Work Package 2

Framework for the Analyses of Learning Outcomes in Europe

Deliverable D2.2

State-of-the-Art Report

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Executive summary

The European funded research project *Constructing Learning Outcomes in Europe. A Multi-Level Analysis of (Under-)Achievement in the Life Course* (CLEAR) is researching the factors that affect the quality of learning outcomes across European regions. It intends to spark innovative policy approaches to tackle academic (under)achievement and increase social upward mobility for young Europeans. CLEAR is inquiring into the construction of learning outcomes and perceives the latter not as a self-evident phenomenon, but rather as resulting from manifold intersecting institutional arrangements, spatial and socio-economic determinants, discursive and socio-cultural influences, as well as individual experiences, dispositions, cognitive and psycho-emotional abilities. It is the combination of these multiple factors that CLEAR seeks to examine and understand to better inform policymaking and forward the research on inclusive and resilient societies. In order to inquire into this complex issue, CLEAR has designed a mixed-method, multi-level research study based on empirical and comparative analyses, as well as innovative participatory strategies.

With respect to the project's overall aim, the *State-of-the-Art Report* (Report) is a central document providing a unified analytical, theoretical and methodological approach to the study of learning outcomes. The main goal of the Report is to inform the project's study on three particular sets of issues, in particular 1) on the current state of research on learning outcomes and academic (under)achievement, 2) on the theoretical, analytical and methodological research design of the study and its operationalisation in the empirical fieldwork, and 3) on the overarching research questions.

In the Report, we proceed in five steps: *First*, we sharpen our core theoretical approaches – Life Course Research, Intersectionality, Spatial Justice – and specify their contribution to the research study; *second*, we define our research object – learning outcomes – as well as our five analytical approaches – individual, institutional, structural, spatial, relational –; *third*, we review the current debates on learning outcomes and academic (under)achievement on national and international levels; *fourth*, we present our methodological approach and describe the operationalisation of the study in our empirical Work Packages; *fifth*, we synthetise the preliminary results and develop the overarching research questions and guiding research assumptions.

The results of the Report can be summarised as follows:

- The project's theoretical approaches show great potential in exploring the construction of learning outcomes, productively turning the focus either on the opportunity structures and agencies of young people (Life Course Research), socially constructed and oppressing nature of learning outcomes (Intersectionality), or unjust spatial division and distribution of rights, opportunities and resources (Spatial Justice). The proven and novel theories mutually support each other without creating redundancies and/or discrepancies.

- The dominant understanding of learning outcomes as statistically measurable units portrays the former as self-evident and governable phenomena, not accounting for the vast complexity of factors involved in their construction, which inevitably creates divisions and categorises individuals into low-achievers or high-achievers based on numeric outcomes alone.
- The project's five analytical entry points – individual, institutional, structural, spatial, relational – encompass the variety of factors involved in the construction of learning outcomes and together with theoretical perspectives articulate into one integrative foundational grid for the collection of contextual information.
- The conceptual debate on learning outcomes and (under)achievement shows the need to re-conceptualise both terms, which often focus on observable aspects of learning and with the aim to provide evidence-based knowledge for better informed policymaking.
- The scholarly and public debates in the countries studied show that learning outcomes are often treated as something which can be compared using large-scale studies. The focus of the studies on formal education and the placement of the accountability on individuals and their imminent surrounding (family, teachers) once again underscores the limited understanding of the concept, with little space for questioning the interplay of institutional and structural aspects, but also the impact of spatiality on learning performances.
- The design of the project as a mixed-method, multi-level study applying variety of approaches – quantitative analyses, policy surveys, institutional analyses and literature reviews, as well as qualitative studies with young people, comparative analyses and participatory tools – enables us to complementarily apply the research tools and create synergies between various Work Packages to yield new knowledge relevant for diverse audiences.
- The theoretical points of departure help us to re-conceptualise learning outcomes as socially constructed and contingent phenomena resulting from the interplay of manifold intersecting individual, institutional, structural and spatial factors.

