Laura BRANDT, Barbara SCHOBER, Marie-Therese SCHULTES[1], Veronika SOMOZA & Christiane SPIEL (Vienna)

Supporting Third Mission activities at Universities: Deans' opinions and recommendations

Abstract

Universities are increasingly required to address societal challenges in teaching and research as their third mission (TM). We took an educational-psychological approach to assessing parameters which support university members in setting goals and taking action for TM activities. For that purpose, we conducted semi-structured qualitative interviews with the deans of all 19 faculties at the University of Vienna assessing opinions and recommendations related to the TM. In addition, we conducted interviews with 23 TM actors and a university-wide online survey to capture current TM activities. Key requirements for implementing the TM were improved visibility and explicit appreciation of related activities.

Keywords

Third mission, university, social engagement, knowledge transfer, implementation

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[1] email: marie-therese.schultes@univie.ac.at

1 The diverse conception of the Third Mission

Since the beginning of the twenty-first century, the interface of basic research, innovation and societal/civic engagement has become increasingly important. Universities and other higher education institutions are called upon in using the results produced by their first (teaching) and second mission (research) to help resolve the growing challenges societies and local communities are facing (Bleiklie, Laredo, & Sörlin, 2007; Pinheiro, Langa, & Pausits, 2015; Schober, Brandt, Kollmayer, & Spiel, 2016). This Third Mission (TM) of universities involves actively taking responsibility for society, on whose behalf they are working (European Commission, 2011).

Amongst others, TM activities involve social and civic engagement, technology and innovation transfer and entrepreneurial activities (E3M, 2013; Henke, Pasternack, & Schmid, 2015; Observatory of the European University, 2006). Specifying what the TM means for universities as well as for individual academics is hampered by different conceptions of "relevance" or "social impact" by different scientific communities and domains (Pinheiro, Benneworth, & Jones, 2012). This controversy has been identified as a key challenge for the TM's realization (Pinheiro et al., 2015).

Despite this challenge, there are many higher education institutions conducting a variety of TM activities in research and teaching. However, these are often neither systematically documented, nor sufficiently interconnected (Lassnigg et al., 2012; Pausits, 2015). Based on the increasing external demand for universities to fulfill their TM in society, the rectorate of the University of Vienna commissioned the project "Third Mission of the University of Vienna" (first project phase: March 2016 – February 2018; Third Mission of the University of Vienna, 2017). The starting point was a clear commitment to the TM expressed in the university's development plan (University of Vienna, 2016). Therefore, the University of Vienna, which is the largest university in the German-speaking area with around 94,000 students and close to 10,000 employees, seems particularly suitable for exemplifying the development of a systematic strategy for the realization of the TM. The

experiences gained in the negotiation process related to the definition and first implementation steps of the TM at the University of Vienna may help university managers entering the debate on Civic Engagement and the TM at their own universities.

1.1 Definition of the Third Mission at the University of Vienna

In a first step of the project, the university management determined the general focus of the TM. Given the size of the University of Vienna and its large variety of disciplines, the focus was rather broadly defined and two key priorities of the TM were determined to achieve greater societal impact of research:

1. Targeted use and transfer of academic knowledge to help resolve diverse societal challenges
2. Transfer of technologies and innovations in the form of cooperation with public and private companies

According to the project's definition, TM activities have to meet the following criteria:

1. Relevance to society/economy: Activities expand research and teaching to societal/economy transfer
2. Activities are based on (one's own) research
3. Networking: External cooperation partners are included
4. Sustainability: The activity has a long-term perspective and includes quality/impact measures

The project team determined these criteria considering the relevant international literature and in consultation with the university management. Roessler and colleagues (2015) propose two different approaches to defining the TM: TM may be seen as (1) separate from teaching and research, and (2) embedded in and fulfilled through teaching and research activities. In addition, there may be hybrid forms of both approaches. According to the University of Vienna's definition, the TM is

strongly connected with research and teaching, while at the same time expanding these missions to engagement with society and economy.

2 Supporting structures for Third Mission activities

A successful realization of the TM requires a conceptual framework for this "third task" of universities, and a systematic strategy for its implementation. As a precondition, this implies creating a climate that promotes university members' motivation for the TM (Spiel, Schober, & Strohmeier, 2016).

