CO-CREATION, REFLECTION, AND TRANSFORMATION: THE SOCIAL IMPACTS OF A SERVICE-LEARNING COURSE AT THE UNIVERSITY OF SZEGED

KÖZÖS ÉPÍTKEZÉS, REFLEXIÓ ÉS ÁTALAKULÁS: A KÖZÖSSÉGI ÖNKÉNTESSÉG KURZUS TÁRSADALMI HATÁSAI – A SZEGEDI TUDOMÁNYEGYETEM ESETE

This paper highlights three aspirations, which are shared by the diverse concepts and practices of responsible research and innovation (RRI): co-creation, reflexivity, and transformation. The authors analyse a service-learning (SL) initiative at the University of Szeged, Hungary, based on the model by Chupp and Joseph (2010). This provides a typology of SL practices and identifies four main approaches to the social impact of SL: traditional, critical, social justice oriented, and an institutional change-focused approach. The authors also use this model to analyse the effects of their initiative with regard to the RRI principles of co-creation, reflexivity, and transformation. They provide evidence that their SL course may reach beyond its traditional (student-learning-based) effects in the Hungarian context, and embrace social justice and critical approaches. While the authors also found certain instances of institutionalisation, embedding critical SL into a Hungarian university and inducing significant institutional transformation seems to be a long way away.

Keywords: responsible research and innovation (RRI), service-learning (SL), critical approach

Jelen tanulmány a Szegedi Tudományegyetemen folyó közösségi önkéntesség (service learning) kurzus társadalmi hatásait elemzi Chupp és Joseph (2010) modelljét felhasználva, amely a közösségi önkéntesség gyakorlatának társadalmi hatása alapján négy fő megközelítést (hagyományos, kritikai, társadalmiigazságosság-orientált és intézményiváltozás-orientált) különböztet meg. Ez alapján, valamint a felelősségteljes kutatás és innováció (responsible research and innovation – RRI) koncepciójának három alapelve, a közös építkezés (co-creation), reflexivitás és átalakulás tükrében reflektálnak a szerzők kurzusuk társadalmi hatásaira. Eredményeik alapján kijelenthető, hogy hazai kontextusban a kurzus és általában a közösségi önkéntesség hatásai túlmutatnak a hagyományos (egyetemi hallgatók tanulására fókuszáló) megközelítésen, és kiterjednek a társadalmi igazságossági és kritikai megközelítések által hangsúlyozott hatásokra is. Ugyanakkor, bár a hatások közt megjelennek az intézményiváltozás-orientált megközelítés egyes elemei, a kritikai közösségi önkéntesség hazai egyetemi működésbe történő beágyazása és az RRI elvei mentén történő intézményi (egyetemi) átalakulás, még a vonatkozó szándékok megléte esetén is, hazai kontextusban bizonyosan hosszú időt vesz igénybe.

Kulcsszavak: felelősségteljes kutatás és innováció (responsible research and innovation – RRI), közösségi önkéntesség (service learning), kritikai megközelítés

Funding/Finanszírozás:

The present publication is the outcome of the project From Talent to Young Researcher project aimed at activities supporting the research career model in higher education, identifier EFOP-3.6.3-VEKOP-16-2017-00007 co-supported by the European Union, Hungary and the European Social Fund.

Acknowledgements/Köszönetnyilvánítás:

We are grateful to our university colleagues for their past and present contributions to the course: József Balázs Fejes, Edit Újvári, Norbert Szűcs, Anikó Vida, Árpád Mihalik, Judit Gébert and Balázs Makádi.

The SL initiative could not function without the committed work of our CSO partners: the Community-based Research for Sustainability Association (CRS); ÁGOTA Foundation; CSEMETE Association for Environmental Protection; "Missed 1000 Years" Association – Afternoon School for Roma Children; "Crafty Tent" Foundation; "Generous Box" Charity Association; Homo Ludens Project; Hungarian Charity Service of the Order of Malta; Hungarian Alternative Theatre Centre Association; Motivation Educational Association; Sunny Side Foundation for the People with Disabilities; Csongrád County Association

of Multiple Sclerosis Patients; "Fairy Garden" for Children's Mental Health Foundation; Csongrád County Association of Visually Impaired People; LGBT Group Szeged; Association for Deaf and Hard of Hearing Children; and the Student Counselling Centre of the University of Szeged Contemporary Support Group.

Authors/Szerzők:

Dr. Judit Juhász, assistant research fellow, University of Szeged, (judit.juhasz@eco.u-szeged.hu)
Dr. habil. György Málovics, associate professor, University of Szeged, (malovics.gyorgy@eco.u-szeged.hu)
Dr. habil. Zoltán Bajmócy, associate professor, University of Szeged, (bajmocyz@eco.u-szeged.hu)

This article was received: 30. 09. 2019, revised: 26. 05. 2020, accepted: 04. 06. 2021.

← Responsible research and innovation' (RRI) is rooted in the understanding that the current operation of research and innovation (R&I) systems do not provide adequate answers to acute environmental and social challenges.

RRI is an open-ended concept, often used as an umbrella term (Bajmócy et al., 2019). Its claim for transforming the R&I system has some core elements. First, it calls for *co-creating change* with actors who are often neglected by the current R&I systems (e.g., citizens, civil society actors). According to Stilgoe et al. (2013, p. 1570) RRI is 'taking care of the future through collective stewardship of science and innovation in the present'. Inclusion and/or deliberation are thus core to the concept of RRI (Bajmócy & Pataki, 2019; European Commission (EC), 2012): in the European Union the term RRI has been taken up as part of the 'science with and for society' discourse (Owen et al., 2012; de Saille, 2015).

Secondly, according to *reflexivity*, RRI is a call to confront ourselves with our assumptions, and to integrate ethical reflection and a focus on social impact into the processes of the R&I systems (Stilgoe et al., 2013). Third, *transformation* means a call for learning, researching, innovating differently (although the concept remains somewhat unclear regarding the exact meaning of 'different'). This implies that the 'uptake' or the 'mainstreaming' of RRI is central in the RRI discourses.

