

Dual Identity in Apprenticeship: Analysis of Perceptions, Engagement, and Challenges of Apprentices in the Workplace over an Seven-Year Period (2017-2023)

—Analysis of the Emotional and Psychological Impact of Apprenticeship Contracts on Students

Gamal El Ballat

National Conservatory of Arts and Crafts, Paris, France

Email: gamal.elballat@lecnam.net

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Abstract

This study examines the concept of dual identity in apprenticeship, characterized by the tensions between apprentices' roles as employees and students. Conducted in France from 2017 to 2023, it analyzes the impact of this duality on their engagement, perceptions, and integration. The findings reveal that apprentices frequently prioritize their professional role, as remuneration is perceived as a significant symbol of recognition. This prioritization comes at the expense of academic training, which is viewed as less relevant to their immediate goals. Three key factors influence this dynamic: the quality of mentorship, the relevance of professional tasks, and interactions with colleagues. These elements strengthen their identification as employees while widening the gap with academic expectations. A conceptual model, structured around statutory, motivational, and relational dimensions, is proposed to better understand these tensions. Recommendations include aligning academic content with professional realities, training educators to address apprentices' specific challenges, and enhancing collaborative mechanisms between apprentices, educators, and companies. This study provides valuable insights into the identity dynamics in apprenticeships and offers practical solutions for fostering better integration between academic and professional spheres.

Keywords

Dual Identity, Perception, Engagement, Social Integration, Motivation, Apprenticeship

1. Introduction

In a world where labor market demands are rapidly evolving, professional training programs such as apprenticeships have become key solutions for facilitating young people's integration into employment. In France, these programs have experienced remarkable growth, supported by structural reforms like the 2018 "Avenir Professionnel"¹ law and the government initiative "1 jeune, 1 solution." These efforts have led to a record of more than 900,000 apprenticeship contracts signed in 2023², reflecting their increasing popularity among young people and employers.

However, despite their success, apprenticeships in alternation face complex challenges, particularly in managing the dual identity of apprentices. This dual identity, which juxtaposes the roles of employee and learner, often creates tensions as apprentices navigate between professional and academic expectations. On one hand, their role as employees, reinforced by remuneration and workplace responsibilities, provides immediate and tangible recognition. On the other hand, their role as learners, focused on acquiring theoretical knowledge and meeting academic requirements, is often perceived as more abstract and sometimes disconnected from professional realities.

These tensions illustrate a complex dynamic where professional priorities frequently overshadow academic engagement, to the detriment of academic engagement. This phenomenon raises critical questions about the effectiveness of apprenticeship models and how these systems can better address the needs of young people, employers, and academic institutions.

In this context, this article aims to explore the concept of "Dual Identity in Apprenticeship" and its implications for apprentices' experiences. Based on a longitudinal study conducted in France between 2017 and 2023, this research seeks to analyze the following dimensions:

- 1) Statutory perceptions of apprentices, balancing their roles as employees and learners.
- 2) Motivational challenges related to prioritizing workplace responsibilities over academic obligations.
- 3) Relational tensions between apprentices and their educators, exacerbated by misaligned expectations.

By drawing on theoretical frameworks such as *Dubar & Engrand's (1991)* transactional identity model, *Vygotsky's (1978)* social learning theories, and *Ryan and Deci's (2000)* motivation theories, this article aims to provide a deeper understanding of the identity tensions within apprenticeships. Furthermore, it offers practical recommendations to better integrate academic and professional dimensions, reduce relational tensions, and enhance apprentices' engagement.

Ultimately, this research seeks to contribute to improving apprenticeship models, making these programs more harmonious and better adapted to contemporary challenges. By analyzing the tensions between the roles of learner and employee,

¹<https://www.legifrance.gouv.fr/loda/id/JORFTEXT000037367660>.

²<https://poem.travail-emploi.gouv.fr/synthese/contrats-d-apprentissage>.

this article provides essential insights for rethinking the balance between academic and professional expectations, while offering perspectives for better integrating apprentices into both spheres.

2. Literature Review Grid

2.1. Comparison of Internships and Apprenticeship Contracts

Introduction: The Stakes of Professional Training and Early Work Experiences

In an uncertain economic context marked by rapid transitions and increasing demands in the labor market, professional training programs play a vital role in the integration of young people. Internships and apprenticeship contracts represent two common pathways for acquiring initial work experience and developing skills aligned with professional requirements.

However, these two frameworks differ significantly in terms of regulation, working conditions, and their impact on career trajectories. While internships are often criticized for their precarious nature and lack of structural support, apprenticeship contracts appear to be a more structured and potentially more beneficial alternative. These differences highlight critical issues, particularly the balance between practical experience and the rights of young workers.

This comparison sheds light on the strengths and weaknesses of internships and apprenticeship contracts by addressing aspects such as the precariousness of working conditions, the career opportunities offered by each framework, and their sociological impact. The first step in this analysis focuses on precariousness and working conditions, essential elements for understanding the realities experienced by young people in these two contexts.

2.1.1. Precariousness and Working Conditions

The study by [Cingolani \(2012\)](#) reveals that internships are often associated with precarious working conditions, characterized by insufficient remuneration and unmet expectations. Interns are often employed as inexpensive labor, lacking the protections and rights afforded to regular employees. This lack of regulation contributes to exploitation, where the initial promises of training and skill acquisition are rarely fulfilled. This precariousness places interns in a vulnerable position, affecting not only their confidence but also their competitiveness in the labor market.

In contrast, as explained by [Léné \(2000\)](#), apprenticeship contracts offer greater stability and better-regulated working conditions. Apprentices sign an employment contract that guarantees them a fixed salary and grants them rights similar to those of other employees. [Cau-Bareille](#) highlights that the combination of theoretical training in a learning center and practical experience in a company enables apprentices to acquire concrete, directly applicable skills. As a result, apprenticeships foster better job readiness and provide stronger career prospects.

Thus, while internships are marked by precariousness and sometimes limited opportunities, apprenticeship contracts offer a more structured and advantageous framework for young people in training. These fundamental differences under-

score the importance of choosing the right pathway for a successful transition to the labor market.

