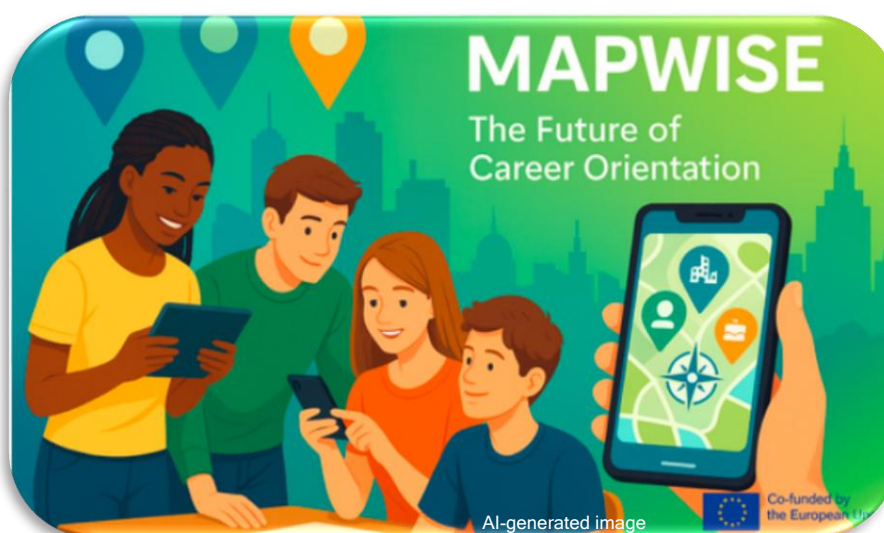


MAPWISE -

Mapping All Professions with Interactive Skills Education

From guidance to experience: a new approach to career choices



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For many young people, the question “What do I want to do when I grow up?” is a source of uncertainty. The sheer number of options makes it difficult to find one's way, whilst at the same time it is often unclear how to gain a concrete insight into different careers. Decisions have to be made before any real-world experience is available.



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The stakeholder analysis (n=456) reveals that this challenge is not solely due to a lack of information. Often, there is a lack of access to companies, clear points of contact and an overview of local opportunities. At the same time, young people are faced with a vast amount of information that is difficult to make sense of.

There is also a striking fundamental contradiction: young people's lives are shaped by the digital world, whilst career guidance remains strongly tied to physical locations. It is precisely at this interface that a key starting point for new forms of guidance emerges.

This document combines key standards of career guidance that can be adapted internationally with relevant pedagogical approaches and relates these to the objectives of MAPWISE. It demonstrates how theoretical foundations and empirical findings are translated into concrete design principles and how this gives rise to the MAP app as a practical tool to support exploration, experience and decision-making.

1 Career guidance and educational standards

Career guidance is a key component of school education, designed to ensure a successful transition from school to vocational training, higher education or employment. The aim is to support young people in making informed decisions about their future educational and career paths. This involves not only providing information about careers and training pathways, but also, and in particular, developing decision-making skills, self-reflection and realistic expectations of the world of work.

International research clearly shows that effective career guidance follows established quality principles. The **Gatsby Benchmarks** provide an established framework for this and define what constitutes good career guidance – namely, that it is structured, practical and oriented towards the real world of work.

Three principles are particularly relevant in the context of MAPWISE.



Access to up-to-date and clear information about the labour market plays a key role. Young people need transparent information about careers, job requirements and opportunities for development in order to have a basis on which to make decisions.



The importance of direct encounters with employers and employees should be emphasised. Such encounters enable young people to gain an insight into real-life work processes and make career options more tangible.



The importance of practical experience in work environments, such as through work placements or company visits. Such experiences help to link abstract information with real-life impressions, thereby fostering a deeper understanding of different career fields.

These principles highlight that career guidance is particularly effective when it goes beyond simply providing information and incorporates experience-based elements. Against this backdrop, a gap emerges between the requirements for high-quality career guidance and the services actually available. In particular, there is often a lack of continuous, low-threshold and practical access to the world of work. MAPWISE bridges this gap by combining information, real-life encounters and experience in an integrated, digital yet practical approach.