Against this background, we have formulated our overarching research questions:

- **What factors are involved in the construction of learning outcomes and how do their interplay shape the expectations on certain levels of learning outcomes? To what extent are young people involved in their construction as active agents?**
- **What do the local/regional opportunity structures of young people look like and how do they affect academic (under)achievement of youth in vulnerable positions? To what extent are social and spatial inequalities embedded in and possibly reproduced by the assessment of learning outcomes?**
- **What is the impact of spatial distribution of educational sites on the quality of learning outcomes? How are spaces affecting (under)achievement and to what extent are they reflected in the educational policymaking?**

Acknowledgements

The Consortium members of the CLEAR research project have contributed to this Report by conducting review of national scholarly and public literature on learning outcomes and (under)achievement. The review was conducted separately for each of the countries studied and was further analysed in Section 4.3 *Scholarly and public debate on learning outcomes and (under)achievement*. The National Partners have also provided selection of relevant national publications and reports that have significantly shaped the national debate on learning outcomes and (under)achievement (see Annex).

The Consortium members and the External Advisory Board members have commented the Report during the project's 2nd Consortium Meeting and thankfully provided their critique and suggestions, highlighting both its strong parts and blind spots, thereby considerably improving the quality and impact of the Report.

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1. Introduction

The project *Constructing Learning Outcomes in Europe. A Multi-Level Analysis of (Under-)Achievement in the Life Course* (CLEAR) is committed to better understanding the factors that affect the quality of learning outcomes across European regions. Instead of considering learning outcomes as self-evident and measurable phenomena, it focuses process of their construction, which results from manifold intersecting institutional arrangements, spatial and socio-economic determinants, discursive and socio-cultural influences, as well as individual experiences, dispositions, cognitive and psycho-emotional abilities. In this vein, the CLEAR project is designed as a multi-level, mixed-method study composed of several Work Packages (see Figure 5) and aiming to examine the combination of multiple factors by means of quantitative and institutional analyses, expert surveys at national and regional levels, qualitative analyses and innovative participatory strategies at local level. By applying novel theoretical approaches, including Life Course Research, Intersectionality and Spatial Justice, the project pays a special attention to groups in multi-disadvantaged and/or in vulnerable positions.

In CLEAR, we have elaborated the State-of-the-Art Report (Report) in order to account for the complexity of the proposed research study and to develop a coherent and applicable research strategy. In the Report, we present how we aim to approach our research object, which theoretical perspectives and analytical dimensions have been chosen and how they integrate to inform the empirical fieldwork and the comparative analyses, and what overarching research questions guide our study. Before continuing with the Report, we briefly want to portray the situation of young Europeans related to learning outcomes and (under)achievement.

As the CLEAR research project is conducted in eight EU-member countries, including Austria, Bulgaria, Finland, Germany, Greece, Italy, Portugal, and Spain, each of which is confronted with various educational demands and challenges, we have to cope with disparate levels of learning outcomes. In international comparisons, learning outcomes are mostly expressed as results of various student and adult assessment studies. Among the most recognised studies are the PISA (*Programme for International Student Assessment*) and the PIAAC (*Programme for the International Assessment of Adult Competencies*) studies led by OECD. Due to the limited scope and data availability of the studies, we will portray the situation of young people in the participating countries using the results of the PISA study.

The PISA study evaluates national educational systems every three years by measuring scholastic performance on mathematics, science, and reading by 15-year-old school pupils. When looking at the mean reading scores (see Figure 1), the evidence from the years 2009, 2012, 2015, and 2018 shows great disparities among the countries, especially in the cases of Bulgaria and Finland. However, it also points out to similar tendencies, one of them being the continuous decline of the reading scores over the observed period,

