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FOSTERING CURIOSITY AND ENGAGEMENT IN HIGHER EDUCATION: A STUDY ON SELF-DIRECTED LEARNING IN A COMMUNITY SERVICE LEARNING COURSE

Gökçe Güvercin-Seçkin

The foundational premise of this action research was the students' underestimation of a community service learning course. The objective of this study was to delve into the experiences and viewpoints of senior-level university students regarding the service learning course, employing the principles of self-directed learning. In this endeavor, criterion sampling was employed, involving the active participation of 36 students. The methodology for data acquisition encompassed individual self-reflections conducted as the semester reached its culmination, regular group contemplative sessions held on a weekly basis, and the researcher's journal documenting their observations and insights. To analyze the data, a thematic analysis approach was adopted. The research findings exhibit that the course transcended a mere focus on grading, enabling students to identify their learning requirements, access top-notch resources, and evaluate their learning process holistically. The research emphasizes that the creation of a self-directed learning-oriented course within the domain of higher education has the potential to reshape students' initially biased and dismissive attitudes, resulting in a gratifying and enjoyable learning milieu.

Keywords: self-directed learning, service learning, adult learning, higher education, reflection

I have devoted considerable thought to the question of how to sustain my students' engagement throughout the semester. The landscape of education has significantly evolved with changes in the nature of information, the proliferation of access methods, and the diverse utilization of knowledge. Gone are the days when university students would solely rely on listening to a great professor who would grace the classroom.

There exists a substantial body of literature concerning the incorporation of service learning in higher education, showcasing its potential to foster positive and direct effects on students' academic outcomes and study skill development (Corbett & Kendall, 1998). Noteworthy research by Warren (2012), Fong et al. (2023), and Hirschinger-Blank and Markowitz (2006) revealed that service-learning courses can positively alter students' prejudices toward subjects, promote more favorable attitudes toward volunteer activities, enhance communication with the community, and facilitate

the development of problem-solving skills through practical application of theoretical knowledge. Furthermore, Phillips (2013), Lee et al. (2018), and Fong et al. (2022) demonstrated that service learning contributes to the improvement of self-directed learning (SDL) skills. In line with this, Shin and Kim (2020) emphasized the integration of SDL and service learning as a means for learners to deepen their academic knowledge, gain practical experience, and make meaningful contributions to the community through service.

Kreber (1998) emphasized the importance of cultivating students' motivation and ability to participate in lifelong SDL as a primary objective of higher education. To achieve this, there is a requirement for a framework that allows students to perceive service learning as a meaningful educational experience. Although there is abundant literature highlighting the advantages of service learning in higher education, the exploration of service learning in conjunction with SDL skills remains limited. The present research, unlike previous studies, investigated the intersection of service learning and SDL and employed an action research approach to ensure the sustainability of this integration throughout the course process.

This study aimed to investigate the experiences of senior-level university students in the Community Service-Learning (CSL) course, which was designed with a focus on SDL. The research aimed to examine how the course contributed to the development of students' SDL skills. Through this comprehensive empirical analysis, novel insights will be provided for the design of undergraduate courses based on SDL principles. Within the framework of action research, the study sought to address the following research questions:

- In what manner can the perceptions of prejudice and disdain towards the CSL course be effectively altered?
- How can the course be structured to facilitate the cultivation of meaningful learning experiences for students enrolled?
- To what extent is it feasible to design the CSL course in a manner that fosters the development of SDL skills?

Theoretical Background

Service Learning

Service learning as acknowledged by Lee et al. (2018) entails an experiential educational process in which students actively participate in community service endeavors to address community needs. These programs integrate volunteer service with educational activities and can be traced back to the ideologies of influential figures such as Aristotle, Plato, Locke, Kant, and Rousseau who emphasized the integration of education and civic responsibilities. The theoretical underpinnings of community service learning are rooted in two significant historical traditions: the progressive education approach championed by Dewey (Dewey & Boydston, 1966) and the service-learning tradition within the American research tradition.

Dewey (1916/2004) is widely regarded as the leading proponent of academic service learning. His work underscored the importance of lifelong learning, incorporating real-life experiences within formal educational settings, and the connection between learning and democratic citizenship. According to Dewey, addressing actual social challenges necessitates students' ability to identify and implement solutions thereby offering opportunities to apply classroom knowledge in practical contexts.

Service learning enables students to recognize and meet real community needs, develop skills to work in harmony with a group, develop creative problem-solving skills, and acquire meaningful learning experiences. At the same time, the student benefits from the opportunity to connect the service experience to the intellectual content of the classroom.

Volunteer service and community service serve distinct purposes. While volunteerism entails selfless assistance provided to those in need, community service emphasizes students or aspiring educators' engagement in activities that tackle social issues, linking learning objectives and opportunities to their academic field. In essence, community service learning diverges from voluntary service practices by affording students the chance to apply their academic knowledge and skills in practical settings that align with their discipline (Bell & Carlson, 2009).

Self-Directed Learning

SDL holds a significant position within the realm of adult education. In fact, it serves as a foundational element for transformative learning as articulated by Mezirow (1985) that stands as a central aim of adult education. A crucial condition for achieving this transformative learning lies in learners' capacity to autonomously navigate their learning journeys, essentially possessing SDL skills. While the acquisition of such skills is intertwined with individual personality traits, it is also profoundly influenced by the conducive atmosphere provided by both formal and informal learning environments wherein these skills can be cultivated across the lifespan. Within formal educational frameworks, the promotion of SDL processes becomes imperative. This underscores the significance of enabling learners of diverse ages to gain exposure to learning spaces that are conducive to honing the aptitude for managing their own learning trajectories thereby profoundly enhancing the quality of the learning experience.

SDL encompasses the process by which learners autonomously identify their learning requirements and objectives. This involves directing their focus toward credible learning resources, formulating learning strategies informed by these resources, conducting assessments of both the learning process and its outcomes, and ultimately gaining profound and meaningful learning encounters as a culmination of these endeavors (Cafferella, 1993; Caffarella & O'Donnell, 1987; Knowles, 1975; Tough (1971).

The foundations of SDL can be traced back to the contributions of Houle (1961) and Tough (1967). It is delineated as a learning approach characterized by various tiers that center on augmenting learning competencies and forging significance through experiential engagement (Brockett & Hiemstra, 1991; Brookfield, 1986; Garrison, 1997;

Knowles, 1968, 1975, 1980; Merriam & Caffarella, 1999; Mezirow, 1985). SDL is firmly grounded in the process of deriving meaningful insights through experiential exploration rooted in inquiry. Brockett and Hiemstra held the view that SDL embodies “a way of life” (p. 18), defining it as a journey wherein learners’ hold primary responsibility within the learning processes.

Guglielmino and Guglielmino (2003) centered their focus on the potential contexts in which SDL may transpire, underscoring its applicability across a diverse array of scenarios that range from conventional teacher-centered classrooms to self-conceived, self-guided learning initiatives. As posited by Knowles (1980), SDL manifests as an amalgamation of processes within which the “capacity (and need) for self-direction develops” (p. 20) as an intrinsic facet of human developmental progression. Knowles (1980) underscored the notion that learner experiences serve as a fertile reservoir for cultivating SDL proficiencies thereby enabling learning processes rooted in problem-solving through inquiry rather than mere content transmission.

In SDL, reflection, action, inquiry and experience are key concepts (Brookfield, 1981, Dewey, 1916/2004; Elias & Merriam, 1995; Knowles, 1975; Lindeman, 1926/1961). These notions align with Dewey’s emphasis on experience and reflection. Dewey introduced the notion of “reflective thinking,” denoting an active and deliberate consideration of beliefs or purported knowledge, considering supporting evidence and potential implications (p. 9). Reflective practice, as underscored by Finlay (2008), involves learning through and from experience while Mathew et al. (2017) defined it as the capacity to engage in continuous learning by reflecting upon one’s actions.