It has long been argued that innovation systems are complex, consisting of various interdependent actors, processes and institutions (Edquist, 2013; Nelson, 1993). Interactive learning is key to the operation of these systems (Lundvall, 1988). It is a multi-actor process, which transgresses spheres and organisational boundaries. RRI's claim to transform the operation of the R&I systems therefore has consequences for the various building blocks, actors and processes of the innovation systems. It is not sufficient to focus solely on research actors and processes, and the actors and processes of education and its interdependence with research should also be scrutinised.

This paper makes its contribution to the RRI discourse by connecting it to the above core aspirations of RRI (co-creation, reflection and transformation). We analyse a service-learning course at the University of Szeged, Hungary, and its social effects. Service-learning (SL) is an approach that links academic coursework with community-based service (Butin, 2006a). There has recently been an increased interest in the effects of SL with regard to

social justice and institutional change (Chupp & Joseph, 2010; Marullo & Edwards, 2000).

Chupp and Joseph (2010) provide a typology of SL practices. They identified four main approaches to SL social impact: traditional, critical, social justice-oriented and institutional change-focused approaches. They concluded that most SL practices confine their intended effects on student learning by prioritising the outcome of providing experience and exposing students to a real-world context.

We demonstrate and analyse an SL case which has two distinctive features. First, critical reflection on social justice, and the endeavour to bring about social change, as well as institutional transformation, have been our core aspirations from the beginning. Second, the course emerged as the bottom-up cooperation of a handful of teachers; SL was not an identified strategical direction of the university.

Our aim is to connect our case to the typology of Chupp and Joseph (2010) and to assess the effects we have made so far in line with their typology. We examine the difficulties and leverages of an SL approach with the aim of inducing social change and institutional transformation in a higher education context in Hungary.

The paper is structured as follows. We begin with an introduction to SL and its diversity, based on the model by Chupp and Joseph (2010). We then introduce our case and methodology. This is followed by the empirical results of our analysis and our conclusions.

The concept of service-learning

There was a wave of innovation in higher education in the late 1960s and early 1970s, based on the applied philosophies of education grounded in experiential and emancipatory approaches to learning (Kezar & Rhoads, 2001). It became increasingly important that students (1) gain real-life experience during the class; (2) personally experience what they learn about in theory; (3) participate actively in shaping the classes and the curricula; and (4) take responsibility for their own learning processes.

Interest in SL is a response to three frequent critiques of conventional academic teaching: the lack of (1) curricular relevance, (2) faculty commitment to teaching, and (3) institutional responsiveness to the larger public good (Kezar & Rhoads, 2001). Practical applicability and usefulness also support commitment towards non-conventional, non-frontal learning, and more "experience-rich", experimental forms of education that are directly related

to the "public good". University cooperation with civil society organisations (CSOs) is also seen as a public interest (in certain countries) (Butin, 2003; Kezar & Rhoads, 2001).

There are numerous definitions of SL in the scientific literature. According to the National Society for Experiential Education, service-learning is "any carefully monitored service experience in which a student has intentional learning goals and reflects actively on what he or she is learning throughout the experience" (Furco, 1996, p. 2).

According to Ballard and Elmore (2009, p. 70), service-learning "is a type of experiential learning that engages students in service opportunities within the community as an integral part of a course. Service-learning enhances a 'traditional learning' course by allowing students the opportunity to link theory with practice, apply classroom learning to real-life situations, and provide students with a deeper understanding of course content." As the above definitions show, SL:

- is a non-conventional and non-frontal form of education, where students can leave behind their conventional passive and subordinate roles as "receivers",
- supports experiential learning,
- is a university course that has credit-value for students,
- is a university course where students participate in the activities of different CSOs during their course,
- includes activities that are (1) relevant for students concerning their academic studies, and (2) attempt to contribute to the solution of local/global social/environmental problems,
- includes regular and structured reflection on the experience of students and related theoretical knowledge with professional university teachers serving as mentors, and
- builds bridges between the university and the local community, and in this way also contributes to university community engagement and social responsibility.

SL as responsible university practice

Universities often see SL as a tool that enables students to practically experience and assign meaning to the theoretical content of university courses (Johnson, 2000). In this way, a direct connection is made between theory and practice, cognitive and emotionally focused learning, and also between the university and the community (Butin, 2003; 2006b). Statistical data manifests in the form of real people, processes and actions, which, in exchange, later constitute a basis for theoretical (classroom) thinking and reflection (Johnson, 2000).

In most cases, learning and community service are equally important within SL. All participants are supposed to profit equally from the process (Furco, 1996; Johnson, 2000). Participants (1) have to show respect for the circumstances, perspectives and lifestyles of the community involved (Johnson, 2000), and (2) an academic context supporting the positive reinforcement between community service and learning is also needed (Furco, 1996). Com-

munity service should thus be relevant concerning both academic content and community needs (Butin, 2003).

Well-prepared SL courses are supposed to have significant positive outcomes for participants. Conventional roles within higher education are transformed into more egalitarian dynamics, in which students are active agents who take responsibility for their own actions and learning, thus realising their own capacities. SL thus supports the active citizenship and civic responsibility of students, and social equity in general (Astin et al., 2000; Butin, 2003).

SL might also have a positive effect on the quality of learning. It supports students in better remembering theories and knowledge, and applying these more efficiently in practice (Johnson, 2000). According to students, voluntary experience supports their deeper understanding of theoretical course material compared to conventional classes, also enhancing enthusiasm and commitment towards learning and the class itself (Astin et al., 2000; Ballard & Elmore, 2009).

Another positive effect of SL is that students (1) commit themselves to activities, and (2) meet people that they otherwise would not—such "border crossing" can be physical, social, cultural or intellectual, and provides students opportunities to get to know/become immersed in a reality previously unknown to them (Butin, 2003). On a larger scale, SL might also support universities and their faculties to become more connected to their direct and wider socio-environments.

