

# A systematized experience of SoTL implementation

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**Abstract.** Although the literature has demonstrated the value of SoTL, it is necessary to advance towards guidelines on how to carry it out. Therefore, a systematized experience of SoTL implementation in the context of a professional learning community is presented. The experience is based on three pillars: motivation, collaboration and inter-discipline; and contemplates four stages -planning, execution, evaluation and reflection- that are continuously complexified and enriched. The results of the systematized experience are translated into participation in academic meetings and publications in collective journals and books. It is concluded that SoTL's contributions are unquestionable in the field of higher education and that the systematization of the experience presented allows the identification of clear differentiated stages, concrete and deployed activities with ascending levels of complexity. This could contribute to guiding the work of those who start or want to advance in the adoption of SoTL. In any case, the proposal constitutes a first approximation subject to revision and improvement, so that its suitability and consistency will have to be validated and tested.

**Keywords:** higher education, educational research, teaching profession.

## 1 Introduction

SoTL has gained relevance for its contribution to the improvement of teaching and learning processes (Vander Kloet et al., 2017). However, it is necessary to advance in guidelines on how to carry it out, with experiences that transcend disciplinary boundaries (Frake-Mistak et al., 2023). Thus, our objective is to present a systematized experience of SoTL implementation, in the context of a professional learning community.

## 2 Theoretical Framework

SoTL constitutes a space for research and professional development for evidence-based decision-making (Frake-Mistak et al., 2023), which can be conducted with impacts at multiple levels (Simmons & Taylor, 2019). What and how we develop university research is anchored in problematization processes experienced by teachers and students, with implications in multiple domains (Bass, 2020).

Proposals in SoTL have been varied, from an analytic-deductive (Kreber & Cranton 2000<sup>1</sup>) or multidimensional (Trigwell et al., 2000<sup>2</sup>) model, to growth or continuous improvement models (Gayle et al., 2013<sup>3</sup>; Richlin, 2001<sup>4</sup>; Weston & McAlpine, 2001<sup>5</sup>).

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<sup>1</sup> Kreber & Cranton (2000) consider three domains: knowledge about the objectives and purposes of university teaching -curricular knowledge-, knowledge about student learning and development towards those objectives -pedagogical knowledge- and knowledge about how to optimize learning and development -instructional knowledge-.

<sup>2</sup> Trigwell et al (2000) propose four phases: 1) information about teaching and learning, as well as about the discipline itself; 2) reflection on that information; 3) focus on the teaching model adopted; 4) communication of the results to the community.

<sup>3</sup> Gayle et al. (2013) contribute a three-stage model of teacher processing for SoTL: 1) learning about one's teaching; 2) knowledge about the corpus of academic teaching; and 3) growth of scholarship in teaching and learning. And, in addition, four bridging or transitional stages that articulate the above: 1) engagement and motivation; 2) performance and action; 3) identity of engagement; 4) SoTL transformation.

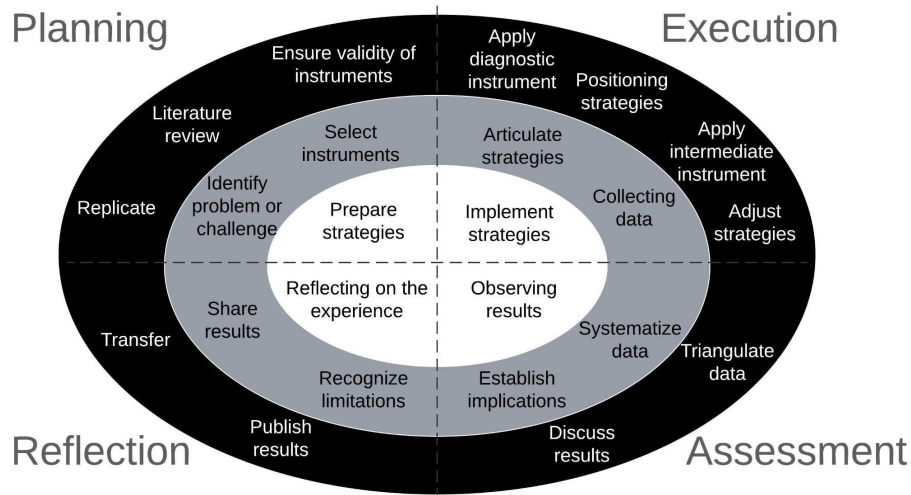
<sup>4</sup> Richlin (2001) describes a continuous cycle of improvement initiated by inquiry, analysis, peer validation of results, translation of research into teaching, and communication of results with the academic community.

