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'I Believe That Employees Adapt to Their Work, While Self-Employed People Adapt Their Work to Themselves.'– Student Beliefs About Professional and Entrepreneurial Self-Employment

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Abstract

Context: Amid profound transformative processes across the labour market, the need for comprehensive career guidance that systematically includes self-employed forms of work is coming into sharper relief. Despite an increase in relevance of self-employed gainful employment, both in the labour market as a whole and also in educational theory, this topic has yet to find its way fully into regular lessons within schools in Germany offering general education. This article addresses this gap, examining upper secondary school students' ideas about self-employment and entrepreneurial work. The aim is to establish a didactic foundation for broadening conceptual ideas of Economic Education within the school system
Approach: Conducted as part of *Selbstverantwortete Erwerbsarbeit* [self-responsible gainful work] SEVEA project, this exploratory study aims to integrate self-responsible gainful work into career guidance and economics lessons. The study is based on guided interviews with twelve pupils at three participating project partner schools in the German federal city state of Bremen. The evaluation was carried out using Mayring's qualitative content analysis (Mayring, 2015), supported by a theory-based category system on key dimensions of professional and entrepreneurial independence, as recommended in European competence frameworks and curricula (European Commission, 2017).
Findings: The results show that students primarily associate self-employment as an income option with autonomy, responsibility and higher risks. Personal and social skills – such as assertiveness, organisational skills and self-confidence – are mentioned most frequently, while economic knowledge plays a subordinate role. Self-employment is perceived as a potentially

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attractive yet uncertain option. Forms, such as intrapreneurship or hybrid forms of employment, are largely absent from young people's minds. Their perceptions also reveal distorted judgment of risk, idealised images of independence and uncertainties in the conceptual classification. **Conclusions:** The study highlights that career guidance must be understood more as a design-oriented learning process that aims not only at matching work with personal characteristics ('matching'), but also at self-realisation ('creating') within an employment relationship. The results provide concrete guidance for the development of didactic concepts that use everyday ideas as a starting point, specifically address misconceptions and systematically integrate entrepreneurial thinking.

Keywords

career guidance, self-employed gainful employment, biographical planning, student beliefs

1 The Importance of Self-Directed Gainful Employment for Career Guidance

The decision to pursue a post-school alternative mode of employment after leaving school marks a key developmental step in young people's lives. In order to make an informed choice, they need up-to-date career guidance that takes all forms of gainful employment into account. Subjectification processes in work (Kleemann et al., 2019) and the growing prevalence of flexible forms of gainful employment, including new forms of work (Alfes et al., 2022; Krause & Matuschek, 2023), make it increasingly necessary to address more than just dependent employment relationships in career and study orientation programs. Entrepreneurial and self-employed forms of gainful employment – including in the context of Entrepreneurship Education – have so far been largely ignored in career guidance at general education schools, at least in German-speaking countries (Schröder, 2019; Retzmann, 2016).

Although there are school (and university) initiatives for Entrepreneurship Education worldwide, these are only rudimentarily linked to career guidance in schools. Classic entrepreneurs, who, in Schumpeter's sense, create new markets or revolutionise existing markets with innovative business ideas in a process of creative destruction (Schumpeter, 1942), are essential for economic progress and the competitiveness of national economies, but nevertheless represent only a minority of self-employed persons. The majority of self-employed people work on the basis of classic business models, e.g. retailers, craftsmen, doctors or lawyers. In addition to innovative start-ups as the central focus of Entrepreneurship Education, there are other ways to become self-employed, such as taking over as a franchisee or taking on a successor role in an existing company.

In German-speaking countries, the term 'professional self-employment' is often associated with the ability to work on one's own account and in one's own name, as well as to determine one's own working hours, location and content. 'A self-employed person is someone who is economically active in their own name and on their own account, who is essentially free to organise their work and who is free to determine their working hours and place of work'. This definition applies only to a limited extent to franchisees and subcontractors, for example (Schröder et al., 2021), because their entrepreneurial freedom is restricted.

