Service Learning in business education: What perceptions and expectations do undergraduate and graduate students have of service-learning courses?

Karl-Heinz Gerholz
Business and Human Resource Education
University of Paderborn

Peter Slepcevic-Zach
Department of Business Education and Development
University of Graz

Corresponding Author: peter.slepcevic@uni-graz.at

Abstract

Service Learning is a modern teaching-learning concept, which combines curricular content with supporting charitable organizations. The effects of courses using this concept on the students’ competences development has already been described in empirical studies. Within these studies the aspects regarding the instructional design were less emphasized unlike in this paper in which they are focused on. In addition to a conceptual foundation of service-learning and a literature review on the impact of service-learning, two didactic prototypes will be presented in the form of empirical case studies. The focus of this research is to describe the attitudes and perceptions of undergraduate and graduate students attending service-learning courses and which conclusions can be drawn on the instructional design. In this article, the concept of service-learning is understood as a course- and credit-based learning and teaching method (in contrast to community-service), which require a specific instructional design to evolve purposeful and curricular learning connections between the course and service projects outside the course.

The values of service-learning in business education

A main challenge in the instructional design of Business Education is to find a balance between academic rigor and the practical needs for future business situations. For instance, Godfrey, Illes, and Berry (2005) analyze that business education has a paradigmatic narrowness of a transactional view of human interactions and therefore students develop a strong material orientation. Aspects regarding social needs in a society and responsible acting in business situations are neglected. The instructional concept service learning can be a potential solution for this because it combines academic contents with real life learning experience in the context of civic responsibility. In service learning, students deal with a specific problem situation that fits a community need and requires the application of business content in real life situations. The reflection of this activity cannot only foster a better understanding of given business contents of the curriculum but also the students’ values and attitudes towards civic responsibility (Gerholz & Losch 2014). Therefore, service learning offers business educators a teaching and learning tool that can help them solve the challenge to combine academic rigor and practical needs.
In the last two decades a growing number of business education institutions have implemented service-learning as an educational approach to foster their students’ knowledge acquisition and personal development (Kenworthy-U’ren & Peterson 2005). Beyond that, empirical studies revealed that service learning fosters academic skills, personal insights, and understanding of social issues among students (Yorio & Ye 2012). However, the existing empirical studies mainly focused on specific learning outcomes rather than on the relationship between the specific teaching and learning design of a service-learning course and its effects. Therefore, the focus of this paper is more on the teaching and learning perspective of service-learning. This article is intended to present a conceptual framework for service-learning and comparing the attitudes and perceptions of undergraduate and graduate students attending such. In doing so, section two presents a foundation of service-learning (2.1) and design characteristics for service-learning courses based on empirical studies (2.2). In section three, two empirical case studies in the form of an ex-ante analysis are presented, which illustrate the expectations of service-learning students and the relationship between instructional design and the students’ perceptions. The design for service-learning courses also takes into account whether there are undergraduate or graduate students. Andrews (2007) argues that the integration of service-learning in business curricula is challenging, especially for undergraduate students because this curricula content is mostly standardized. Case Study 1 refers to undergraduate students whereas Case Study 2 refers to graduates students (3.1 and 3.2). The findings offer important orientation in regard to the target groups and their perceived instructional design of service-learning courses.

Service-learning: A didactical and an empirical view

Didactical conceptualization of service-learning

Bringle & Clayton (2012) define service-learning as a “course or competency-based, credit-bearing educational experience in which students (a) participate in mutually identified service activities that benefit the community, and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility.” (p. 105). The term ‘credit-bearing’ demonstrates a link to the curriculum and in the definition it is shown that service learning is mostly course-based. This represents also the dissociation to ‘community service’, in which students also support the community, but it is not embedded in a curriculum or course. All in all, as defined, service learning has a learning perspective as well as a community perspective.