SL may also support students in dispelling stereotypes they may hold prior to this interaction; it also supports critical thinking and respect for cultural diversity (Astin et al., 2000; Ballard & Elmore, 2009). Direct experience also affects the perspective of students, and thus it supports a meaningful, deep understanding of complex social processes (Ballard & Elmore, 2009; Johnson, 2000).

Certain studies have also reported improved cognitive results for students (Butin, 2003). Frequent reflections in writing (diaries, essays) as vital course components improve writing skills (Astin et al., 2000). Participation in community service and activities, and related reflection supports communication and leadership skills, and activities and consciousness concerning carrier choices (Astin et al., 2000; Ballard & Elmore, 2009). SL also catalyses faculty research and scientific work by introducing new problems, ideas, methods and connections to both students and university (research) staff (Johnson, 2000).

Diversity of SL

The actual effects of SL depend on its practical realisation. Opportunities for this are clearly diverse (Chupp & Joseph (2010) (Table 1)).

Traditional SL focuses primarily on student learning as a "pedagogical process whereby students participate in course-relevant community service to enhance their learning experience" (Chupp & Joseph, 2010, p. 193). Social justice SL is "designed to expose students to the root causes of social problems, structures of injustice and inequity that persist in society, their own privilege and power, and their potential role as agents of social change"

Four Approaches to Service-Learning Impact

Service learning approach	Focus of impact	Summary definition	Priority outcomes
Traditional service learning	Students (learning)	Community service that enhances academic learning through student action, reflection and application	Service experience and exposure to a real-world context with better reten- tion and application of course content
Social justice service learning	Students (learning and moral development)	Community service that integrates theory and practice to foster critical thinking and moral development in students	Deepen student moral and civic val- ues and student potential and com- mitment and change agents
Critical service learning	Students and community	Service learning that promotes critical consciousness among students and community members who together seek meaningful social change	Redistribution of power, more equitable and mutually beneficial relationships between students and community members, social change action
Service learning with institutional change	Students, community and university	Service learning as an opportunity to examine and change institutional structures and practices	Institution-wide reorientation toward more equitable and mutually benefi- cial relationships between the univer- sity and the community

Source: Chupp & Joseph (2010, p. 192)

(Chupp & Joseph, 2010, p. 195). Contrary to these approaches, critical SL emphasises the principle of reciprocity and aims to generate more lasting social change for the community and its members. Finally, service-learning with institutional change also explicitly aims to influence the attitudes, behaviours, and future roles of entire academic institutions (in our case: universities) by focusing "on the way that institutional structure, operations, and subculture can often promote the very social inequities that SL aims to help students confront" (Chupp & Joseph, 2010, p. 196). In this approach service-learning thus aims to support the transformation of higher education (institutions) into "agents of social transformation".

We reflect below on the service-learning initiative (including a service-learning course) that has been ongoing at the University of Szeged since 2017 February. We evaluate this bottom-up service-learning initiative based on the aforementioned typology and reflect on the potential achievements, shortcomings and possible tensions of bottom-up SL initiatives in a Hungarian higher education context.

The case: A bottom-up service-learning initiative at the University of Szeged

A few university employees (referred to as teacher-mentors below) started a bottom-up initiative in early 2016 to

Figure 1

Actions of the bottom-up service-learning initiative at the University of Szeged

Spring 2016

"University-civil society-volunteering" forum Declaration of intent

Autumn 2016

"Local environmental and social problems, civic solutions" course



Spring 2017 - present

"Service learning" course

The process:

- Information about CSOs and requirements are accessible
- Course requirements are clarified in detail on the first face to face occasion
- Second face to face occasion:
 - interactive introduction to the theory of university community engagement
 - workshop on CSOs and volunteering
 - local CSOs introduce themselves to students personally
 - students list three CSOs
- Initial contact between students and CSOs
- Volunteering activities
- Written and personal reflections

Source: Own construction

enhance and give focus to community engagement activities at the University of Szeged (Figure 1). The idea was first expressed in a narrow circle of teacher-mentors based on professional and personal relations, later expanded through professional relations within the university, and resulted in regular joint meetings and conversations. Several community engagement activities had already been present in our lives, in the form of individual and/or small group initiatives without any networking (cooperation, coordination) between us. In order to improve resources, knowledge and community connections, networking activities were started, also involving local civil society actors. The focuses of the initiative were defined as supporting (1) local voiceless/marginalised social groups, and (2) environmental sustainability initiatives.

The first major step was the organisation of a forum entitled "University-civil society-volunteering". We, as university stakeholders introduced our ideas while a few local CSOs introduced themselves and their activities to each other and the interested local public. We also created a "declaration of intent" containing our aims and values

A major step was the launch of a course (entitled "Local environmental and social problems, civic solutions") in autumn 2016, which was open to all university students studying at any of the 13 faculties of the university. This course provided opportunities for local CSOs working on social and/or environmental issues to introduce themselves to university students. Based on student and CSO feedback we concluded that: (1) students were interested in more active participation in CSO activities, practical field experience and getting closer to real, living communities and social phenomena, while (2) CSOs are in need of voluntary work. We therefore decided to transform our work through the approach of service-learning.

The service-learning course

The service-learning course started in spring 2017 with the coordination of eight university teacher-mentors. During the semester, usually 6-8 lecturers with diverse educational and research backgrounds (including sociology, pedagogy, educational theory, economics, philosophy, psychology, cultural theory, and social work) cooperate within the course. Teacher-mentors play an organising role in the course and serve as mentors for students: facilitating cooperation among student groups and CSOs, and providing reflection opportunities for students, including "expert" knowledge and feedback. CSOs help students to gain real-life experience about social and environmental issues by involving them in their everyday activities, while gaining significant volunteer support in exchange. The process of the course is the following:

 All CSOs send data sheets about themselves, their activities and needs concerning voluntary work.
 These data sheets are made accessible for students prior to the actual start of the course. Opportunities for students are diverse. They can volunteer for