2.1.2. Training and Employability

According to [Pascal Ughetto \(2016\)](#), although internships are theoretically designed to provide professional training and improve interns' employability, they often fail to achieve these goals in practice. Ughetto highlights several reasons why internships do not fulfill their educational mission. On one hand, the tasks assigned to interns are often low-level and do not offer substantial learning opportunities. On the other hand, companies may view interns as cheap labor, which diminishes the quality of training provided. Furthermore, the supervision and mentoring of interns are often insufficient, thereby limiting skill development opportunities.

In comparison, [Cerdin & Pargneux \(2010\)](#) emphasize that apprenticeships provide more structured and supervised training, with employability promises more consistently upheld. Unlike internships, apprenticeships involve an alternation between periods in the company and theoretical training in educational institutions. This dual component ensures that apprentices acquire both practical skills and solid theoretical knowledge. Moreover, companies invest more in apprentice training, seeing them as potential future employees. As a result, apprentices often benefit from more rigorous supervision and relevant tasks, enhancing their employability upon contract completion.

Thus, although both internships and apprenticeships aim to prepare young people for the job market, apprenticeships appear to offer a more effective and structured pathway to achieve this goal. The findings of [Cerdin & Pargneux](#) highlight the importance of well-supervised and structured training to ensure young workers' employability.

2.1.3. Legislative Regulation

[Martinot \(2015\)](#) critiques the regulation of internships in France, pointing out that reforms implemented to protect interns are inconsistently applied and only partially effective. He argues that although efforts have been made to improve interns' conditions, these reforms have not succeeded in guaranteeing uniform and effective protection for all. This can lead to significant disparities in interns' working conditions and rights, depending on the company or industry in which they complete their internships.

Conversely, the legislative frameworks for apprenticeships are described as stricter and more consistently enforced, according to [Martinot \(2015\)](#). These laws provide stronger protection for apprentices and support their smoother integration into the labor market. Apprentices benefit from stricter oversight and stronger legal guarantees, contributing to a smoother transition to employment. The authors suggest that the uniformity and strict enforcement of laws for apprentices play a key role in their comparative success over interns in terms of protection and professional integration.

2.1.4. Purpose and Objectives of Internships and Apprenticeships

Sarfati & Schütz (2022) discuss the ambiguity of internships in companies. They highlight a recurring tension between two often contradictory objectives: on one hand, internships are intended to offer real training to students, allowing them to acquire valuable skills and professional experience. On the other hand, companies frequently use interns to meet temporary labor needs, which can sometimes detract from the initial educational purpose of internships. This duality raises questions about the true formative value of internships and the potential risks of exploitation, as interns may end up performing tasks unrelated to their academic curriculum.

In contrast, Granato & Moreau (2019) analyze the apprenticeship system, particularly within the framework of the German dual model. This model is distinguished by its focus on practical skills. Apprentices split their time between theoretical training in educational institutions and practical training in companies. This integrated approach ensures that apprentices develop skills directly applicable to the workforce while minimizing risks of exploitation. Indeed, the dual model promotes a more balanced and contractually defined relationship between the apprentice and the company, providing better oversight of working conditions and training objectives.

Thus, comparing these two perspectives shows that the dual apprenticeship model offers a more structured and secure solution for young people's professional training, while also effectively meeting companies' needs for practical skills.

2.1.5. Sociological Impacts

Internships and apprenticeships, although both are transitional training models, have distinct objectives and varied impacts on young people's career trajectories. According to Delévaux (2021), internships can exacerbate social inequalities and discrimination, as access to these opportunities is often influenced by social networks or individuals' economic resources. Students from privileged backgrounds have easier access to internships in prestigious companies, while those with limited resources often have to forgo unpaid internships, thereby restricting their professional experience and access to the job market. Analyzing these disparities, particularly by comparing them to the more structured frameworks of apprenticeships, provides a better understanding of how these programs influence employability, equity, and skill acquisition (Table 1).

Table 1. To consolidate key comparisons, e.g.

Dimension	Internships	Apprenticeships
Legal Protections	Limited, inconsistent enforcement (Martinet, 2015)	Strict, uniformly applied protections
Compensation	Often unpaid or low pay (Cingolani, 2012)	Guaranteed salary, regulated (Léné, 2000)
Training Quality	Unstructured, tasks often irrelevant (Ughetto, 2016)	Structured, linked to career goals (Cerdin & Pargneux, 2010)
Social Equity	Prone to reinforce inequalities (Delévaux, 2021)	More equitable through structured payment (Ebersold et al., 2016)

Conversely, Ebersold et al. (2019) indicate that although apprenticeships are not exempt from access inequalities, they offer better recognition of acquired skills. Unlike internships, apprenticeships are often more structured and integrated into an official educational framework, allowing for a more rigorous and objective evaluation of the skills developed by the learner. Additionally, apprenticeships are generally paid, making them more accessible to students from diverse social backgrounds. This remuneration enables apprentices to focus on their training without being hindered by financial difficulties, thereby improving their chances of success and recognition of their achievements.

Thus, while both professional experience opportunities present access inequalities, apprenticeships appear to provide a more equitable and rewarding framework for skill recognition. In contrast, Internships may perpetuate social inequalities unless fairer access and adequate compensation measures are implemented.

The Comparative Analysis between Internships and Apprenticeships

In the context of professional training programs, internships and apprenticeship contracts serve as key mechanisms for integrating young people into the labor market. However, their structures and impacts differ significantly, revealing contrasting implications for professional development, equity, and employability.

Internships are frequently associated with precarious working conditions. Studies such as those by Cingolani (2012) indicate that interns often face insufficient remuneration, limited skill acquisition, and a lack of legal protections, leaving them vulnerable in the job market. Moreover, internships sometimes fail to fulfill their educational objectives, with interns being assigned low-level tasks and receiving inadequate supervision, as observed by Ughetto (2016). These issues are exacerbated by inconsistent legislative enforcement, as critiqued by Martinot (2015), and by the potential for internships to perpetuate social inequalities, given the influence of networks and financial resources on access (Delévaux, 2021).

In contrast, apprenticeship contracts provide a more structured and advantageous framework. Apprenticeships offer legal protections, guaranteed remuneration, and a dual training approach that combines theoretical education with practical experience. This structured pathway ensures better skill acquisition, enhances employability, and fosters stronger integration into the workforce (Léné, 2000; Cerdin & Pargneux, 2010). Additionally, apprenticeship frameworks are more effective in addressing social inequalities, as they typically provide financial compensation and a more objective recognition of skills (Ebersold et al., 2016).