2.1 Evaluating preconditions for implementing the Third Mission at the University of Vienna

The project "Third Mission of the University of Vienna" follows an educational-psychological approach to assessing parameters which are necessary for a person to set goals and take action in relation to the TM. This approach is based on the actiotope model. The so-called actiotope of a person is "the subjective living space with which a person comes to terms by means of his/her actions" (Ziegler et al. 2006, 144). Promoting a person's actions in specific areas requires to systematically focus on all relevant action parameters (see Fig. 1):

(1) If and how a person takes action depends on their currently available options for operation, i.e. their *action repertoire*.

(2) The *subjective action space* addresses a person's attitudes and preferences, values, self-view and interests. Based on these variables, specific parts of the objective action-repertoire are selected and concrete action-goals are formed.

(3) *Goals* determine the direction of actions; i.e., they limit the action-repertoire to those actions which are necessary to achieve a specific objective.

(4) The choice of goals and options for operation as well as their conduction are co-determined by *environmental features* such as the expected appreciation and reinforcement for a specific action.
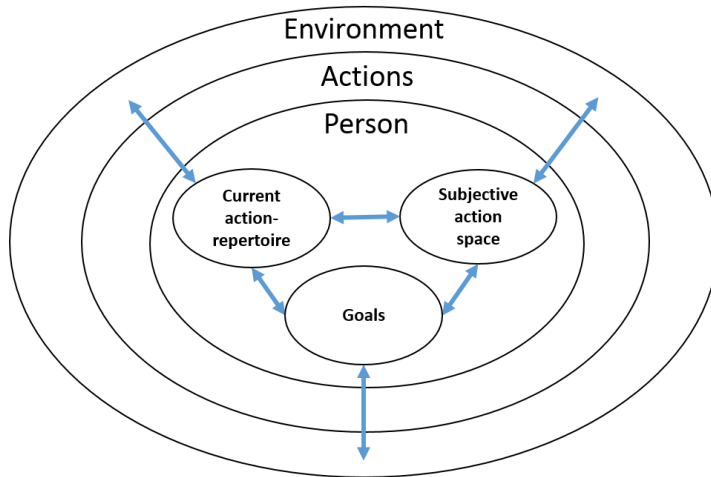

Figure 1: The actiotope model (ZIEGLER et al., 2006)

To assess the status quo of these parameters at the University of Vienna, we conducted semi-structured qualitative interviews with the representatives of all 19 faculties and centers (one interview per faculty/center), in order to (1) assess the perception of the TM, (2) gain insight into existing and planned TM activities, and (3) evaluate supporting conditions and barriers for the realization and sustainable implementation of TM activities.

2.2 Interviews with deans at the University of Vienna

The interview guide addressed each component of the actiotope model (see Fig. 1) in order to capture the status quo regarding the four action parameters in relation to the TM at the University of Vienna.

Prior to the interview, the deans were introduced to the TM-concept and the project. During the interview, we first inquired about the current perception of the TM and related activities at the faculties/centers to capture the deans' *subjective action space*. Subsequently, we asked for ongoing TM activities in order to gain an insight into the currently available operational options (*action-repertoire*). To identify *goals* with regard to the TM, we asked for activities planned in the future. Finally, the deans were asked for requirements (*environmental features*) for the realization and sustainable implementation of the TM.

The interviewees' answers were recorded in writing and on tape. Interview protocols were created and sent to the interviewees with the option for amendment. After the interviewees' approval of the protocols, we categorized the data using a deductive code system (Forman & Damschroder, 2007) based on the actiotope's action parameters. We categorized the information on each parameter into topics and ranked them according to their agreement among interviewees (from "all deans mentioned this aspect/agreed on its importance" to "only one dean mentioned this aspect/considered it important"). In the narrative description of the results below, we included topics/aspects that were mentioned and considered important, respectively, by at least one third of deans ($n \geq 6$). The aim was to provide an overall representation of the university, and not to single out faculties/centers or persons.

2.2.1 Results

The results represent the appraisal of all interviewed deans concerning the four actiotope components.