The learning perspective refers to the combination of academic contents and real life experiences in a service-learning course. The experience in the service-learning course refers to the specific service activity the students work and reflect on, based on their academic knowledge. Therefore, service learning can be described as a type of experiential education. Kolb (1984) defines learning as a “process whereby knowledge is created through the transformation of experience” (p. 41). Particularly the reflection of this experience is important for forming abstract concepts (Kolb & Kolb 2005). Thus, the impact of service-learning depends also on the intensity of reflection. In accordance to Godfrey, Illes, & Berry (2005), reflection referred to the balancing of the students’ internal elements and the external elements of the service experience. Consequently, it is important that students reflect about their experiences and knowledge acquisition during the service activity. The latter comprises the content of the curriculum as well as the personal insights regarding the community needs.
The community perspective refers to the civic role of higher education. It is influenced by the work of Dewey and his idea that a democratic society will only work with engaged citizens. Therefore, it is an aim of higher education to prepare students to be responsible citizens. For Dewey (1966), a civic learning process is provided when students are engaged in the community and given problems. The latter focuses on the service activity, in which the students are faced with real social issues (e.g. poverty, charity, human dignity). The students work on the given social issues, including corresponding problems. Furthermore, it is important that students and a community partner, like a charity organization, build a reciprocal relationship. Both parties have specific kinds of knowledge and experience that bring together an essential contribution to solve the given community problem. Brower argues that this reciprocal gain is an important factor leading to the initial and sustained success of the service-learning course (Brower 2011, p. 63).

All in all, service learning can be described as a holistic concept in which different teaching and learning approaches like experiential learning, problem-based learning, and cooperative learning are assigned. A common ground is the differentiation between service and learning activity. In doing so the student is carrying out a working process in the service activity. This is connected to the learning, process and an acquirement of skills and personal insights (see figure 1). It is an action-oriented approach of service learning where the students are confronted with a community problem (action context), which they should solve (action process) to reach a valuable contribution to the community’s needs and their own competence development (action result). How students perceive these elements depends on the perspective. During the service process students should clarify their service problem, work on this, and should come to a result that improves the community. During the learning process students should be motivated towards the service activity and should discover and apply the relevant academic content that they need to solve the community problem. At the end they should reflect on their learning process, that is the learning result. (Gerholz & Losch 2014).
The differentiation between service and learning process represents an analytical conceptualization. The service process and the learning process are interdependent. It is comparable to the ‘organic connection’ between the service experience and attitudes and knowledge of the student founded by Dewey (1998). The ‘organic connection’ means that in service-learning courses students should build a relationship between their professional and personal competence development and the work on the service activity. To help students to do this, a teaching and learning clarification is needed. That includes the adaptation of the service problem concerning a connection to the academic content, the support of the students during the work on the service activity, and helping the students reflect on their service and learning process.

**Empirical evidence to the impact of service-learning**

In parallel to the increase of service-learning in business curricula, a growing interest in research of service-learning can be observed. Empirical studies on the impact of service-learning have revealed that academic skills, for instance critical thinking or problem-solving skills, during service-learning can be promoted (Govekar & Rishi 2007, Prentice & Robinson 2010). This does not indicate that also differences in academic performance between service-learning students and non-service-learning students exist (Prentice & Robinson 2010), although there are indications. Herbert & Hauf (2015) were able to show that a service-learning design contributes to a better understanding of course content. Nevertheless, students in service-learning courses have a higher perception of their self-efficacy and learning success than students in traditional courses (Yorio & Ye 2012, Reinders 2010, Peters, McHugh & Sendall 2006). Furthermore, service-learning can make a contribution to development of civic attitudes and engagement. For instance, Yorio & Ye (2012) revealed in a meta-study that service-learning fosters an understanding of social issues and the personal development of students (Yorio & Ye 2012). Other studies have shown that students reflect and develop their civic attitude, civic responsibility, and empathy with social issues in service-learning courses (Govekar & Rishi 2007, Astin, Vogelgesang, Ikeda...
& Yee 2000, Weber & Glyptis 2000, Astin & Sax 1998). Also, the willingness to be engaged can increase through service-learning courses (Prentice & Robinson 2010, Reinders & Wittek 2009). Moorer (2009) has shown that graduate students have a higher sense of civic responsibility than undergraduate students at the beginning of a service-learning course (p. 69).