Evidence from research demonstrates the favorable impact of SDL competencies on an individual’s scholastic accomplishments (Cazan & Schiopca, 2014) as well as their proclivity for critical thinking (Karataş & Zeybek, 2020). Concurrently, Edmondson et al. (2012) illuminated that adept utilization of SDL skills by students is associated with traits such as creativity, curiosity, elevated life satisfaction, and the capacity to autonomously define future aspirations. As Carré (2012) argued, fostering SDL in academe empowers students with autonomy in learning, defines outcomes, and assesses tailored feedback. Carré also noted that creating a self-directed environment involves minimizing traditional instruction, fostering collaboration, and using electronic resources and promotion of self-regulation strategies that nurture autonomy in formal education. Currie-Knight et al. (2020) indicated students initially found selecting the first project worrisome but shifted to excitement once chosen, feeling reassured by the professor’s unobtrusive suggestions and support that eased concerns about course structure.

Morris (2020) and Robinson and Persky (2020) directed attention towards the instructor’s pivotal role within SDL processes and encounters. They emphasized the instructor’s responsibility to direct learners toward pertinent educational resources, ascertain learning objectives, and participate in the cocreation of meaningful learning engagements. They proposed a shift in the instructor’s role from that of a “sage on the stage” to a “supportive guide” (p. 296), nurturing the learning journey. In tandem, Lee and Mori (2020) as well as Patterson et al. (2002) advocated for the integration of reflective practices to foster the development of students’ SDL proficiencies. They posited that collaborative endeavors, introspective contemplation, and constructive peer

feedback constitute the most influential factors underpinning students' capacities for SDL.

As articulated by Pata (2009), the dynamism of swiftly evolving environments necessitates the cultivation of individuals who possess the attributes of continuous learning, creativity, independence, responsibility, and autonomy. Institutions of higher learning should instigate the principles of shared authority (democracy), accountability, and experiential learning all while honing learners' capacities for SDL and professional competence (Fischer & Palen, 1999). Within this context, the imperative to bolster SDL encounters throughout university education is progressively gaining prominence.

Method

This study adopted a qualitative research approach within the framework of action research as outlined by Creswell and Creswell (2018). The research design was implemented through a CSL course targeting senior-year, seventh-semester students enrolled in the undergraduate Guidance and Psychological Counseling program. The study period spanned from October 2018 to January 2019.

The data for this study were obtained from three distinct sources. These sources encompassed routine group reflective check-ins conducted during in-class sessions, an action research journal maintained by the researcher, and individual reflections provided by participants subsequent to the conclusion of the course.

A total of 36 undergraduate students were engaged as participants in the study, selected using criterion-based purposeful sampling in accordance with Patton's (2014) guidelines. The criterion necessitated the participants to be seventh-semester senior students enrolled in the CSL course, a course facilitated by the author-researcher of this article. The collected data underwent analysis using thematic content analysis as per the approach outlined by Patton.

The Service-Learning Course Context

The 14-week course was planned and implemented in four parts as per Fong et. al. (2023, p. 30): diagnosing, planning, implication, and evaluation. Within the scope of the course, the aim was for students to design, implement, and evaluate an educational program, a training program consisting of four sessions of 45 minutes each organized on a weekly basis.

Diagnosing (Before the Course Began)

As a long-standing academic, I was troubled by the perception among my students that undergraduate courses were merely about taking notes and passing or failing. I noticed a lack of application of adult education principles in higher education courses. To address this issue, I believed it was appropriate to integrate SDL and service-learning approaches in the CSL course. With these concerns in mind, I chose to design the course around SDL and implemented action research to ensure its ongoing effectiveness

throughout subsequent semesters. The diagnostic phase comprised two stages and served as an initial assessment.

During the diagnostic phase, I initiated a discussion with my students on the first day of the course. I requested them to express their thoughts and assumptions about the CSL course through written and verbal means. Feedback from senior students and those in other departments of the faculty of education indicated that they perceived the course as easy and believed that simple volunteer work would suffice to complete it. Unlike theoretical courses, this one required fieldwork. When I explained the course structure and encouraged discussion about its content, most of the students resisted and expressed their discomfort. Following the verbal sharing, I asked them to anonymously provide individual written expectations and opinions about the shared content. Out of the 36 students, 25 found the course content potentially demanding, three were enthusiastic about the practical aspect, five expected simpler volunteer work as in previous semesters and felt somewhat disappointed with the content, while three students did not respond. In this diagnostic phase, I was able to identify students' dismissive attitudes towards this course and their reluctant approach to lessons in general.

Planning (Weeks 1–7)

During the planning phase, the students took the initiative to form their own working groups based on their preferences. Given that they were seniors who knew each other well, they had already established dynamics for collaboration. Each group had its own unique dynamics with group members possessing complementary competencies and differing levels of readiness. When I asked them about their preferred formation of study groups, they expressed a desire to work with friends whom they had been in class with for 4 years rather than a random assignment of members. The group formation process considered the strengths of the individuals and the areas in which they needed improvement. Their past experiences played a facilitative role in this planning phase, resulting in a smooth completion of this stage.

The next step involved assigning each group the task of selecting an institution for their 4-week training program. They were expected to arrive in class with their chosen topic and the institution where they intended to implement their program. Additionally, as part of the planning stage, they were required to decide on the specific organization they wished to collaborate with prior to attending the class.

The students' past experiences had both positive and negative impacts on the process. In terms of enrichment, their prior involvement in various elective, compulsory, and practical courses in previous semesters proved beneficial. These experiences and networks played a crucial role in selecting the project topic, identifying the implementing institution, and establishing agreements with said institution. However, there were also negative aspects to consider. Some students held prejudices that diminished the significance of the course based on the experiences shared by their friends who had previously taken it.

After finalizing an agreement with the institution, a needs analysis was conducted to determine the training program requirements for each group. Building upon their previous experiences, the students had already designed a theoretical

program as part of the Program Development in Guidance course in the spring 2018 semester. Using this foundation, they carried out a needs analysis specific to the institution they intended to implement the program in and provided a report based on their findings. Subsequently, they gradually developed four-session training programs with each session lasting 45 minutes, tailored to address the identified needs.¹

I put emphasis on acting as a facilitator and guide in the process of conflict resolution within the group, identifying the institution, negotiating with the institution, planning, finalizing the needs analysis, and updating the program draft according to the results of the needs analysis. At the end of 7 weeks, nine projects were ready to move to the implication phase.

Implication Process (Weeks 8–11)

During the implication process, the groups shared their practice experiences with me on a weekly basis. They updated the content for the following week according to feedback they received from me. At this stage, the pedagogical formation courses they completed as fourth-year students constituted their previous experiences and contributed positively to their experiences in the implication process. The projects' participants included students ranging from kindergarten to university levels within public schools.

Evaluation Process (Weeks 12–14)

The evaluation process should be considered in two aspects: the evaluation of the students taking the course and the evaluation of the projects. The aspect of students taking the course consists of two dimensions: formative and summative evaluation. First, formative evaluation was carried out from the first week of the course; activities carried out in the process were discussed and improved with feedback. Plans for the following week were designed based on the experiences of the previous week.

The summative evaluation of the students consisted of both weekly group reflections with a weight of 30% and group portfolios prepared at the end of the semester with a weight of 40%. Thirty percent of the students were graded on their individual reflections. All student grades ranged from AA to BA.

The second aspect was the evaluation of the program in terms of the projects' participants in the developed programs by my students. Both qualitative and quantitative data were collected from the participants after the completion of the program implementation. In the second phase, feedback from the participants of the projects was gathered regarding the four-session training. They also used quantitative tools to measure the outcomes of the program content.