- organisations focusing on child and adult poverty: afternoon schools that support poor, and often stigmatised Roma children; a network, which supports children through individual mentoring; initiatives that focus on homeless and other extremely poor people; disability and health-related associations: the charity of the local paediatric psychiatry clinic; CSOs of blind and visually impaired people; deaf and hard of hearing children; people suffering from multiple sclerosis; people living with physical or mental disability; and artistic community centres.
- 2. Transparency is especially important at this point. First, students from all over the university, and with diverse backgrounds, are allowed to apply. Second, the course is non-regular in its schedule and other requirements. As suggested in the SL literature (e.g., Ballard & Elmore, 2009), we therefore provide a highly detailed course description containing exact tasks, time requirements and so on, in order to reduce student stress and support better student time-management, as a flexible time-requirement, in addition to its advantages, is also a challenge for numerous students.
- 3. A student's personal attendance starts with two face-to-face occasions. After clarifying course requirements in detail, the second, so called "opening" occasion begins with an interactive introduction to the theory of civil society and university community engagement, including the basics of service-learning. This part is followed by a short workshop on the social role of CSOs and the main features of volunteering (cooperation, communication, time management etc.). Finally, local CSOs introduce themselves to students personally, which is followed by questions and answers, and teamwork in a world-café setting. As a result, students list three CSOs that they prefer for their volunteering.
- Teacher-mentors appoint students to the CSOs based on their preferences during the following week
- 5. Teacher-mentors facilitate the initial contact between students and CSOs. Students and CSOs agree on the frames of cooperation in a decentralised way based on the previously agreed and transparent guidelines. The most important general criterion is that the amount of expected voluntary work within the framework of the course is at least 20 hours per student.
- 6. During the semester, students fulfil their volunteering activities at CSOs. They also have to prepare two written reflection documents and take part in one oral, face-to-face group reflection together with other students and mentors. This latter serves to discuss experience, dilemmas, problems and so on. Mentors also aim to provide feedback for students, to facilitate reflection.
- 7. At the end of the semester students present their experiences in small groups (students who volun-

teered for the same CSO constitute one group) in front of all course participants (students, teacher-mentors, and CSOs) – creating a rather inspiring event.

Research methodology

Applying the SL method does not mean that all of its theoretical advantages are actually realised in practice. Whether these are indeed realised in our case is subject to continuous reflection. Applying the SL approach for us is therefore definitely not a "conventional" research process, but a process of reflective multi-actor cooperation, learning and development that serves meaningful social change. The current analysis is also part of this wider process, and serves to help us reflect on the strengths, weaknesses, development needs and opportunities of our work in a structured way.

We applied a constructivist approach and carried out ad-hoc qualitative analysis focusing on emerging themes and patterns, relationships and differences (Brinkmann & Kvale 2015, p. 268). The analysis had four main stages:

- First, we collected the interfaces and channels that serve as data sources about the effects of our work (see "Information sources").
- Secondly, we focused on the information content (explicit meanings) of these channels: the actual effects of the course (e.g., new partnerships, extent of participation etc.).
- Thirdly, we analysed implicit meanings based on the information content, according to the interpretations of the authors. We focused on the connections between, and reasons behind information, actual doings and events, also considering the wider context (antecedents, chronology, relationship among participants) of the process.
- Eventually, we fed back to the applied theoretical model based on our empirical results, and formulated our conclusions.

Information sources

We can distinguish four main channels of communication within the SL process that serve as information sources for the present analysis: (1) communication with students; (2) communication with CSOs; (3) communication among teacher-mentors; and (4) communication towards the public.

1. The pedagogy of SL rejects the conventional frontal model of education, characterised by one-way communication from the teachers (as the possessors of knowledge) to the students (in passive roles) (Butin 2003). Active communication with students is of outstanding importance within SL. Students share their experience four times during the semester in structured ways. These occur in the forms of written reflective essays (two occasions), small group discussions and a final presentation in front of all course participants. We

also started a scrapbook album, which contains valuable feedback concerning the course, although in itself it does not serve as a surface of reflection. Teacher-mentors and the course coordinator (also one of the teacher-mentors) are also in continual contact with students via e-mail and the university's information system (e.g., in case students have questions, concerns etc.).

- 2. There is frequent communication between teacher-mentors and CSO representatives about the current state of the course, different activities and so on, both personally and via e-mail. We meet CSO representatives at least three times during a semester: on the opening occasion (where they introduce themselves to students), when students begin their volunteering, and on the final occasion of the course (where students present their experience). CSOs are thus just as active and influential participants of the SL course as students and teacher-mentors.
- 3. There is lively communication among teacher-mentors. Most teacher-mentors participate in the opening and closing occasions, and during the semester we communicate via our e-mail group, where plans, actualities, ideas, memos of personal meetings and so on, are shared. We also organise strategic meetings, usually at least once per semester. Decisions are made by consensus within this group.
- 4. Eventually, public appearances and events are also bases for reflection, and serve as feedback for us. These include press interviews, scientific conferences, and also the Facebook page of the SL course and initiative. This latter is used to share our activities and experience, pictures about events, and so on.

The effects of service-learning

In the present section of our paper we evaluate the effects of the SL initiative based on the model by Chupp and Joseph (2010) (see "Diversity of SL" and Table 1). In their model they propose that intentionally aiming for impact at three levels – on students, on the community, and on the academic institution (university) – might be key to achieving substantial and beneficial outcomes in any service-learning project. We found this model suitable in order to (1) categorise the effects of the SL course, which we reveal during our analysis; and (2) evaluate our own SL course in relation to the typology of SL offered by the model. We found this process useful in helping us to structurally reflect on the effects of our initiative so far, and it also supports planning for the future.

Table 2 summarises these effects in the present case. Such a categorisation of effects is to some extent necessarily arbitrary, since effects are interdependent and might be related to more than one category. Being aware of this, we still attempted to rate the experienced effects alongside the aforementioned categories.