The existing empirical studies have focused on specific learning outcomes rather than on the relationship between the instructional design of a service-learning course and its effects. However, some studies concentrated on didactical elements in service-learning courses. Yorio and Ye (2012) have revealed that credit bearing service-learning has a stronger impact on the competence development than an extra-curricular service-learning arrangement. For the learning process and success respectively it is important to support students for recognizing the connection between curricular content and service activity during the service process (Prentice & Robinson 2010, Batchei & Root 1994). All in all, a general comparison of the results should be considered cautiously. The conducted service-learning courses in the cited studies have several variations in their teaching and learning realization. Beyond that, the studies have used different forms of methodical design and measuring instruments. Therefore, a context sensitive comparison is needed. However, a trend can be shown that service learning has the potential to foster the professional and personal competence development of students. Nevertheless, the design of the learning and teaching criteria is only mentioned briefly. Based on that, the following case studies focus on the relationship between instructional design of a service-learning course, perceptions and attitudes of service-learning students.

**Empirical case studies: Perceptions of undergraduate and graduate students of service-learning courses**

**Interest and Research design**

The interest of the two single case studies (Yin 2003) is a description of the attitudes and expectations of undergraduate and graduate business students prior to them attending a service activity. Therefore the case studies are based on an ex-ante evaluation to evaluate the quality of a program – here the service-learning courses – before it is launched (Camphel & Rozsnyai 2002, 132; Moorer 2009, 66). It is about the idea to analyze the target group of a service learning-arrangement to find indications for an adequate teaching and learning design of service-learning courses in business education and whether the intended impact is possible.

**Research design in the case studies**

To examine the attitudes and perceptions of the students in both case studies a mixed method-approach in a convergent parallel-design (Creswell & Clark 2010) was used. Table 1 shows the methodology of the case studies.
Table 1
Case Studies: Methodology and context

<table>
<thead>
<tr>
<th>students</th>
<th>Case study 1</th>
<th>Case study 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>groups</td>
<td>Undergraduate students</td>
<td>Graduate students</td>
</tr>
<tr>
<td>teaching and learning method / instructional design</td>
<td>experimental group</td>
<td>control group</td>
</tr>
<tr>
<td>quantitative data collection</td>
<td>questionnaire (self-report) n = 39</td>
<td>questionnaire (self-report) n = 17</td>
</tr>
<tr>
<td>analysis</td>
<td>Variance and correlation analysis</td>
<td>Variance analysis</td>
</tr>
<tr>
<td>qualitative data collection</td>
<td>semi-structured interviews with every group (n =10)</td>
<td>semi-structured group-interview with the whole group</td>
</tr>
<tr>
<td>analysis</td>
<td>Qualitative content analysis</td>
<td>Qualitative content analysis</td>
</tr>
</tbody>
</table>

The data collection was in an experimental-control-group-design at the beginning (after the first module session) of the service-learning course (experimental group) and the traditional course (control group) respectively. At this point, the service-learning students had already met once with the charity organizations. In the traditional course, the instructional design in case study 1 was a traditional instructional-based teaching method and case study 2 has a problem learning design, in which the students work on a specific project (in the field of knowledge management) in groups.

