

How & when to achieve Students' Immersion in Soft Skills in Technical Higher Education Institutions (HEIs)?

Houinsou Dedehouanou, Augustin Aoudji, Barthélemy G. Honfoga, Médard Clément Vinasse, Elie Iboukoun Adjeran, Fréjus O. Sanya, Cédric Agbessi and Robertson Klaingar

Introduction

Behavioural, transversal and even entrepreneurial skills or soft skills are increasingly becoming non-tangible resources that count towards the performance of companies/businesses (Saint-Germes, 2021). For this reason, the royal road to ensuring the employability of graduates from Technical Higher Education Institutions (HEIs) is to equip them with these skills; however, Hernandez (2016) and other authors have highlighted the shortcomings of higher education in terms of appropriate teaching methods and learning practices. Despite the urgency, this issue remains unresolved among stakeholders in education in general and university education in particular.

At the same time, stakeholders disagree among themselves about the meaning of behavioural and transversal or even entrepreneurial skills and whether or not they constitute a need linked to subjects (Mourshed et al., 2014). These two dimensions of constraints on the free movement of skills are not the only ones; teaching methods for immersing learners in soft skills are neither adequate nor adapted for HEIs (Hernandez, 2016). Innovative methods have yet to be created and tested by the players involved such as those involving body language (López, 2020), tutoring, mentoring and coaching (Hernandez, 2016; Mokibelo and Seru, 2020), those improving communication and organisation (Stryckman, 1996), studying discourse and storytelling (Crible, 2022), and those linking most potential soft skills with creativity (Saint-Germes, 2021). Despite these numerous obstacles to making soft skills accessible to university students, Blagojevic (1997), Mokibelo and Seru (2020), and Molaie (2016) have recommended a multi-stakeholder platform, where stakeholders collaborate, participate intensively and engage with each other, to significantly reduce friction and stimulate the dissemination and acquisition of soft skills.

The debate on intention models and theories targeting the adoption or non-adoption of soft skills by learners (Valcin, Pierre, Uchiyama & Paul, 2024) – including the theory of the entrepreneurial event, the theory of planned behaviour, the psycho-economic model, and the model combining the learner's personality traits and contextual variables – will not be pursued in this chapter. However, parts of this debate that intersect with the present research are retained to characterise the model of the employable learner or learner with employability and entrepreneurship skills. To be clear, we assert that no study that takes into account students within both their micro- and macro-environments can ignore the potential negative or positive influences of the program's administrative structure and the learning curriculum. Although the research did not set out to collect data to directly analyse the

impact of the academic organisation of the program or the weight of the curriculum on the teaching of soft skills, the proposed research seeks to demonstrate the negative role of administrative and academic organisation on learners' willingness to undergo training in soft skills.

Furthermore, the literature has not yet explicitly addressed the role of soft skills as components of training curricula, nor has it considered the status of students. In short, the literature on soft skills has generally focused on individuals who are ready for the workforce and rarely on students currently in training (Peyron & Lanquar, 2023). By taking into account contextual variables from the learner's environment – in short, curriculum and academic organisation of the training – which ones certainly have an impact on the learner in terms of his or her potential for adopting and changing behaviour conducive to employability and entrepreneurship. A few challenges, including the differentiation between the public and private sectors, disciplinary deliberations and even teaching methods, have yet to receive attention. One of the most important challenges relates to sectarian friction or simply the differentiation between the private and public sector. Bangali & Veilleux (2015) argued that cognitive assumptions are rarely compatible with the job market or simply the requirements of the private sector.

Soft skills and assumptions about teaching soft skills

Theoretical evidence

Based on the findings of Blagovitch (1997) and Dressen-Hammouda (2022), the question of why language learning is a starting point for understanding how to transfer behavioural, transversal or even entrepreneurial skills to learners, remains obvious. Gestures are an integral part of communication, whereas language serves precisely to facilitate communication. Language learning along the lines of the “Berlitz method” (López, 2020), and even better music learning (Shiner, 2021), could inspire skills learning. Powell and McGrath (2014) and Robinson (2019) suggested that the platform approach is the one adopted by stakeholders in experiential employability learning for graduates of academic training institutions. Following the example of current platforms represented by Information and Communication Technology (ICT)-based networks (i.e. computer and social networks), stakeholders observe three essential rules: collaboration, participation, and engagement (Powell & McGrath, 2014; Valcin et al., 2024). On this platform, the players must comply with four criteria that must be traceable in each stakeholder: participation, institutional efficiency and effectiveness, employer and learner satisfaction, and learner employability (Galaup, Lelardeux & Lagarrigue, 2016). This is on the supply side of the learning process. On the demand side, Müllegger and Chapman (2024), stated that it is the conscious plan to perform a given behaviour.

The authors cited above have highlighted the level of commitment required from education providers to deliver standardised training to learners. They suggested more and more specialisation of administrative staff, better structured training programmes for teachers, more training equipment and so on. Performing a given behaviour would require the promotion of the development of new pedagogical teaching methods and materials that would be appropriate to the diversity of the trainees' abilities, ultimately boosting their confidence for a successful transition to employment. Dressen-Hammouda

(2022) has reported on the need for a relationship between trainers and professional assessors when assessing learners during their work placements. This relationship could theoretically be represented by a meeting or simply by an explanatory correspondence on the points of interest in the assessment grid. Otherwise, according to the author, the evaluation could suffer from a methodological bias coupled with semantic inadequacies.

The effectiveness of flexibility in the timetable constitutes a major advantage granted to the student-entrepreneur by means of a "Joint Rectoral Order on the Promotion of the Status of Student Entrepreneur in Benin" (Arrêté Rectoral Conjoint de Promotion du Statut de l'Etudiant-Entrepreneur au Bénin, 2024, p. 5). The way in which such a reform would be applied, however, raises the possibility of new difficulties in view of the minority nature of this privileged group within a training programme. Should the reorganisation of the academic timetable be operational in order to satisfy a few Student-Entrepreneurs? Would the other students, or rather the lecturers, have the patience to submit to the diktats imposed by this model of entrepreneurship?