¹ **Titles of developed programs:** Nutrition Awareness in Individuals with Autism, Anger Management for Adolescence, Peer Bullying, Peer Mentoring, Career Program for Guidance and Psychological Counseling Students, Gender Awareness, Creative Thinking Support Program, Awareness Program for Teachers on Special Needs Learners, Exam Anxiety and Coping Skills for Secondary School Students.

Participants of the Research

The study employed a purposive sampling technique with the utilization of a criterion sampling strategy. Participation in the study was contingent upon being a fourth-year student enrolled in the undergraduate program of Guidance and Psychological Counseling and concurrently undertaking the CSL course. The analysis was rooted in data collected from a cohort of 36 undergraduate students, comprising 29 self-identified female participants and 7 self-identified male participants (see Table 1). The age range of the participants was 22 to 24 years.

As indicated in Table 1, a notable majority of the participants are female. The allocation of university scholarships displays a somewhat equitable distribution. With respect to Grade Point Average (GPA), there is an observable concentration within the range of 2.00 to 2.99.

Table 1

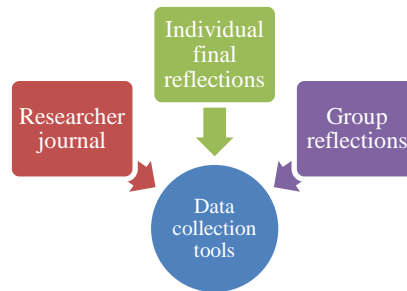
Participants of the Study

GPA/ Scholarship status	0–1.99/4	2.00–2.99/4	3.00–3.50/4	3.51–4.00/4	Total
Full scholarship	0	0	5 (1♂, 4♀)	7 (7♀)	12 (1♂, 11♀)
Partial scholarship	0	9 (3♂, 6♀)	4 (4♀)	1 (1♀)	14 (3♂, 11♀)
No scholarship	0	8 (3♂, 5♀)	2 (2♀)	0	10 (3♂, 7♀)
Total	0	17 (6♂, 11♀)	11 (1♂, 10♀)	8 (8♀)	36 (7♂, 29♀)

Note. ♂ = male, ♀ = female.

Data Collection Tools

Three different data collection tools were used in the study (see Figure 1). The first data collection tool was the researcher journal kept by me, the second was the weekly group reflection reports prepared by the students, and the third was the individual reflections written by the students at the end of the semester. The researcher’s reflective journal was included as a supportive form of data collection.

Figure 1*Data Collection Tools*

The weekly group reflections served as the second method of data collection. These reflections encompassed a collective evaluation of the preceding week and the formulation of a preliminary plan for the subsequent week. Within the group, members jointly appraised the strengths, areas for improvement, and necessary adjustments for the forthcoming week. Modifications such as simplifying, altering, or expanding planned activities were made accordingly. These reflections were communicated to me in written form, shared verbally, and deliberated upon collectively using the brainstorming technique. In turn, I provided feedback to each working group on their accomplishments from the previous week and their plans for the upcoming week. The group reflection questions were designed to elicit open-ended responses, focusing on identifying the strengths of the previous week's implementation as a group, highlighting areas in need of improvement or challenges encountered, and delineating areas for potential enhancements in the following week.

As the third data collection tool, students were requested to write reflective accounts on their experiences throughout the semester as part of their final report, following the conclusion of the 14th week of the course. Open-ended questions were formulated by me, the instructor, to guide their reflections. Students provided written responses addressing aspects such as their favorite and least favorite aspects of the service-learning experience, the knowledge gained through service learning, and the challenges encountered along with their problem-solving approaches. These reflection papers were collected and students were debriefed on the possibility of utilizing their insights within the scope of the action research, encompassing individual and group reflections. All participating students willingly expressed their interest in partaking in the research with those volunteering being asked to provide their consent through a signed form. The entire research process and materials were approved by the Maltepe University's institutional review board.

Analysis of the Collected Data

The analysis was conducted in three steps. First, individual end-of-term reflections were analyzed via thematic analysis that identified main themes. Secondly, weekly group reflections were analyzed via thematic analysis and themes supporting the themes that

emerged in the first stage were determined. In the third stage, the sections in the researcher's journal that reinforced the themes that emerged in the first two stages were included in the analysis process.

Researcher's Role

In the realm of action research where the researcher's role intertwines with that of a practitioner, ethical considerations become paramount. Teaching the CSL course for the fourth time provided me with a distinct advantage in terms of my mastery over the process. Furthermore, a notable benefit arose from the fact that this marked the third occasion of conducting the course alongside the students, fostering the development of mutual trust and a well-established rapport through the process of becoming acquainted with one another.

In light of these two advantages, I apprised the students of my intent to conduct action research within the framework of our CSL course. I communicated that their weekly group reflections throughout the course and their individual reflections at the semester's closure would serve as the research data. Additionally, I clarified that I would maintain a researcher's journal, documenting my observations and encounters throughout the course journey. Furthermore, I ensured them of their voluntary participation, stating their right to abstain if desired. All enrolled students willingly chose to participate and subsequently endorsed the research participation consent. Importantly, my dual roles as both the course instructor and the action research investigator remained distinct and unobtrusive throughout the process.

This study was conducted with the permission of Maltepe University Ethics Committee with the decision dated 03/01/2022 and numbered 2022/01-06.

Findings

Upon meticulous examination of both the participants' reflections, group reflections and the researcher's journal, the themes and corresponding subthemes delineated in Figure 2 came to the forefront.

Identifying One's Own Learning Needs and Developing Insight

Insight is a realistic way of reflecting, evaluating, and concluding one's acceptance, beliefs, values, and self-perception in one's own inner world. Within the scope of this course, students developed insight as an outcome of the processes they reflected on individually and as a group and were able to identify their learning needs. This determination can be classified into subthemes that include their own positioning individually, in the group, and in contact with the participants (see Table 2)

Figure 2

Themes of the Results

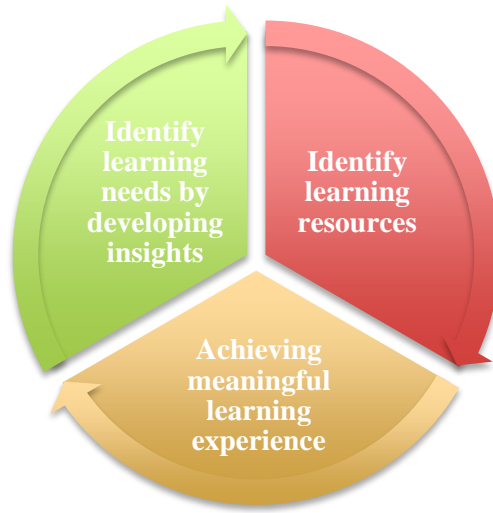


Table 2

Identifying Learning Needs

Theme	Subtheme
	Own positioning
Identify learning needs by developing insights	Positioning in the group
	Positioning in contact with the participants

The following interview fragment includes Student 1’s reflection on the need for his individual learning in the process:

One of the issues I need to improve about myself is my impatience and perfectionism. When working with a group, being able to use time effectively and planning the distribution of tasks fairly are very important factors. At the stage when these things start to be realized, I think that I succumb to my

excitement a little bit and act too impatient and get caught up in the thought of “let’s do it as soon as possible.” As for perfectionism, I think that I stress myself because I always wish the work I do to be the best. These are among the issues I need to improve. (Student 1²)

In the interview excerpt provided, Student 1 demonstrated an initial inclination towards the course, expressing impatience, perfectionism, and a desire to expedite the tasks at hand. These characteristics posed challenges for him during project preparation, implementation, and group work in the initial stages. Student 1 acknowledged the necessity of improving these attributes through self-reflection. A similar theme is reflected in the researcher’s journal, particularly during the initial phase. The students’ desire to assume control over the course, coupled with anxiety regarding the multistage project process and their impatience to reach the conclusion, are highlighted in the researcher’s journal. Furthermore, the following interview excerpt exemplifies the students’ ongoing need for control during the initial stages of the process.

