

## LIFELONG EMPLOYABILITY: DEVELOPING POWER TO ACT IN HIGHER EDUCATION STUDENTS

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### Abstract

Due to technological and demographic challenges and the increasing relevance of new work arrangements, job transitions are becoming more frequent (Bridgstock, 2009), impacting individuals' trajectories and their perceived turning points (Hareven & Masaoka, 1988). It is, therefore, crucial to create conditions in Higher Education (HE) to support all students in promoting autonomy and the power to act concerning their employability throughout their careers. Our aim is to understand how the participation in a structured programme on employability-related issues during HE pathways is reflected in the expansion of students' power to act (Clot, 2008), enabling them to, collectively or individually, gain a greater capability to act on what is important to them, concerning their career path. A b-learning training programme was developed with the aim of developing Bachelor's and Master's students' skills to promote their lifelong employability. By integrating this programme in their curricular plan, the promotion of students' reflection on employability is worked alongside their technical skills, while ensuring that the training programme could be part of the formative path of every student who wishes to do so, by considering the goal of reaching up to 500 students simultaneously. The implementation occurred between October 2021 and July 2023 and an impact questionnaire with a pre and post-test comparison (N=173) allowed us to understand that the training promoted their perception of competence, which facilitated the implementation of a series of actions, thus increasing their power to act. Likewise, the results showed that the students felt prepared to deal with contextual changes, empowering them to rethink the different situations and contexts in which they could act. An impact on collective influence was also found, as they felt more confident to support others, which seems to highlight the promotion of a sense of career community (Lee & Patel, 2019). This study highlights the contribution this programme has made to students' ability to reflect as well as their potential actions in relation to employability and career management to navigate in these uncertain contexts.

**Keywords:** *Lifelong employability, power to act, training, career community.*

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### 1. Introduction

In a context in which we are experiencing rapid and abrupt changes deriving, among other things, from the challenges posed by technological and demographic changes (Volkoff, 2011; Savickas et al., 2021), we are witnessing the spread of new forms of work organization and an increase in professional transitions (Bridgstock, 2009). These professional transitions have an impact on individuals' paths and their perceived bifurcation moments / turning points (Hareven & Masaoka, 1988; Hélarlot, 2009).

While some turning points can bring opportunities, some can "send life trajectories off track" (Hutchison, 2019, p. 355), exposing individuals to unemployment and social exclusion, with an impact on individual health and well-being. Thus, it is essential to support people through these transitions by broadening their choices and providing security to cope with change (International Labour Organization, 2019).

Higher Education (HE) students are typically associated with an intensified experience of labour market integration, and therefore increasing attention has been paid to the role of Higher Education Institutions in promoting students' employability (Bridgstock, 2009; Clarke, 2018). For this reason, it is crucial to create conditions in HE to support all students in developing employability and career management skills, by promoting a higher level of self-exploration and other proactive career behaviours (Okay-Somerville and Scholarios 2015).

Nowadays, the career development paradigm centres on the need to expand knowledge to make career related choices (Savickas, 2021). A development which highlights the importance of flexibility in

career decision-making and the conceptualization of careers as multidirectional projects, in alternative to the paradigm of a linear career throughout life (Baruch, 2004). It is assumed that these capacities will enable the individual to get out of difficult situations, take on change, regain control and deal with turning points (Hareven & Masaoka, 1988; Hélaridot, 2009) throughout their professional career. In this sense, there is a dimension of expansion of the individuals' power to act (Clot, 2008), which allows them to deal with and overcome some of the vulnerabilities to which they are subject, given the situation they find themselves in, although there is no release of responsibility from other agents (Lacomblez & Teiger, 2007).

The power to act represents a process by which people, together or separately, gain greater possibilities to act on what is important to them (Le Bossé, 2011). This construct was chosen as the object of this study because it represents the action that enables emancipation and, at the same time, avoids the risk of making empowerment a purely individual attribute, when in fact the exercise of power cannot be considered independent of the resources available in the context (Le Bossé et al., 2004).

Simultaneously, the demand to meet the growing needs of students and changes in the field have been challenging Higher Education, largely based on an individual guidance model, to develop new models (Young, 2016). In this regard, one framework that has gained popularity is based on career communities (Contomanolis et al., 2015) defined by Lee and Patel (2019) as groups of individuals who share similar career interests or aspirations, where one can receive direct or indirect customised benefits through the exchange of knowledge, expertise, and resources.