<sup>5</sup> Weston & McAlpine (2001) propose three phases: 1) of growth in one's teaching; 2) of dialogue with peers about teaching and learning; 3) of growth in teaching professionalism.

### 3 Methods

A systematized experience (Jara, 2018) of the implementation of SoTL, in the context of a professional learning community, is presented. The sample corresponds to a professional learning community made up of three university teachers -2 women and 1 man-, with postgraduate degrees and more than 5 years of experience.

The work develops and complements in a more concrete way proposals already existing in the literature (Richlin, 2001; Trigwell et al., 2000; Weston & McAlpine, 2001) and is based on three pillars: motivation, collaboration and inter-discipline. It contemplates four stages - planning, execution, evaluation and reflection - which are continually complex and enriched. Figure 1 represents the proposed systematization, which takes the form of an ascending spiral observed from above, where the most basic activities -the first to be implemented- are at the core and the more elaborate ones -which are progressively incorporated as teaching practice becomes more professional- are distributed in the spires.



**Fig. 1.** The activities of the first level -in white constitute basic manifestations of each stage, characterized by the implementation of isolated strategies and their evaluation based on self-perceptions. Those of the second level -in gray- move towards the articulation of strategies based on a problem or challenge, the selection of instruments that, later on, allow establishing implications and limitations and, thus, sharing results in academic instances. Those of the third level -in black- are articulated from the review of specialized literature, the continuous application of instruments -which comply with validity criteria- that allow to situate the strategies and introduce adjustments; in addition, it contemplates the triangulation of data, their discussion and publication, promoting transfer and replicability.

## 4 Results

The systematized experience has had, for the members of this professional learning community -individually or jointly-, the following results:

Between 2019 and so far in 2023, didactic and/or methodological strategies were implemented: gamification, citizen training workshops, virtual debate, digital portfolio, project-based learning, educational capsules, modified essay and effective feedback. Also, measurements of self-perceptions of the development of competencies and/or personal resources: achievement of competencies, research skills, self-regulation, self-efficacy and academic goals. In addition, development and/or validation of instruments: the scale of perceptions on the legal status attributed to animals, an instrument to evaluate clear writing in the legal field and an instrument to evaluate the development of research skills. The activities were implemented in 6 careers belonging to 3 Chilean higher education institutions.

Several of the experiences have been submitted for peer validation in 12 academic meetings<sup>6</sup> and, to date, 9 papers have been published (Covarrubias Apablaza, Veas Alfaro & González Marino, 2023; González Marino, Veas Alfaro & Covarrubias Apablaza, 2023; Meza, González-Catalán, González Marino & Turull Rubinat, 2022; González Marino, 2022; Veas Alfaro & González Marino, 2022; González Marino, Veas Alfaro & Covarrubias Apablaza, 2021; González Marino, Covarrubias Apablaza & Acosta Antognoni, 2021; González Marino, 2020; Covarrubias, Acosta & Mendoza, 2019), 4 are in press and 1 is under evaluation.