Sargis-Roussel and Belmondo (2018) studied the evaluation bias among business professionals who consider a given group of practitioners to be homogeneous, when this is not the case, for example the lack of distinction to be made between strategist and non-strategist practitioners. Lefebvre and Hamelin (2021) documented the philosophy of companies regarding growth, whether internal or external, to explain the importance attached to the resources held by the company, for example human resources. Larsen and Andersen (2017) drew attention of academics to the qualities of observation and, above all, the specialisation in action research needed by business professionals to be as successful as possible in their role in a human resources assessment process.

Building on this literature, the experiment will focus on undergraduate students in their final-year internships, who will be taught twelve soft skills using active learning methods during the period between the end of classes and the start of their internships. The aim will be to test the immediate application of the training received in a corporate setting.

Empirical evidence

Valcin et al. (2024) cited a fourth model according to which the learner is characterised by his or her personality traits and contextual variables. An analogy could be drawn with the psycho-economic model which the same authors interpret as being conviction, intention and situation. The first two are personality traits, while the last consists solely of contextual variables.

In terms of learner characteristics and behavioural and transversal or even entrepreneurial skills, learning strategies should be the focus of attention (Blagovitch, 1997; Dedehouanou, 2022). These strategies involve, on the one hand, the learner's ability to use their five senses; and on the other hand, the possible combinations that the learner can make between the senses and the six rhetorical structures which are enumeration, comparison/contrast, classification, generalisation, description and sequential structure.

To date, Shiner (2021) notified some doubt on two of the five senses on the olfactory side (taste and smell) could be used to guarantee skills without subjectivity). Several rationalities are highlighted, the

two most important of which are: i) volatility in terms of structure and sequence; ii) no contemplation of the object tasted and the origin of the smell. However, several subjects such as biology and the social sciences have given considerable power to these two senses and have confirmed their cognitive dimension. For example, in perfumery and winemaking – and even in catering – experts describe and use appropriate vocabulary better than novices. Given these empirical realities, the brain regions associated with taste and smell are anatomically more developed in experts than in novices. It is empirical evidence that the cognitive power of the senses of smell and taste can be cultivated to astonishingly high levels. Training and practice can overcome olfactory neural processing limitations.

In developed countries on the one hand, as Lo Schiavo (2021) described the difficulties inherent in the neo-liberal reforms of the last three decades, which hinder the employability and entrepreneurship of young people in general, and students in particular. These reforms include austerity measures and neoliberal education; the dismantling of the welfare state; the transformation of education into private goods (welfare to workfare); the demand for entrepreneurship, lifelong learning, and transferable skills (e.g. employability); reforms to the organisation of teachers; the disparity (mismatch) between the education system and the labour market; young people falling into the trap of overeducation; and the challenges for those concerned with the transition to adulthood. Students, especially in these developed countries, have organised themselves to defend their interests through political organisation with a view to collective action. Their goal is to demonstrate that education is a collective and public good.

In developing countries on the other hand, Valcin et al. (2024) documented the almost insurmountable difficulties of employability and entrepreneurship for students, which are poverty and war. While emigration remains the only hopeful alternative, the favourable conditions that could support these young people include knowledge of how to prepare business plans, identification of successful agribusinesses, leadership experience and a frantic search for autonomy. For instance, in Republic of Benin, there is a joint rectoral decree that specifies the eligibility requirements for students applying for Student-Entrepreneur status. A glance to Articles 4, 5, 6, 7 & 8 of the decree informs a knowledgeable academic that it only gives pride of place to a predatory context for innovations (Arrêté Rectoral Conjoint ... au Bénin, 2024). Two flaws are very characteristic: the first one relates to the requirements that student- candidates should provide detailed and precise descriptions of their projects and their innovations, what is contradictory to the Schumpeter type of entrepreneur claimed by Velardo (2021); the second relates to the silence as regard the creation of university technology transfer sub-offices to act as relays to the sector-wise offices in order to entrust property rights, as developed by Ciucci (2021). Although insufficient, this decree is a step in the right direction. However, the monitoring and evaluation structure will have to carry out an enormous amount of work, the summaries of which will have to be integrated as they are produced. Some prospects for improvement: delegation of authority from the education authorities to the training establishments and regular coordination meetings.

The platform approach enables students in developed countries to forge agency solutions such as Do-it-Ourselves politics and Direct Social Action. On the contrary, the absence or rather inadequacy of platforms in developing countries forces students to develop adaptive measures and characterises them as actors lacking initiative.

Analytical framework

It is recommended that academic training institutions initiate platforms with the consent of companies/businesses, civil society and communities with development needs, which would function as learning environments for learners (Galaup, Lelardeux & Lagarrigue, 2016). According to Blagojevic (1997) and Molaie (2016), learning processes require collaboration, participation, and commitment. The other processes, in this case capacity building at HEIs, learning strategies at learners' individual level, acquiring competences at the company and field level, are carried out either internally or outside academic training institutions (Dedehouanou, 2022; Powell & McGrath, 2014).