2.2.1.1 Perception of the Third Mission – subjective action space

The attitudes of the deans themselves as well as the perceived attitude of the majority of faculty/center members toward the TM were positive. However, they repeatedly mentioned that existing activities are difficult to document, since the TM label is rather vague. Moreover, the majority of interviewees pointed out that the perception of the TM depends on the specific research focus. In contrast to applied researchers, basic researchers were described as more focused on "pure" knowledge

production. Some interviewees – particularly those from faculties oriented toward natural sciences – noted that taking responsibility for society and participating in a societal discourse are rather new tasks to them.

The perception of the TM differed distinctly depending on its focus. Activities related to the use and transfer of academic knowledge to help resolve societal challenges were perceived unambiguously positive. The interviewees shared the opinion that researchers have a responsibility to disseminate scientific knowledge to target groups outside of the university and to react to acute critical situations. In contrast, a transfer of technologies and innovations in the form of cooperations with public and private companies was seen more skeptical. In this context, disciplines which traditionally work in cooperation with industry partners – mostly natural sciences – were described as distinctly more open to intensifying these collaborations; e.g. through EU grants or start-up firms.

The deans agreed in that university members' motivation to conduct TM activities would considerably increase if their efforts were higher valued and supported, which in turn may increase the quality and intensity of such activities. The aim of the TM should be to better communicate research results and to make them more accessible to society. However, research would have to remain autonomous, and no "TM pressure" should emerge. Moreover, there was high agreement that the rectorate should propose an overarching strategy, whereas the concrete activities and their content and focus should be organized by the faculties/centers themselves.

2.2.1.2 Third Mission activities – current action repertoire

It became apparent that the humanities are involved more actively in social engagement activities, while natural sciences tend to engage more frequently in cooperation with economy. Irrespective of their focus, it was repeatedly mentioned that activities were frequently neither visible nor interconnected.

With regard to social engagement, primarily activities in the following areas were reported: research to achieve social progress (regionally and internationally); interdisciplinary and translational research platforms focusing on societally relevant

topics; social engagement in acute crisis situations; cooperation with political and educational stakeholders; developing education concepts for practitioners and the interested public; libraries and web-resources open to the public; organization of exhibitions and active contributions to museums with the aim of giving access to a wide audience.

Activities with an emphasis on technology and innovation transfer primarily focused on the development of societally-relevant products; interdisciplinary and translational research platforms focusing on technological innovation; the foundation of start-up and spin-off firms; the systematic placement of students in firms (e.g. as an integral part of Master or PhD programs); direct cooperation with public and private companies; "career days" (personnel departments of companies are being invited to present their firms and career opportunities).

2.2.1.3 Activities planned in the future – goals

Effective collaboration was mentioned to be particularly relevant to meet the diverse challenges of our time. In this context, virtual research centers were seen as an innovative way to combine expertise and for reacting more rapidly to ever-changing environmental and societal conditions.

The majority of deans expressed their concern that many potential collaborations with economy or society fall through due to a lack of information about ongoing activities and existing expertise at the university. An improved online presence was seen as a potential approach to improve this situation. Some interviewees also mentioned actively reaching out to the society as a primary goal for their faculty in the future; e.g. presenting their research in schools.

2.2.1.4 Requirements for the realization and sustainable implementation of the Third Mission – environmental features

Besides additional monetary resources to increase staffing, the deans identified appreciation for ongoing activities as a key requirement for the realization and sustainable implementation of the TM. The interviewees concurred that acknowledgement of TM activities within the university would best be achieved by inte-

grating related activities in individual evaluations as well as in performance indicators and university target agreements.

The predominant focus on publications in high impact journals was mentioned as a barrier to communication with society. Especially representatives of disciplines outside the natural sciences stressed the importance of a successful communication between the university and politicians, which may lead to increased consideration of scientific knowledge for political decisions.

Increased collaboration with industry partners was seen as indispensable for ensuring a long-term, sustainable transfer of technologies and innovation. A proposed solution for establishing contacts was organizing events together with industry representatives. The interviewees also identified a more intense support of start-up/spin-off firms as an important mechanism to increase technology transfer.

Finally, increasing enthusiasm about science in society was seen as an important task of the university, in addition to building awareness about the objectives and results of research. This kind of legitimization of scientific work was thought to be crucial for strengthening society's support of the university.