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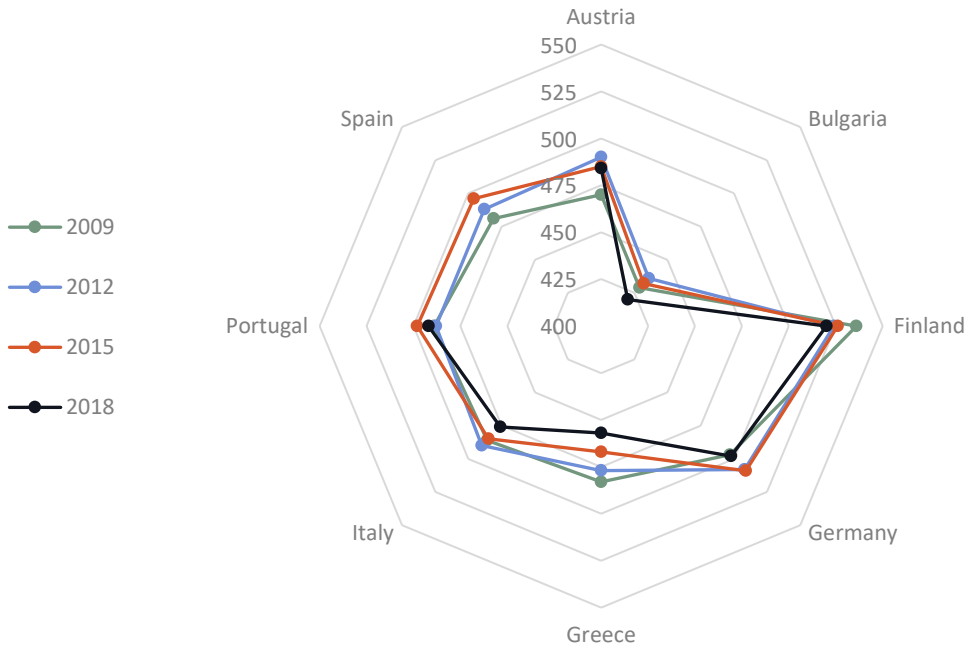
most visible in the case of Greece, but also in economically better-performing countries, including Germany and Finland. On the contrary, the scores in Bulgaria and Spain have gradually grown, with the exception of the last recorded year (missing data for Spain). Other countries rather fluctuate between similar scores and show no clear tendency on whether the learning outcomes improve, worsen or remain the same.

Figure 1 – Mean reading scores recorded by PISA



Source: WP2 Team's own elaboration (based on OECD PISA results) [1]

Similarly, when looking at the mean scores in mathematics (see Figure 2), the distinctions are even greater, particularly when comparing Germany and Finland with Bulgaria and Greece. Both Finland and Germany, however, show a steady decline in scores, which is the case for most of the countries. Only in three project's countries – Portugal, Spain, Austria – the numbers have remained constant, with only little changes in either direction. Common to all countries is the low level of scores in the last recorded year, which raises doubts on the successfulness and impact of the policy measures aiming at improving the quality of learning outcomes.

Finally, the mean science scores (see Figure 3) show striking results. While Germany and Finland, partially also Austria, all economically well-performing countries, report gradual decline in scores, the scores in countries of Southern and South-West Europe, particularly in Spain, Portugal and Italy, remain levelled off. Different developments are reported from Bulgaria, with the lowest levels in scores, but with little improvement over the observed period, and from Greece, where the scores have steeply declined and remain constant.

These short observations yield conflicting and ambiguous evidence.

[1] Results based on reading performance are reported as missing for Spain for 2018.