Categorisation of the effects of the SL initiative

Students (Learning and moral developments)	Community	University
Professional learning depending on the "match" between the student's training programme, the profile of the CSO and the expertise of the teacher-mentor Traditional SL	Cooperative, harmonious relationship among teacher-mentors Critical SL	Stronger bottom-up cooperation among university faculties Critical SL/SL with Institutional Change
Enhanced active, initiator roles of students con- cerning their university studies, their participation in opening occasions, meetings and reflection occasions Traditional SL	Widened and strengthened relation- ships among teacher-mentors and local CSOs Critical SL	Professional cooperation among teacher-mentors: joint events, invitations, roundtable discussions, facilitation, publications Critical SL/SL with Institutional Change
Students became more conscious and they actually applied to carry out community service and experience learning through volunteering Traditional SL	Smoother communication between students and CSOs Critical SL	Contribution to the formation of a local academic community (including CSO members as practical experts); cooperation, networking, knowledge sharing Critical SL/SL with Institutional Change
Most students become more and more committed to community service and local community needs during the semester Social Justice SL	Enhanced and developed communication among local CSOs Critical SL	CSO partners start cooperating with other university courses SL with Institutional Change
Enhanced openness to social problems and injus- tice, new experience as agents Social Justice SL	Teacher-mentors as resources for students regarding volunteering and local civic activities Critical SL	Enhanced institutional embeddedness of the course within the university SL with Institutional Change
Numerous students feel personal responsibility towards social issues and continue their voluntary work after the course Social Justice SL	Development of the online profile and community of the course Critical SL	Principles and values behind the SL initiative gain official recognition in at least one university faculty (also related to requirements concerning international applications, partnerships and accreditation processes) SL with Institutional Change

Source: Own construction based on the typology of Chupp & Joseph (2010, p. 192)

Effects on students

The most direct effect of the initiative is probably related to the participation and cooperation of students. Traditional SL is primarily focused on enhancing learning and professional experience (Chupp & Joseph, 2010). In our case, the extent of professional learning depends on the professional closeness of the training programs of participating students, the profile and activities of CSOs where they spend their voluntary period, and teacher-mentor expertise. The course is open to all university students at Bachelor's and Master's levels, and therefore students with diverse majors apply. The courses usually involve students in economics, kindergarten teaching, health education, social pedagogy, psychology, medicine, sociology, history, pharmacy and IT, but also with majors in biology, physics and mathematics. The teacher-mentors also have different competencies, and CSOs are manifold. Student experience concerning professional learning/development is therefore rather diverse. During written and personal oral reflections, many students confirm that they did not feel any professional development related to their majors. However, students often do not choose voluntary activities that suit their studies on purpose, as this is not expected within the course. Others choose according to their majors – they are obviously more likely to develop professionally.

"I think, I will surely be able to utilise this experience both personally and professionally. On the personal level, I think, all the people we meet affect and enrich us. On the professional level, we get to know their diseases [multiple sclerosis], but what is more important, them as humans. On the top of this, our communication and team leader skills improve."

However, there are numerous direct effects for participating students, other than professional development. "SL has become the principle mechanism for putting students in a more active and engaged role than that of a passive classroom learner" (Chupp & Joseph, 2010, p. 193), which is an important factor for traditional SL as well. Our SL course is somewhat different from conventional university courses; for example, students have to play an active role from the beginning. They have to collect information about participating CSOs, actively participate and com-

municate during the opening occasion (where CSOs introduce themselves to students) and the reflection occasions. Students thus get used to being more active during their university studies. Numerous students participated in conferences, and in a short introductory film related to the course, beyond mere volunteering. Indeed, it was the student demand for an active course, which made us shift the original profile of the course to the SL approach.

"The fact that I didn't have to meet definite requirements, that I could organise my schedule, and what and how I would like them [children in an afternoon school] to teach/practice gave back my faith in my study area."

Feedback also shows that students become more and more conscious concerning their motivation for participation in community service and experiential learning, which is also crucial for traditional SL. It is a common experience at our university that students subscribe to freely elective courses without knowing their content precisely. Since these are not their main subjects, they often consider them inconvenient necessities. Something similar happened to the SL course initially; most applicants had no idea about the course when they subscribed, however, by now, almost all of the applicants clearly subscribe because of its declared aim: to carry out local voluntary work that meets community needs (of course, there are exceptions). The course is increasingly known at the university among students. Participating students explain it to their peers, and students are also informed about the course by university teachers, CSOs, or through the public Facebook site. Since autumn 2016, the number of participants has fluctuated in the following way:

- 2016 autumn 25 students,
- 2017 spring 38 students,
- 2017 autumn 25 students,
- 2018 spring 13 students,
- 2018 autumn 69 students,
- 2019 spring 33 students,
- 2019 autumn 56 students,
- 2020 spring 24 students.

It is not clear why only 13 students applied for the course during spring 2018. One of the reasons could be that at that time the title of the course (the first and probably most important thing student meet/see when picking up such open courses) used to be long and complicated and did not refer to course content. However, this has not been a problem in previous years. On the other hand, according to student feedback, it was also difficult to find the course among the numerous options for open courses, and especially to find it in the complicated university course registration system. The low number of students was probably due to technical and organisational reasons. At the moment, from an organising and pedagogical perspective, the optimal number of participants seems to be somewhere between 20 and 40. As the number of CSO partners has grown during past years, too few students would mean that we are not able to satisfy the "resource" needs of CSO partners. In this case the costs of participation for them might exceed benefits. On the other hand, having too many students on the course is a challenge for mentors because of their limited capacity. The same applies to CSO partners: it might be difficult (or even impossible) for them to meaningfully involve too many student volunteers at the same time.

Social Justice SL highlights social injustice, inequity and the active role of students in changing these beyond experiential and professional learning (Chupp & Joseph, 2010). In our case, at the beginning of the semester, students are relatively diverse concerning their motivation for engagement and participation. Some are enthusiastic about social phenomena and community services, others are curious about the forthcoming volunteering experience, while some just want to fulfil course requirements.

"It is important that we experience all the knowledge that we learn at the university in practice. We cannot expect that learning and listening to the theory automatically will enable us to utilise our knowledge, until we test ourselves in situations where we gain experience."