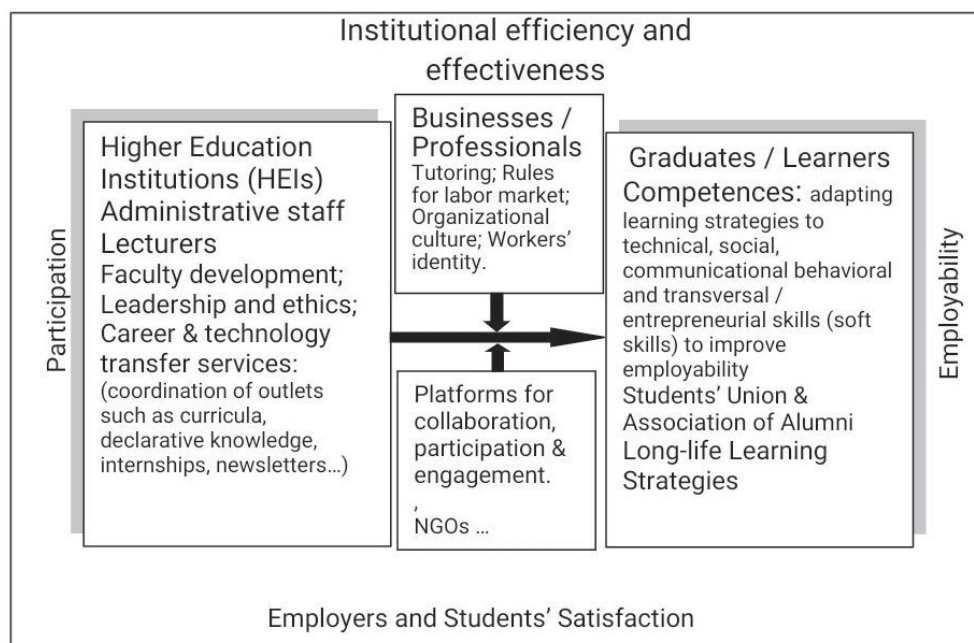


Diagram. 22.1. Analytical framework

Source: Adapted from Powell and McGrath (2014); Robinson (2019); Valcin et al., 2024.

In view of those three principles that govern the creation of the platforms, and the four important criteria that must be tracked by each stakeholder, that is, participation, institutional efficiency and effectiveness, employer and learner satisfaction, and learner employability, there is real transparency between the human resources needs of companies and communities and the training provided in universities. The economic growth choices made by companies in a competitive environment are proposed and formulated based on the training provided.

The platform approach outlined earlier is undoubtedly accessible but increasingly requires capacity building and pedagogical and andragogical upliftment to achieve the standard (Blagojevic, 1997; Mokibelo & Seru, 2020; Molaie, 2016). The case study in Benin was unable to bring professionals and teachers together in the same room. The professionals made themselves available and came to give a

presentation, although there was evidence of dialogue between the two groups of actors. The learners were not involved, for lack of time.

The literature distinguishes teaching methods for initial training from those needed for lifelong learning (Hernandez, 2016; Peyron & Lanquar, 2023). The question would be whether there is any difficulty on the part of teachers in appropriating the appropriate methods, or is there ambiguity? The context that prevailed prior to the demand for soft skills is as follows: teaching and research were the two essential missions of universities. Then suddenly, employability and its corollaries in terms of career services were added to occupy teachers' time (Jeantet, 2003; Wang, 2020; Weerts & Freed, 2016). Could the lack of enthusiasm for adopting the new active teaching methods be justified by the impact of this new mission, which is still unfathomable for university actors (Hernandez, 2016)?

Research Methodology

Materials

Under the aegis of two NGOs dedicated to providing support for guidance and employability in university training establishments – ACCESS-Bénin and APPUI-OEEUF – a preliminary meeting was held with teacher-researchers from four subjects: enterprise management, information and communication within enterprises, socio-anthropology within organisations and enterprises, and workplace and organisational psychology. The meeting resulted in the collection of some thirty soft skills (each more astute than the last) that formed the list of grievances that the invited professionals presented to the teachers. This quest for knowledge concerning the gap between professionals and teachers was presented at the ACCESS international conference held in Kigali, Rwanda, from February 4-10, 2024. Notably, a participant from Rwanda criticised the methodology for not involving learners in the meeting. Other comments from the Tunisian participants highlighted the widespread failure of soft skills teaching in most universities of their country. Using Tunisia, as an example, they noted that despite the funding received from the World Bank, significant advancements in soft skills development within student populations could not be made. These comments from participants constituted some methodological warnings on the subject.

Back in Benin, and prior to the students' soft skills training and to facilitate assessment, a preliminary exercise involved translating soft skills into concrete indicators that are visible even to an untrained observer. Some indicators are common and overlap across different soft skills. Others are highly distinctive and characteristic of a specific soft skill, which opens the possibility of representing soft skills through gestures or images. Such an extension is not within the scope of this research.

Then, two groups of students were selected for the experiment from two different learning programmes at the Faculty of Agronomic Sciences of the University of Abomey-Calavi (FSA/UAC) in Benin. The two groups of students came from two agricultural training departments: i) ESVR, a training stream geared towards agricultural extension; and EA, a training stream geared towards agricultural entrepreneurship; ii) AGFPN, a training stream geared towards forest management and development. Both groups constituted the treatment group of 22 undergraduate students (T1) on the one side and the control group of 17 undergraduate students (T0) on the other side. The group of

students trained in soft skills participated in a tutoring session based on twelve agreed-upon soft skills, led by the four original teachers who served as instructors for the occasion. The classroom was large enough to accommodate four tables, each surrounded by six to seven participants, including one of the four instructors and the students. The instructors rotated among the tables based on the students' requests for clarification regarding soft skills. The Vice-Dean of the FSA/UAC acted as a figure of authority for the launch of the training.

Methods

A seminar was held between business professionals and several university lecturers. The business professionals preferred a planned non-stop meeting during which they would give a presentation on what they criticised about graduate training in general. Everyone, therefore, negotiated the time they would spend voicing their opinions about graduates. Regarding the teaching staff, four subjects were selected at the outset of the process: enterprise management, information and communication within enterprises, socio-anthropology within organisations and enterprises, and workplace and organisational psychology. Enterprise management and socio-anthropology are represented at the FSA/UAC, while information and communication within enterprises and workplace and organisational psychology were found in other faculties of the University of Abomey-Calavi (UAC). The chief of the research team wrote to the heads of the departments of the target entities but replies came late. One of the proposed lecturers withdrew on the day of the meeting due to poor communication but was replaced before the activity began.

After being alerted by feedback from Kigali, which was relayed to the research team, the principal investigator conducted a more in-depth review of the study's methodology, leading to a focus on the pedagogy for teaching soft skills and the related practical arrangements. Consequently, active teaching methods and the "World Café Model" were selected as the framework for the study.