I was the one who thought and planned every plan and set down to the finest detail throughout the project. This was a point I needed to improve. Because there were many times when I couldn’t be patient, when I wanted it to happen immediately. Because I was preparing for everything that could happen outside of the plan I had set up. Being ready for every possible problem and question caused me to be impatient about the project. (Student 2)

In the interview fragment above, it is seen that the student’s need to be prepared for any unexpected situation and his anxiety about this situation is at an extremely high level. This anxiety also leads to being impatient.

In the process of fostering insight, an additional aspect to consider is the students’ awareness of their own position within the group. The formation of groups was based on members’ understanding of each other’s strengths and weaknesses. The seniority of the students facilitated this phase as they had already shared numerous courses and developed a strong familiarity. Each group exhibited unique dynamics with individual members possessing distinct competencies. Throughout the group work process, they acknowledged the need to enhance their collaborative skills and cultivate a more constructive approach in providing feedback to their peers and evaluating the process. This dimension is exemplified by the following interview excerpt:

I think that my collaborative spirit, that is, working together with group members, is low. Apart from that, I observed that my criticism was harsh during the decision-making process in the group. (Student 3)

At the end of the semester, students were highly motivated to accept and take responsibility for their individual characteristics that needed improvement. After their self-reflection on their individual skills of managing the process and working with the

² All names of people, institutions, and cities are anonymized.

group, the last dimension in which they developed insight was the quality of the relationship with the participants in the training at the implementing institution. The following interview fragment exemplifies this situation:

I think I need to improve myself in terms of ensuring that the students pay attention to the practice during the implementation and maintaining classroom authority. I think I should also improve my ability to improve my one-to-one communication with them and get down to their level. (Student 5)

In the interview fragment above, the student shows that he realized the need to communicate in accordance with the levels of the students participating in the program. Similarly, in the following interview fragment, Student 8 expresses that he realized the need to consider the developmental characteristics of the individual in front of him while communicating:

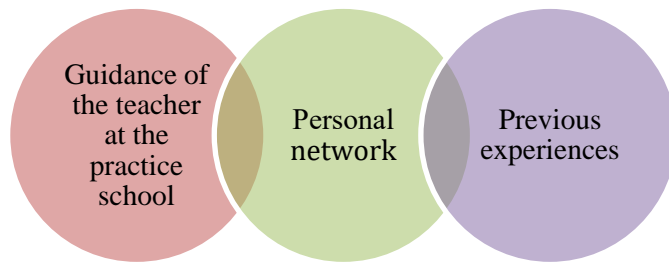
I realized that I should use a simpler and plainer language when giving information to students and that I should think more about the fact that the person in front of me is a child, not an adult, and I should apply this. (Student 8)

One of the important elements of SDL is the development of insight, a metacognitive skill, through appropriate learning experiences. Insight development is a skill that enables an individual to identify their own learning needs. It was revealed by the participants of the study that developing insight contributes to the structure that allows them to accept feedback and engage in self-reflection. It is possible to state that the experience and interaction-oriented structure of the course and its structure that allowed group work are determinant in the process of developing insight.

Identify Learning Resources: Rich Previous Experiences and Supervision

Students were required to engage with learning resources as part of their course projects. The selection and discussion of these resources took place in weekly reflection meetings between the enrolled students and me. Initially, the students expressed apprehension about conducting their programs in an actual educational setting with real participants.

Initially, the students hesitated to make decisions regarding whom to approach for assistance, the reasons behind their choices, and the methods of seeking help. However, through supportive and instructive dialogues between the students in the course and me, they successfully identified and reached out to appropriate resources. These learning sources can be classified into three categories: the guidance provided by administrators and counselors in the implementing institutions, the personal networks of the group members, and the individual interests and prior experiences of the group members, which may be relevant to their interests (see Figure 3).

Figure 3*Learning Resources*

The personal networks participants had developed in different institutions in various courses—especially in the internship course—were among their primary resources. Their previous experiences and relationships constituted a rich resource for the planning. The following interview fragment exemplifies this situation. The student describes the challenge of finding an organization to host their project:

The biggest challenge we had during the planning was finding the group that would implement our project, the biggest challenge was overcome when the negotiations were done, and the procedure was in place. The teachers and administrators at the esteemed Ahmet Yilmaz School, whom I had the opportunity to get to know in last year's internship course, approved our project. (Student 13)

Participants having connections with the institutions where they could practice in their field was an important factor that facilitated their program development. Being seniors was another factor that enabled them to have personal network contacts. The following interview fragment exemplifies this:

The first difficulty we had in the planning phase was, of course, finding the school where we would implement the training. At first, we didn't know what to do, who to contact. But then we decided to ask for help from our lecturer who teaches our Learning Disabilities course. Then we met with the institution where we would carry out the training sessions in this intensive course program. (Student 11)

The above interview fragment exemplifies that they requested support from a faculty member from whom they had previously taken courses. In the rest of the process, they were guided by the same instructor.

The third source of learning was the previous experience of the students. The identification of the implementing institution and deciding on the project topic

progressed simultaneously. There are four main sources of intertwined previous experiences (see Figure 4).

Figure 4

Previous Experiences



Project subjects were decided upon by drawing from the four main types of previous experiences highlighted in Figure 4. During in-group discussions, students identified the value of their previous experiences in identifying program topics. The following interview fragment is an indication that the topic was decided upon based on the personal experience of Student 11:

Since my 12-year-old sister, who has a diagnosis of special learning disability, was bullied in middle school, the issue of bullying in schools, why students bully, and how the bully can stop this behavior started to haunt me. When I took the community service-learning course, we thought that this could be an opportunity and decided that we could do bullying prevention work with my groupmates. (Student 11)

The following interview fragment was from a member of the group that conducted a needs analysis on a topic that emerged from a personal experience, detailing how they had to change the intended topic after the needs analysis:

Our process of deciding on the project was not very easy, we had some setbacks. First, we decided to implement the training program we developed in the program development course, but after conducting the needs analysis, we realized that there was no need for this training. Therefore, after giving up the celiac awareness training, we thought that we could be useful in schools with our group friends and we went to visit Mehmet Rifat Evyap Vocational and

Technical Anatolian High School, where our main purpose was to meet with the school's guidance teacher, but we learned that they did not have a guidance teacher and we had an interview with the school's chemistry teacher. During this interview, we learned that the students were very angry, they could not control their anger and there were fights for this reason. In line with this interview, we made a needs analysis, and we concluded that trainings on anger control with students would be useful. (Student 12)

The students decided that it would be more useful to implement training on anger management in line with the information received as a result of the expert interviews at the school and the fact that the program participant students were in adolescence. The following interview fragment also contains statements regarding an example of an elective course that participants took previously:

Deciding on our project process was not very difficult for us. Because we were taking the "special learning disabilities" course simultaneously with the semester in which we designed the project. We started our process by saying why not choose a course and subject that we were very interested in as our project topic. This was a choice that both shed light on our choice of topic and enabled us to use what we learned in the course more effectively. (Student 15)

The students drew inspiration from various sources, including their previous courses (primarily electives), personal experiences (both within their families and social circles), and their own individual encounters. Transforming these inspirations into a tangible program required the support and facilitation of the course instructor, counselors, authorities from potential implementing institutions, and other instructors who had taught relevant courses that the participants had previously completed.

Meaningful Learning Experience

Participants began to recognize the impact of weekly discussions and the feedback provided during these sessions in enhancing the process, particularly after the second and third weeks. This realization could be attributed to their engagement in real-world practice through the needs analysis and the valuable contribution of feedback received on their practical experiences. My research journal observations revealed a gradual shift towards greater individual responsibility for learning within most groups. The project transcended being a mandatory graded assignment and transformed into a personally meaningful learning experience. Students who undertook the course expressed the significance of effective planning as the first dimension and the importance of process evaluation as the second dimension both of which contributed to their meaningful learning experiences.