Entrepreneurial thinking and actions are also becoming increasingly important in dependent employment, which is expressed through terms such as corporate entrepreneurship and intrapreneurship, whereby the term intrapreneurship places greater emphasis on the person-oriented perspective and the term corporate entrepreneurship places greater emphasis on the organisational perspective (Schießl, 2015). From an organisational perspective, the development

of intrapreneurial capabilities plays an important role, as Klofsten et al. (2021) show in their literature review. Person-oriented approaches to intrapreneurship can in turn be distinguished in terms of employees' entrepreneurial behaviour (Schießl, 2015): 'Entrepreneurial co-entrepreneurs' (Wunderer & Kuhn, 1995; Neugebauer, 1997; Draeger-Ernst, 2003) manage themselves and implement the organisational strategy with above-average activity and innovation. 'Internal entrepreneurs' (Draeger-Ernst, 2003) are permanent employees who behave like entrepreneurs and drive the development of innovations within the company.

Employees who are intrapreneurs are expected to act independently, innovatively and proactively (Blanka, 2019; Eckardt, 2015). This shifts entrepreneurial thinking to the internal organisational sphere. After comparing various studies on the competencies of entrepreneurs and intrapreneurs, Ghandi et al. (2021) come to the following conclusion: 'Upon doing an overall comparison of the similarities and differences of the entrepreneurial and intrapreneurial competencies, we noted that intrapreneurs need competencies more or less similar to entrepreneurs' (p. 16). In their study, Jain et al. (2015) identify the following common characteristics: performance orientation, risk-taking, internal control mechanisms, innovative ability, proactive behaviour and market orientation. In her exploratory study, Vargas-Halabí (2017) also assumes that intrapreneurs are internal entrepreneurs and identifies the following similar characteristics: promotion of opportunities, proactivity, flexibility, drive and willingness to take risks. With regard to didactic transfer, it is important to note that when starting their careers, students are usually first required to act as entrepreneurial co-entrepreneurs, meaning that the development of personal characteristics is first required at this stage.

The erosion of traditional career paths must also be taken into account: careers that follow a linear sequence of school education, employment in the learned profession and retirement are increasingly being replaced by fragmented paths characterised by career changes, reorientation or further training (Wilke, 1999; Freiling et al., 2025). Self-employment is an option in various career phases, as can be seen, for example, in the age distribution of company founders (Statista, 2016). At a European level, the European Commission counts entrepreneurship competence among the eight key competences for lifelong learning (European Commission, 2007, 2019). At the same time, there is a high affinity here with modern approaches towards career choice theory. Adaptability to changing professional requirements and securing employability are central topics in theories of career development (Hirschi, 2015, p. 68 ff.). The importance of personal value orientation for career development is emphasised in protean theory (Hall, 2004). Life design focuses on the development of professional identity throughout one's whole working life (Schreiber, 2015). Career Construction Theory (Savickas, 2013) bridges the gap between life design and career theories because it combines personal life themes, professional personality and career adaptability.

Overall, Entrepreneurship Education constitutes a gap in career guidance (see, among others, Schröder, 2019; Retzmann, 2016). Career guidance in schools cannot be limited to immediate post-school options, but must also prepare students for further transitions and demands in working life. Career guidance should therefore not only aim to match individuals with occupations, but also open up perspectives for shaping career development, whether in the context of self-employment (entrepreneurship) or within organisational structures (intrapreneurship) (Loerwald & Kirchner, 2019).

Various concepts attempt to address the increasing plurality of professional self-employment including the labour entrepreneur, the entrepreneurial self (Bröckling, 2007), self-employment, Business Model You and the idea of entrepreneurship in one's own life each of which is

linked to a broader perspective on economic self-relationship and professional development. In the SEVEA project (see Chapter 3), the term 'self-responsible gainful work' was created to take this diversity into account. Self-responsible gainful work encompasses classic forms of self-employed gainful work as well as hybrid forms of work and entrepreneurial activity within dependent employment. Simultaneously, the term emphasises the active role of the individual in shaping their work and career.

2 Belief Studies as a Field of Research in Economic Education and Career Guidance

According to Baalmann et al. (2004), ideas are understandings and thoughts that relate to a specific subject area and are constructed or generated by individuals themselves. Ideas have a 'mental structuring and organising function and can influence actions' (Kirchner, 2016). Although ideas are considered relatively stable, they can be changed under certain conditions, especially when new experiences or contradictions arise in the learning process (Reusser et al., 2010, p. 481). This changeability is central to didactic transformation processes, as it enables learners to rethink and expand existing concepts. In didactic research, this process is described as conceptual change (Birke, 2013; Duit, 1995). The focus here is not on replacing 'misconceptions', but rather on their productive irritation, further development or coexistence with concepts that are scientifically accepted. Ideas influence knowledge acquisition and can also be defined as barriers in this context (Kirchner, 2016, Birke & Seeber 2011).