In regard to the quantitative data, self-report questionnaires assessed the students’ self-efficacy (10 items), self-concept (5 items), attitude to be engaged (6 items), and subjective learning success (7 items) (e.g. Reinders 2010, Mabry 1998). A 6-point likert scale was used. Furthermore, the undergraduate service-learning students in case study 1 were asked for their reasons for attending the service-learning course. The reliability of the used scales are good to excellent (case study 1: .78-.87; case study 2: .73-.78)

Concerning the qualitative data in case study 1, semi-structured interviews with two students in each service activity were conducted at the beginning of the service-learning course. In case study 2 a group interview (Lamnek 1995) with five students at the beginning of the service-learning course was conducted. To analyze the qualitative data in both case studies, a qualitative content analysis (Mayring, 2010) was used.
Case study 1: Attitudes and expectations of undergraduate students

**Context of the case study 1.**

The context of Case Study 1 is a service-learning course (experimental group) for undergraduate students at a business faculty in Germany. The design of the course was problem based. The students worked in groups to solve existing problems at charity organizations in the given community. Examples for the service problems are the development of an advertising campaign to acquire new volunteers for a charity organization or the optimization of investment management of a vehicle fleet in a charity organization. In the course of problem solving the students drew on scientific methods, which represented the academic content of the course. Thus, the service-learning course has a connection to relevant business contents as well as to scientific methods in social science. Altogether 39 undergraduate students (27 female and 9 male with an average age of 24.6 years) worked in six groups and each group had to work on a different service activity.

**Findings in case study 1.**

In the analysis of the differences between service-learning students and students in the traditional course, a factor variance analysis has shown that there is a moderate effect in the subjective learning success (F (1,53) = 9.554, p < .01, η² = .160); other significant effects could not be found. Thus, the students in the control group have attributed their expected learning success less (mean = 3.85, sd = 0.88) than the service learning-students (mean = 4.56 , sd = 0.68). Based on that, a correlation analysis (see table 2) was made regarding the reasons of the service-learning students to attend the service-learning course.

Table 2

<table>
<thead>
<tr>
<th>Scales / reasons for service learning-course</th>
<th>Subjective learning success</th>
<th>Self-efficacy</th>
<th>Self-concept</th>
<th>Attitude to be engaged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance of practical application: For me, it is important to can apply my knowledge in real-life situations</td>
<td>0.481*</td>
<td>0.205</td>
<td>-0.094</td>
<td>0.558**</td>
</tr>
<tr>
<td>Charitable aspect: For me it is important, to have the possibility helping charity organizations.</td>
<td>0.324</td>
<td>0.079</td>
<td>0.324T</td>
<td>0.709**</td>
</tr>
</tbody>
</table>

A significant correlation can be shown in relevance of practical application and the subjective learning success. The results of the content analysis provide an orientation, why students weighted the practical application higher than the charitable aspect. All in all, 29 indications were found for reasons to attend the service-learning course. 52 % of these indications refer to application of knowledge in real-life.
problems (e.g. “For me it is definitely the practical relevance”; „The main reason was the practice-orientation.”) and 6% of the indications relate to a charitable aspect („yes, it does have the social aspect and charitable organizations”; „that one also gets the chance to work with charity organizations “). Other aspects have often been mentioned for pragmatic reasons (24%) and the form of assessment of the service-learning course (17%) could be identified. Beyond that the correlation, analysis also shows significant results between attitude to be engaged and the relevance of practical application and charitable aspect.

Based on the correlation analysis, the question arises: what kind of skills will be developed during the service-learning course from the students’ point of view and is there a connection to the service activity? An ANOVA has shown that there is a high effect between the several groups and service activities respectively in the perception of the subjective learning success (F (5,36) = 5.36, p < .001, η² = .493)). The results of the content analysis show indications that the service-learning students expect a development in their professional and problem-solving skills (e.g. methodological expertise in general or also applying it), social skills (e.g. “slightly advanced conduct of conversations”; „social areas provided by co-operation partners to get in touch”), and personal skills (e.g. „take responsibility for such things”). A clear trend between assessment of learning success in several groups and the expected development of skills could not be found.