The question, "How was the World Café Model applied in the immersion case in Benin (immersion of 22 students in soft skills or T1)?" followed certain basic principles and a physical setup. Let's recall the guiding principles. First, soft skills are not supposed to be taught. Second, in the traditional learning process learners are distant from lecturers; this explains the rationale of the choice of immersion in order to reduce significantly the distance between students and lecturers. This is meant to reduce the discrepancy of knowledge and to flatten the so-called behavioural bias. Third, there is no proof that greater knowledge necessarily corresponds to stronger behavioural competencies; the objective is to challenge and dispel the misconceptions held by many learners. Fourth, students should not be disadvantaged in terms of their cognitive potentials, particularly when soft skills may better align with the strengths of less academically endowed learners. Finally, lecturers should reconceptualise their role, shifting from that of traditional teachers to tutors or mentors, in order to facilitate and ensure equitable opportunities for all learners to participate and express their views.

On the question of "What is the World Café model in the immersion case in Benin (22 learners or T1)?" one table and six to seven chairs were provided to accommodate at most seven persons. Tables were repeatedly scattered around depending on the number of actors involved. Having 22 students,

four tables were created – two with five students and two with six students. There was an extra seat for a teacher per table.

The process was structured around four stages: an initial presentation of three soft skills, followed by an hour-long debate at each table, a stage where lecturers joined the discussions or helped upon request, and a final stage where students collaborated to report on their discussions. Debates centred around three critical questions: What was learned from the presentation of each soft skill? Which one of the four subjects is most applicable to understanding a given soft skill? And what challenges might arise in applying these skills in a professional setting? This process was repeated 4 times given that 12 soft skills were at stake. The entire process, which spanned over 1.5 days, focused exclusively on the educational content of the soft skills and learners' interaction.

After this immersive experience, T1 undertook internships at businesses of their choice during March 2024. Concomitantly, T0 (learning program not instructed with soft skills) engaged in internships. The performance and application of soft skills by both groups during their internships were evaluated using a guide sent to business officials. By the end of the internships, tutors/mentors from the businesses returned seventeen evaluation sheets out of twenty-two (17/22) and fourteen evaluation sheets out of seventeen (14/17) for group T1 and group T0 respectively. This comparative analysis aimed at measuring the impact of the World Café Model on trainees' development of soft skills.

Data Processing and Analysis

The evaluation scores are affected to the indicators of each soft skill and represent five points on the Likert scale (-2, -1, 0, +1, +2). For each one of the seven soft skills investigated, and for each treatment (T0 and T1), the index of appreciation (IA) was determined i) by calculating the average score; ii) after adding up evaluation scores for each indicator; iii) and dividing by the number of indicators.

The socio-demographic characteristics of the trainees were established beforehand by means of a frequency distribution. Cross-tabulations between the trainee's field of study, gender, age and background at the high school level were produced.

For each undergraduate trainee, the assessment index (AI) of the groups of trainees treated and the control groups was determined by the average of the assessment scores (Score [with soft skills] - Score [without soft skills]) for each of the soft skills assessed.

$$AI_i = \frac{1}{m} \sum_{l=1}^m Score_l \quad (1)$$

With AI_i an assessment index defined for a given soft skill (i) and (l) the criterion for a given soft skill (i). In this way, the characteristics of the treated and untreated groups of trainees are determined. For a given soft skill (i), the trainee is well appreciated in this soft skill if his $AI_i > 0$.

A classification of soft skills by treatment group was then possible and its concordance was tested at Kendall's rate.

The study of the correlation between the various characteristics (age, sex, background at the high school of the groups treated T1 and not treated T0) were carried out through a principal component

analysis allowing the characterisation of the treatments (T1 and T0). This analysis is intended to describe, through a system of canonical axes, the different groups of trainees according to the relevant variables selected above. The statistical analysis was carried out using R software.

Box plots are constructed based on the values of the appreciation index AI_i from the treatment and no-treatment soft skills proposed beforehand. A soft skill is considered to be better if it brings an appreciation at least equal to that of the control group. In other words, an innovation soft skill is more appreciated if the median of its appreciation index values is greater than or equal to zero (median [soft skill] ≥ 0). A cross-tabulation between the trainees' characteristics and the categorisation of soft skills (encouraging adoption and not encouraging adoption) was therefore carried out. Moustache boxes were created using Minitab 14 software.

Based on the assessment criteria for each soft skill with and without treatment, an assessment index AI_i is defined for a given criterion (I) and a given treatment.

$$AI_i = \sum_{j=1}^n Score_{ij} \quad (2)$$

In equation (2), j denotes the score of the trainees selected.

This index reflects the trainees' overall assessment of the criterion concerned in relation to the soft skill. Bar charts are constructed from these assessment indices to determine the best-rated criterion in relation to the soft skill and the least-rated criterion in relation to the soft skill with the weighted value of the criterion.

An overall assessment index (AI) is determined for each trainee assessed based on the treatment or non-treatment characteristics selected.

$$Ig = \frac{1}{n} \sum_{i=1}^n IA_i \quad (3)$$

Where (i) is the soft skill index.

A treatment group is well appreciated if its Ig is greater than zero ($Ig > 0$). It was then possible to compare the two groups of trainees. The appropriate test was the Student's T-test.

Hypothesis H0 = there is no significant difference between the treatments (T1 & T0) versus Hypothesis H1= there is a difference between the treatments (T1 & T0).

The probability of having the same assessment within the treatment groups was calculated and compared with the theoretical mean at the 5% threshold.

Limits of the World Café Model

The carefully arranged World Café Model hardly accommodated for defective learners whose past psychological trauma has remained unhealed. In the case study of T1, one student was withdrawn and demonstrated limited understanding of the nature of behavioural competencies, which may be attributed to a lifelong lack of contact with his mother, who is still alive. This extreme psychological case might not fit in the category of learners thought to be covered by the World Café Model from the beginning. Another limitation of the World Café Model is that not all (more than 30) soft

skills translated from professional grievances were retained. While a limited number (12) of crucial soft skills were effectively applied, only seven of those skills were evaluated. Lastly, abiding by the assumptions of too much is less desirable than little in the behavioural skills set, the expectation was very high with respect to 12 soft skills compared to over 30 soft skills within the time span of 1.5 days available for learning.