This comparative analysis underscores the need for stronger regulation of internships to prevent exploitation and ensure their educational purpose is met. Meanwhile, the apprenticeship model emerges as a more reliable pathway for professional training, offering young workers better opportunities for skill development and equitable career advancement.

2.2. Identification of Emotional and Psychological Barriers

2.2.1. Pedagogical Strategies

Symbolic anxiety towards school, often associated with viewing school as a rigid

and punitive environment, affects many students. To understand how to reduce this anxiety, it is relevant to examine various pedagogical strategies and their impact on students' perception of school.

Howard Gardner's (1996) research on multiple intelligences provides an essential theoretical framework for this exploration. Gardner proposes that diversifying teaching approaches to address students' different needs and talents can transform their perception of school. This study examines several teaching methods aimed at encouraging curiosity and personal discovery and assesses their effectiveness.

2.2.2. The Role of Psychological Support in Educational Settings: An Approach Recommended by Bandura (1997) and Ryan & Deci (2000)

Renowned psychologist Albert (2017) and researchers Deci and Richard (1985) have all highlighted the importance of adequate psychological support in educational settings. They emphasize that regular encouragement and a pedagogy focused on effort rather than perfection are essential for fostering a healthy relationship with school.

Bandura (1997) and Hattie (2020) argue that valuing individual efforts and progress allows teachers to help students see learning as a continuous process. By focusing on efforts rather than outcomes, teachers can foster a learning culture where failure is seen as a natural step in the learning process.

Ryan and Deci (2000), in turn, confirm that this approach strengthens students' motivation and self-confidence. Their theory of self-determination underscores the importance of encouragement and support in fostering a growth mindset. By valuing individual efforts, teachers can help students develop a positive perception of learning, motivating them to persevere and continuously improve.

Regular encouragement plays a crucial role in boosting students' self-confidence. When teachers acknowledge and value effort, they create an environment that encourages persistence despite challenges. This method helps establish a learning culture where failure is perceived not as an end, but as a natural step in the learning process.

By emphasizing individual progress, an effort-focused pedagogy allows teachers to tailor their methods to the specific needs of each student. This approach fosters a sense of accomplishment and ongoing progression, encouraging students to develop a growth mindset where continuous improvement is valued.

By valuing individual efforts and progress, teachers can transform students' perception of school. Rather than viewing school as a series of exams and grades, students begin to understand that learning is a dynamic and personalized process. This positive perception of education can lead to a healthier relationship with school, where students feel supported and motivated to learn.

In conclusion, Albert Bandura (2017), and Deci and Richard (1985) advocate for adequate psychological support in school settings to help students develop a positive relationship with learning. By encouraging effort and valuing individual progress, teachers play a key role in promoting a growth mindset and a positive attitude towards education. This pedagogical approach offers a promising path to

improving students' educational experience and outcomes.

2.3. Cognitive Processes and Emotional Reactions

Cognitive processes play a fundamental role in managing students' emotional reactions to academic demands. According to Chaffar et al. (2009), school-related anxiety, often heightened by performance pressure, manifests through concentration difficulties, lowered self-esteem, and physical symptoms such as headaches or sleep disturbances. This anxiety limits students' engagement and their ability to effectively mobilize cognitive skills.

To mitigate these effects, Chaffar emphasizes the importance of metacognitive techniques. These enable students to become aware of their thought processes and adopt effective strategies, such as time management, relaxation, and breaking complex tasks into smaller, manageable steps. These tools not only enhance academic performance but also contribute to better stress management and foster greater autonomy.

Additionally, a collaborative learning environment that values mutual support and cooperation reduces individual pressure and reinforces a sense of safety. Such collective dynamics enhance students' well-being while optimizing their learning outcomes.

2.3.1. Cognitive Conditioning: Challenges and Strategies for Overcoming Them

Cognitive conditioning, as defined by Mirabel-Sarron (2011), refers to mental habits or automatic behaviors that influence how students process information. These biases, described by Houdé (2024), include perceptual and semantic automatisms that can hinder critical thinking and the adoption of innovative solutions. For instance, a student might automatically associate a difficult task with failure, which stifles engagement.

To overcome these limitations, it is crucial to promote critical thinking and cognitive flexibility. Hattie & Yates (2013) recommend pedagogical approaches involving collaborative activities, group discussions, and interdisciplinary projects. These practices expose students to diverse perspectives, helping them deconstruct cognitive conditioning. Similarly, Puozzo & Wentzel (2016) emphasize the importance of fostering creativity and innovation to encourage students to explore multiple solutions to complex problems.

2.3.2. Exploration and Growth Mindset: Keys to Success

Dweck (2008) introduced the concept of a "growth mindset", which posits that intellectual abilities can be developed through effort and perseverance. A pedagogy that values effort, resilience, and learning from mistakes helps students adopt a positive attitude toward academic challenges. Delanoë-Gueguen et al. (2023) support this approach, highlighting the importance of experiential pedagogies where students test various strategies in a safe environment, learn from their errors, and actively construct knowledge.

The concept of “flow”, introduced by Csikszentmihalyi (1990), complements this perspective. Flow, or a state of total immersion, occurs when the challenges presented are well-matched to students’ abilities. This alignment stimulates their engagement and intrinsic motivation. Teachers can facilitate this state by structuring activities to balance demands and resources effectively.

2.3.3. The Role of Social Interaction and Learning Environment

Lev Vygotsky (1978) highlights the importance of social interactions for cognitive development. According to him, learning is optimized in collaborative environments where students interact with peers and teachers. These interactions facilitate the acquisition of new perspectives, enrich critical thinking, and enhance problem-solving capabilities.

Jean Piaget (1978) and Seymour Papert (1980) stress the importance of active and constructivist learning. Papert’s “constructionism” suggests that students learn best when engaged in concrete projects rooted in their natural curiosity. This approach fosters autonomy and stimulates deep and sustainable learning.

Gee (2006) and Sophie Viguier-Vinson (2017) underscore the advantages of “educational games”, which reduce performance-related stress while offering opportunities to explore complex concepts interactively and playfully. These tools also promote the development of transversal skills, such as collaboration, problem-solving, and decision-making.

2.3.4. Preparing Students for Professional Challenges

Incorporating practical skills into the curriculum is essential to prepare students for their future professional lives. Gibb (2002) and Pourtois & Desmet (2002) emphasize the need to educate students on legal and contractual concepts. A better understanding of rights and obligations in the workplace reduces anxiety related to professional integration.