The importance of ideas is particularly evident in the context of economic education, where abstract concepts such as market mechanisms, entrepreneurial activity and income models are taught. Learning processes are based on the activation and transformation of existing prior knowledge. Beerenwinkel et al. (2007) illustrate how strongly this prior knowledge influences the absorption of information: 'The prior knowledge of pupils has a fundamental influence on what information is perceived and how it is interpreted [...]. Failure to grasp these ideas can lead to learning difficulties' (p. 7).

From a didactic perspective, ideas therefore open valuable points of reference. If they are used as starting points for a systematically planned learning process, cognitive connectivity, motivation and acceptance can all be fostered (Wodzinski, 2011). Teaching that refers to existing ideas can foster the transfer of academic concepts into everyday patterns of interpretation and at the same time increase the acceptance of innovations to the curriculum (Schmidt, 2015).

Despite its importance in the world of work, the relevance of self-employment has not yet been systematically incorporated into career guidance or economics lessons (Aff, 2008). Initial studies on student beliefs in this field do exist, yet they remain selective and thematically limited. They mostly focus to set up innovative companies and neglect alternative forms, such as freelancing or intrapreneurship (Hekman, 2007; Ivanova et al., 2018; Josten & van Elkan, 2010).

In the international context, too, there is a hesitant approach to the topic in school teaching. Empirical studies often focus on students in tertiary education and examine their attitudes towards starting a business (e.g. Saeed & Gongyi, 2020, for Yemen; Whitlock, 1995, for US economics students). However, there is a lack of systematic empirical evidence for general education schools. This study addresses this research gap with the aim of creating a robust empirical basis for the didactic integration of professional and entrepreneurial self-employment in school career guidance.

The study presented here to addresses this issue and makes an empirically based contribution to the subject-didactic and educational-theoretical foundation of self-directed gainful employment in school career guidance and economics lessons. Systematic collection and evaluation of student beliefs are intended not only to provide insights into existing frameworks of thought, but also to provide concrete impetus for the design of action-oriented, compatible teaching concepts.

3 Context of the Research Questions

This study was conducted and evaluated as part of the project 'Self-directed gainful employment as a perspective for career guidance and economics education' (SEVEA) between 2019 and 2022. Funded by the Herrmann-Leverenz-Stiftung, the project aims to promote and strengthen self-employed gainful employment within the framework of school-based career guidance. To achieve this objective, a didactic concept and 29 modular teaching units were developed and made available online (https://sevea.eu/). These modules enable flexible thematic integration into economics lessons, especially in the context of career guidance. The project was carried out in close cooperation with stakeholders in the field. This is reflected, for example, in the underlying research design of the design-based research approach (detailed in Schröder et al. 2025). This approach increases the practical applicability in schools and thus also the sustainability of the project's results. While research in subject didactics, including economic education, is increasingly examining teachers' perceptions (e.g. Kattmann, 2005; Kirchner, 2016; Friebel et al., 2016), there is currently little systematic knowledge available on learners' perceptions of self-employment and self-directed gainful employment.

This was the rationale why the development work itself was supported by exploratory interviews being conducted with pupils and teachers to capture existing ideas about self-directed gainful employment and incorporate them into the development work. Two research questions were pursued in the context of student belief:

(1) What ideas do upper secondary students express on entrepreneurial and self-employed gainful employment?
(2) To what extent do pupils consider entrepreneurial and self-employed gainful employment as a realistic alternative option, and to what extent is it present in their plans?

The systematic collection and evaluation of student beliefs thus address this research gap.