2.3 Making third mission activities at the University of Vienna more visible

In the interviews with deans, it became obvious that a variety of different TM activities with diverse foci exist at the University of Vienna. In order to clearly present the activities, three categorizing dimensions were derived from the scientific literature (E3M, 2013) and interviews:

1. "Social Engagement" refers to the targeted use of scientific knowledge for resolving manifold societal challenges
2. "Knowledge Transfer" includes the preparation and sharing of scientific knowledge with target groups outside of the university (e.g. practitioners, politicians, high school students), and the systematic integration of scientific knowledge in societal discourses

3. "Technology and Innovation Transfer" involves the transfer of knowledge/know-how, ideas, technologies, innovations and patents from the university to economic contexts

Continuing education was not included as a dimension – notwithstanding that it is an important element of the Third Mission – since continuing education courses at the University of Vienna are already anchored at an institutional level (e.g., the Postgraduate Center).

In the interviews with the deans, appreciation for ongoing activities was ranked as a top priority for the successful implementation of the TM. However, a prerequisite to the appreciation of activities is to make them more visible. Therefore, the next step of the project included systematically documenting existing activities related to the TM. For this purpose, we conducted a second round of interviews to capture good-practice examples of TM activities at the University of Vienna. In addition, we performed a university-wide online survey in order to document existing activities as completely as possible. For both assessments, we used the definition for TM activities based on the four criteria mentioned above (see chapter 1.1).

2.3.1 Interviews with Third Mission actors & university-wide online survey

We conducted semi-structured interviews with 23 TM actors. Interview candidates were identified in the interviews with deans and included members of the university across all faculties/centers who are involved in innovative TM activities. We asked the actors to describe their activities in detail, including their relation to the TM, aims, cooperation partners, results, impact, and quality assurance measures. We created protocols of the activity descriptions which were published on the project website as good-practice examples of TM activities after the interviewees' approval. Nine of these activities were categorized in the dimension "Social Engagement", ten as "Knowledge Transfer", and four as "Technology and Innovation Transfer".

In a second step, we distributed an online-survey to the entire research staff of the University of Vienna. Similarly to the interviews with TM actors, we asked for a

detailed description of activities related to the TM. Besides the four criteria described above, survey participants were referred to the 23 good practice examples for additional clarification of the definition of TM activities. Overall, 152 individuals participated in the online survey. Of those, 86 persons had conducted or were currently conducting TM activities, and they reported a total of 127 activities. The vast majority of reported activities ($n = 92$) was categorized as "Knowledge Transfer" followed by "Social Engagement" ($n = 24$), with the least mentions in the category "Technology and Innovation Transfer" ($n = 11$).

The project team screened all activities and discussed in multiple feedback loops whether each activity met all four criteria of TM activities. Based on this review, 83 activities were classified as TM activities and published on the project website (see http://thirdmission.univie.ac.at/).

The main emphases of the reported activities were health promotion in society (primary, secondary and tertiary prevention); justice and human rights; access to education and promotion of students' and teachers' competences; knowledge transfer and increasing society's enthusiasm for science. In light of the focus of this special issue, we particularly recommend referring to the "Social Engagement" activities as they highlight how TM activities may be aligned to increase Civic Engagement of universities.

4   Discussion

Our findings provide insight into the perspectives, existing activities and future plans as well as perceived barriers related to the TM at the largest university in the German-speaking area.

4.1 Third Mission actors: Perspectives, current activities and future goals

Constituting an important supporting factor for conducting TM activities at an individual/person level (*subjective action space*), the interviewed deans had a positive attitude toward the TM and acknowledged the increasing necessity of knowledge and technology transfer. Actively engaging the society in research and innovation processes is also increasingly acknowledged as a key aspect by national politics; e.g. within the initiative "Responsible Science" by the Austrian Federal Ministry of Science, Research and Economy. Apart from the Austrian context, this development can also be observed at the EU level and internationally (Roessler et al., 2015).

Apart from a positive attitude toward the TM, it became apparent that commitment to the TM requires a clarification of the "TM label"; i.e., a specification of the university's orientation and strategy in realizing the TM. Consistent with this finding, the ambiguity in the definition and conception of the TM has been identified as a considerable challenge in its implementation (Pinheiro et al., 2012, 2015).

Regarding the *current action-repertoire*, numerous ongoing TM activities at the University of Vienna with multifaceted emphases were identified. However, those were frequently neither visible nor interconnected. This result corresponds to the observation that TM activities are still frequently conducted without formal procedures such as reward mechanisms and measures of quality assurance (Koryakina, Sarrico, & Teixeira, 2015).