The students' most prominent meaningful learning experience was that they learned the importance of planning during the course. The following interview fragment exemplifies this situation:

In this course, first, I learned that the planning part is very important, because I saw that some groups who did not do the planning part well and solidly had difficulties, fell behind and went back to the planning stages. ... A project with good planning is good in the implementation and evaluation phase. Within the scope of the course, I learned that the planning, implementation, and evaluation phases should never be considered separately from each other because they are all interrelated and would be the main lines of a project. (Student 22)

In the interview fragment above, Student 22, while expressing the consequences of a poor planning phase, drew attention to the inseparability of the planning, implementation, and evaluation phases.

A dimension accompanying the ability to improve the process through self-reflection on content is the experience of the importance of process evaluation. Making self-reflective evaluations through process evaluation, developing the ability to learn from one's own experience, and seeing the development of the ability to look at one's own experience from a critical perspective over time are the second dimension that stand out in the meaningful learning experiences gained in this process.

When the students enrolled in my CSL course experienced improvements at each stage of the process, they started to enjoy it and started to create a meaningful learning space. The following interview fragment exemplifies this situation:

The course design went completely beyond my expectations and gave me positive things in terms of transforming a project from a theoretical, written form into a reality. It was much more than a course. Honestly, when the whole implementation was over and we were going to deliver it in written and photographed form, I felt proud of what we had done. It was a project that was completely our own work, with all its strengths and weaknesses. I always felt that I was developing and evolving in the process, encountering new perspectives, and acquiring new perceptions. (Student 11)

In the process, individual and group reflections and dialogues with the instructor played a decisive role and developed self-direction skills. The students were able to recognize their own rich experiences and put these experiences to work within the scope of the project. They realized their relationship with themselves individually as well as their positioning in the group and the way they carried out group work and made efforts to transform them positively. They also developed insights into their attitudes and behaviors towards the participants. They had the opportunity to plan and implement their projects by turning to different learning resources.

Discussion

The research considered the CSL course as a process for developing students' SDL skills, and in this context, it aimed to reveal students' experiences within the scope of the 14-week course developed based on the SDL approach. Three main themes emerged

within the scope of the research findings: (a) the students' experiences of determining their own learning needs by developing insight within the course, (b) their experiences of identifying learning resources and orienting towards these resources in line with their needs, and (c) the meaningful learning experiences through their experiences within the course.

The research provided insights into the initial questions. The first query examined the transformation of prejudice and disdain towards the CSL course. Initially perceived as unnecessary and involving menial tasks like building bird cages, the course evolved into a platform for students to apply their academic competencies within their respective fields of study. By the end of the semester, participants' prejudices had shifted towards a positive outlook. In their own words, the course took on a significance that surpassed its initial label. This finding aligns with previous research by Fong et al. (2023) and Hirschinger-Blank and Markowitz (2006) that also observed a transformation in attitudes towards a course. However, it should be noted that this transformation does not meet the criteria for transformative learning as outlined by Güvercin and Varlikli (2020) as it fell short of a fundamental shift in the students' frame of reference. Instead, for the participants in this study, the transformation manifested as a transition from initial skepticism to a positive acceptance based on the experiences gained throughout the course. It is noteworthy that such positive shifts in prejudices occurred due to students engaging with real social problems, which was emphasized by Dewey (1916/2004). Additionally, the findings support the assertions of Bell and Carlson (2009) that the course should extend beyond mere volunteering service, offering students a much more comprehensive experience.

The second research question focused on structuring the course to facilitate meaningful learning experiences for students. The CSL course challenged their previous perceptions of conventional courses characterized by fulfilling mandatory requirements, receiving grades, and promptly forgetting the material. However, within the CSL course that was centered on experiential learning and reflection, students experienced notable advancements in problem-solving skills and the application of theoretical knowledge into practical contexts. Over time, these skills improved through feedback and self-reflection. The significance of effective planning became evident alongside the need for flexibility when faced with unforeseen circumstances. These findings align with prior studies by Phillips (2013), Lee et al. (2018), and Fong et al. (2023) that indicated that integrating SDL elements into course design leads to meaningful learning experiences for students. Furthermore, the outcomes validate the assertions of Finlay (2008) and Mathew et al. (2017) who emphasized the crucial role of reflective practice and experiential learning in enhancing SDL abilities.

The third research question addressed the possibility of constructing the CSL course to foster SDL skills. The course design that incorporated elements conducive to SDL notably increased students' motivation to engage in the projects. Collaborative brainstorming sessions, reflective discussions, experiential learning, and the supportive role of the instructor provided a favorable environment for nurturing SDL abilities. Participants in this study expressed that their meaningful learning experiences during the course enabled them to approach their theoretical courses in a new light. Furthermore, echoing the sentiments of Edmondson et al. (2012), the participants

reported satisfaction with the challenging yet enjoyable project process evident in their final reports. They acknowledged a shift in their perspective, recognizing the need for deeper learning and a more comprehensive understanding of their theoretical coursework. These findings also support Kreber's (1998) vision of higher education fostering SDL as a fundamental objective.

Conclusion

The study revealed the feasibility of designing higher education courses that foster SDL and facilitate meaningful learning experiences for students. By incorporating community service learning elements, university students can actively participate in SDL, assume responsibility for their own educational journey, and select projects and activities aligned with their individual interests and objectives. Service learning courses offer an ideal platform for such an educational configuration. This research highlights that service learning courses extend beyond mere volunteerism, instead leveraging the expertise of higher education institutions to make a tangible societal impact.

Among the findings, it is evident that students were immersed within a sphere of real-life experiences throughout the process, and this authentic engagement facilitated the cultivation of meaningful learning encounters by fostering the progression of their self-directed skills. The pivotal constituents of SDL encompass experience and inquiry, concepts that have been underscored by scholars such as Dewey and Boydston (1966), Elias and Merriam (1995), Knowles (1975), and Lindeman (1926/1961). Validation of the facilitative nature of SDL projects within the course structure is provided by Guglielmino and Guglielmino (2003) who affirm the promotion of SDL. Moreover, Morris (2020) highlighted the significance of undertaking projects centered on real-life subjects as an additional influential facet in nurturing SDL.

Through the implementation of the CSL course, students were afforded the chance to engage with tangible real-life issues or scenarios. The course's practical framework facilitated collaborative group endeavors. The instructor's role, positioned as a facilitator, empowered learners to assume ownership over the learning and teaching process. Within such contexts, the course can be accurately described as a learning environment that fosters SDL. This signifies a noteworthy prospect that course structures can be deliberately designed to enhance SDL proficiencies within higher education as posited by Pata (2009), Currie-Knight et al. (2020), and Carré (2012).

Further research on SDL and service learning can be considered in the context of different course contents within higher education. In the context of self-determination theory (Deci & Ryan, 2002), SDL and service-learning approaches can be addressed, and learners' internal motivations can be processed within the scope of the theory. Longitudinal research can be designed for students who take the CSL course to understand reflection of the course outcomes on their future professional and personal lives. Courses that promote SDL need to be mainstreamed. For this, it is important that academic staff acquire and develop the skills to be able to construct courses in the context of SDL. These findings will provide effective strategies for future iterations of service learning to researchers and practitioners interested in incorporating service learning into their classrooms.

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THE DETERMINATION OF CITATION METRICS FOR THE *INTERNATIONAL JOURNAL OF SELF-DIRECTED LEARNING*

Michael K. Ponton

Citation metrics have become a popular method of characterizing the citation performance of academic journals. Because the *International Journal of Self-Directed Learning* is not indexed in a data system that provides such metrics, the purpose of this research was to determine two popular citation metrics—h-index and i10-index—via scholar.google.com for the journal’s 20 years of publications.