4 Methodological Approach

A qualitative research design was chosen to survey students' beliefs. Use of qualitative approaches is widespread in belief research, as beliefs are generally not directly observable, are often implicit, and are not fully conscious to the respondents themselves (Fletemeyer, 2021). They must therefore be explored reflexively using appropriate methodological procedures. This study was conducted as an interview study with a total of twelve 10th grade students at three project schools in the German federal city state of Bremen. The schools participating in the study consists of two grammar schools and a comprehensive school (known as a Schulzentrum in Bremen) with a grammar school upper level. All the pupils interviewed were enrolled in an educational program with the aim of obtaining their Abitur (German university entrance qualification). The interview participants were selected based on self-activation in a snowball system, i.e. the pupils volunteered for the interviews. The problem-centred (group) interviews

(Witzel & Reiter, 2012) were conducted outside of regular class time. Due to pandemic-related restrictions (Covid-19), some interviews were conducted digitally via the Zoom platform.

The concepts to be analysed were based on key dimensions of professional and entrepreneurial independence as recommended in European competence frameworks and curricula (European Commission, 2017).

- *Entrepreneurial attitudes* (self-confidence and initiative)
- *Entrepreneurial skills* (creativity, planning, general financial knowledge, resource management, dealing with uncertainty/risk, teamwork*)* and
- *Entrepreneurial knowledge* (knowledge of how to assess opportunities, understanding of the role of business in society, and awareness of career options as an entrepreneur)

Mayring's (2015) qualitative content analysis was used to evaluate the data. This method enables a systematic, rule-based and comprehensible interpretation of qualitative data (Lamnek, 2008, p. 241). Coding was performed using MAXQDA software. The aim was to develop a categorically structured analysis model that integrates both theory-driven and inductively derived categories and can be used to interpret the students' belief. Since ideas, as explained in chapter 3.2, often remain implicit, it was necessary to use suitable stimuli to activate and articulate these inner concepts. For this purpose, a structured interview guide was developed and used in combination with a supporting PowerPoint presentation during the digital interviews. The presentation contained all the key questions as well as additional visual and textual stimuli to encourage reflection. The pupils were able to work on the slides interactively during the interview. In some cases, they were asked to note down key points, form rankings or represent conceptual hierarchies. In addition, each question offered the opportunity to record thoughts in writing; however, written responses were optional.

The aim of this methodological approach was to give interviewees low-threshold access to articulating their ideas and to capture both spontaneous and reflective statements. The methodological combination of guided interviews and visual stimuli proved helpful in revealing implicit thought patterns and making them accessible for subsequent qualitative content analysis.

5 Results

Selected results from the student perception study are presented below. The data was interpreted using Mayring's content structuring method (Mayring, 2015). The explanations are based on the categories in the interview guide. For greater clarity and transparency, the results are illustrated with direct quotes from the pupils interviewed. The type of school is also indicated using abbreviations (school centre = SZ; secondary school = Gym).

Everyday Contexts and Comparisons Between Dependent and Independent Employment

Many of the pupils surveyed were able to refer to experiences with self-employment in their family setting. They mentioned classic activities such as a 'technology company' (I_1_SZ: 21) or a 'flower shop' (I_3_Gym: 23), but also small creative businesses such as 'small studios' (I_3_Gym: 29). Self-employment was primarily associated with the motive of autonomy, i.e. 'being your own boss' (I_1_SZ: 17; I_2_Gym: 9), running 'your own business' (I_1_SZ: 15) and taking responsibility for employees (I_2_Gym: 9). Independence from superiors was emphasised as a key distinguishing feature from dependent employment: there is 'no one telling

you what to do' (I_3_Gym: 218). With regard to skills, many students said that self-employed people and employees need similar skills, but that the latter need them to a lesser extent. This applies in particular to time management. There was disagreement about the importance of punctuality or social interaction. The respondents cited responsibility, independence and financial security as key differences. Self-employed people have to act more on their own initiative: 'When you're self-employed, you have to know what you're doing', while employees perform clearly defined tasks (I_1_SZ: 89).

Individual statements also addressed different degrees of freedom in the organisation of work time. It was noted that employees had to be more punctual, as self-employed people had more freedom over their time (I_3_Gym: 231). The students drew the clearest distinction between the different forms of employment in terms of security and risk. Employees received a reliable income and could change jobs more easily in the event of a crisis, while self-employed people were financially vulnerable in the event of failure (I_1_SZ: 94). At the same time, their higher profit share was emphasised: '[Self-employed people] simply earn everything they take in as a percentage – as earnings' (I_1_SZ: 90). Overall, the picture is ambivalent: self-employment appears to be both an opportunity-rich and risk-laden option.