Results

Professionals’ opinions on graduate’ soft skills

According to the professionals, graduates from technical HEIs have a skills gap compared to the ideal expected in a company, particularly in soft skills. Roughly speaking, between 60% and 80% of graduates have a definite shortfall in soft skills, while only between 20% and 40% have a shortfall in hard skills. Clearly, the level of dissatisfaction is high, justifying the increasingly critical slings and arrows directed at academics by professionals. While these criticisms are justified, it is important to remember that soft skills are not taught in technical courses, although they are implicit in certain social science and humanities subjects.

Socio-demographic characteristics of the survey population

Students were organised by several socio-demographic characteristics (see Table 22.1). The average age of the student trainees was around 20. While the oldest trainee, aged 21, came from the AGFPN department, the youngest trainees at ESVR and EA were around 20 and 19 respectively. The gender breakdown of the survey population was 55% men and 45% women. The training stream with the highest number of women was ESVR, while the one with the lowest number was EA.

Table 22.1. Socio-demographic characteristics of trainees

Learning Programs		Treatment (T0)		Treatment (T1)				Total	
		AGFPN		ESVR		EA			
Average age (years)		21.28 (2.09)		20.77 (0.83)		19.62 (1,6)		20.70 (1.77)	
Sex		Number	%	Number	%	Number	%	Number	%
	Male	09	64	02	22	06	75	17	55
	Female	05	36	07	78	02	25	14	45
Back-ground Studies	Math	00	00	02	22	00	00	02	06
	Biology	10	71	07	78	08	100	25	81
	Technical	04	29	00	00	00	00	04	13

22. How & when to achieve Students' Immersion in Soft Skills?

Learning Programs		Treatment (T0)		Treatment (T1)				Total	
		AGFPN		ESVR		EA			
Average age (years)		21.28 (2.09)		20.77 (0.83)		19.62 (1,6)		20.70 (1.77)	
Total		14	100	09	100	08	100	31	100

Source: Experiment data, June 2024.

Standard errors are in brackets.

Regarding their high school backgrounds, these are associated with the priority subjects, which include biology and mathematics for some and Technical Agricultural High School for the rest. While 81% studied biology, only 6% studied mathematics, and 13% came from the Technical Agricultural High School. These three school backgrounds are distributed unevenly across the three training streams: Mathematics (22% of ESVR), Technical Agricultural High School (29% of AGFPN), and Biology (71% of AGFPN; 78% of ESVR; 100% of EA).

Ranking soft skills following the two groups of surveyed trainees (T0, T1)

The evaluation forms on the student trainees returned by the companies enabled us to rank the soft skills according to the weightings linked to the assessments of the placement tutors. Table 22.2 shows that the two groups of trainees (T0 and T1) were assessed and rated fairly evenly with respect to the seven soft skills evaluated.

The Kendall rank test is run to check the concordance of the ranking. The values ($W = 0.631$; $\text{Khi-two} = 54.2$; $\text{df} = 7$; $p = 0.001$) demonstrate a high degree of concordance, significant at 1%. Therefore, 'Solution of enterprise problems' and 'Entrepreneurship spirit' are respectively the most appreciated and the least appreciated soft skills, treatments wise.

There was, however, a comparative advantage for the T0 group over the T1 group in terms of professionals' assessment of the seven soft skills. This comparative advantage was observed for six soft skills, except for the soft skill called 'Entrepreneurship spirit'.

Table 22.2. Ranking of soft skills following professionals' appraisal during internship

N°	Soft skills	Treatment (T1) Ranking	Treatment (T0) Ranking
1	Solutions to enterprise problems	1	1
2	Motivation	2	2
3	Trusting oneself	3	3
4	Enterprise vision	4	4
5	Team work	5	5
6	Emotional intelligence	6	6
7	Entrepreneurship spirit	7	7

Source: Calculated from field data, June 2024

What are the decisive characteristics of professionals' assessment of soft skills?

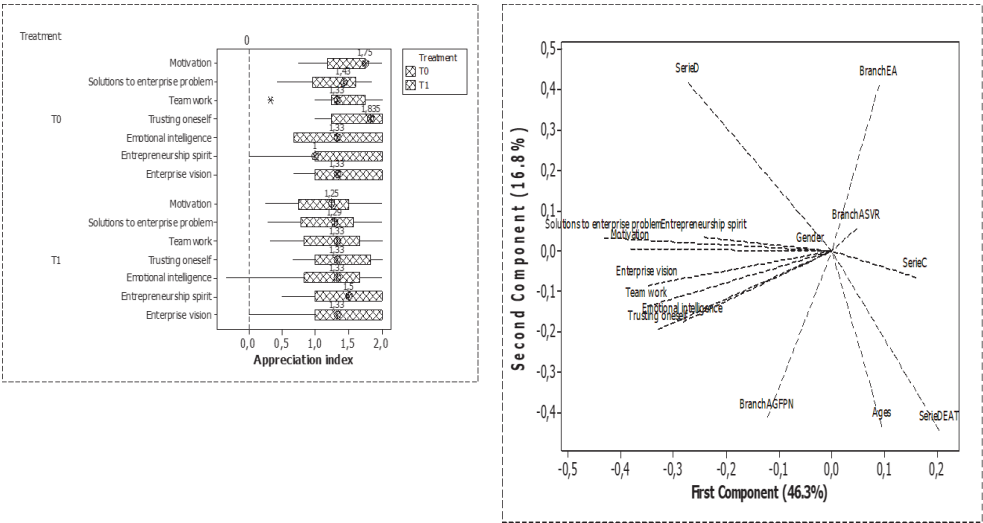


Figure 22.1 Student characteristics influencing professionals' appreciation of soft skills

a) Appreciation of soft skills by treatment

b) Correlation circle between characteristics and soft skills

Legend: T0 = Untreated trainee group; T1 = Treated trainee group

Source: Field data, June 2024

Figure 22.1a illustrates the results for the two treatment groups. “Trusting oneself” is the most appreciated soft skills of the group T0 by professionals, while “entrepreneurship spirit” is the one for the group T1. Crossing the characteristics of trainees with the seven soft skills (cf. figure 22.1b) and analysing the correlations it comes up that background in biology, sex and learning programs ESVR and EA encourage professionals' appreciation of the following soft skills: Entrepreneurship spirit, Emotional intelligence and to a lesser extent Motivation. On the contrary, ages, learning program AGFPN, background in Technical Agricultural High School, and to the least extent background in mathematics encourage professionals' appreciation of the following soft skills: trusting oneself, teamwork, solutions to enterprise problems and enterprise vision.