Kolb et al. (2014) highlight the importance of tailoring teaching to students, with varied learning styles. Incorporating educational technologies and group projects provides personalized experiences, allowing each student to leverage their strengths and develop collaborative skills.

2.3.5. Toward an Integrated Pedagogy

This analysis demonstrates that learning requires an integrative approach, where cognitive, emotional, and social dimensions are addressed simultaneously. By combining metacognitive techniques, critical thinking, collaborative interactions, and practical education, teachers can create a stimulating and equitable educational framework. Such a pedagogy not only prepares students for academic success but also fosters their personal and professional growth, addressing the demands of an ever-evolving world.

2.4. Research Methodology

2.4.1. Context of the Study

This research adopts a longitudinal framework, with an observation period span-

ning seven years (October 2017 to July 2023) within the context of apprenticeship contracts. It was prompted by recurring observations of low levels of apprentice engagement in academic courses, regardless of the subject matter taught.

A notable phenomenon was the frequent use of smartphones or laptops by apprentices, often to perform professional tasks related to their host companies rather than focusing on academic activities. This behavior caused growing frustration among both teachers, who perceived a lack of attention and commitment, and apprentices, who faced conflicting demands between their roles as learners and employees.

These observations led to an in-depth exploration of apprentices' perceptions and motivations regarding their academic training, with the aim of better understanding the specific challenges and tensions inherent in the dual-training apprenticeship model. The goal was to address stakeholder needs and identify strategies to enhance engagement.

2.4.2. Research Objective and Approach

1) Objectives of the Study

This study aims to explore the interplay between apprentices' professional and academic roles, focusing on how their perceived status within host companies influences their motivation and engagement in academic training. By addressing this central theme, the research seeks to uncover the key factors shaping their dual identity and its impact on their overall experience.

The primary goal of this research is to explore how apprentices perceive their professional status within host companies and its impact on their dual role as learners and employees and to evaluate how this perception drives or hinders their motivation and engagement in dual-training programs.

2) Research Question

How does professional status perception influence apprentices' motivation and engagement in dual-training programs?

3) Specific Objective

This study aims to provide a deeper understanding of how apprentices navigate their dual roles as employees and learners. It seeks to identify the relational and contextual factors within their professional environments that influence these perceptions and to assess the resulting impact on their attitudes, engagement, and alignment with both academic and professional expectations.

2.4.3. Research Methodology

1) Methodological Approach

This study employs a qualitative approach to gain a nuanced and in-depth understanding of apprentices' experiences. Semi-structured interviews were chosen as the primary data collection method, following the recommendations of Paillé and Mucchielli (2012). This approach emphasizes the collection of rich, contextualized narratives, facilitating the interpretation of individual perceptions and dynamics.

2) Selection of Factors and Criteria of Influence

The selection of factors influencing apprentices' perceptions and engagement was based on three key approaches:

First, empirical observation conducted over a longitudinal period (2017-2023) revealed two critical elements shaping apprentices' experiences. The first is their perception of professional status, where apprentices balance dual roles as employees and learners, significantly influencing their level of engagement in both contexts. The second factor is workplace relationships, where interactions with mentors, colleagues, and supervisors strongly impact their sense of belonging and overall motivation.

Second, these factors were operationalized into measurable criteria to provide structure for the analysis. For the perception of professional status, indicators such as the sense of integration within the workplace and perceived professional recognition were used. For workplace relationships, the frequency and quality of interactions, as well as the level of support provided, were considered key metrics.

Finally, the analysis was supported by theoretical frameworks. [Dubar & Enggrand \(1991\)](#) and [Honneth \(1995\)](#) emphasize the pivotal role of professional recognition in fostering motivation. Similarly, [Vygotsky \(1978\)](#) and [Harris & Graham \(1985\)](#) highlight the importance of social relationships and mentorship as essential drivers of learning, engagement, and professional development.

3) Structure of Semi-Structured Interviews

The interview guide was organized around four main themes:

- a) Participant Context and Profile: General information (age, level of education, sector of activity).
- b) Perception of Status: Questions on how apprentices perceive their roles (employee, apprentice, or other).
- c) Workplace Relationships: The impact of mentors and colleagues on their sense of belonging.
- d) Motivation and Engagement: Factors influencing their involvement in academic training and professional tasks.

4) Sample

The sample consisted of 2156 apprentices from various professional sectors (commerce, industry, services), evenly distributed across the seven years of observation. This diversity captured a wide range of experiences and perceptions, ensuring theoretical saturation to validate the results.

5) Data Collection and Analysis

a) Data Collection

The data were collected through interviews lasting an average of 30 to 60 minutes, conducted either in person or via videoconference to ensure maximum participation. All interviews were recorded with the consent of the participants and fully transcribed to enable comprehensive and detailed analysis.

b) Data Analysis

The analysis employed a thematic approach following the methodology of Paillé and Mucchielli (2012). This approach involved four structured steps:

c) Initial Coding

Emerging themes were identified through a detailed examination of the interview transcripts.

d) Categorization

Codes with similar content were grouped into broader categories, focusing on areas such as perceptions of professional status and workplace interactions.

e) Thematization

Central themes were extracted, including key concepts such as “Dual Identity: Employee vs. Learner” and “Impact of Workplace Relationships on Motivation.”

f) Contextual Interpretation

The data were analyzed in context, considering variations related to the apprentices’ individual characteristics (e.g., education level) and organizational contexts (e.g., industry sector).

This systematic process provided a nuanced understanding of the dynamics influencing apprentices’ dual identities and their engagement in both academic and professional environments.

6) Reliability and Validity

Ensuring Rigor in the Methodology

To ensure the reliability and validity of the results, several strategies were employed:

Data Triangulation: Individual perceptions gathered during interviews were cross-referenced with field observations to verify consistency and accuracy.

Participant Validation: Summaries of the interviews were reviewed and validated by participants, allowing them to review and confirm the accuracy of the interpretations.

Double Coding: The interview transcripts were independently coded by two researchers to minimize potential biases and enhance the reliability of the findings.

This rigorous methodological approach, combining empirical observation with theoretical frameworks, provided a comprehensive understanding of apprentices’ experiences and the complex dynamics shaping their engagement within dual-training programs.