Entrepreneurial Mindsets and Skills

During the interviews, the students surveyed mentioned a wide range of attitudes, characteristics and skills that they associate with professional independence. What is striking is the strong emphasis on personal and social skills over technical and economic knowledge. Skills that are considered central to dealing with other people were repeatedly highlighted. The most frequently mentioned characteristics were self-confidence and self-assurance, understood as the ability to make decisions independently and take responsibility for them. Self-employed people have to 'stand up for themselves [...] and also stand behind their opinions one hundred per cent,' because 'there is no one to say what is right or wrong' (I_1_SZ: 185). This was linked to qualities such as assertiveness (I_2_Gym: 120; 124; 135) and leadership skills, e.g. in dealing with employees or solving operational problems (I_2_Gym: 126). Empathy was also mentioned as a prerequisite for successful leadership. In addition, the students emphasised individuality and innovative ability as the key to differentiation in the market. What is needed, they said, are people 'who are different from others', 'have their own ideas' and 'do not conform to others' (I_2_Gym: 189), i.e. people who 'break new ground that may not yet exist in the field' (I_2_Gym: 191).

Economic expertise was mentioned less frequently but played a role in specific areas, e.g. as 'general knowledge about business' (I_1_SZ: 84), bureaucratic knowledge or subject-specific specialisation (I_2_Gym: 136–138). The importance of entrepreneurial self-organisation was emphasised much more frequently. Good time management is necessary, as self-employed people 'do not necessarily have fixed working hours' and therefore run the risk of 'their private life becoming mixed up with their work' (I_2_Gym: 143). In addition, one must be prepared to 'invest a lot of time' and, if necessary, 'sacrifice one's everyday life' (I_3_Gym: 205). Self-employed people should therefore be 'very organised' (I_4_Gym: 164; 197). Other skills mentioned were judgement (e.g. for employee selection and crisis management), (I_2_Gym: 126f.), negotiation skills (I_1_SZ: 83) as well as discipline, stress tolerance, sociability, a sense of responsibility and goal orientation (I_3_Gym: 172ff.; 196; I_2_Gym: 125). However, these characteristics were only mentioned, in the most part, without being elaborated on in detail.

In summary, it is striking that key economic core competencies, such as business analysis skills, market orientation or entrepreneurial decision-making logic, hardly played a role in the statements. The students' entrepreneurial self-image focuses strongly on personal dispositions, self-assertion and social leadership skills, and less on business rationality or strategic entrepreneurship in the narrower sense.

Diversity of forms of self-employment and perceived advantages and disadvantages of professional self-employment

In their statements, the pupils differentiate between different forms of professional self-employment, but rarely use specific terms such as solo self-employment, false self-employment or secondary self-employment. Instead, self-employment is predominantly understood in terms of job profiles. There is agreement that professions such as artist, craftsman or YouTuber are typically self-employed. In the students' view, the decisive factor is whether they work on their own assignments or are employed by another company (I_2_Gym: 85, among others).

However, there is uncertainty when it comes to academic professions, such as doctors or lawyers. Here, opinions vary as to whether work in practices or law firms is self-employed or salaried. One pupil sums it up: 'Actually, doctors are only salaried if they work in a hospital' (I_3_Gym: 121). A further distinction was made on the basis of production logic: while professions with a clear product reference (e.g. crafts, art) are perceived as more independent, service-related activities (e.g. medicine, law) are considered more dependent on customer demand (I_3_Gym: 389).

The students surveyed cite various advantages of self-employment. Freedom to make decisions is particularly often highlighted, e.g. when it comes to choosing employees, working hours or implementing their own ideas (I_1_SZ: 206; I_2_Gym: 248). Independence, personal responsibility and self-fulfilment are seen as further advantages, while creative aspects or career opportunities are less frequently mentioned (I_3_Gym: 471f.; I_2_Gym: 251).

On the other hand, there are perceived disadvantages, in particular the financial risk, lack of security and high level of responsibility. Several students point to the risk of debt in the event of a lack of demand or a business crisis (I_1_SZ: 206; I_3_Gym: 460). Constant availability is also described as stressful: self-employed people have to be 'always present,' and their professional life is 'quasi their entire life' (I_2_Gym: 246). Other disadvantages mentioned include irregular working hours and increased psychological pressure due to sole responsibility for decision-making. Overall, self-employment is perceived as a potential but uncertain option, the attractiveness of which depends heavily on individual life circumstances, expectations of security and career goals.