Keywords: h-index, i10-index, academic journal

By the end of the 2023, the International Society for Self-Directed Learning (ISSDL) will have completed 20 years of publishing the *International Journal of Self-Directed Learning (IJSDL)* that is comprised of a volume and two numbers each year. As this represents a period likely sufficient to become immersed in the extant literature, the purpose of this research was to determine two popular citation metrics for this journal: h-index and i10-index. Currently, it is common for journals to be provided citation metrics from partnered data indexing systems; however, the *IJSDL* is not part of a system that does this, which is why this research was necessary.

The Hirsch or h-index that was introduced in 2005 represents “the largest number h of a scientist’s papers that received at least h citations” (Schreiber, 2008, Abstract), and this index is used not only for individual scholars but also for journals. As an example, an h-index of 5 indicates that 5 articles have been cited at least 5 times and that there is no number larger than 5 for this to be true (i.e., there are not 6 articles that have been cited at least 6 times). The i10-index simply refers to the number of articles with at least 10 citations; thus, an i10-index equaling 5 indicates that 5 articles have been cited at least 10 times and there is no number larger than 5 for this to be true (i.e., there are not 6 articles that have been cited at least 10 times). In order to determine the h-index and i10-index, citation information was gathered and analyzed for this study.

Method and Findings

The ISSDL curates the *IJSDL* on its website at <https://www.sdlglobal.com/journals> and provides a listing of all articles by volume (ISSDL, 2023). In order to determine the number of citations for each peer-reviewed article (i.e., articles and briefs), the citation provided in ISSDL (2023) was entered directly (excluding the sdlglobal URL) into

scholar.google.com for each of the 159 articles published through volume 20, number 1 (i.e., spring 2023). Table 1 provides the citation count for all published articles in chronological order. Total citations are 3,163, which is approximately 20 citations per article. Unsurprisingly, there is a strong negative correlation between citation year and mean citation count per year, $r(18) = -.74$, $p < .001$; that is, older articles tend to have more citations.

The articles presented in Table 1 were then sorted in descending order of citations and numbered (see Table 2). As highlighted in Table 2, the resultant h-index = 32 and i10-index = 78; that is, there were 32 articles with at least 32 citations, and 78 articles with at least 10 citations.

Table 1

Citation Count for All Published, Peer-Reviewed IJSDL Articles (n = 159) in Chronological Order

Year	Volume	Number	Pages	Sole/First Author	Citations ¹
2004	1	1	1–17	L. Guglielmino	0
2004	1	1	18–25	T. Reio	106
2004	1	1	26–38	N. Boyer	16
2004	1	1	39–58	G. Confessore	140
2004	1	1	59–69	M. Ponton	55
2004	1	1	70–75	R. Bulik	8
2004	1	2	1–6	R. Hiemstra	74
2004	1	2	7–25	S. Hoban	61
2004	1	2	26–37	V. McCauley	40
2004	1	2	38–52	T. Thompson	11
2004	1	2	53–62	J. Hanor	3
2004	1	2	63–81	H. Long	4
2004	1	2	82–94	B. Kops	9
2004	1	2	95–108	E. Park	3
2005	2	1	1–17	N. Boyer	48
2005	2	1	18–39	M. Mok	0
2005	2	1	40–49	T. Reio	123
2005	2	1	50–61	M. Ponton	64
2005	2	1	62–70	M. Derrick	29
2005	2	1	71–93	L. Guglielmino	42
2005	2	2	1–11	R. Donaghy	18
2005	2	2	12–23	J. Peters	42
2005	2	2	24–38	H. Long	1
2005	2	2	39–54	M. Mok	14
2005	2	2	55–65	E. Park	4
2005	2	2	66–80	N. Boyer	10
2005	2	2	81–90	M. Ponton	0
2005	2	2	91–101	G. Confessore	2
2006	3	1	1–12	A. Oliveira	80

CITATION METRICS FOR THE *IJSDL*

Year	Volume	Number	Pages	Sole/First Author	Citations ¹
2006	3	1	13–23	L. Chuprina	20
2006	3	1	24–35	D. Gabrielle	35
2006	3	1	36–51	E. Park	5
2006	3	1	52–60	K. Rager	20
2006	3	2	1–13	K. Scott	43
2006	3	2	14–26	D. Johnson	9
2006	3	2	27–33	R. Brockett	51
2006	3	2	34–44	J. Canipe	45
2006	3	2	45–60	R. Hiemstra	48
2007	4	1	1–15	R. Bulik	5
2007	4	1	16–26	N. Boyer	10
2007	4	1	27–38	M. Maung	28
2007	4	1	39–52	S. Kirkman	36
2007	4	1	53–64	V. Ricard	43
2007	4	2	1–18	H. Long	25
2007	4	2	19–37	L. Guglielmino	18
2007	4	2	38–57	E. Park	12
2007	4	2	58–68	P. Zsiga	31
2007	4	2	69–80	P. Carmichael	8
2008	5	1	1–14	L. Guglielmino	0
2008	5	1	15–29	T. Liddell	9
2008	5	1	30–44	G. Hollingsworth	2
2008	5	1	45–54	R. Bulik	3
2008	5	1	55–60	M. Ponton	6
2008	5	2	1–10	C. Biasin	11
2008	5	2	11–22	K. Muller	13
2008	5	2	23–34	J. Taylor	8
2008	5	2	35–49	P. Zsiga	11
2008	5	2	50–65	N. Ghani	0
2009	6	1	1–10	M. Boucouvalas	41
2009	6	1	11–30	L. Guglielmino	17
2009	6	1	31–45	B. Rowe	7
2009	6	1	46–58	M. Ponton	14
2009	6	1	59–67	P. Zsiga	3
2009	6	2	1–12	R. Bulik	7
2009	6	2	13–22	P. Bouchard	68
2009	6	2	23–39	J. Peters	7
2009	6	2	40–52	J. Kranzow	8
2009	6	2	53–75	T. Conner	23
2010	7	1	1–14	S. Ng	23
2010	7	1	15–29	C. Davis	17
2010	7	1	30–45	G. Francom	105
2010	7	1	46–59	A. Oliveira	26
2010	7	2	1–20	R. Kop	272
2010	7	2	21–34	J. Kirwan	41
2010	7	2	35–53	L. Phares	8
2010	7	2	54–63	M. Ponton	10

CITATION METRICS FOR THE *IJSDL*

Year	Volume	Number	Pages	Sole/First Author	Citations ¹
2010	7	2	64–75	N. McDonald	4
2011	8	1	1–6	L. Guglielmino	39
2011	8	1	7–17	P. Carré	1
2011	8	1	18–28	C. Kasworm	16
2011	8	1	29–45	P. Guglielmino	0
2011	8	1	46–59	R. Hiemstra	0
2011	8	2	1–10	R. Brockett	26
2011	8	2	11–27	N. Hyland	49
2011	8	2	28–43	B. Findley	32
2011	8	2	44–52	J. Piskurich	7
2012	9	1	1–10	M. Ponton	22
2012	9	1	11–23	A. Jezegou	19
2012	9	1	24–37	N. Boyer	15
2012	9	1	38–49	A. Mettler	1
2012	9	2	1–10	P. Carré	11
2012	9	2	11–27	J. Kirk	9
2012	9	2	28–43	L. Holt	2
2012	9	2	44–51	G. Reitsma	7
2013	10	1	1–22	T. McCarthy	17
2013	10	1	23–34	R. Hiemstra	59
2013	10	1	35–45	S. Payne	10
2013	10	2	1–20	N. Boyer	3
2013	10	2	21–37	S. Boyer	4
2013	10	2	38–51	L. Holt	2
2014	11	1	1–11	D. Morrison	25
2014	11	1	12–28	M. Kim	15
2014	11	1	29–40	M. Ponton	10
2014	11	1	41–51	S. Payne	14
2014	11	2	1–12	L. Cosnefroy	65
2014	11	2	13–28	G. Strods	9
2014	11	2	29–45	D. Morrison	7
2014	11	2	46–57	M. Taylor	2
2015	12	1	1–15	K. Grover	21
2015	12	1	16–28	C. Teal	15
2015	12	1	29–40	J. Aliponga	8
2015	12	1	41–49	M. Ponton	0
2015	12	2	1–21	E. Park	1
2015	12	2	22–48	N. Boyer	42
2015	12	2	49–62	E. Post	2
2015	12	2	63–81	A. Golightly	13
2016	13	1	1–11	C. Seifert	8
2016	13	1	12–25	M. Ponton	9
2016	13	1	26–41	S. Brewer	11
2016	13	2	1–14	J. Kranzow	49
2016	13	2	15–37	E. Beese	7
2016	13	2	38–53	J. Woodilla	3
2017	14	1	1–16	I. Van Duyne	6