## 5 Discussion

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<sup>6</sup> XII International Digital Congress on University Pedagogy and Didactics of Law (2022), Universidad de Chile; II Conference on Didactics of Law (2022), Universidad Central de Chile; II National Conference on Clinical Teaching of Law (2021), Pontificia Universidad Católica de Chile; I Conference on Didactics of Law (2022), Universidad Central de Chile; VI International and XI National Digital Congress of University Pedagogy and Didactics of Law, together with the II National Congress of Mexico, Legal Sciences, complexity and innovation from a learning perspective (2021), Universidad de Chile; VIII International Congress of Educational Innovation (2021), Tecnológico de Monterrey; Webinar: Pedagogical experiences applied to teaching law in virtual environments (2020), Universidad Central de Chile; VII International Congress on Educational Innovation of the Tecnológico de Monterrey (2020), Tecnológico de Monterrey; II International Congress: Legal Sciences, Complexity and Innovation from the student's perspective (2020), Universidad de Atacama; National Conference on Clinical Teaching of Law (2020), Universidad de Chile; V Interdisciplinary Congress of Research in Education (2019), Chilean Association of Researchers in Education; I Congress of Teaching in Higher Education CODES (2019), University of La Serena.

SoTL models tend to be two-pronged: focused on the continued growth of teaching (Weston & Alpine, 2001; Kreber & Cranton 2000) or on the implementation of SoTL (Richlin, 2001, Trigwell et al., 2000). This systematization responds to both. On the one hand, it contemplates 4 stages that, in a way, gather the proposals of Trigwell et al. (2000) -information; reflection; teaching model; communication- and Richlin (2001) -inquiry; analysis; validation; research; communication-. It also considers the importance of curricular knowledge, pedagogical knowledge and instructional knowledge (Kreber & Cranton, 2000), and complements the view of Weston & McAlpine (2001) by focusing on teaching itself, dialogue with peers and the professionalization of teaching. All of the above, in a continuous cycle of improvement (Richlin, 2001).

## **6 Conclusions**

The contributions of SoTL are unquestionable in the field of higher education. Although several models, phases or stages for its implementation are described in the literature, its implementation will depend on multiple factors. The systematization of the experience presented allows the identification of clear differentiated stages and concrete and deployed activities with ascending levels of complexity. This could contribute to guiding the work of those who start or want to advance in the adoption of SoTL.

## **7 Limitations and Future Research**

The proposal is the result of the particular experience of a professional learning community, so its suitability and consistency will have to be validated and tested.

## References

- Bass, R. (2020). What's the problem now? *To Improve the Academy*, 39(1), 3-30. <http://dx.doi.org/10.3998/tia.17063888.0039.102>
- Covarrubias, C. G. Acosta, H. & Mendoza, M. (2019). Relación de autorregulación del aprendizaje y autoeficacia general con las metas académicas de estudiantes. *Revista Formación Universitaria*, 12(6), 103-114.
- Covarrubias Apablaza, C. G., Veas Alfaro, M. L. & González Marino, I. (2023). Autorregulación del aprendizaje en estudiantes de derecho de primer año: Un diseño preexperimental. *Revista Pedagogía Universitaria y Didáctica del Derecho*, 10(1), 195–214. <https://doi.org/10.5354/0719-5885.2023.68085>
- Frake-Mistak, M., Friberg, J. & Hamilton, M. (2023). Reimagining the 4M Framework in educational development for SoTL. *Teaching and Learning Inquiry: The ISSOTL Journal*, 11. <https://doi.org/10.20343/teachlearninqu.11.14>
- Gayle, B., Randall, N., Langley, L. & Preiss, R. (2013). Faculty Learning Processes: A model for moving from scholarly teaching to the Scholarship of Teaching and Learning. *Teaching & Learning Inquiry: The ISSOTL Journal*, 1(1), 81-93. <https://doi.org/10.2979/teachlearninqu.1.1.81>
- González Marino, I. (2020). Aprendizaje Basado en Proyectos en un curso electivo de Cambio Climático de la carrera de Derecho impartido en modalidad online. In *Memorias CIIE* (pp. 438-443). Tecnológico de Monterrey. <https://ciie.itesm.mx/es/memorias/>
- González Marino, I. (2022). Implementación del debate en formato virtual asincrónico. In T. Gómez Francisco & J. F. Báez Corona (comp.), *Experiencias de formación jurídica en el contexto de la pandemia por covid 19* (pp. 115-125). Editorial Universo Sur. <https://nube.ucf.edu.cu/index.php/s/da9Fp7eYEO8e32L>
- González Marino, I., Covarrubias Apablaza, C. G., & Acosta Antognoni, H. (2021). Validación de una escala de percepciones acerca del estatus jurídico atribuido a los animales no humanos. *Revista dA. Derecho Animal (Forum of Animal Law Studies)* 12(3), 57-77. <https://doi.org/10.5565/rev/da.586>
- González Marino, I., Veas Alfaro, M. & Covarrubias Apablaza, C. G. (2021). Portafolio digital mediante Google Sites: experiencia en un curso de técnicas y metodologías de estudio de la carrera de Derecho. In *Memorias CIIE* (pp. 267-274). Tecnológico de Monterrey. <https://ciie.itesm.mx/es/memorias/>
- González Marino, I., Veas Alfaro, M. & Covarrubias Apablaza, C. G. (2023). Talleres de formación ciudadana en un curso electivo de Derecho Animal. In *Libro de Contribuciones 2023: International Conference on Educational Innovation* (pp. 203-207). Tecnológico de Monterrey. <https://ciie.itesm.mx/es/memorias/>