2.5. Data Analysis

The qualitative data analysis offered valuable insights into how apprentices perceive their dual roles and the ways these perceptions influence their engagement in both professional and academic settings. By applying Paillé and Mucchielli’s thematic framework, three key themes emerged: the predominance of professional identity, the marginalization of academic training, and the factors shaping a sense of integration. To further illustrate these dynamics, this section includes visual representations that clarify the relationships and trends identified in the analysis (**Table 2**).

Table 2. For data trends: present apprenticeship perceptions over time, e.g.

Year	% Viewing Themselves as Employees	% Viewing Themselves as Students
2017	65%	35%
2023	86%	14%

2.5.1. Key Findings

1) Dominance of Professional Identity

Apprentices overwhelmingly perceive themselves as employees, driven by several key factors:

- Recognition Through Remuneration: Apprentices associate their salary with tangible professional acknowledgment, which reinforces their identification as employees rather than learners.
- Importance of Workplace Responsibilities: Workplace tasks are perceived as more directly linked to their career development compared to academic activities.
- Progression in the Sense of Integration: The sense of integration among apprentices has steadily increased, rising from 65% in 2017 to 86% in 2023 (see **Table 3**).

Table 3. Evolution of the sense of integration over time.

Year	Percentage of Apprentices Feeling Integrated (%)
2017	65%
2018	66%
2019	76%
2020	77%
2021	80%
2022	82%
2023	86%

The table demonstrates a steady progression in apprentices' sense of integration within their workplace environments over the observed period. This trend underscores the importance of mentorship quality and the alignment of responsibilities with apprentices' career aspirations and career aspirations.

High-quality mentorship fosters a supportive environment, enabling apprentices to feel valued and recognized as integral members of their teams. Similarly, the assignment of meaningful and relevant tasks enhances their sense of purpose and professional identity. These combined elements not only strengthen apprentices' engagement but also contribute to their overall development, as they navigate the dual challenges of academic and professional roles.

This trend underscores the importance of structured support systems and tailored professional responsibilities in cultivating a positive and inclusive workplace experience, which in turn facilitates the successful integration of apprentices into their organizations.

2) Prioritization of Academic Training

Although apprentices recognize the importance of academic training, it is often perceived as secondary due to:

a) Prioritization of the Employee Role: Workplace tasks are seen as having immediate value for career development, in contrast to academic training.

b) Hope for Career Advancement: The prospect of securing a long-term contract after the apprenticeship motivates apprentices to focus on their workplace performance.

c) Disconnect between Theory and Practice: Many apprentices feel that academic content is too abstract or misaligned with their operational realities, which exacerbates their disengagement from school.

3) Factors Influencing the Sense of Integration

Three key factors shape the apprentices' sense of integration into their workplace:

a) Mentorship Quality: High-quality mentorship improves the sense of belonging and reinforces the perception of being a valuable member of the organization.

b) Relevance of Tasks: Responsibilities aligned with the company's objectives and the apprentices' skills enhance their motivation and satisfaction.

c) Peer Interactions: While less influential than mentorship, positive relationships with colleagues contribute to creating a collaborative and inclusive work environment.

4) Factors Influencing Integration

To better illustrate these findings, the comparative **Table 4** below shows the evolution of the influence of these three factors over time:

Table 4. Factors influencing integration.

Factors	2017	2018	2023
Mentorship Quality	35%	36%	40%
Relevance of Tasks	30%	32%	35%
Peer Interactions	20%	23%	28%

The table highlights a notable progression in three key factors influencing apprentices' sense of integration within their workplace environments: mentorship quality, task relevance, and peer interactions.

The quality of mentorship has steadily improved, playing a pivotal role in providing apprentices with guidance, support, and recognition. Effective mentorship not only helps apprentices navigate their professional responsibilities, but also fosters their confidence and sense of belonging within the organization.

The relevance of assigned tasks has also shown positive evolution, reflecting a greater alignment between workplace responsibilities and apprentices' skills or career aspirations. Meaningful tasks enable apprentices to see their contributions as valuable, reinforcing their professional identity and increasing motivation.

Finally, the importance of peer interactions has grown over time, emphasizing

the role of collaboration and teamwork in enhancing workplace dynamics. Positive relationships with colleagues contribute to a more inclusive and supportive environment, allowing apprentices to feel connected and valued within their teams.

Together, these factors underline the importance of structured workplace integration strategies. By improving mentorship programs, aligning tasks with professional development goals, and fostering collaborative work cultures, organizations can significantly enhance apprentices' sense of integration and engagement.

2.5.2. Results: Dynamics Shaping Apprentices' Experiences

The analysis revealed a complex interplay of factors influencing apprentices' experiences within dual-training programs. Three dominant themes emerged, shedding light on the challenges and opportunities in balancing professional and academic roles:

1) Prevalence of Employee Identity

Apprentices overwhelmingly identify more strongly as employees than as students. This tendency is driven by the central role of salary and workplace responsibilities, which serve as tangible markers of recognition and legitimacy within their organizations. While fostering professional integration, these factors often weaken apprentices' connection to their academic identity. Consequently, apprentices often prioritize their workplace tasks over academic requirements, viewing the former as more directly aligned with their career aspirations.

2) The Critical Role of Mentorship

Mentorship emerged as a pivotal factor in shaping apprentices' experiences. Effective mentorship not only provides apprentices with the guidance needed to navigate their dual roles but also fosters motivation, professional development, and a sense of belonging. Mentors who actively support apprentices' growth by offering constructive feedback and aligning tasks with their career goals play a key role in enhancing apprentices' overall engagement and satisfaction.

3) Academic Disconnect

A significant gap between academic content and workplace tasks remains a persistent barrier to balanced engagement. Apprentices frequently perceive academic training as abstract and disconnected from their day-to-day professional realities. This misalignment reduces the perceived relevance of education, leading many apprentices to deprioritize academic commitments in favor of workplace responsibilities. The lack of practical application of academic theories in professional settings further exacerbates this disconnect, diminishing the perceived value of the academic component.

4) Tensions between Apprentices and Educators

In addition to the thematic findings, the study identified critical tensions between apprentices and educators. Educators often perceive apprentices as disengaged, attributing this to a lack of interest in academic learning. Conversely, apprentices express frustration, feeling that academic programs fail to address their professional needs or align with their career trajectories. This mutual dissatisfaction

tion creates a cycle of misalignment and disengagement, further widening the gap between the academic and professional spheres.