It is therefore fundamental to create conditions in Higher Education that support all students in promoting the power to act concerning their employability, as career transitions are becoming more frequent, impacting individual trajectories. On that account, we aim to understand how the inclusion of training modules on employability-related topics in Higher Education pathways is reflected in the expansion of the students' power to act (Clot, 2008), allowing them, collectively or individually, to gain a greater capability to act on what is important to them, in relation to their career path.

## 2. Method

A training programme was created with the objective of promoting the development of Bachelor's and Master's students' skills to foster their lifelong employability. The integration of this programme in the students' curricular plan aimed to allow the students' employability skills to be worked on alongside their technical skills.

This training programme was based on a blended-learning format, and it was guided by a learning roadmap composed of three stages. The first stage focused on the students' reflection on their past experiences, their skills, their future goals and the actions they need to put into practice to achieve them. This was accomplished through an initial workshop with the purpose of exploring current world trends that impact career paths. The second stage of the programme, called "employability toolkit", consisted of five modules based on content focusing on different employability-related topics, specifically: how to analyse the labour market; how to prepare a CV; how to write a cover letter; how to manage a digital footprint and network; and how to prepare for an interview. The third and final stage of the learning roadmap was based on the participation in various initiatives, such as listening to a podcast specially developed for this programme, which consisted of short conversations with Alumni about their professional paths. Students could also participate in visits to real work contexts, as well as any activities focused on professional paths and employability skills.

To measure the impact of participation in this training programme, a quantitative study was conducted. This study involved pre and post-test data collections based on the application of a questionnaire specifically developed for this purpose. This decision was made due to the difficulty in identifying an adequate scale that measured the dimensions under analysis, which confirms the differentiating scope of this study.

The data collection process involved the application of the aforementioned questionnaire before the students started the training programme and after its completion. The response to this questionnaire required an informed consent from each participant, approved by the Ethics Committee of the Higher Education Institution. Data collection took place between October 2021 and July 2023. After the exclusion of incomplete responses, 173 complete responses were considered for analysis.

The questionnaire included student characterization items, to collect data on gender, age group, year of study and field of study. Of the 173 participants, 47% were female and 52% were male. In terms of age, 52% were under 20 years old, 46% were between 21 and 25 years old, and less than 2% were between 26 and 35 years old. 82% were Bachelor students and 17% were Master students. Regarding the field of study, 20% of the participants studied Industrial Engineering and Management; 20% Mechanical Engineering; 13% Informatics and Computing Engineering; 12% Electrical and Computer Engineering;

10% Civil Engineering; 9% Bioengineering; and the remaining 16% of the participants studied other fields of engineering (less than 5% each).

The questionnaire consisted of five groups of items. Considering the scope of this study, we will focus on nine specific items relating to students' perception of their ability to identify past experiences and future goals, their perception of power to act regarding their employability and their ability and availability to support others in developing employability skills. Seven items were assessed with the use of a five-point Likert scale, where one meant "totally disagree" and five meant "totally agree": "I feel capable of envisioning a potential professional path I would like to explore"; "I feel capable of outlining an action plan to reach my goals"; "I feel capable of supporting others in building potential professional paths"; "I consider it important for my future to focus on the theme of lifelong employability"; "I feel prepared to handle changes that involve redesigning my future professional plans"; "I feel prepared to create alternatives in the face of the impossibility of achieving what I have designed"; "I am available to use some of my free time to support others in building their employability tools (e.g., CV, cover letter, digital profile)". Two items were assessed with the use of a five-point Likert scale, where one meant "not confident" and five meant "extremely confident": "Redesign your academic and professional goals based on new information related to you or your context"; "Support others in building their own employability tools (e.g., CV, cover letter, digital profile)".

The data were processed using IBM SPSS Statistics 27, where descriptive, frequency and group distribution analyses were performed. A Wilcoxon signed-rank test was used to analyse whether there were significant differences on each item between the pre-and post-test, instead of a paired t-test, as the Kolmogorov-Smirnov test used to assess the normality of the variables indicated that the majority of the items did not follow a normal distribution ( $D(173) = 0.19$  to  $0.40$ ,  $p < .001$ ).

### 3. Results

The results in Table 1 reveal significant differences in most of the items concerning students' sense of ability regarding future academic and professional issues, with a strong, statistically significant difference observed in envisioning potential professional paths and outlining action plans to reach achieve one's goals. A smaller but still significant and moderate effect was found in supporting others in building potential professional paths, before the intervention. Regarding their confidence, a strong, statistically significant difference was similarly observed in the items related to the possibility of having to adapt their academic and professional goals, either because of new inputs about themselves or their contexts, as well as the possibility of supporting others with employability tools.