- Jara, O. (2018). *La sistematización de experiencias: práctica y teoría para otros mundos posibles*. Centro Internacional de Educación y Desarrollo Humano.
- Kreber, C. & Cranton, P. (2000). Exploring the Scholarship of Teaching. *Journal of Higher Education*, 71(4), 476-495. <https://doi.org/10.2307/2649149>
- Meza, P., González-Catalán, F., González Marino, I. & Turull Rubinat, M. (2022). Un instrumento para evaluar la escritura clara en el ámbito jurídico. *Revista Pedagogía Universitaria y Didáctica del Derecho*, 9(2), 63-91. <https://doi.org/10.5354/0719-5885.2022.66990>
- Richlin, L. (2001). Scholarly Teaching and the Scholarship of Teaching. *New Directions for Teaching & Learning*, 2001(86), 57-68. <https://doi.org/10.1002/tl.16>
- Simmons, N. & Taylor, L. (2019). Leadership for the Scholarship of Teaching and Learning: Understanding Bridges and Gaps. *The Canadian Journal for the Scholarship of Teaching and Learning*, 10(1). <https://doi.org/10.5206/cjsotl-rcacea.2019.1.7995>
- Trigwell, K., Martin E., Benjamin, J. & Prosser, M. (2000). Scholarship of Teaching: A model. *Higher Education Research & Development*, 19(2), 155-168. <https://doi.org/10.1080/072943600445628>
- Vander Kloet, M., Frake-Mistak, M., McGinn, M. K., Caldecott, M., Aspenlieder, E. D., Beres, J. L., Fukuzawa, S., Cassidy, A. & Gill, A. (2017). Conditions for Contingent Instructors Engaged in the Scholarship of Teaching and Learning. *The Canadian Journal for the Scholarship of Teaching and Learning*, 8(2), 1–17. <https://doi.org/10.5206/cjsotl-rcacea.2017.2.9>
- Veas Alfaro, M. & González Marino, I. (2022). Aportes de la Clínica Jurídica UCEN Región de Coquimbo al logro del perfil de egreso. In C. Lepin Molina (Dir.), *Estudios sobre enseñanza clínica del Derecho: Actas Primeras Jornadas Nacionales de Enseñanza Clínica del Derecho* (pp. 95-106). Tirant Lo Blanch.
- Weston, C. B. & McAlpine, L. (2001). Making Explicit the Development Toward the Scholarship of Teaching. *New Directions for Teaching and Learning*, 2001(86), 89–97. <https://doi.org/10.1002/tl.19>