In addition, an ANOVA reveals a main effect between the student groups in several service activities and their perception of the self-efficacy (F (5,36) = 4.57, p < .01, η² = .432). The results of the qualitative data analysis show that the students differentiate between group work and solving the given service problem of the charity organization. In regard to group work 37 comments could be found from which 76% (28 comments) are positive (e.g. “group is fine, everything is harmonious”) and 24% (9 comments) are negative (e.g. “if I did this all alone I would get on faster”). In contrast, the students expected the work on the service problem to be more challenging: 92% (22 indications) are negative comments. Here indications can be found regarding the service process (e.g. “demanding a lot from the non-profit organization and not being able to meet the expectations in this short time”) and the learning process (e.g. “we have enormous difficulties to narrow the problem down”, “the know-how, what do we really do [...] this is really the problem”). In the data, a moderate trend can be found that the groups expected challenges in the service process as well as in the learning process that assess their self-efficacy lower.

**Case study 2: Attitudes and expectations of graduate students**

**Context of the case study 2.**

The context of Case Study 2 is a service-learning course for graduate students at a business faculty in Austria. The didactical design of the course was basically similar to that in Case Study 1. The students also worked in groups to solve existing problems at charity organizations in the given community.

Examples of the service problems are the development of a marketing plan for an organization serving long-term unemployed, supervising the accompanying reflection of a measure to increase the employability of young adults, or the development of a fundraising strategy for an organization caring for refugees. In the course of problem solving, the students drew on scientific methods, which represented the academic content of the course. Thus, the service-learning course had a connection to relevant business content as well as to scientific methods in social science. 18 graduate students (11
female and 7 male with an average age of 28.8 years) worked in four groups and each group had to work on a different service activity.

**Findings in case study 2.**

In the analysis of the differences between service-learning students and students in the traditional course, a factor variance analysis has shown that there are effects in the self-concept and subjective learning (see table 3).

Table 3
Comparisons of means between service-learning course and control group

<table>
<thead>
<tr>
<th>Scales</th>
<th>mean</th>
<th>sd</th>
<th>p</th>
<th>F</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>service-learning course</td>
<td>4.71</td>
<td>0.63</td>
<td>0.914</td>
<td>0.012</td>
<td>0</td>
</tr>
<tr>
<td>control group</td>
<td>4.69</td>
<td>0.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-concept</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>service-learning course</td>
<td>3.77</td>
<td>1.09</td>
<td>0.006</td>
<td>8.239</td>
<td>0.155</td>
</tr>
<tr>
<td>control group</td>
<td>2.96</td>
<td>0.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude to be engaged</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>service-learning course</td>
<td>4.81</td>
<td>0.76</td>
<td>0.487</td>
<td>0.491</td>
<td>0.11</td>
</tr>
<tr>
<td>control group</td>
<td>4.66</td>
<td>0.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective learning success</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>service-learning course</td>
<td>4.93</td>
<td>0.54</td>
<td>0.16</td>
<td>5.133</td>
<td>0.102</td>
</tr>
<tr>
<td>control group</td>
<td>4.43</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The students in the control group have attributed their learning success less (mean = 4.43, sd = 0.88) than the service-learning students (mean = 4.93, sd = 0.54). The service-learning students had on average a significantly more pronounced self-concept (mean = 3.77 in comparison to mean = 2.96). Within the service-learning course, however, no differences are shown among the four project groups.

The group interview revealed that graduate students primarily have a more critical look at the questions concerning the project management and implementation of the project at the beginning of the project.

In the case of project management, mainly questions about the organization are put into the foreground ("of course we set up our own Dropbox for the group"; "the first two appointments [with the organization] have already been set"; "the distribution of the work load within the group was not a problem"). When implementing the project, students generally proceeded according to the routines they learned in their studies ("first we did a bit of literature research"; "for coming up with the first ideas for the marketing concept we met and worked with the material from the marketing course – so it was really useful that I specialized in marketing for my bachelors as well as for my masters degree").