Lastly, statistically significant differences were identified in the importance of focusing on lifelong employability and, consistent with the previous conclusions, in the availability to support others with their employability tools and the readiness to adapt professional plans and actions when faced with unforeseen changes or constraints in achieving some of their plans.

Table 1. Results from the applied impact questionnaire: pre-test and post-test.

	Pre-test (N=173)		Post-test (N=173)		Wilcoxon test
	Mean	Std. Dev.	Mean	Std. Dev.	
<b>Take a moment to think about your academic and professional future, and rate your agreement with each of the following statements...</b>					
I feel capable of envisioning a potential professional path I would like to explore.	3.18	.92	4.02	.89	Z = -8.00, p < .001
I feel capable of outlining an action plan to reach my goals.	3.06	.83	3.86	.81	Z = -7.96, p < .001
I feel capable of supporting others in building potential professional paths.	3.11	1.02	3.68	.95	Z = -5.82, p < .001
<b>Assess your confidence level to...</b>					
Redesign your academic and professional goals based on new information related to you or your context.	3.14	.78	3.72	.85	Z = -6.81, p < .001
Support others in building their own employability tools (e.g., CV, cover letter, digital profile).	2.66	.99	3.61	.94	Z = -8.08, p < .001
<b>Rate your agreement with each of the following statements...</b>					
I consider it important for my future to focus on the theme of lifelong employability.	4.09	.69	4.35	.67	Z = -4.08, p < .001
I feel prepared to handle changes that involve redesigning my future professional plans.	3.35	.78	3.87	.72	Z = -6.37, p < .001

I feel prepared to create alternatives in the face of the impossibility of achieving what I have designed.	3.52	.80	3.93	.72	Z = -5.34, p < .001
I am available to use some of my free time to support others in building their employability tools (e.g., CV, cover letter, digital profile).	3.54	.89	3.87	.83	Z = -4.79, p < .001

#### 4. Discussion

Our research shed light on the relevance of the role of Higher Education in the development of employability-related topics through the expansion of students' power to act (Clot, 2008), allowing them to, collectively or individually, gain greater capacity to act on what is important to them, concerning their career path.

After the training programme, students felt more capable of not only envisioning a potential professional path they would like to explore but also of outlining an action plan to achieve their goals, highlighting the importance of the training programme on the students' current perceptions of competence and power to act concerning their professional paths. The analysed results are consonant with recent employability models (Pool et al., 2007), as the programme promotes self-efficacy beliefs in its students, by making use of learned career-related competencies. It is worth noting that the design of action plans within the scope of the programme is based on proactive career exploration, characterised by a goal-oriented mindset, which according to Savickas' career construction theory (2021) is an important practice to continuously construct and reconstruct the students' career paths.

Another relevant outcome of the research was that after the programme, students felt more prepared to deal with contextual changes by redesigning their academic and professional goals based on new information related to them or their context. They also felt more prepared to deal with changes that involved redesigning their future professional plans, and to create alternatives when faced with the impossibility of achieving what they had designed, and considered it important for their future to work on the issue of lifelong employability. The results showed that training empowers them to rethink the different situations and contexts in which they can act, when facing unforeseen constraints, allowing them to deal with turning points (Hareven & Masaoka, 1988; Hélaridot, 2009) throughout their professional careers, enabling them to manage and overcome some of the vulnerabilities to which they are exposed.

The third and final contribution derived from the results is the impact of the programme on students' sense of capability, confidence and willingness to support others to construct their professional paths, for example, by feeling able to support others in building potential professional paths, supporting others in building their own employability tools, and being available to use some of their free time to support others in building their employability tools. This suggests that the programme not only prepares students to build their professional paths but also to aid others in doing the same, leading to a multiplier effect as they actively share what they have learned during the programme. These findings are consistent with existing literature that frames the learning process within a social context, moving beyond exclusively individual learning (Lave & Wenger, 1991). Additionally, we can identify the emergence of a career community (Lee & Patel, 2019) as one of the outcomes of the programme, as students recognise the value of sharing knowledge of interest with their peers, surpassing individual reflections and learnings.

Nonetheless, the career community fostered by this programme is worthy of further study, particularly in terms of bidirectional support between peers. Conducting a longitudinal study to follow students throughout their careers would also be relevant.

#### 5. Conclusion

In conclusion, Higher Education students can adapt to current and future contextual challenges, if they are provided with useful tools and structured learning aimed at developing their reflection capacity and their power to act on their career management. In this programme, students fostered strategies for their lifelong employability and increased their confidence in their value and ability to support others, thus galvanising a career community. There is no question that HE Institutions should actively work on their students' preparation and capacity to design and re-design their paths, as career development begins before students enter the job market - it is built throughout the individual's life (Savickas, 2021) and embedded in social interactions replete full of diverse opportunities (Savickas, 2021; Coimbra et al., 1994).