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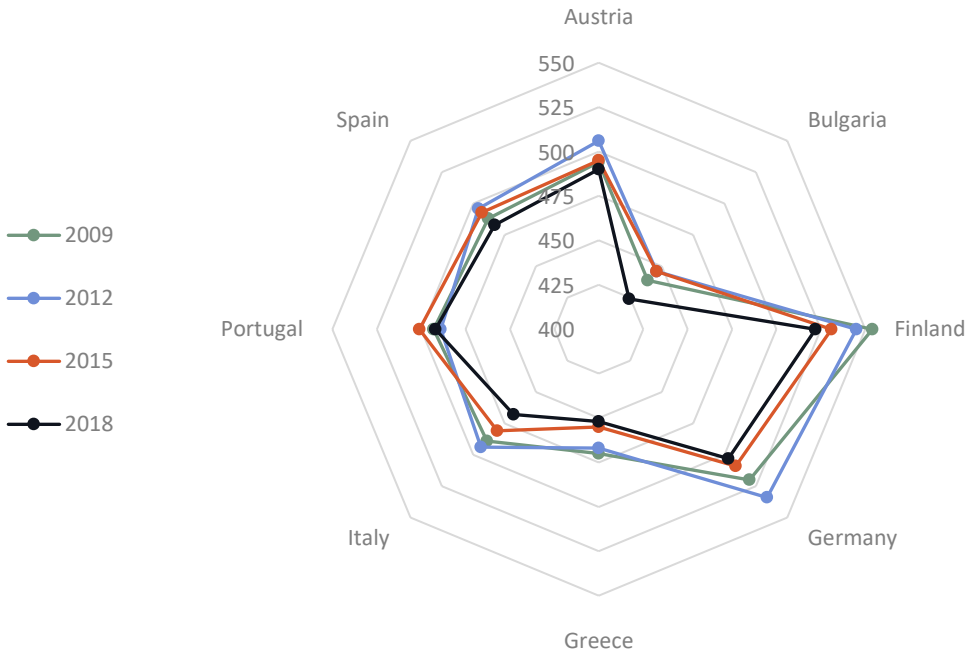
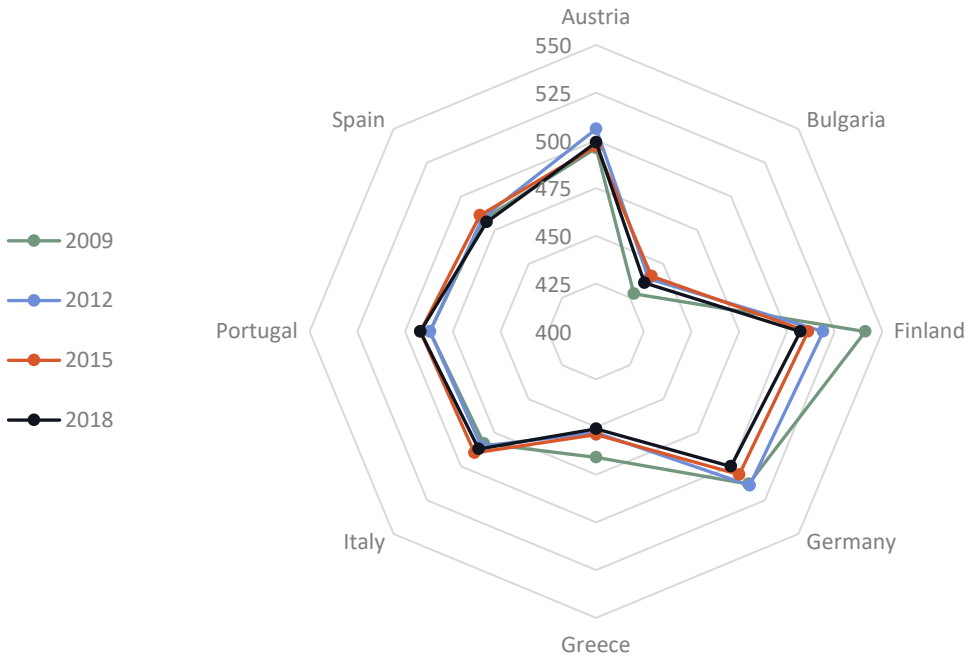
Figure 2 – Mean mathematics scores recorded by PISA



Source: WP2 Team's own elaboration (based on OECD PISA results)

Figure 3 – Mean science scores recorded by PISA



Source: WP2 Team's own elaboration (based on OECD PISA results)

On the one hand, the surveys demonstrate that a considerable number of countries saw virtually no improvement in the performance of pupils and students over a period of 10 years, despite large investments in education systems. The improvement and/or worsening of educational performances are nationally often declared as resulting from the (more or less) successful implementation of the corrective education policies (OECD, 2020), which some consider a rather flawed assumption (Gomendio, 2023). On the other

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hand, the evidence provided by such large assessment studies has more often political, rather than purely educational implications. The diverse and repeated assessments constantly provide the educational policymakers with new data, creating the impression that learning outcomes are and can be statistically captured, measured and, in the result, governed by implementing tailor-made policies.