The social aspect of the projects emerged only marginally in the first discussion and was quickly overshadowed by other considerations ("only people who live below the poverty line are allowed to go there [...] but this is more than € 1.000, - [...] I am sure there are people who live on others"). The social organizations were strongly discussed in another aspect. Students criticized the lack of economic approach of these organizations, which were visible to the students during their respective projects ("they still have 1.7 tons of oranges in stock, they are not selling anything and have already re-ordered 3..."
tons and do not even have room in the cooling chamber”; “we were told that the price was just fixed, it is far too high and this has certainly not been calculated”; “the [organization] will start in a month with this new measure, and they still do not know what products they actually offer, not to mention any calculation”).

Classification of the findings

The two case studies are embedded in different contexts, but the design of service learning courses and study structure are basically similar, which is why similarities and differences between undergraduate (Case Study 1) and graduate (Case Study 2) students can be identified.

The findings in Case Study 1 revealed that service-learning students expect a higher learning success than students in traditional instructional-based courses. One reason for this perception is the relevance of practical application of knowledge in real-life situations and less the community link to give support to charity organizations. Furthermore, it can be shown that the service activity and the membership in a group respectively have an influence of expected learning success and expected self-efficacy. Like in Case Study 1, the findings in Case Study 2 show that service-learning students expect a higher learning success than students in the course with the problem-based design. Furthermore, the service-learning students assess the impact of the course on their self-image higher. The access of students to the projects is strongly influenced in both case studies by a business background and the emphasis on the social aspect in the reflection and is, therefore, of great value. In Case Study 1, differences exist in the assessment of students with regard to self-efficacy depending on the service activity in which they worked. The qualitative analysis showed that the expected self-efficacy corresponds to perceived challenges in the service process and learning process. This effect does not occur in Case Study 2. It can be assumed that the graduate students already have more experience with projects and also the older age suggests that they do approach the projects more elaborately which is reflected inter alia in the results of the interview data.

Both case studies show that the service-learning students have a higher perception of their learning success than students in traditional courses. This result is also reflected in ex-post observations in other studies (Yorio & Ye 2012, Reinders 2010, Peters et al. 2006). The expectation of the concept of service-learning thus appears to be higher. Here the aspect of the positive expectations transformed into a concrete learning success becomes significantly important. Beyond, Case Study 2 (graduate students) revealed that the service-learning students have a more pronounced self-concept in terms of the module or the course as compared to students in the control group.

From the point of view of teaching design in service-learning courses, first indications can be presented on the basis of the results. First, the preparation of the specific service activity has an impact on the expected effect of the students. It also shows that the students need support in the service-learning process and in the learning-process (which is shown in the results of the qualitative data). From a teaching perspective these results are indications that in service learning-courses the connection between service-process and learning-process is guided by the lecturers. Furthermore, the communication processes among the charity organizations, the students, and the teachers need to be coordinated coherently. Therefore the specific problem definition and curricular content used by the students need to be looked at (e.g. Prentice & Robinson 2010). In these communication processes the students’ learning process must be taken into account as well as the learning of the social organizations.
This provides not only a learning opportunity to the organizations but also the special viewpoint that students, especially in the field of economic subjects, have on their organization and their projects.

A restriction though is that the case studies results were based on self-reports of the students. Both case studies were carried out in the context of business faculties; therefore, the question remains open whether these results can be transferred to other contexts. Finally, the kinds of conclusions you can draw from an ex-ante analysis are limited. The ex-ante analysis provides some questions for future research. On the one hand, the differences between undergraduates and graduates students while using a service-learning approach need to be analyzed. On the other hand, it seems relevant to adapt the methodical instruments more on the context of service learning. It was shown that the perceived self-efficacy corresponds to both the service process and learning process. Therefore, the scales for measuring self-efficacy should be adapted to these constructs.

References