Both in the interviews with TM actors and the online survey, activities classified as "Knowledge Transfer" were reported most frequently. This finding indicates that this TM dimension is already an integral part of the professional self-conception of many members of the University of Vienna. In regard to "Social Engagement" there was high agreement that researchers have a responsibility to react to societal needs. However, reports of activities in this dimension were mostly limited to human, social and cultural sciences (see http://thirdmission.univie.ac.at/en/third-mission-activities/). The perception of activities related to "Technology and Inno-

vation Transfer" was more skeptical, and, correspondingly, the smallest number of activities was reported in this dimension. In this context, it is important to consider that the University of Vienna is embedded in a diverse higher education landscape, with 19 different universities based in Vienna. Whereas the University of Vienna offers a broad range of disciplines, most other universities are defined by their high specialization and applied research foci.

4.2   Third Mission environment

From the deans' perspective, decisive *environmental requirements* for the sustainable implementation of TM activities at the University of Vienna comprise a) explicit appreciation of such activities, b) extended national and international cooperation with societal actors and the economy, c) improved communication of existing activities and competences, and d) additional resources to meet these challenges.

The need for changing career incentives and valuing TM activities similarly to high impact publications was ranked as a high priority for a successful realization of the TM. This result corresponds to requirements identified in prior studies for creating bottlenecks to successfully institutionalize such types of activities (Benneworth, de Boer, & Jongbloed, 2015; Gunasekara, 2006; Kohtamäki, 2015; Koryakina et al., 2015). While still discussed controversially, the TM has the potential to expand – not replace – the dimensions which are used to define scientific excellence beyond classical academic and research criteria (Montesinos, Carot, Martinez, & Mora, 2008).

In terms of an implementation of the TM, the deans of the University of Vienna evaluated an exclusive top-down approach in determining the focus of TM activities as counterproductive. Similarly, the findings from an exploratory case study indicate that promoting the TM through top-down instructions by the university management decreases university members' motivation considerably (Philpott et al., 2011).

4.3 Lessons learned and next steps

Our findings indicate that the "subjective living space" (i.e., the actiotope) of many university members supports TM activities. In accordance with prior studies, there seem to be more environmental than internal/motivational challenges (Koryakina et al., 2015). Based on our experiences, we recommend a combined top-down/bottom-up approach to developing a strategy for the realization of the TM. That is, the university management proposes an overarching strategy and a clear statement concerning the importance of the TM, while the responsibility for organizing concrete activities is entrusted to the faculties/centers.

Defining what the TM means for a specific institution and which activities it involves is a longer-term negotiation process. Involving all stakeholders – from the university management to the individual researcher – in this process has the potential to create a climate that promotes university members' motivation to engage in the TM. Pertaining to the frequent "invisibility" of TM efforts at universities, systematically documenting existing efforts related to the TM is an important first step. Some of the TM actors we interviewed indicated that (finally) being asked about these kinds of activities was an important form of appreciation in itself. Moreover, presenting good practice examples of TM activities, e.g. on the university's website, may not only increase their visibility but help clarifying the individual university's orientation in realizing the TM for their members and the broader public.

Despite the differences between universities and scientific communities, common themes seem to emerge with regard to challenges in developing concrete measures for institutionalizing the TM. These include the (lack of) appreciation of TM activities, the visibility and communication of existing activities and competences, both within universities and externally, and the need for additional resources to meet these challenges. However, this does by no means imply that there is a "one-size-fits-all solution" to successfully implementing the TM at universities, given the vastly differing institutional conditions and, perhaps even more important, the differing societal needs (Sánchez-Barrioluengo, 2014).

Our findings highlight the necessity of adapting the definition of the TM to the (unique) regional and contextual factors of each higher education institution. In this context, it has been suggested that developing a fuller institutional understanding of the relationship between universities and their contexts is an important step toward realizing a university's potential with regard to the TM (Lebeau & Cochrane, 2015), while also considering the possible impact of increased regional engagement activities on existing cultural norms (Gunasekara, 2006). Developing the content-related orientation of a university's TM based on its existing strengths and research foci seems to be a viable option to increase researchers' commitment to the TM, while at the same time focusing on the essential pillars of the university, namely research and teaching (Dornbusch, Kroll, & Schricke, 2012).