Converging and Diverging views of professionals on soft skills following the groups T0&T1

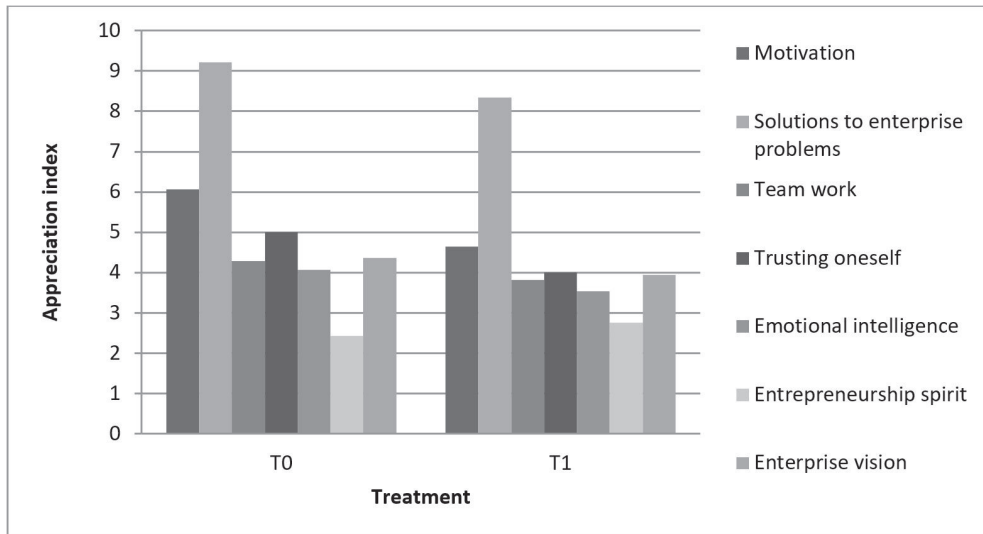


Figure 22.2. Assessment of the innovation introduced compared with the reference situation

Legend: T0 = Untreated trainee group T1 = Treated trainee group

Source: Field data, June 2024

Besides, the global indexes are the lowest for six out of seven soft skills for the group T1. AIG of the group T1 is 88.73% that of the group T0. However, the difference between both values is not significant at 5% ($t\text{-value} = 1.22$; $df = 28$; $p = 0.234$). The observed differences are then randomly distributed.

Comparing the two groups (T0 and T1) according to the seven soft skills

Using the global appreciation index and a student t-test, the two groups (T0 and T1) are compared. The global appreciation index is positive for the two groups ($IgT0 = +1.42$ and $IgT1 = +1.26$).

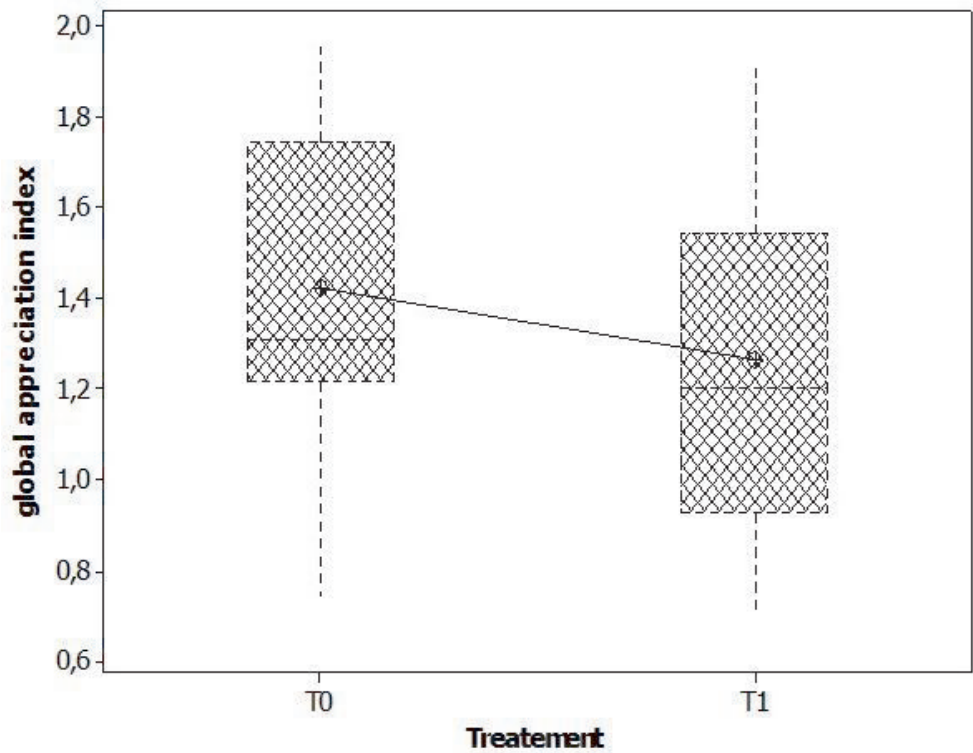


Figure 22.3 Comparison of the two groups of trainees
Legend: T0 = Untreated trainee group T1 = Treated trainee group
Source: Calculated from field data, June 2024

Comparing the two groups (T0 and T1) according to a soft skill “entrepreneurship spirit”

The T1 group performs better following the soft skill “Entrepreneurship spirit,” according to professionals, compared to the T0 group ($Ig_{T0}=1,21$ et $Ig_{T1}=1,38$).