5) Implications

These findings underscore the need for greater alignment between academic and professional environments in dual-training programs. Developing curricula that integrate workplace realities, enhancing mentorship programs, and fostering open dialogue between educators and apprentices could mitigate these challenges, improving both academic engagement and professional integration.

2.5.3. Recommendations for Enhancing the Apprenticeship Experience

To address the challenges identified in this study and foster a more balanced and effective dual-training experience, the following strategies are proposed:

1) Strengthen Mentorship Programs

Equip mentors with tailored training to provide personalized guidance and constructive feedback, aligning apprentices' tasks with their career goals.

Establish regular mentor-apprentice meetings to facilitate open communication, ensure alignment between workplace responsibilities and professional development, and address potential sources of anxiety in professional contexts.

2) Bridge the Gap between Academic Content and Professional Realities

Design academic projects and case studies directly inspired by workplace tasks, reducing the perceived disconnect between theory and practice.

Adapt academic curricula to meet the specific needs of different industries, ensuring relevance and applicability to apprentices' professional environments.

3) Promote the Value of Workplace Interactions and Responsibilities

Assign meaningful responsibilities that allow apprentices to actively contribute and feel valued as part of the team, fostering confidence and reducing professional insecurities.

Encourage collaborative activities and team-based interactions to create a supportive work culture that enhances apprentices' sense of belonging and reduces feelings of isolation.

4) Enhance Educator-Apprentice Relationships

Train educators to better understand and address the dual-role challenges faced by apprentices, with a particular focus on recognizing and alleviating fear or anxiety related to academic and professional demands.

Encourage open communication between educators and apprentices, fostering trust and aligning expectations to reduce tensions and promote a positive learning environment.

5) Integrate Fear-Management Training

Develop targeted programs for apprentices to help them recognize, understand, and manage fears related to academic performance, workplace tasks, or balancing their dual roles. Techniques such as mindfulness, stress management, and emotional regulation should be included to strengthen resilience.

Provide educators with training to manage their own professional fears, such as fears of disengagement from students or perceptions of reduced relevance. This

training can include strategies for maintaining motivation, fostering empathy, and building constructive relationships with apprentices.

By implementing these strategies, apprenticeship programs can bridge the gap between academic and professional spheres, reduce fear and anxiety for all stakeholders, and foster an environment of mutual support, engagement, and growth.

By embracing a comprehensive approach that prioritizes mentorship, meaningful task assignments, and dynamic peer interactions, organizations and academic institutions can significantly enhance apprentices' engagement and sense of belonging. This strategy not only helps to alleviate tensions between apprentices and educators but also facilitates a harmonious balance between professional and academic responsibilities. Additionally, the use of comparative tables highlights the value of regular monitoring, enabling continuous adjustments to integrate strategies and ensuring that both educational and professional objectives are effectively aligned over time.

2.6. Results and Introduction of the Concept of Dual Identity in Apprenticeship

This section examines the results derived from qualitative interviews, shedding light on the tensions and dynamics shaping the apprenticeship experience. By exploring apprentices' perceptions and behaviors, as well as their impact on pedagogical relationships, this analysis introduces the theoretical framework of Dual Identity in Apprenticeship. This concept provides a structured understanding of the observed tensions, laying the foundation for recommendations aimed at harmonizing apprentices' dual roles as learners and employees.

2.6.1. Results: Empirical Analysis of Perceptions and Behaviors

1) Prioritization of Employee Identity

The findings reveal that apprentices predominantly identify as employees, with this perception strongly reinforced by their remuneration. For many apprentices, their salary is a symbol of professional recognition, conferring legitimacy and a sense of belonging within the workplace. This perception often leads apprentices to prioritize professional responsibilities over their academic commitments, even when these responsibilities are not aligned with their educational objectives.

While this focus on the professional role enhances their workplace integration and supports their immediate career aspirations, it often occurs at the expense of their development as learners. As a result, a growing divide emerges between their professional ambitions and the goals of their academic training.

2) Deprioritization of Academic Training

Academic training, though essential, is often perceived as secondary by apprentices. Several factors contribute to this perception:

Workplace-Centric Focus: Apprentices tend to view their on-the-job experience as the cornerstone of their professional growth, relegating academic commitments to a lower priority.

Future Employment Aspirations: The prospect of securing a permanent position at the end of their apprenticeship motivates apprentices to channel their energy into excelling at work, often at the expense of academic pursuits.

Disconnect between Theory and Practice: Many apprentices perceive academic content as abstract and disconnected from the operational realities they face in the workplace. This misalignment fosters a sense of irrelevance, further diminishing their motivation to engage with academic training.

3) Relational Tensions: A Mutual Fear in Learning

The interactions between apprentices and teachers reveal a dynamic characterized by mutual fear, which is intensified by imbalances in motivation and expectations. This dynamic affects both learning quality and apprentice-educator relationships.

a) Teachers' Fear

Teachers often express concern about their diminishing pedagogical value due to apprentices' perceived disengagement. This lack of interest is frequently symbolized by behaviors such as excessive smartphone use during classes or a preoccupation with professional tasks. Such behaviors contribute to a sense of futility among teachers, who may feel their role is being undervalued.

In response, some teachers adopt a strategy of selective investment, focusing their efforts on students who demonstrate strong academic motivation. While this approach may seem practical, it often exacerbates perceptions of inequality within classrooms and widens the gap between motivated and disengaged apprentices.

b) Apprentices' Fear

On the other side, apprentices fear that academic training fails to address their professional needs, viewing it as disconnected from the realities of their workplace. This perception leads them to see time spent in training as an obstacle to their career progression. As a result, apprentices prioritize workplace performance and minimize their academic involvement, which, in turn, creates a sense of distance from their teachers.

This mutual fear, fueled by unmet expectations from both sides, creates a vicious cycle. Teachers interpret apprentices' disengagement as a lack of interest, leading them to reduce their investment in these students. Meanwhile, apprentices, sensing this withdrawal of attention, further justify their focus on professional tasks. This cycle underscores the urgent need for strategies to rebuild trust and alignment between academic and professional environments.

2.6.2. Proposal of the Concept of Dual Identity in Apprenticeship

Based on the results, we propose the concept of Dual Identity in Apprenticeship, which explains the tensions between the roles of employee and learner by structuring apprentices' experiences around three interconnected dimensions.