2 Educational principles: experiential learning and self-efficacy

Effective career guidance does not arise from information alone, but through **experience and action**. From an educational perspective, this can be justified primarily through two approaches: **experiential learning and self-efficacy**. Both form the foundation for an active engagement with real-life contexts, rather than the purely passive absorption of knowledge via information channels alone.

David A. Kolb's theory of experiential learning describes learning as a process in which knowledge is generated and further developed through concrete experiences (Kolb, 2014). The key here is the **connection between experience, reflection and application**. For career guidance, this means that young people understand professions not through descriptions, but through real-world insights, such as by observing work processes or through direct contact with companies. Practical formats have been shown to promote both motivation and decision-making skills (e.g., Kuijpers et al., 2011; Gaylor & Nicol, 2016; Alfeld et al., 2013)

Closely linked to this is **the concept of self-efficacy** (Bandura, 1997). It describes the belief that one is capable of taking action and making one's own decisions successfully. This ability is particularly crucial in the career guidance process: young people who **perceive themselves as competent** act more proactively, make clearer decisions and pursue them more consistently (Lent & Brown, 2013). Self-efficacy does not arise from information, but from one's own actions, the experience of progress and concrete experiences.

At the same time, the context of learning is increasingly shifting to **digital spaces**. Young people **seek information online, communicate digitally** and **navigate hybrid environments** as a matter of course. Digital tools can facilitate orientation and support exploration, but only realise their full potential when linked to real-world experiences (Redecker, 2017).

This has clear implications for the **design of career guidance**: the key lies in combining **digital exploration with real-world experience**. Learners need not only information, but above all opportunities to experience and test this information in concrete contexts and to translate it into their own actions. This is precisely where **MAPWISE** comes in.

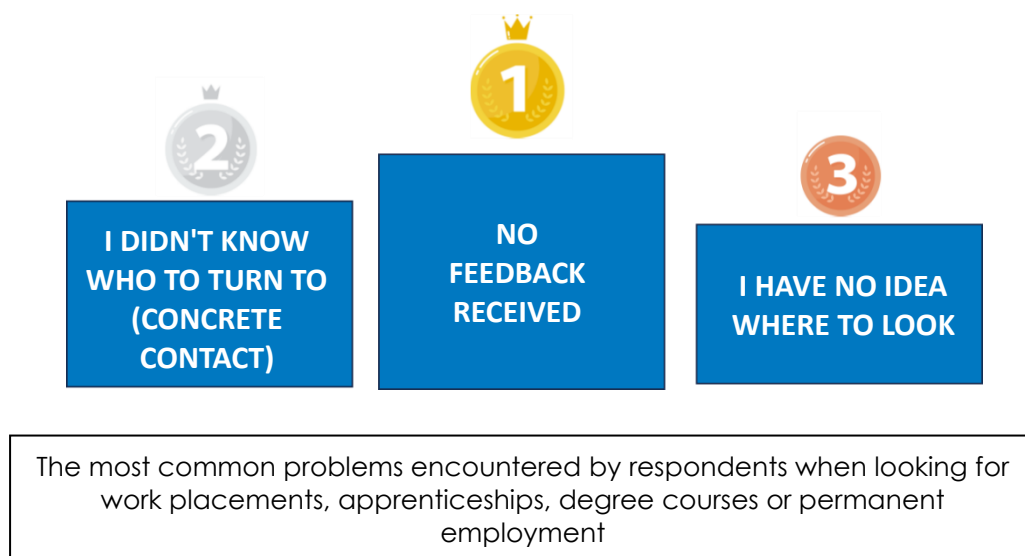
3 Empirical basis: Findings from the MAPWISE project

The theoretical considerations regarding experiential learning, self-efficacy and practical career guidance are supplemented by the empirical data collected during the project. As part of MAPWISE, surveys were conducted among school pupils to identify **key challenges in the career guidance** process from the target group's perspective. In total, over 450 young people from Germany, Spain, Lithuania and Slovenia, predominantly aged between 12 and 18, took part in the survey.