Regardless of the initial student motivation concerning course application, it is vital for us to provide useful experience, broad insightfulness and awareness about social phenomena for students, their significant role as actors, and to ensure that student and CSO expectations match as much as possible. It is not an expectation that participating students intend to "save the world". When students carry out small and practical tasks that are important and useful for the organisation that they volunteer for, and in the end all parties are satisfied, it makes a significant contribution to local civil society in itself, in our view. Of course, there are students who start with more ambitious plans and focus on broader community goals.

"I started with the aim of doing something good and useful. And I have totally experienced this feeling. On the top if this, I could sense being the glue that keeps a community together."

As a result of the diversity of CSOs and their activities, the perception of students is also diverse. Someone are very happy with the credit they receive for the course, however, feedback shows that the majority of students manage to formulate an engaged and reliable relationship with their partner CSO by the end of the semester. Numerous students report that they gain significant new insights, and greater openness and empathy to social problems and injustice, and that they gathered experience as social agents through community service.

"It helped me overcome my prejudices. I also feel that I got better with kids, I got a lot better in communicating with them." "What is the most spectacular for me is that I think differently about a whole lot of questions than I did before."

"For me this course and volunteering provide a really positive experience. I had already volunteered formerly, and most of the cases I gained positive experience. I think it really affects our personalities, widens our horizons."

Numerous students feel personally responsibility for social issues, and become more and more committed to community service and local community needs during the semester. Several students emphasised that they intend to continue volunteering for their partner CSO after the course is finished, on a totally voluntary basis. It also happens that ex-students reappear on the SL course later, as representatives for their former partner CSOs. They may also recommend us new CSOs to cooperate with. The experience gained during the course therefore in many cases reaches beyond acquiring credits and experiential learning itself, and contributes to social engagement and university community engagement (albeit in small, bottom-up steps) following some of the recommendations of the social justice SL approach. We also keep in touch with interested students within our closed Facebook group, to support future volunteering, information exchange and networking activities to strengthen our community.

Effects on the community and the university

Critical SL fosters more lasting social change for the community and its members by generating common goals and values, and active engagement in the community served. It emphasises reciprocity, interdependence and aims to redistribute power among those in service-learning. In this way it is a more radical approach than social justice SL, which may be one-sided and exploitative (Chupp & Joseph, 2010).

Goals and desirable activities have been subject to continual discussions and reflections among the initiators since the beginning of our initiative. The joint work (running the initiative) and the continual discussions and reflections mean that we (teacher-mentors) have managed to get to know each other meaningfully, and set common goals and work structures. Most lecturers are actively involved in the opening occasion, and participate in a "co-teaching" process. One teacher-mentor gives a lecture, others (at least four lecturers) run the world café, and others help navigate the representatives of the organisations. On the closing occasion, lecturers again practice co-teaching by reflecting on student presentation and volunteering activities, and participating in the discussions following each presentation. For the rest of the semester, teacher-mentors work with their own students in the first place, but in order to cooperate and discuss questions with other teacher-mentors, we created an e-mail list, Facebook group and site (for the cooperation), and structured communication forms. By now, we can talk of a harmonious, cooperative professional relationship between teacher-mentors, led by shared values. Since the running of the initiative is also a voluntary initiative for most of the teacher-mentors, except for the coordinator, we always respect individual life situations (e.g., changing activity of group members from semester to semester), while common goals and values keep us motivated, both as individuals and as a group.

In addition to the cooperation alongside the SL initiative, teacher-mentors also formed new professional relationships with each other. Examples are participation at roundtable discussions, common volumes (publications) and (scientific) events. We consider the meaningfully developed relationship with local CSOs as one of the most significant effects of our initiative. While we already had connections to certain local CSOs before the SL initiative as individuals, the initiative structured and further supported these connections, and created new ones. During the last three years, the relationship between university teacher-mentors (as a team) and local CSOs developed to a regular, meaningful partnership. As cooperation developed among CSOs and students, and students carried out more and more activities for CSOs – even such unforeseen activities as preparing advertisement films or homepages for CSOs - the process started to be more reciprocal between the different actors.

"The attitude of the leader of the CSO was really touching. She explained with true enthusiasm about the handicraft they do, and how they plant lavender and how they recycle. It was very good to see that she pulled all her strength and motivation together and came to the introductory class, even though she really felt under the weather in the afternoon — as she explained. I would really like to help the members of that CSO either by talking to them or joining them in handicraft work or in gardening."

There are no "bad" volunteers among students. Those who are eventually not interested in volunteering typically disappear at the beginning of the semester after clarification of the course content. Those who get involved, usually do so responsibly. Of course, there are differences in the performance of students - not all voluntary activities are always perceived as outstanding by CSOs. But as some students become increasingly involved within the respected CSOs, these groups have become more and more enthusiastic and started to share their ideas concerning the development of the course and volunteering. It became clear that they are interested in student feedback, for example, by participating in the student presentations in the closing occasion of the course. CSOs also asked us to facilitate their networking activities to get to know each other better. We support these requests through joint events, e-mail lists, and the public Facebook page and closed group.

The SL course started with seven CSO partners. In recent semesters we have cooperated with 12-15 CSO partners per semester. One organisation cancelled for an extended period of time because it could not provide enough voluntary tasks for students. Other organisations have missed a few semesters for personal or other organisa-

tional reasons. The operation of many of the organisations among the cooperative CSOs depends to a large extent on one person. If they have, for example, personal problems/difficulties during the given semester, it affects the functioning of the organisation and thus the management of the volunteers as well. New CSOs joined either by invitation or by application. Cooperation among teacher-mentors and between teacher-mentors and CSOs supported numerous initiatives during the recent years, for example:

- A local academic committee was founded, which also includes CSO partners as practical experts.
- There was new individual-level cooperation between certain teacher-mentors and CSOs (e.g., teacher-mentors themselves volunteer for certain CSOs).
- The teachers of an existing university course (related to non-profit marketing) at the Faculty of Economics and Business Administration became interested in cooperating with CSOs that participate in the SL course. In this this way, CSOs that needed marketing assistance were matched with another university course and can be supported by student volunteers interested and trained in marketing.