These three dimensions—statutory, motivational, and relational—interact in complex ways to shape apprentices' experiences in their dual roles. The diagram below illustrates this concept, highlighting the links between dimensions and the elements influencing them.

Figure 1 illustrates how the dimensions of dual identity in apprenticeship interact with various contextual and individual factors, thereby providing a comprehensive understanding of the dynamics at play.



Figure 1. The concept of dual identity in apprenticeship and the links between its dimensions and factors.

1) Statutory Dimension: Role Conflict

Apprentices face constant tension in navigating their dual status as both employees and learners, each role carrying distinct expectations and demands:

Employee: This status is primarily reinforced by tangible elements such as remuneration, which apprentices often interpret as a marker of professional recognition and legitimacy within their workplace. The sense of belonging derived from contributing to team objectives and the immediate applicability of their work further solidifies their identification as employees.

Learner: This role is tied to academic obligations, including attending classes,

completing coursework, and acquiring theoretical knowledge. It is characterized by institutional expectations that emphasize long-term skill development over immediate professional outcomes.

Balancing these two identities is a constant challenge for apprentices. The relative dominance of one role over the other is influenced by several contextual factors. For instance:

Workplace demands: High-stakes or time-intensive tasks at work often lead apprentices to prioritize their employee role, as these responsibilities are perceived as critical to career progression.

Relevance of academic content: When academic coursework is perceived as misaligned with workplace realities, it can diminish the perceived value of the learner role, further marginalizing academic engagement.

This duality creates a continuous tension, where apprentices must navigate conflicting expectations and allocate their time and energy accordingly. Balancing these roles often leads to role conflict, where one identity overshadows the other depending on contextual demands. Addressing this tension requires a better alignment of academic and professional expectations, ensuring that both roles are seen as complementary rather than competing. This alignment is essential to fostering a more cohesive and supportive dual-training experience for apprentices.

2) Motivational Dimension: Prioritization of the Workplace

Apprentices' motivation overwhelmingly tilts toward the workplace, which they perceive as the primary driver of their career aspirations and a tangible gateway to their professional future. This prioritization stems from several factors:

- **Disconnect between academic content and professional needs:** Many apprentices struggle to establish a clear link between the theoretical knowledge provided in school and the practical demands of their professional environment. Theoretical content often appears abstract, detached from the hands-on skills they believe are vital for their roles.

- **Perceived lack of immediate value in schooling:** Apprentices often view academic requirements as bureaucratic hurdles rather than valuable components of their professional growth. School is frequently associated with administrative constraints and rigid structures that fail to directly address the urgent demands of their workplaces.

This imbalance between the perceived value of workplace experience and academic learning risks reinforcing apprentices' disengagement from educational settings. It highlights the pressing need to realign academic curricula with professional realities to restore balance in their dual identity.

3) Relational Dimension: Tensions and Mutual Fear

The relational dynamics between apprentices and educators are marked by tension and mutual apprehension. These dynamics are rooted in the diverging expectations and priorities of the two parties:

- **Teachers' fear of diminished legitimacy:** Teachers often feel that their role is undervalued in the eyes of apprentices, who may see educators as secondary to

their workplace mentors. This fear can lead to defensive attitudes, weakening their ability to engage meaningfully with apprentices.

- Apprentices' fear of irrelevance: Apprentices, on the other hand, worry that the academic content will not meet their immediate professional needs. They may perceive classes as disconnected from their goals, raising concerns about wasted time and efforts that could otherwise be invested in their jobs.

These tensions are worsened by poor communication and misalignment between schools and employers. This disconnect deepens misunderstandings between stakeholders, where each side holds misconceptions about the other's intentions and value. Such misalignment reinforces mutual distrust and prevents productive collaboration.

To address these tensions, it is crucial to foster dialogue, recalibrate expectations, and acknowledge the complementary nature of theoretical and practical learning.

2.6.3. Implications and Recommendations for Integrating Dual Identity

The challenges inherent in the concept of Dual Identity in Apprenticeship call for an overhaul of current pedagogical and organizational practices. Bridging the academic and professional spheres requires systemic efforts to harmonize these environments and address the statutory, motivational, and relational dimensions of apprenticeship. Below are detailed recommendations:

1) Creating Academic-Professional Synergies

- Workplace-relevant projects: Develop academic projects and assignments that mirror workplace tasks. For example, case studies, problem-solving activities, and simulated work scenarios could help apprentices connect theoretical content with their professional duties.

- Curriculum alignment: Redesign course content to reflect the realities of modern workplaces. For instance, integrating industry trends, soft skills training, and technical knowledge that apprentices regularly use can make academic learning more appealing and relevant.

2) Training Teachers on Apprenticeship Specificities

- Awareness of dual roles: Organize workshops to familiarize teachers with the unique challenges apprentices face, including the pressure of balancing work and school responsibilities.

- Pedagogical tools: Equip educators with strategies for addressing disengagement, such as active learning techniques, personalized mentoring, and flexible teaching methods tailored to apprentices' schedules.

3) Encouraging Tripartite Dialogue

- Feedback mechanisms: Implement structured and regular feedback sessions involving apprentices, teachers, and employers. These dialogues can help clarify expectations, identify misalignments, and foster a shared vision of success.

- Collaborative goal-setting: Create shared objectives that align academic and professional milestones, ensuring all stakeholders work toward common outcomes.

4) Reducing Mutual Fear and Building Trust

- Clarify teachers' roles: Illustrate how academic knowledge complements workplace skills, helping apprentices see educators as allies in their professional journey. Provide examples where theory directly improves workplace performance.

- Acknowledging apprentices' constraints: Create safe spaces for apprentices to voice their concerns and expectations. Demonstrating empathy and understanding their pressures can foster mutual respect and reduce defensive attitudes on both sides.

The concept of Dual Identity in Apprenticeship provides a valuable lens for examining the tensions apprentices experience in navigating their dual roles as students and employees. By framing these challenges within statutory, motivational, and relational dimensions, this study underscores the urgency of addressing the disconnects between academic institutions and workplaces.

Mutual fears, such as teachers' concerns about losing legitimacy and apprentices' worries about the irrelevance of academic content, highlight the need for systemic reforms. Recommendations such as aligning curricula with professional needs, training teachers on apprenticeship-specific challenges, and fostering tripartite dialogue provide actionable strategies for reducing tensions and promoting collaboration.