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Year	Volume	Number	Pages	Sole/First Author	Citations ¹
2017	14	1	17–36	N. Curry	37
2017	14	1	37–57	R. Plews	30
2017	14	1	58–72	K. McCarthy	7
2017	14	1	73–86	D. Ginnings	4
2017	14	2	1–12	K. Grover	13
2017	14	2	13–26	L. Herod	7
2017	14	2	27–44	S. Bartholomew	10
2017	14	2	45–52	M. Ponton	0
2018	15	1	1–15	T. Piper	5
2018	15	1	16–30	J. Cooper	1
2018	15	1	31–42	M. Ponton	3
2018	15	2	1–17	K. Bordonaro	4
2018	15	2	18–33	S. Wagner	16
2019	16	1	1–11	R. Brockett	4
2019	16	1	12–18	M. Ponton	0
2019	16	2	1–21	D. Hashad	1
2019	16	2	22–38	A. Katz	3
2019	16	2	39–60	M. Zhu	18
2020	17	1	1–18	T. Porter	7
2020	17	1	19–38	M. Piotrowski	5
2020	17	1	39–50	B. Artman	14
2020	17	1	51–63	H. Linkous	1
2020	17	2	1–9	M. Brockett	2
2020	17	2	10–32	K. Chen	4
2020	17	2	33–49	K. Currie-Knight	3
2021	18	1	1–9	S. Payne	4
2021	18	1	10–21	C. Collier	0
2021	18	2	1–17	N. Boyer	2
2022	19	1	1–16	K. Karataş	0
2022	19	1	17–29	A. Damrow	1
2022	19	1	30–44	B. Artman	1
2022	19	2	1–10	K. Currie-Knight	0
2022	19	2	11–20	J. Beard	0
2023	20	1	1–15	M. Ponton	0
2023	20	1	16–36	A. Rock	0
2023	20	1	37–42	K. Currie-Knight	0

Note. Citation count data retrieved from scholar.google.com on August 1, 2023. A citation of 0 refers to articles with either a zero citation count or not listed on the website.

¹3,163 total citations.

Table 2

Citation Count for All Published, Peer-Reviewed IJSDL Articles in Descending Order of Citations

Year	Volume	Number	Pages	Sole/First Author	Citations	Article No.
2010	7	2	1–20	R. Kop	272	1
2004	1	1	39–58	G. Confessore	140	2
2005	2	1	40–49	T. Reio	123	3
2004	1	1	18–25	T. Reio	106	4
2010	7	1	30–45	G. Francom	105	5
2006	3	1	1–12	A. Oliveira	80	6
2004	1	2	1–6	R. Hiemstra	74	7
2009	6	2	13–22	P. Bouchard	68	8
2014	11	2	1–12	L. Cosnefroy	65	9
2005	2	1	50–61	M. Ponton	64	10
2004	1	2	7–25	S. Hoban	61	11
2013	10	1	23–34	R. Hiemstra	59	12
2004	1	1	59–69	M. Ponton	55	13
2006	3	2	27–33	R. Brockett	51	14
2011	8	2	11–27	N. Hyland	49	15
2016	13	2	1–14	J. Kranzow	49	16
2005	2	1	1–17	N. Boyer	48	17
2006	3	2	45–60	R. Hiemstra	48	18
2006	3	2	34–44	J. Canipe	45	19
2006	3	2	1–13	K. Scott	43	20
2007	4	1	53–64	V. Ricard	43	21
2005	2	1	71–93	L. Guglielmino	42	22
2005	2	2	12–23	J. Peters	42	23
2015	12	2	22–48	N. Boyer	42	24
2009	6	1	1–10	M. Boucouvalas	41	25
2010	7	2	21–34	J. Kirwan	41	26
2004	1	2	26–37	V. McCauley	40	27
2011	8	1	1–6	L. Guglielmino	39	28
2017	14	1	17–36	N. Curry	37	29
2007	4	1	39–52	S. Kirkman	36	30
2006	3	1	24–35	D. Gabrielle	35	31
2011	8	2	28–43	B. Findley	32	32 ¹
2007	4	2	58–68	P. Zsiga	31	33
2017	14	1	37–57	R. Plews	30	34
2005	2	1	62–70	M. Derrick	29	35
2007	4	1	27–38	M. Maung	28	36
2010	7	1	46–59	A. Oliveira	26	37
2011	8	2	1–10	R. Brockett	26	38
2007	4	2	1–18	H. Long	25	39
2014	11	1	1–11	D. Morrison	25	40
2009	6	2	53–75	T. Conner	23	41

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Year	Volume	Number	Pages	Sole/First Author	Citations	Article No.
2010	7	1	1–14	S. Ng	23	42
2012	9	1	1–10	M. Ponton	22	43
2015	12	1	1–15	K. Grover	21	44
2006	3	1	13–23	L. Chuprina	20	45
2006	3	1	52–60	K. Rager	20	46
2012	9	1	11–23	A. Jezegou	19	47
2005	2	2	1–11	R. Donaghy	18	48
2007	4	2	19–37	L. Guglielmino	18	49
2019	16	2	39–60	M. Zhu	18	50
2009	6	1	11–30	L. Guglielmino	17	51
2010	7	1	15–29	C. Davis	17	52
2013	10	1	1–22	T. McCarthy	17	53
2004	1	1	26–38	N. Boyer	16	54
2011	8	1	18–28	C. Kasworm	16	55
2018	15	2	18–33	S. Wagner	16	56
2012	9	1	24–37	N. Boyer	15	57
2014	11	1	12–28	M. Kim	15	58
2015	12	1	16–28	C. Teal	15	59
2005	2	2	39–54	M. Mok	14	60
2009	6	1	46–58	M. Ponton	14	61
2014	11	1	41–51	S. Payne	14	62
2020	17	1	39–50	B. Artman	14	63
2008	5	2	11–22	K. Muller	13	64
2015	12	2	63–81	A. Golightly	13	65
2017	14	2	1–12	K. Grover	13	66
2007	4	2	38–57	E. Park	12	67
2004	1	2	38–52	T. Thompson	11	68
2008	5	2	1–10	C. Biasin	11	69
2008	5	2	35–49	P. Zsiga	11	70
2012	9	2	1–10	P. Carré	11	71
2016	13	1	26–41	S. Brewer	11	72
2005	2	2	66–80	N. Boyer	10	73
2007	4	1	16–26	N. Boyer	10	74
2010	7	2	54–63	M. Ponton	10	75
2013	10	1	35–45	S. Payne	10	76
2014	11	1	29–40	M. Ponton	10	77
2017	14	2	27–44	S. Bartholomew	10	78 ²
2004	1	2	82–94	B. Kops	9	79
2006	3	2	14–26	D. Johnson	9	80
2008	5	1	15–29	T. Liddell	9	81
2012	9	2	11–27	J. Kirk	9	82
2014	11	2	13–28	G. Strods	9	83
2016	13	1	12–25	M. Ponton	9	84
2004	1	1	70–75	R. Bulik	8	85
2007	4	2	69–80	P. Carmichael	8	86
2008	5	2	23–34	J. Taylor	8	87
2009	6	2	40–52	J. Kranzow	8	88