Beliefs of personal independence and the importance of intrapreneurship

The views of the students surveyed on self-employment are heterogeneous, ranging from clear rejection to concrete career plans. While some can well imagine working for themselves, mostly in connection with certain professions such as a doctor or lawyer, others expressly reject self-employment. The majority of students are ambivalent: self-employment seems conceivable in principle, but highly dependent on context, e.g. for example, on their life situation, career aspirations or the existence of a viable business idea.

Many students emphasise that professional experience is necessary before taking the step into self-employment. The idea of a gradual transition, e.g. through part-time work or after several years of employment, is articulated several times: 'If work goes well [...] then I would

consider it' (I_1_SZ: 213). Professional self-employment is thus seen more as a medium-term option than as an immediate follow-up to school or university.

Self-employment as a form of gainful employment is clearly rejected, particularly in view of the high level of responsibility, uncertainties and subjectively perceived excessive demands. Some pupils refer to a lack of business ideas or to professions with strong institutional ties, such as teaching, in which self-employment does not seem appropriate (I_2_Gym: 259).

There are also significant differences in terms of the time frame. While some students envisage self-employment early in their professional lives, e.g. for example, 'in the first third' (I_3_Gym: 543), others cite the age of 30 to 40 as a realistic time frame in order to build up qualifications and experience beforehand (I_1_SZ: 223; I_2_Gym: 262). Self-employment at the end of working life, on the other hand, is largely ruled out both for reasons of lack of profitability and lack of time (I_3_Gym: 539f.).

In contrast to self-employment, which was explicitly discussed, the concept of intrapreneurship remained largely vague. Only a few pupils expressed any ideas on the subject at all; the attributions ranged from 'head of a company' to 'self-employed employee' to 'developer', with two stating that they did not understand the term. This indicates a low level of awareness of the possibility of entrepreneurial activity within dependent employment – a finding that is also relevant for the further development of corresponding didactic concepts (cf. Aff 2008).

6 Learning to Think About Self-Employment – Implications for Career Guidance

The evaluation of the ideas collected shows that the majority of upper secondary school pupils reflect on the topic of self-employment in an open, differentiated and practical manner. Many have concrete everyday references, ones that can be linked to teaching. The young people surveyed perceive self-employment not only as an abstract option, but as a potential biographical reality, partly in the context of concrete career goals and partly as a long-term perspective. At the same time, there are gaps in their knowledge regarding terminology, forms and framework conditions of self-employed gainful employment.

The results of the study also highlight a great deal of heterogeneity in students' ideas about professional and entrepreneurial self-employment. While the term 'self-employment' is primarily associated with the absence of hierarchical control, there is also a nuanced understanding of social interactions and dependencies in entrepreneurial activity. In addition, a significant proportion of respondents consider self-employment to be a realistic option for the future. It is noteworthy that personal skills, such as self-confidence, assertiveness and organisational talent, are mentioned significantly more often than economic expertise. At the same time, the evaluations show a remarkable overlap between the requirements for self-employed persons and employees. This points to an implicit but poorly differentiated understanding of intrapreneurship.

In line with didactic reconstruction (Kattmann, 2005), the primary experiences and ideas of learners should be systematically incorporated into the design of teaching and learning processes, in addition to academic work. The survey revealed several misconceptions. These include, for example, idealised notions of independence, distorted risk assessments, traditional role models, and an insufficient understanding of economic logic such as pricing or market interactions. These misconceptions need to be addressed specifically in the sense of a conceptual change (Duit, 1995; Kirchner, 2016). The following ideas held by young people were particularly significant for the development of the teaching materials created in the project:

- Simplified notions of independence and responsibility,

- Influence of traditional gender roles on career choices,
- Misconceptions about turnover, costs and earning potential,
- Lack of knowledge about forms of self-employed work and intrapreneurship,
- Lack of perspective on self-employment as a dynamic element of one's biography,
- Reduction of personal requirements to social or personal soft skills.

This study is intended as an exploratory survey of student beliefs regarding professional and entrepreneurial independence. The next step will be to extend the survey to other types of schools, federal states/countries and age groups to create a broader empirical foundation and identify context-specific differences.

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