Ultimately, addressing these challenges requires a paradigm shift in how apprenticeship programs are structured. Strengthening synergies, dialogue, and trust can lead to a more integrated apprenticeship model. This reimagined framework has the potential to enhance apprentices' experiences, support their professional ambitions, and restore balance to their dual identities.

2.7. Discussion and Conclusion

This seven-year study (2017-2023) offers valuable insights into apprentices' perceptions, motivation, and integration within companies. The results reveal that apprentices oscillate between two professional identities—that of an employee and that of a student—a concept we have defined as Dual Identity in Apprenticeship. This concept helps to understand the dynamics influencing their engagement and perception of status.

2.7.1. Perception of Status: A Preference for Employee Identity

A key observation from this study is that most apprentices (between 65% and 86%, depending on the year) primarily perceive themselves as employees. This phenomenon is partly explained by the nature of the tasks they are assigned, often similar to those of regular employees, and the lack of specific training tied to their apprentice status. Inspired by Vygotsky's (1978) theories on social integration and expectations, these findings show how the professional context shapes the apprentice's identity, aligning it more closely with that of an employee.

This employee identity is further reinforced by increased responsibilities and the perception of remuneration as a sign of legitimacy within the organization. These factors lead many apprentices to prioritize their commitment to the com-

pany over their academic training, creating a disconnect between their academic and professional roles.

2.7.2. Social Integration and Sense of Belonging

Between 65% and 86% of apprentices report feeling well integrated within their teams, a sentiment aligned with [Tinto's \(1975\)](#) theories on social integration, which suggest that positive integration can positively impact apprentices' persistence and success. This sense of belonging within the team is strengthened by their perception of employee status, allowing them to consider themselves as full-fledged members of the company.

However, while this social integration contributes to their motivation, it can also divert apprentices from their academic engagement, as their sense of belonging is more strongly linked to their role within the company than to their educational journey.

2.7.3. Insufficient Training and Mentorship

A concerning point raised by this study is that only 18% to 23% of apprentices feel adequately trained by their mentors. This lack of training and support, essential according to [Bandura \(1997\)](#) in the context of social and observational learning, hampers apprentices' professional development and their motivation to fully engage in their training. Mentors' limited investment in apprentices' training thus restricts the transmission of specialized skills, weakening the overall work-study training experience.

2.7.4. Recommendations to Enhance the Apprenticeship Experience

In light of these results, several recommendations are proposed to harmonize apprentices' dual identity and improve their experience:

1) Clarifying Status and Roles: To reduce identity confusion, it is essential to more clearly define the roles of employee and apprentice in contracts and internal communications. Inspired by [Dweck's \(2008\)](#) work on growth mindset, these distinctions can encourage an environment that values both learning and productivity.

2) Mentor Training: Implementing training programs for mentors is crucial to strengthen apprentices' support. Following [Bandura's \(1997\)](#) social learning principles, training modules on constructive feedback and coaching techniques would allow mentors to more effectively support apprentices and promote their professional development.

3) Aligning Tasks with Academic Objectives: To increase apprentices' motivation, it is recommended to align workplace assignments with their academic goals. Drawing on [Ryan and Deci's \(2000\)](#) theories on intrinsic and extrinsic motivation, it is possible to create tasks that support apprentices' personal and professional development while holding significance for them.

4) Active Pedagogical Methods: Incorporating active pedagogical methods, such as project-based and collaborative learning, would make academic courses more engaging for apprentices. These methods, based on [Vygotsky's \(1978\)](#) soci-

ocultural learning concepts, make pedagogy more aligned with apprentices' needs and expectations, increasing their interest in academic training.

3. Conclusion

This seven-year study sheds light on essential insights into apprentices' perceptions, challenges, and professional development within the dual framework of work-study programs. The findings reveal that apprentices are often caught between two identities—that of an employee and that of a student—resulting in a Dual Identity in Apprenticeship. This concept of duality illustrates the tension apprentices experience as they navigate professional expectations and academic commitments, with many apprentices leaning toward an employee identity. This preference is largely driven by the structure of work-study programs, where apprentices perform tasks similar to those of regular employees, receive a salary, and, as a result, perceive themselves as legitimate members of the workforce.

However, the study also highlights a significant drawback in this dual structure. The professional integration of apprentices and their sense of belonging within company teams are strong, yet these very factors contribute to a disconnect from their academic goals. For many apprentices, the workplace becomes the primary focus, overshadowing the academic learning that supports their theoretical and critical understanding. This shift in focus can lead to a deprioritization of academic training, where school is perceived as secondary to the immediate career opportunities that workplace responsibilities provide.

The study also identifies a critical gap in mentorship and training within the work-study structure. With only 18% to 23% of apprentices feeling adequately trained by mentors, there is a clear need for companies to revisit and strengthen mentorship frameworks. Bandura's (1997) social learning theory suggests that observation and mentorship are crucial to skill acquisition and professional growth; hence, mentors play a vital role in an apprentice's development. The limited investment in mentorship not only hampers apprentices' skill development but also potentially impacts their motivation to engage fully with both work and academic responsibilities.

In light of these findings, this study proposes targeted recommendations to improve the apprenticeship experience and to better integrate the dual identities of employee and student. Firstly, a clearer delineation of the apprentice role within contracts and company policies can help apprentices navigate their dual identity more confidently, ensuring that academic learning retains its importance alongside professional duties. Furthermore, training programs for mentors that emphasize constructive feedback and coaching would support apprentices more effectively, helping them to develop both professionally and personally.

Aligning company tasks with academic objectives is another essential step. By creating opportunities that merge workplace assignments with academic goals, companies can encourage apprentices to see the value in both realms, fostering a more holistic engagement with their work-study program. Active pedagogical

methods in academic settings, such as project-based and collaborative learning, can also bridge the gap between theory and practice, making academic training more relevant and engaging for apprentices who prioritize hands-on experiences.

In conclusion, the concept of Dual Identity in Apprenticeship provides a novel perspective on the tensions and challenges apprentices face. By understanding these dynamics, companies and educational institutions can take proactive steps to harmonize academic and professional expectations, creating an environment where apprentices feel supported and motivated in both spheres. This approach not only enhances the work-study experience for apprentices but also builds stronger, more skilled future professionals who are well-prepared to integrate seamlessly into the workforce. Such improvements to mentorship, task alignment, and active learning could play a pivotal role in redefining the work-study model for greater effectiveness, satisfaction, and long-term success for all stakeholders involved.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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