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Year	Volume	Number	Pages	Sole/First Author	Citations	Article No.
2010	7	2	35–53	L. Phares	8	89
2015	12	1	29–40	J. Aliponga	8	90
2016	13	1	1–11	C. Seifert	8	91
2009	6	1	31–45	B. Rowe	7	92
2009	6	2	1–12	R. Bulik	7	93
2009	6	2	23–39	J. Peters	7	94
2011	8	2	44–52	J. Piskurich	7	95
2012	9	2	44–51	G. Reitsma	7	96
2014	11	2	29–45	D. Morrison	7	97
2016	13	2	15–37	E. Beese	7	98
2017	14	1	58–72	K. McCarthy	7	99
2017	14	2	13–26	L. Herod	7	100
2020	17	1	1–18	T. Porter	7	101
2008	5	1	55–60	M. Ponton	6	102
2017	14	1	1–16	I. Van Duyne	6	103
2006	3	1	36–51	E. Park	5	104
2007	4	1	1–15	R. Bulik	5	105
2018	15	1	1–15	T. Piper	5	106
2020	17	1	19–38	M. Piotrowski	5	107
2004	1	2	63–81	H. Long	4	108
2005	2	2	55–65	E. Park	4	109
2010	7	2	64–75	N. McDonald	4	110
2013	10	2	21–37	S. Boyer	4	111
2017	14	1	73–86	D. Ginnings	4	112
2018	15	2	1–17	K. Bordonaro	4	113
2019	16	1	1–11	R. Brockett	4	114
2020	17	2	10–32	K. Chen	4	115
2021	18	1	1–9	S. Payne	4	116
2004	1	2	53–62	J. Hanor	3	117
2004	1	2	95–108	E. Park	3	118
2008	5	1	45–54	R. Bulik	3	119
2009	6	1	59–67	P. Zsiga	3	120
2013	10	2	1–20	N. Boyer	3	121
2016	13	2	38–53	J. Woodilla	3	122
2018	15	1	31–42	M. Ponton	3	123
2019	16	2	22–38	A. Katz	3	124
2020	17	2	33–49	K. Currie-Knight	3	125
2005	2	2	91–101	G. Confessore	2	126
2008	5	1	30–44	G. Hollingsworth	2	127
2012	9	2	28–43	L. Holt	2	128
2013	10	2	38–51	L. Holt	2	129
2014	11	2	46–57	M. Taylor	2	130
2015	12	2	49–62	E. Post	2	131
2020	17	2	1–9	M. Brockett	2	132
2021	18	2	1–17	N. Boyer	2	133
2005	2	2	24–38	H. Long	1	134
2011	8	1	7–17	P. Carré	1	135

Year	Volume	Number	Pages	Sole/First Author	Citations	Article No.
2012	9	1	38–49	A. Mettler	1	136
2015	12	2	1–21	E. Park	1	137
2018	15	1	16–30	J. Cooper	1	138
2019	16	2	1–21	D. Hashad	1	139
2020	17	1	51–63	H. Linkous	1	140
2022	19	1	17–29	A. Damrow	1	141
2022	19	1	30–44	B. Artman	1	142
2004	1	1	1–17	L. Guglielmino	0	143
2005	2	1	18–39	M. Mok	0	144
2005	2	2	81–90	M. Ponton	0	145
2008	5	1	1–14	L. Guglielmino	0	146
2008	5	2	50–65	N. Ghani	0	147
2011	8	1	29–45	P. Guglielmino	0	148
2011	8	1	46–59	R. Hiemstra	0	149
2015	12	1	41–49	M. Ponton	0	150
2017	14	2	45–52	M. Ponton	0	151
2019	16	1	12–18	M. Ponton	0	152
2021	18	1	10–21	C. Collier	0	153
2022	19	1	1–16	K. Karataş	0	154
2022	19	2	1–10	K. Currie-Knight	0	155
2022	19	2	11–20	J. Beard	0	156
2023	20	1	1–15	M. Ponton	0	157
2023	20	1	16–36	A. Rock	0	158
2023	20	1	37–42	K. Currie-Knight	0	159

Note. Citation count data retrieved from scholar.google.com on August 1, 2023. A citation of 0 refers to articles with either a zero citation count or not listed on the website.

¹h-index = 32; ²i10-index = 78.

Discussion

The h-index of 32 places the *IJSDL* in the ranking range of 448–458 out of 1,421 “All regions/countries” journals under the subject area “Social Sciences” and subject category “Education” via a Scrimago Lab (2022) search performed on August 3, 2023. Scrimago Lab metrics are based on Scopus® data as of April 2023; Scopus (2023) is a leading citation database copyrighted to Elsevier. Thus, the *IJSDL* h-index places this journal in the top third of similar journals published worldwide.

The complete citations for the top 10 cited *IJSDL* articles are presented in Table 3. Ostensibly, these 10 articles have been greatly influential in the literature; thus, they are recommended for further reading.

Table 3*Complete Citations for the Top 10 Cited IJSDL Articles*

Article	Citations
Kop, R., & Fournier, H. (2010). New dimensions of self-directed learning in an open-networked learning environment. <i>International Journal of Self-Directed Learning</i> , 7(2), 1–20.	272
Confessore, G. J., & Park, E. (2004). Factor validation of the Learner Autonomy Profile (Version 3.0) and extraction of the short form. <i>International Journal of Self-Directed Learning</i> , 1(1), 39–58.	140
Reio, T. G., & Davis, W. (2005). Age and gender differences in self-directed learning readiness: A developmental perspective. <i>International Journal of Self-Directed Learning</i> , 2(1), 40–49.	123
Reio, T. G. (2004). Prior knowledge, self-directed learning readiness, and curiosity: Antecedents to classroom learning performance. <i>International Journal of Self-Directed Learning</i> , 1(1), 18–25.	106
Francom, G. M. (2010). Teach me how to learn: Principles for fostering students' self-directed learning skills. <i>International Journal of Self-Directed Learning</i> , 7(1), 30–45.	105
Oliveira, A. L., & Simoes, A. (2006). Impact of sociodemographic and psychological variables on the self-directedness of higher education students. <i>International Journal of Self-Directed Learning</i> , 3(1), 1–12.	80
Hiemstra, R. (2004). Self-directed learning lexicon. <i>International Journal of Self-Directed Learning</i> , 1(2), 1–6.	74
Bouchard, P. (2009). Pedagogy without a teacher: What are the limits? <i>International Journal of Self-Directed Learning</i> , 6(2), 13–22.	68
Cosnefroy, L., & Carré, P. (2014). Self-regulated and self-directed learning: Why don't some neighbors communicate? <i>International Journal of Self-Directed Learning</i> , 11(2), 1–12.	65
Ponton, M. K., Derrick, M. G., Hall, J. M., Rhea, N., & Carr, P. B. (2005). The relationship between self-efficacy and autonomous learning: The development of new instrumentation. <i>International Journal of Self-Directed Learning</i> , 2(1), 50–61.	64

Note. All articles available at <http://sdjglobal.com/journals.php>

Conclusion

Over the past two decades, the ISSDL has published 159 articles in the *IJSDL* that have been cited 3,163 times in the extant literature (approximately 20 citations per article); 78 articles have been cited at least 10 times. The journal's h-index of 32 places it in the top third worldwide of similar journals indexed on Scopus®. These findings suggest the *IJSDL* has established itself as a relevant member of the international academic publishing community.

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