Contratry to this reduced and instrumental view on learning outcomes, and the resulting (under)achievements in education and training, CLEAR problematises the root causes of the issue, namely the complexity of factors involved in the very *construction* of learning outcomes and affecting their quality.

The entry point of the CLEAR research project is the assumption, that learning outcomes have diverse meanings and understandings and result from manifold intersecting institutional arrangements, spatial and socio-economic determinants, discursive and socio-cultural influences, as well as individual experiences, dispositions, cognitive and psycho-emotional abilities. Reducing learning outcomes solely to their quantified and measurable forms and formats fails to address the very nature of the problem itself: seeking to enhance the quality of learning outcomes across disparate regions and states. Therefore, in CLEAR we study learning outcomes with the aim to disentangle the various meanings and understandings that different actors ascribe to the term and seek to inquire into the mechanisms and processes of their construction.

In the Report, we integrate our theoretical and analytical approaches, contextualise our research object, specify the methodological tools and provide the overarching research questions. In particular, the Report unwraps in five sections:

The first section is devoted to the detailed description of our *theoretical perspectives* – Life Course Research, Intersectionality, Spatial Justice – through which we perceive the issue at stake. The deliberate choice of the perspectives helps us to concentrate on learning outcomes and (under)achievement from various angles. Each perspective has a specific scope, looking either at the construction of individual life courses and biographies (Life Course Research), at the intersecting factors that underlie social inequality (Intersectionality), or at the spatial dimension that affects the choices and opportunity structures of young people (Spatial Justice). The discussion of the theoretical perspectives results in formulating research questions that guide the empirical work.

The second section presents the *contextualisation of the research object*. In this part, we contextualise the concepts of learning outcomes and (under)achievement and specify our research object and the overall aim. We then present our five analytical dimensions – individual, institutional, structural, spatial, relational – through which we approach the research object and integrate them with the theoretical perspectives to deliver a foundational grid for the fieldwork and comparative analysis. The foundational grid is composed of guiding research questions, which focus different aspects in different analytical dimension.

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In the third section we discuss the *current research state* on learning outcomes and (under)achievement. We present both concepts one by one alongside various disciplinary research debates and show the variety of meanings and aspects ascribed to both concepts. We then present the scholarly and public debate on learning outcomes and (under)achievement in the countries studied, with the aim to outline differences among the countries and fix the prevalent national understandings.

The fourth section informs about our *methodological approaches*. It starts by presenting the overall design of mixed-method-research and continues by showing what methods and how we apply in each Work Package in order to reach our goals set. We then provide a detailed overview of how we attempt to operationalise the work in the empirical Work Packages, which will use secondary and provide primary data for the comparative analyses.

The fifth, closing section offers a synthesis of the Report and defines our *overarching research questions*, structured according to the three theoretical perspectives. It also develops theoretical points of departure that will guide the processing of data and comparisons of the preliminary results.

2. Theoretical perspectives in CLEAR

This section contains a fine-grained, in-depth description of each theoretical perspective, thereby providing the overall lens on the research object and outlining their implementation in each Work Package. The sub-sections below describe the approach of using the overarching theoretical perspectives, explaining how the perspectives contribute to the project's objectives and discussing the resulting implications for the empirical research and comparative analyses. Thus, the theoretical conceptualisation informs the sampling of research units for the empirical work and provides the theoretical guided research hypotheses. In following, we discuss the theoretical frameworks in turn.

