faculty of Law students:

- **Undergraduate research is the community** (of students, supervisors, university, experts and others). Therefore the community management principles are applicable to the architecture and management of undergraduate research activities;
- **Undergraduate research should be individualized** with regard to the character and needs of a student. Therefore the relationship between student and supervisor should start as soon as possible (at least in the $\sim 3^{rd}$ or 4^{th} year of studies).
- **Undergraduate research is limitless** and should be developed within fundamental or applied fields, in any forms of results, having the free will of a student as a paramount determinant for the research topicality and form of dissemination of results
- Undergraduate research is a methodological process, therefore the major task for UR managers is
 to build the most efficient process of research and development that may be used universally in any field of
 student interest.
- **Undergraduate research is a capital stock,** and the portfolio of fundamental and applied researches, start-ups and spin-offs, should generate public and private support from other sources, in addition to the university (infrastructure, network and funds).

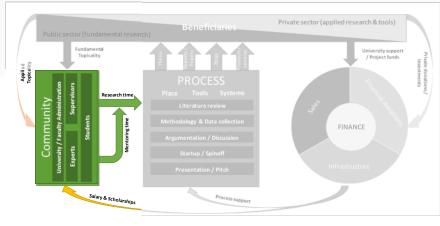


Undergraduate Research Model @ VMU Faculty of Law





Community



University / Faculty Administration:

- Forms inner culture of community and ecosystem of sharing, inclusion and creative studies;
- Forms marketing strategy for UR program and personal branding of students, supervisors and experts (social partners)
- Develops knowledge base and tools for discovery, drafting, dissemination of results and experiments with the practical applications
- Trains supervisors
- Forms network of universities and knowledge base

Supervisors:

- Form the research fields, attracting the topicalities from public and private sectors
- Inspire curiosity and creativity of students
- Manage the research project
- Collect and analyze UR process and behavioral data
- Form network of supervisors and knowledge base

Expert:

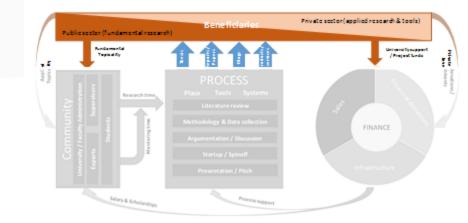
- Provide on-demand expert consultations / lectures
- Form network of experts and knowledge base

Students:

- Initiate and perform UR projects,
- Explore and experiment with the practical applications of UR results
- Volunteer in supervising or managing activities
- Form network of students and knowledge base



Beneficiaries



Public sector:

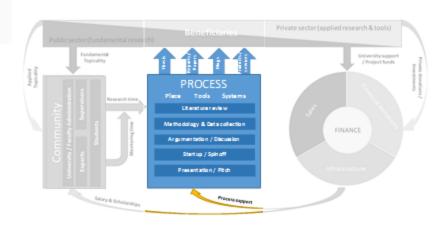
- Fundamental research results;
- Individualized, creative education programs and practices oriented to student needs
- Inclusion in market after graduation (through labor or start-ups)
- Fundamental advisory boards of experts, network.

Private sector:

- Applied research results
- Lifelong learning through inclusion in education process
- New products and services
- Applied advisory boards of experts, network.



Process



Place, Tools, Systems

- Process management approach to UR activities,
- Building the most efficient process of research and development that may be used universally in any field of student interest
- Structured knowledge base and advanced discovery and drafting tools

Research

- Seminars and individual consultations on:
 - Literature review
 - Methodology and data collection
 - Argumentation and discussion
- Training of drafting technique
- Dissemination of UR results

Development of new products and services

- Start-up and/or spin-off ecosystem
- Training of presentation skills
- Crowdsource and crowdfund procedures (and platform management)



Finance

Infrastructure:

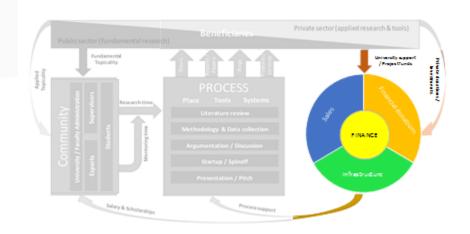
- University
- Social partners

Financial donations

- Private scholarships
- University funding
- Research project funding

Sales

- Paid content and events
- Advertisements
- Study materials and tools
- New products and services developed by students
- On-demand advisory opinions, market watch (ratings)



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