SL with institutional change focuses on influencing the structure of entire academic institutions, including attitudes, behaviours, roles and instructors, departments and so on. Very few SL efforts are able to do that explicitly (Chupp & Joseph, 2010). Although there has been some institutional transformation in our case, it is unknown how this initiative will be able to foster institutional change in the long run.

The SL course was not initiated by university strategy/management but arose as a bottom-up initiative of university staff. Nevertheless, it seems that it is also becoming valuable to the university (as an organisation) itself. The Faculty of Economics and Business Administration, in addition to providing space for the course, also provides a supportive institutional environment by recognising it as a valuable resource for the faculty. This contributes to embedding the course into the university structure.

The various forms of these recognitions include the acknowledgement of the initiative within the faculty or the launching of a separate SL course for the international students of the faculty. Values followed by the initiative, including equity, diversity, supporting marginalised social groups, social justice, social and environmental sustainability, inclusion, and probably even reflexivity and transformation, are increasingly recognised as important values in the university. They seem to be especially important regarding practices such as planning tender applications, accreditation processes and international partnerships.

Co-creation, reflexivity and transformation

Although establishing an RRI-kind initiative was not among our initial goals, three principles of RRI – co-creation, reflexivity and transformation – have clearly been present as guiding principles throughout the whole process. Taking these into consideration helps us more thoroughly reflect on our initiative.

Initiating cooperation among university teacher-mentors and involved CSOs, have been vital for us since the beginning, having both practical and symbolical significance. However, when reflecting on the effects of the initiative, one can see that co-creation exceeds cooperation of different university and non-university actors within the SL initiative. The SL course is the result of the contribution of every single actor involved, and requires significant effort from each of them. This results in co-creating "something new" together, which supports actors to take further steps towards the "university with and for society" and "science with and for society".

Reflexivity has also been instinctively present within the initiative and the course since the beginning. Compared to its "purely instinctive" initial presence, activities supporting reflexivity have become conscious, and have become highly significant/important aspects of the initiative. It supports and surrounds each and every process, and it continually appears in new dimensions. Students reflect on social and academic learning effects; teacher-mentors reflect on the social and educational quality of the course, including the quality and effects of cooperation with CSOs; and CSOs reflect on their own new roles as "educational institutions" - tasks and opportunities offered for students, and the quality of related student learning and experience. Meanwhile, the initiatives and actors (individuals, organisations) are continually shaped by common reflection and cooperative communication in order to increase our joint social effect -that is, to contribute to the transformation of the existing social reality around us.

Reflection suggests we have had numerous transformative effects, such as deepening student civic values and commitment; questioning conventional frontal education, which put students in passive roles and distinguishes between those who "know" and those that "do not know and have to be taught"; and encouraging stronger local CSOs. However, there are still numerous challenges and a huge amount of learning in front of us, especially concerning our aims to transform conventional academic research and the institution that we are members of – or at least to significantly contribute to these transformations. Finally, we are committed to moving towards this vision by applying continual reflection and co-creation; indeed, we are persuaded that these are necessary elements/requirements for those transformative changes that we consider desirable.

Findings and discussion: Effects of service learning

This paper analysed a service-learning (SL) initiative at the University of Szeged, Hungary. While the initiative did not emerge as an explicit case for responsible research and innovation (RRI), we believe our results are highly relevant for the RRI discourse.

We argued that the diverse concepts and practices of RRI share certain common aspirations. These are co-creation, reflexivity and transformation. When introducing our case, we linked to these aspirations of RRI. We found the model of Chupp and Joseph (2010) to be particularly useful in connecting the diverse effects of SL to the aspirations of RRI.

Our analysis showed that effects on and by the students, the community and the university are all important and significant in our case, and these three aspects are closely interrelated. The initiative was initially made possible by the cooperation of university teachers, who were individually embedded in the local community of CSOs and shared similar values regarding the role of universities in local communities. Later on, the stability of the SL initiative was provided by (1) student interest in the course, (2) the efforts of mentors and the course coordinators as a team based on shared values, (3) CSO interest, (4) reciprocal relations between CSOs and university participants, and (5) the institutional embedding of the course in one faculty of the university. Such a diversity of coopering actors makes the initiative lively, functioning and, as it seems for the moment, promising in the long term.

Based on the typology of Chupp and Joseph (2010) we can state that our SL initiative (1) embraces elements of a traditional SL approach, (2) also has a strong social justice character, but (3) can be mostly characterised as a critical SL initiative. While participants are diverse concerning both their social roles and individual views and motivations, our analysis shows that the main motivation for most of the participants — especially for teacher-mentors and CSOs, but also numerous students — is lasting social change. The aspired social change counteracts marginalisation and oppression, and serves social equity, based on equal partnership, and also supports critical (self-)reflection on these issues.

Students play a specific role in inducing social impact. Since the SL course can be chosen by all the students of the university and is not confined to a single professional field, traditional learning outcomes are difficult, and may be difficult to grasp. It is therefore the "moral" learning/development that comes into focus instead: stepping out of comfort zones, experiencing previously unknown situations resulting in changed attitudes and behaviours in relation to marginalised and often stigmatised social groups. However, this does not mean that there is no traditional professional learning. Numerous students emphasise this type of learning, for example, students of social work/social pedagogy working with disabled/stigmatised groups during the course.

The teacher-mentor motivations are strong concerning institutional change: the vision and aim is to transform the university towards what Goddard (2017) calls a "civic university". This is an institution that fully integrates education, research and community engagement, and where the social effects (related to environmental sustainability and social justice) of research and education are highly important and valued. Compared to such intentions, the results so far are moderate and incremental. Although there was recognition and institutionalisation to some extent, this did not have an effect on the wider structure (university) within which the initiative is situated, and which it aims to transform.

The evaluation highlighted further lessons for us as well. The transgression of borders between the university and the community, teachers and students, or students and the community is vital for the concept of SL, however, these effects do not emerge automatically in practice (Butin, 2006a). In order to move towards real transgressions, at least two challenges have to be handled. First, in accordance with the *principle of reflexivity*, the actual functioning of the SL course and the broader initiative has to be continually refined, based on the feedback of students and CSO partners. This potentially affects numerous areas, such as communication (tackling the divergence of the norms of communication among groups of actors), or the practical organisation of the course (dates, schedules, venues, etc.).