The results **reveal a clear tension**: on the one hand, there is a fundamentally high level of interest in career guidance; on the other hand, existing services are perceived as being of little help.

Many participants state that **traditional career or aptitude tests** are of limited use. At the same time, the majority express a desire to try out such services at least once. This suggests that whilst there is a need for guidance, current formats do not adequately meet this need.

The **challenges** become particularly clear **in the actual search process**.



There are also significant gaps when it comes to **access to information**.



At the same time, **41%** of young people would like **more concrete insights**, for example in the form of a structured schedule for their first day at work or an overview of typical tasks.

Overall, the results show that, whilst young people are motivated to think about their future careers, they often struggle due to **a lack of transparency, guidance and concrete opportunities to get started**.

4 Educational design principles for MAPWISE

The previous chapters clearly demonstrate that the challenges facing career guidance are well understood, as are the educational principles that enable effective solutions. The crucial step now is to translate these insights into concrete action at regional, national and European levels – and this is where MAPWISE comes in.

The focus is not on the isolated application of theory, but on its consistent translation into functional solutions. Design decisions are specifically derived from empirically identified problems and theoretical foundations, and these are directly reflected in the MAP app and the MAP Guide. The following chapter illustrates this logic: it shows how concrete features, structures and usage scenarios emerge from needs and theory.

4.1 Operationalising experiential learning

A key finding of both the theory and the empirical research is the lack of real-world insights into the world of work. Whilst the theory of experiential learning emphasises that lasting learning arises from concrete experiences, the data from the field study show that such experiences are often only available to a limited extent during the career guidance process. Young people often have little knowledge of real-world work processes and rarely have the opportunity to actively explore different career fields.

This combination highlights the need not only to consider **experiential learning** in theory, but also **to actively put it into practice**. MAPWISE achieves this by guiding users through the app to explore real-world workplaces. Through so-called '**tours**', young people are guided in a structured manner to companies and interesting vocational training locations that they can visit in person. The app does not serve as a substitute for real-world experiences, but rather as a **catalyst and companion** for such experiences.

Because, according to Kolb, learning arises in particular through concrete interaction with the environment, **physical encounters with workplaces** become a central element of career guidance in MAPWISE. The digital application serves to make these experiences accessible, plannable and low-threshold.

4.2 Promoting self-efficacy

In addition to a lack of experience, the empirical analysis highlights another fundamental challenge: many young people find the career guidance process confusing and are unsure how to take the first steps. This often leads to **passive behaviour** or **procrastination**.

Because self-efficacy arises in particular through personal experience and active participation, MAPWISE is based on a user concept that **enables independent exploration**. Instead of presenting information in a linear fashion, the app allows for self-directed navigation through various career fields and companies. Young people decide for themselves which places to visit and which information they wish to explore in greater depth.

This approach is reflected not only in the product itself, but also in the development process. Pupils and teachers are actively and continuously involved in the development, for example through surveys and stakeholder workshops during the testing and roll-out phases. In this way, **their perspectives are directly incorporated into the project**. Crucially, it is the users themselves who demonstrate the benefits the app brings them.

This active involvement complements traditional, more passive information formats. Because self-efficacy is fostered through action and active participation, the career guidance process in MAPWISE is designed—both in its use and in its development—as an active exploration process in which young people make decisions, gain experience and help shape the process themselves.

4.3 Low-threshold access

Another key problem lies in the **high barriers to entry** that many young people perceive during the career guidance process. In particular, formal requirements, application processes or unclear expectations lead to initial contact with companies being avoided or delayed.

The project's rationale therefore highlights the need to deliberately **design low-threshold access points**. MAPWISE addresses this issue by not creating immediate pressure to apply, but instead facilitating an informal approach to

companies. The app relies on exploratory and playful elements, such as collecting badges, which make it easier to get started and break down barriers.