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## References

- Baruch, Y. (2004). Transforming careers: from linear to multidirectional career paths: Organizational and individual perspectives. *Career Development International*, 9(1), 58-73. <https://doi.org/10.1108/13620430410518147>
- Bridgstock, R. (2009). The graduate attributes we've overlooked: enhancing graduate employability through career management skills. *Higher Education Research & Development*, 28(1), 31-44. <https://doi.org/10.1080/07294360802444347>
- Clarke, M. (2018). Rethinking graduate employability: the role of capital, individual attributes and context. *Studies in Higher Education*, 43(11), 1923-1937. <https://doi.org/10.1080/03075079.2017.1294152>
- Clot, Y. (2008). *Travail et pouvoir d'agir*. Paris: PUF.
- Coimbra, J. L., Campos, B. P., & Imaginário, L. (1994, July). *Career intervention from a psychological perspective: definition of the main ingredients of an ecological-developmental methodology*. Paper presented at the 23rd International Congress of Applied Psychology, Madrid, Spain.
- Contomanolis, E., Cruzvergara, C. Y., Dey, F., & Steinfeld, T. (2015). The future of career services is now. *National Association of Colleges and Employers Journal*. <http://www.nacweb.org/career-development/trends-and-predictions/the-future-of-career-services-is-now/>
- Hareven, T. K., & Masaoka, K. (1988). Turning Points and Transitions: Perceptions of the Life Course. *Journal of Family History*, 13(1), 271-289. <https://doi.org/10.1177/036319908801300117>
- Hélaridot, V. (2009). Vouloir ce qui arrive? Les bifurcations biographiques entre logiques structurelles et choix individuels. In M. Bessin, C. Bidart, M. Grossetti (Eds.), *Bifurcations. Les sciences sociales face aux ruptures et à l'événement* (pp. 160-167). Paris: La Découverte.
- Hutchison, E. D. (2019). An Update on the Relevance of the Life Course Perspective for Social Work. *Families in Society*, 100(4), 351-366. <https://doi.org/10.1177/1044389419873240>
- International Labour Organization. (2019). Global Commission on the Future of Work: Work for a Brighter Future. [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/publication/wcms\\_662410.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/publication/wcms_662410.pdf)
- Lacomblez, M., & Teiger, C. (2007). Ergonomia, formações e transformações. In P. Falzon (Org.), *Ergonomia* (pp. 587-601). São Paulo: Blucher.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511815355>
- Le Bossé, Y. (2011). *Psychologie des sciences de l'orientation: un point de vue interactionniste et stratégique*. Quebec: Ardis.
- Le Bossé, Y., Dufort, F., & Vandette, L. (2004). L'évaluation de l'empowerment des personnes: développement d'une mesure d'indices psychosociologiques du pouvoir d'agir (MIPPA). *Revue Canadienne De Santé Mentale Communautaire*, 23(1), 91-114. <https://doi.org/10.7870/cjcmh-2004-0007>
- Lee, J. Y., & Patel, S. (2019). Redefining Career Communities in Higher Education. *International Journal of Higher Education*, 8(5), 1-11. <https://doi.org/10.5430/ijhe.v8n5p1>
- Okay-Somerville, B., & Scholarios, D. (2017) Position, possession or process? Understanding objective and subjective employability during university-to-work transitions. *Studies in Higher Education*, 42(7), 1275-1291. <https://doi.org/10.1080/03075079.2015.1091813>
- Pool, L., & Sewell, P. (2007). The key to employability: developing a practical model of graduate employability. *Education + Training*, 49(4), 277-89. <https://doi.org/10.1108/00400910710754435>
- Savickas, M. L. (2021). Career construction theory and counseling model. In S. Brown & R. Lent (Eds.), *Career Development and Counseling: Putting Theory and Research to Work* (pp. 234-276). Hoboken, NJ: John Wiley & Sons, Inc.
- Volkoff, S. (2011). Les éléments d'une nouvelle donne sociodémographique. In C. Gaudart & J. Thébaud (Eds.), *Transmission des savoirs et mutualisation des pratiques en situation de travail* (pp. 9-18). Paris: Centre D'Études De L'Emploi.
- Young, J. R. (2016). Reinventing the career center. *The Chronicle of Higher Education*. <https://www.chronicle.com/article/Reinventing-the-Career-Center/238107>