Second, social impact also has to be subject to continuous reflection. Here, SL initiatives might face tension. On the one hand, SL – especially its critical approach – is about meaningful social impact, fostering equity, counteracting marginalisation, stigmatisation and poverty. In this respect, it is about social transformation, and its voluntary, movement-like character necessarily involves a potentially conflictual relationship with actors in power. For example, it may involve cooperation with CSOs that have a conflictual relationship with local/national politics or the university itself. For example, in a Hungarian context, independent CSOs (those that do not have a close relationship with any of the major political parties and/or companies) often struggle with (1) state-led stigmatisation (such as "foreign-funded" organisations that are the "agents" of foreign powers); (2) lack of continuity of financial resources; and (3) lack of being able to provide proper wages and work-life-balance for leaders and employees (as part of their financial struggles). On the other hand, the sustainability and social effect demands a certain extent of institutional embeddedness (institutionalisation). This can motivate the course organisers to less radicalism and towards more compromises and "neutrality" (Butin 2006b) if such institutional expectations appear. Institutionalisation might thus counteract criticality. Finding a balance here is a complex and uncertain process. Intuitionally embedding critical SL into the University of Szeged, and probably most other Hungarian Universities, is therefore still a long way away.

References

Astin, A. W., & Vogelgesang, L. J., & Ikeda, E. K., & Yee, J. A. (2000). *How service learning affects students*. Los Angeles: Higher Education Research Institute, UCLA Graduate School of Education.

Bajmócy, Z., & Pataki, G. (2019). Responsible research and innovation and the challenge of co-creation. In Arno Bammé & Günter Getzinger (eds.), *Yearbook 2018 of the Institute for Advanced Studies on Science, Technology and Society* (pp. 1-15). München; Wien: Profil Verlag.

Bajmócy, Z., Gébert, J., Málovics, G., & Pataki, G. (2019). Miről szól(hatna) a felelősségteljes kutatás és innováció? *Közgazdasági Szemle*, *66*(3), 286-304. https://doi.org/10.18414/ksz.2019.3.286

- Ballard, S. M., & Elmore, B. (2009). A labor of love: Constructing a service-learning syllabus. *Journal of Effective Teaching*, 9(3), 70-76.
- Brinkmann, S., & Kvale, S. (2015). *InterViews. Learning the craft of qualitative research interviewing*. Thousand Oaks: Sage Publications.
- Butin, D. W. (2003). Of what use is it? Multiple conceptualizations of service learning within education. *Teachers College Record*, *105*(9), 1674-1692. https://doi.org/10.1046/j.1467-9620.2003.00305.x
- Butin, D. W. (2006a). Special issue: Introduction future directions for service learning in higher education. *International Journal of Teaching and Learning in Higher Education*, 18(1), 1–4. https://scholarworks.merrimack.edu/soe facpub/16
- Butin, D. W. (2006b). The limits of service-learning in higher education. *The Review of Higher Education*, 29(4), 473-498. https://doi.org/10.1353/rhe.2006.0025
- Chupp, M. G., & Joseph, M. L. (2010). Getting the most out of service learning: Maximizing student, university and community impact. *Journal of Community Practice*, 18(2-3), 190-212. https://doi.org/10.1080/10705422.2010.487045
- Furco, A. (1996). Service-Learning: A Balanced Approach to Experiential Education. In Furco, A. (ed.), Expanding Boundaries: Serving and Learning (pp. 2-6). Washington, DC: Corporation for National Service. https://www.shsu.edu/academics/cce/documents/Service_Learning_Balanced_Approach_To_Experimental Education.pdf
- European Commission (EC) (2012). Responsible research and innovation. Europe's ability to respond to societal challenges. Bruxelles: European Commission.
- Edquist, C. (2013). Systems of innovation: technologies, institutions and organizations. London: Routledge.
- Goddard, J. (2017). The strategic positioning of cities in 21st century challenges: the civic university and the city. In Grau, F.X. (Ed.), *Higher education in the world*

- 6. Towards a socially responsible university: balancing the global with the local (pp.115-127). Girona: Global University Network for Innovation.
- Johnson, D. B. (2000). Faculty guide to service-learning. Washington, DC: Community service center Mary Graydon Center, American University. https:// www.american.edu/ocl/volunteer/upload/faculty-guide.pdf
- Kezar, A., & Rhoads, R. A. (2001). The dynamic tensions of service learning in higher education. *Journal of Higher Education*, 72, 148-171. https://doi.org/10.2307/2649320
- Lundvall, B. A. (1988). Innovation as an interactive process: From user-producer interaction to national systems of innovation. In G. Dosi, C. Freeman, R. Nelson, G. Silverberg, & L. Soete (eds.), *Technical change and economic theory* (pp. 349-369). London: Pinter Publishers.
- Marullo, S., & Edwards, B. (2000). From charity to justice: The potential of university-community collaboration for social change. *American Behavioral Scientist*, *43*(5), 895-912. https://doi.org/10.1177/00027640021955540
- Nelson, R. R. (Ed.). (1993). *National innovation systems: A comparative analysis*. Oxford: Oxford University Press on Demand.
- Owen, R., Macnaghten, P., & Stilgoe, J. (2012). Responsible research and innovation: From science in society to science for society, with society. *Science and Public Policy*, *39*(6), 751-760. https://doi.org/10.1093/scipol/scs093
- De Saille, S. (2015). Innovating innovation policy: The emergence of 'Responsible Research and Innovation'. *Journal of Responsible Innovation*, *2*(2), 152-168. https://doi.org/10.1080/23299460.2015.1045280
- Stilgoe, J., Owen, R., & Macnaghten, P. (2013). Developing a framework for responsible innovation. *Research Policy*, 42(9), 1568-1580. https://doi.org/10.1016/j.respol.2013.05.008