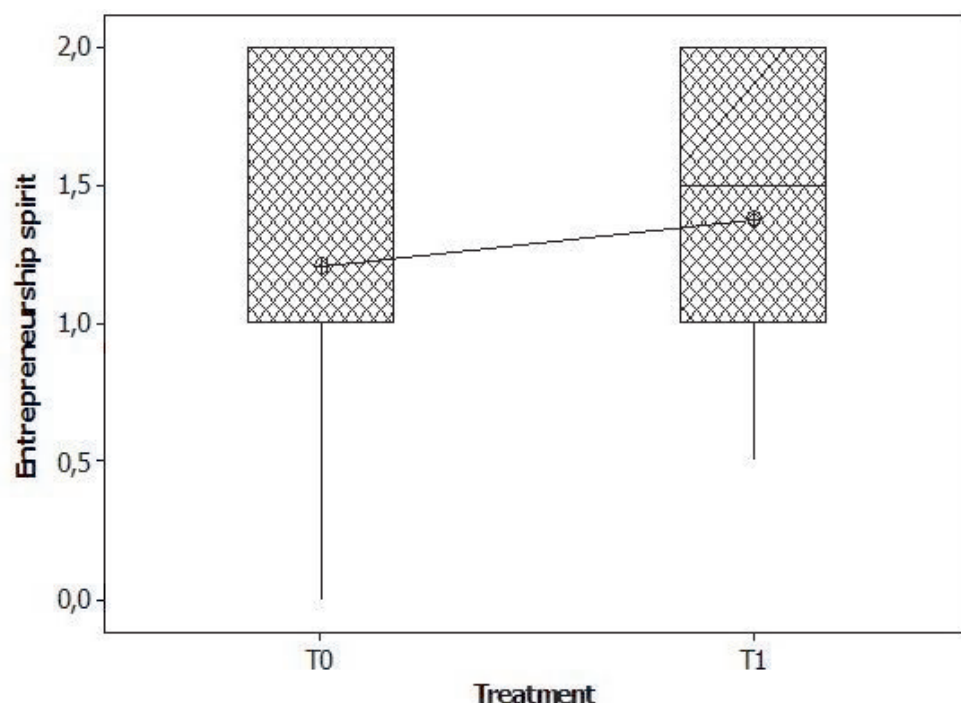


Figure 22.4 Comparison of groups according to soft skill entrepreneurship spirit

Legend: T0 = Untreated trainee group T1 = Treated trainee group

Source: Calculated from field data, June 2024

Discussion

The discussion is organised following three lines of thought: i) theoretical and ii) empirical importance of soft skills and iii) the failure of the dispositive to ensure a successful immersion of soft skills for graduates.

Theoretical Importance of soft skills for businesses

With a return rate of around 77% and 82% for the soft skills evaluation forms for the treatment group (T1) and the control group (T0) respectively, it would be almost peremptory to assert the importance of soft skills for business professionals. The conditions of collaboration, participation and commitment theoretically prescribed for this purpose are well above those that prevailed in the FSA/UAC case study (Powell & McGrath, 2014; Robinson, 2019; Shiner, 2021; Valcin et al., 2024). It is assumed that the unreturned forms are due to the concerns of the professionals, including the importance attached to human resources (Lefebvre & Hamelin, 2021), the qualities of observation and

active research (Larsen & Andersen, 2017), the fear of evaluation bias (Sargis-Roussel & Belmondo, 2018).

As far as the results of the evaluation forms are concerned, they exceeded expectations, as the global appreciation index is positive and above +1. This result asserts that trainees were readily well appreciated in general. It could be that the same reasons cited above for not returning the forms are still being used to explain the generosity of the assessors. Otherwise, student trainees are considered soft skills specialists. Where the problem lies is in the perceived progress made by the control group over the treatment group, which leaves the analysis dubious, even though the difference is not statistically significant. Could this result be linked to the adaptation of young students as highlighted by Valcin et al. (2024)? In order to validate the theoretical standpoint, Scholman, Demberg and Sanders (2022) suggested converging evidence from multiple methods of which psychometric tests before and after the training and even the internships. Moreover, it is critical that more researchers collaborate across subjects, including socio-anthropology, management, information and communication, and psychology, to investigate the influencing factors that are relevant for the adoption of soft skills (Cheng & Espanha, 2021). However, fitting learners' evaluation for soft skills into the Multiple Streams Framework does not preclude the process from unanswered questions (Fowler, 2024).

Several shortcomings in the collaboration, participation and commitment platform can be cited in no order. The absence of students during the collection of soft skills, the failure of professionals to collaborate in drawing up the in-company evaluation grid and the lack of contact between lecturers and professionals until the trainees returned home are all shortcomings that skewed the process. The theoretical model behind the platform cannot be replicated in its current state (Powell & McGrath, 2014; Robinson, 2019). Professionals in the developing countries do not fully appreciate the behavioural and cross-disciplinary skills of graduates entering the labour market, because they are not faced with the costs of adapting them (Valcin et al., 2024). Just as information is gathered on soft skills during meetings between teachers and professionals in Benin, job advertising campaigns alternatively provide relatively detailed information on the skills in demand on the labour market (Suleman, Suleman & Cunha, 2024). Unless this theoretical platform-based model is respected, Fréguin-Gresh and Angeon (2024) claimed that professional insertion and livelihoods are not attainable.

Empirical Importance of soft skills for businesses

Beninese professionals state they cannot find the workers they need, but they are more optimistic in recognising that graduates with the right soft skills would be welcome to acquire technical modernity. This is to affirm, as Bangali and Veilleux (2015) have done, on the one hand the crucial role of soft skills in companies. The bias of the present results in favour of the T0 group, although not statistically significant, also raises the question of whether the transfer of soft skills to the T1 group is appropriate given the existing context. The prevailing context was that students were barely over the stress of the validation of credentials. Peyron and Lanquar (2023), on the other hand, highlighted the extra-curricular nature of soft skills in Morocco, agreeing on the one hand on the need for soft skills in companies, and pointing out on the other hand, in the case of calls concerning the education sector, that promoters should include at least sixty hours of soft skills to be transferred to beneficiaries. The

immersion of graduates in soft skills can probably be outsourced to programmes or structures outside the curriculum. Recommending modern equipment to education providers, as most academics have done, does not make sense either (Mokibelo & Seru, 2020).