Further research on supporting structures for TM activities should particularly explore similarities and differences between university contexts and their subjective living spaces. For this purpose, interviews and surveys with department leaders at other universities that are also based on the actiotope as a theoretical framework would expand the present study's explorative results. Augmenting the scope of this research, universities that already have reward mechanisms for an implementation of TM activities in place should be surveyed with regard to the impact of these supporting structures on systematic knowledge transfer efforts. Correspondingly, developing and measuring common indicators for an impact assessment of supporting structures and reward mechanisms would shed further light on the question of how to systematically support TM activities at universities.

5 References

Benneworth, P., de Boer, H., & Jongbloed, B. (2015). Between good intentions and urgent stakeholder pressures: Institutionalizing the universities' third mission in the Swedish context. *European Journal of Higher Education*, *5*(3), 280-296. https://doi.org/http://dx.doi.org/10.1080/21568235.2015.1044549

Bleiklie, I., Laredo, P., & Sörlin, S. (2007). Conclusion. *Higher Education Policy*, *20*(4), 495-500.

Dornbusch, F., Kroll, H., & Schricke, E. (2012). *Multiple dimensions of regionally-oriented university involvement: How motivation and opportunity prompt German researchers to engage in different ways.* Working Papers firms and region (Vol. R6).

E3M (2013). *Needs and constraints analysis of the three dimensions of third mission activities.* Brussels: European Commission.

European Commission (2011). *A renewed EU strategy 2011–14 for corporate social responsibility*. Brussels. Retrieved from http://www.eurocommerce.eu/media/7237/position-csr-renewed_csr_strategy_2011-14-07.03.2012.pdf

Forman, J., & Damschroder, L. (2007). Qualitative Content Analysis. In L. Jacoby, & L. A. Siminoff (Eds.), *Empirical Methods for Bioethics: A Primer* (Advances in Bioethics, Volume 11, pp. 39-62). Oxford: Elsevier.

Gunasekara, C. (2006). Leading the horses to water: The dilemmas of academics and university managers in regional engagement. *Journal of Sociology*, *42*(2), 145-163. https://doi.org/https://doi.org/10.1177/1440783306064950

Henke, J., Pasternack, P., & Schmid, S. (2015). *Viele Stimmen, kein Kanon. Konzept und Kommunikation der Third Mission von Hochschulen* [Many voices, no canon. Concept and communication of universities' third mission]. Halle-Wittenberg. Retrieved from http://www.hof.uni-halle.de/publikation/hof-ab-2-15-viele-stimmen-kein-kanon/

Kohtamäki, V. (2015). Does structural development matter? The third mission through teaching and R&D at Finnish universities of applied sciences. *European Journal of Higher Education*, *5*(3), 264-279. https://doi.org/http://dx.doi.org/10.1080/21568235.2015.1044547

Koryakina, T., Sarrico, C. S., & Teixeira, P. N. (2015). Third mission activities: University managers' perceptions on existing barriers. *European Journal of Higher Education*, *5*(3), 316-330. https://doi.org/http://dx.doi.org/10.1080/21568235.2015.1044544

Lassnigg, L., Trippl, M., Sinozic, T., & Auer, A. (2012). *Wien und die „Third Mission" der Hochschulen* [Vienna and universities' „Third Mission"]. Vienna. Retrieved from http://www.forschungsnetzwerk.at/downloadpub/third-mission.pdf

Lebeau, Y., & Cochrane, A. (2015). Rethinking the "third mission": UK universities and regional engagement in challenging times. *European Journal of Higher Education*, *5*(3), 250-263. https://doi.org/http://dx.doi.org/10.1080/21568235.2015.1044545

Montesinos, P., Carot, J. M., Martinez, J. M., & Mora, F. (2008). Third mission ranking for world class universities: Beyond teaching and research. *Higher Education in Europe*, *33*(2-3), 259-271. https://doi.org/http://dx.doi.org/10.1080/03797720802254072

Observatory of the European University (2006). *Methodological Guide. Prime Network of Excellence.* Retrieved from http://www.enid-europe.org/PRIME/documents/OEU_guide.pdf