Access is thus achieved through **informal exploration rather than formal processes**. The aim is to create initial points of contact with the world of work before concrete application or selection processes come into focus.

4.4 Connecting digital and physical learning spaces

The analysis shows that there is a clear disconnect between young people's digital lives and the predominantly analogue world of career guidance: **information is sought online, whilst real-world experiences take place offline**.

Because these two spheres have often been kept separate until now, MAPWISE addresses this very interface. The app **links digital information with real-world locations** by guiding users directly to businesses whilst simultaneously providing context-specific information. Digital content thus serves to prepare for, support and reflect on real-world experiences.

In addition, MAPWISE makes targeted use of **gamification elements** to promote motivation and active engagement. Interactive, playful formats can strengthen intrinsic motivation and activate learning processes by arousing curiosity and encouraging independent exploration (Poliakov et al., 2025). Reward systems such as badges can increase engagement, provided they are linked to meaningful, challenging activities and are not awarded for trivial actions (Brandenburger & Janneck, 2023b). The aim is to support learning processes without supplanting **intrinsic motivation**, but rather to strengthen it in a targeted manner.

This connection represents a key innovation of the approach: the app acts as a **bridge between digital exploration, playful engagement and physical experience**, thereby enabling an integrated career guidance process.

4.5 Local roots and visibility

Another key finding is the **limited awareness** many young people have of **local businesses and training opportunities**. Many respondents do not know which businesses are located in their local area or what opportunities they offer.

Because career guidance depends heavily on precisely these local conditions, MAPWISE focuses on targeted **regional integration**. The platform raises the profile of local businesses and integrates them directly into the guidance process. This creates a direct link between learners and their local area and makes it easier to make initial contact with potential employers and training providers.

At the same time, it is clear that MAPWISE can only be effective in the long term if it fits into existing local support structures. Therefore, the project is already actively seeking synergies with existing regional services, schools and school-related career guidance stakeholders to incorporate existing expertise and ensure connectivity.

This local perspective is central to the project's logic: career guidance is firmly anchored in the individual's own living environment. By making regional businesses more visible and accessible, MAPWISE takes a decisive step towards overcoming existing barriers to access.

5 Impact on the MAP app and the MAP guide

5.1 MAP App

The MAP app is aimed directly at young people and is designed to encourage independent use and exploration. It is based on the realisation that many young people struggle to structure the career guidance process and find suitable entry points.

The app enables users to actively explore their own surroundings and, in doing so, get to know real-world workplaces. Through location-based content, known as '**Points of Interest**' and '**Tours**', companies are made visible and accessible. This transforms career guidance from an abstract search for information into a concrete, experience-based process.

At the same time, the app **promotes users' self-efficacy**. Young people decide for themselves which places to visit and which content to explore in depth. This form of self-directed exploration aligns with the project's objective of enabling **active participation rather than passive information absorption**.

Motivational elements such as **gamification** further support this process. They lower barriers to entry and encourage continued use by transforming career guidance into an **interactive and everyday-life-oriented format**.

The MAP app thus functions as a low-threshold tool that combines digital exploration with real-world experiences and encourages young people to actively engage with career opportunities.

5.2 MAP Guide

The MAP Guide complements the app by providing an **educational framework** and is aimed at teachers and other stakeholders involved in career guidance. Its main purpose is to provide an educational framework for using the app and to integrate it into existing learning contexts.

The guide offers concrete approaches for **integrating MAPWISE into lessons** and career guidance programmes. These include suggestions for learning settings, combining exploration and reflection, and embedding the app within curriculum-based activities.

Furthermore, the guide enables the **targeted management and structuring of learning processes**. Teachers can prepare tours, define learning objectives and subsequently reflect on the pupils' experiences. This ensures that the app is not used in isolation, but is embedded within a pedagogically meaningful context.

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