The failure to ensure a successful immersion of soft skills for graduates

The “World Café Model” and human materials failed to make differences between students with immersion in soft-skills and those without. The results reveal that trainees without immersion in soft skills perform fairly better than trainees with immersion in soft skills. With respect to the “World Café Model” and the literature (Hernandez, 2016; Peyron & Lanquar, 2023; Mourshed et al., 2014), it assumed several strengths and weaknesses. Regarding the strengths of the “World Café Model,” it takes great account of the learning by project approach. It also involves theoretical learning as well as learning by mentorship. Finally, this is close to multi-modal learning.

Turning to the weaknesses of the World Café Model, it was cumbersome to organise a meeting involving professionals and students. It was particularly complicated to align the spare time of professionals with the calendar of students and lecturers. In addition, the mentorship aspect was not fully complete because students rarely asked questions to mentors during their internships, although students and lecturers were connected on social media. Furthermore, the multi-modal learning aspect was not complete as lecturers could not guarantee the reflexive approach given that the entire process spanned over 1.5 days. These weaknesses justify the rationale behind why Hernandez (2016) and Peyron and Lanquar (2023) stigmatised the scarcity of a pedagogic dispositive to support soft skills in the universities. More importantly, words like tutoring, mentoring and coaching would not live up to expectations given the structuring and the missions attached to the technical HEIs (Hernandez, 2016; Mokibelo & Seru, 2020).

With respect to human materials, several options stayed open. First, the mentoring role conceded to four lecturers was not achieved and because of lecturers' own time constraints, trainees were not recalled to seek counselling as was planned. Second, the divergence of understanding made also its ways in curbing down professionals' enthusiasm to evaluate trainees. Third, the team in charge of soft skills avoided to interfere through direct supervisions of trainees in businesses.

With regard to formal partnerships between HEIs and businesses, Chevaillier (2005) highlighted several obstacles, including the difficulties public-sector HEIs face in collaborating with businesses and organisations such as NGOs; mentoring in companies remains a voluntary effort and is not necessarily engaging or demanding; evaluation may be subjective because each intern is expected to apply to the company of their choice, especially where the project appears attractive, rewarding, and, incidentally, familiar; professionals rarely refrain from making value judgments about the difficulties students face in applying their instructions.

An example of the initiative taken by academics to establish partnership frameworks with the professional world – combined with new concepts such as Service-Learning, Living-Laboratory, and other approaches designed to highlight the role of universities within their host communities – is illustrated by Dedehouanou (2025a). There is therefore a consensus that universities must initiate and establish

formal partnerships. However, the levels of accountability for the initiative within universities – such as the University of Abomey-Calavi (UAC), which alone comprises approximately 27 higher education institutions – must be carefully considered (Dedehouanou, 2025b).

Conclusion

There is still room for improvement in the theoretical model of the stakeholder platform for the employability of university graduates. This model suggests the collaboration, participation and commitment of the stakeholders, each individually and in solidarity. Better still, the stakeholders must serve the common ideal of employability on the basis of participation, institutional efficiency and effectiveness, and employer and learner satisfaction. The immersion of learners in soft skills targeted in this research has a particular significance, because the supposed adoption of soft skills by learners obeys this theoretical model. The research focused on such a process while observing the associated hazards. It is instructive to recall that the organisation of the SEPT conferences served as a compass for this research. The ACCESS Kigali conference (Rwanda) sounded the alarm on active teaching methods for the infusion of soft skills, while the ACCESS Hammamet conference (Tunisia) provided an opportunity to communicate the results and identify areas for improvement. Several shortcomings of the theoretical model have been noted, including insufficient participation by learners, insufficient collaboration between teachers and professionals, insufficient ownership of employability by the players involved, etc.

Elsewhere, in developed countries, the theoretical model has produced motivated learners who are ready to take their destiny into their own hands, whereas in Africa, learners adapt to circumstances, leaving the other players free to decide whether or not to estimate the cost of their adaptations and whether or not to take responsibility (taking accountability) for the roles to be played by each of them. The experiment carried out on the immersion of learners in soft skills has shown that these skills must be infused into learners who are ready to enter the workplace and who are not involved in the administration of training curricula.

The difficulties for following the theoretical model stem from the disciplinary entanglement on the one side, and the unfeasibility to bring stakeholders to agreements on the meaning on the other side. Of course, researchers in that domain called upon stakeholders to facilitate the process through the creation of platforms of actors where collaboration, intense participation and engagement are rather the rules than the exceptions. In the case study of the University of Abomey-Calavi, stakeholders are still side by side and not together. The workshop of exchanges and debates planned between lecturers and professionals from businesses turned into sessions of lecturing within which professionals became lecturers and lecturers from the HEIs played a singular role of students. It is of interest to call the attention on those sessions, which could have led to bring together students, professionals and lecturers, but were rather devoted to the collect of soft skills. This was a missing opportunity to nurture the platform approach with the major stakeholders.

The following phase of the research was smoothly conducted: from the agreement on the essential soft skills amongst lecturers to the World Café Model with students, no one actor could predict the deceptive outcomes. As largely explained in the methodology, tutoring, mentoring and coaching which

were the key assets of the experimentation stopped at the gate of the workshop. Although students were enthusiastic and optimistic with this new pedagogic endeavour, once at their internships and their daily concerns, they got silent with respect to the promised initiatives of seeking counselling. The team also missed the opportunities for supervision visits to trainees.

The results of the evaluation of both groups (students with immersion in soft skills and others without this experience) reveal very positive opinions of professionals on trainees for six out of seven soft skills. The last one, "entrepreneurship spirit", was severely appreciated for both groups. Nonetheless, the group with preparation in soft skills performed better compared to the second group.

Many conditions are still to be reconciled while dealing with soft skills. Professionals need to be surveyed after their very positive opinions on the two groups of trainees. There is still a need to consider a variety of methods for assessing the adoption of soft skills, including psychometric tests before and after training and even internships. The remaining question is whether those trainees can easily be inserted in their respective enterprise.

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