Pausits, A. (2015). The Knowledge Society and Diversification of Higher Education: From the Social Contract to the Mission of Universities. In A. Curaj, L. Matei, R. Pricopie, J. Salmi, & P. Scott (Eds.), *The European Higher Education Area* (Vol. 2, pp. 267-284). https://doi.org/10.1007/978-3-319-20877-0

Philpott, K., Dooley, L., O'Reilly, C., & Lupton, G. (2011). The entrepreneurial university: Examining the underlying academic tensions. *Technovation*, *31*(4), 161-170. https://doi.org/10.1016/j.technovation.2010.12.003

Pinheiro, R., Benneworth, P., & Jones, G. A. (2012). *Universities and Regional Development: A Critical Assessment of Tensions and Contradictions*. Milton Park and New York: Routledge.

Pinheiro, R., Langa, P. V., & Pausits, A. (2015). The institutionalization of universities' third mission: Introduction to the special issue. *European Journal of Higher Education*, *5*(3), 227-232. https://doi.org/10.1080/21568235.2015.1044551

Roessler, I., Duong, S., & Hachmeister, C.-D. (2015). *Welche Missionen haben Hochschulen?* [What are higher educations' missions?] Retrieved March 25, 2018, from https://www.che.de/downloads/CHE_AP_182_Third_Mission_an_Fachhoch schulen.pdf

Sánchez-Barrioluengo, M. (2014). Articulating the "three-missions" in Spanish universities. *Research Policy*, *43*(10), 1760-1773. https://doi.org/https://doi.org/10.1016/j.respol.2014.06.001

Schober, B., Brandt, L., Kollmayer, M., & Spiel, C. (2016). Overcoming the ivory tower: Transfer and societal responsibility as crucial aspects of the Bildung-Psychology approach. *European Journal of Developmental Psychology*, *13*(6), 636-651. https://doi.org/10.1080/17405629.2016.1231061

Spiel, C., Schober, B., & Strohmeier, D. (2016). Implementing Intervention Research into Public Policy – the "I3-Approach." *Prevention Science*, 1-10. https://doi.org/doi:10.1007/s11121-016-0638-3

Third Mission of the University of Vienna (2017). Third Mission of the University of Vienna. Retrieved February 3, 2017, from http://thirdmission.univie.ac.at/en/

University of Vienna (2016). *University of Vienna 2020 Development Plan*. Retrieved from https://www.univie.ac.at/uploads/media/Entwicklungsplan2020 _en.pdf

Ziegler, A., Heller, K. A., Schober, B., & Dresel, M. (2006). The Actiotope. In D. Frey, H. Mandl, & L. von Rosenstiel (Eds.), *Knowledge and Action* (pp. 143-175). Munich: Hogrefe.

Authors

Dr. Laura BRANDT ‖ University of Vienna, Department of Applied Psychology: Work, Education and Economy ‖ Universitätsstraße 7, A-1010 Vienna

https://ucris.univie.ac.at/portal/de/persons/laura-brandt(e99e0d65-55ae-4894-8fa6-43b9d91bdb17).html

laura.brandt@univie.ac.at

Univ.-Prof. Dr. Barbara SCHOBER ‖ University of Vienna, Department of Applied Psychology: Work, Education and Economy ‖ Universitätsstraße 7, A-1010 Vienna

http://homepage.univie.ac.at/barbara.schober/

barbara.schober@univie.ac.at

Dr. Marie-Therese SCHULTES ‖ University of Vienna, Department of Applied Psychology: Work, Education and Economy ‖ Universitätsstraße 7, A-1010 Vienna

www.researchgate.net/profile/Marie_Therese_Schultes

marie-therese.schultes@univie.ac.at

Univ.-Prof. Dr. Veronika SOMOZA ‖ University of Vienna, Department of Physiological Chemistry ‖ Althanstraße 14, A-1090 Vienna

https://ucris.univie.ac.at/portal/de/persons/veronika-somoza(8fc4b0e5-cbc5-4206-bb82-4a7c77bb5b4a).html

veronika.somoza@univie.ac.at

Univ.-Prof. Dr. Dr. Christiane SPIEL ‖ University of Vienna, Department of Applied Psychology: Work, Education and Economy ‖ Universitätsstraße 7, A-1010 Vienna

http://homepage.univie.ac.at/christiane.spiel/

christiane.spiel@univie.ac.at