2.1 Life Course Research

In the Social Sciences, the Life Course Research (LCR) encompasses a variety of research practices and perspectives focusing the domain of individual life course. The concept of LCR is based on the observation that life progresses through several stages and that individuals can actively shape their current conditions as agents of their lives. Thus, from a broad perspective, the LCR reflects upon and enquires into the interplay of dualisms such as agency vs. structure, individuals vs. society, opportunity structures vs. individual abilities, active handling vs. path dependencies, continuity vs. disruption, perceived reality vs. portrayed reality, institutional interventions vs. individual creativity, standardisation vs. social change etc. In order to study the complexities surrounding the above-mentioned relations and dualisms, the scope of the LCR perspective needs to be more specified. In CLEAR, we apply the LCR approach to shed more light on the interplay

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of multiple factors that shape learning outcomes and educational (under)achievement in a (life)long run.

As stated previously (see *Research Strategy Paper and Glossary*), the LCR regards individuals' life courses as developing across several articulated, interacting dimensions that are part and parcel of given institutional and socio-historical contexts (Mayer, 2004; Heinz et al., 2009; Tikkanen, 2020). Thus, life courses always develop and unfold under different conditions and circumstances and present "a temporal pattern of age-graded events and roles that chart the social contours of biography" (Elder et al., 2015, p. 6). There is no universal rule on how a life course unfolds. Instead, it develops in different mutually related and influencing life domains (Mayer, 2004) that correspond to functionally differentiated spheres of modern societies (Heinz, 2010) often affected by disruptive social and/or natural crises (e.g., wars, financial crises, climate changes). LCR conceives of individual lives as consisting of trajectories and transitions that are constructed in a reciprocal process of political, social, economic and spatial conditions, welfare state regulations and provisions, and biographical decisions and investments. There are three core concepts of LCR – life trajectories, transitions, and agency – that need to be introduced more properly.

In LCR, life *trajectories* can be understood as sequences and combinations of transitions between positions and stages, rather than a linear, uninterrupted progression of events. *Transitions*, on the other hand, represent a dense and dynamic change between one stage and another, be it a transition from one school to another or from school to the labour market. This change is often accompanied by insecurity, risks, unpredictability and the loss of stabilising elements in life, such as peer groups, social circles, family and friend networks etc. In general, people tend to follow normative patterns of age-proper behaviour and proper sequence of transitions in their lives which, however, vary across social classes or status groups (Mayer, 2004). The normative patterns prescribe socially expected and desired outcomes and are shaped by ethical prescriptions and cultural preferences, as much as by institutionalised regulations of the welfare state and its institutions (Kok, 2007). Thus, people are surrounded by an ecology of expectations, in which they make life choices and compromises based on the alternatives that they perceive before them. From a LCR perspective, individuals are capable of making decisions and influencing their life courses and are not, hence, passively acted upon by social influence and structural constraints. The concept of individual *agency* has a rich history of research debates (see Hitlin & Johnson, 2015) and up to now, there is no general definition of it. However, two meanings can be clearly distinguished: 1) agency as the actual capacity to exert actions in one's life – the structural or bounded agency, and 2) agency as the subjective perception of one's own capacities – the individual agency (Hitlin & Long, 2009, p. 149). The structural or bounded agency is shaped by the context and its constraints (Elder et al., 2003), while the individual agency depends on the individual's

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self-belief, imagination, and self-assessment of the capacity to influence the surrounding reality.

Individual life courses are further embedded in different social and cultural settings and are therefore shaped and (co-)constructed according to various institutionalised policies, which aim to govern individuals' life courses and define normal and desired patterns of transitions. Even though social change constantly undermines such notions of normality (Kovacheva et al., 2016), the lifelong learning policies continue to refer to "the model of a standard – educational and occupational – life course" (Parreira do Amaral & Zelinka, 2019, p. 417). Such policies make the synchronisation of biographical steps increasingly complex, since the life courses is becoming less similar and the domination of specific types of life courses weaker (Elzinga & Liefbroer, 2007). Given the nature of the social changes of last years, particularly the increased individual responsibility for developing meaningful life projects, the individual life courses are increasingly becoming less predictable, less stable, and less collectively determined and, hence, increasingly flexible, individualised, insecure, and uncertain – especially for young people (Brückner & Mayer, 2005; Kovacheva et al., 2016), who are pushed by institutions to make pivotal choices for their future. As mentioned before, life courses are not purely a matter of individual choice, but are also structurally and institutionally framed by the given social settings:

> While subjective choices and individual resources impact life course formation the negotiation and construction of life courses are always embedded in institutional macrosocial frames such as the labor market, education programs and the welfare mix, as well as more intangible frames such as social inequality, systems of relations and age norms (Parreira do Amaral & Tikkanen, 2022, p. 2).

With regard to education, LCR offers a holistic and long-term perspective on the role and meaning of learning outcomes and (under)achievement in individual life courses. It shows that life course is a cumulative process, in which advantages and disadvantages do not occur randomly during a lifetime, but according to a logic of path dependence that usually starts with early advantages or disadvantages brought about by people's social origins (Levy & Bühlmann, 2016). It further highlights that the contexts, in which life courses unfold, are aggravated by the structures of opportunities and constraints at national, regional, and local level, which form a complex mix of socio-economic conditions (Cefalo et al., 2020; Scandurra et al., 2020), institutionalised policies creating distinct youth transition regimes (Walther, 2017; Chevalier, 2016), and diverse practices of various actors including educators, policy professionals, and employers (Rambla & Kovacheva, 2021; Roberts, 2018). Finally, the LCR perspective is sensitive to the principle of linked lives, which "specifies the ways that one's life is embedded in a large network of social relationships – with parents, children, siblings, friends, coworkers, in-laws, romantic partners, and others" (Carr, 2018, p. 46). The mutual interdependence (spatial, inter- and intragenerational, regional, symbolical, etc.) and the interactions between young people and their families, schools, policy professionals, and other stakeholders are crucial in

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shaping the individual trajectories and, in particular, the processes of falling into or coming out of vulnerable and/or multi-disadvantaged positions.

In terms of application, the LCR perspective helps us to:

- **focus the construction of life events (trajectories, transitions) and, thus, also the construction of learning outcomes as institutionalised expectations on individuals;**
- **perceive learning outcomes as a processual (developing in time and space), relational (not singular, but mutually dependent, interactive and iterative) and socio-cultural and socio-historical (meanings and interpretations vary across times, cultures and societies) phenomena;**
- **envision individual and group actors as capable of actions and change of life events and distinguish between actual and perceived learning outcomes.**

Regarding the operationalisation of the theoretical perspective of LCR, we use its lenses in our empirical Work Packages (WPs) in different ways, depending on the objective and focus of the WP.

WP3 provides descriptive and explorative analyses on the connection between learning outcomes, labour market and socio-economic conditions at national and regional level. In WP3, the LCR perspective *supports the choice of statistical indicators*, as it informs the empirical study on the embeddedness of individual life courses in (local/regional/national) structures of opportunities resulting from the complex mix of socio-economic and labour market conditions, as well as institutionalised youth and education policies and practices. The LCR approach also *underscores the impact of lifelong experiences in the study*, as it takes into account the scope of indicators spanning over 16 years from 2005 to 2021. Finally, it *integrates the logic of path dependence* in the empirical part of the research, as it shifts the focus on the socio-economic conditions stirred by economic (financial crisis in 2008), societal (migration crisis in 2015) or global health (COVID-19 pandemic in 2019-2021 years) upheavals.

WP4 reviews educational policies and maps out processes of skills formation and skills utilisation to analyse how they connect on the level of policy coordination. In WP4, the LCR perspective *problematises the institutionalisation of standard life courses* according to the dominant policy models and practices. Since the policies seek to govern individual life courses by designing and implementing a unified set of expected skills and competencies, the LCR perspective *helps to uncover the processes of construction of desired learning outcomes*. In addition, as the individual life courses are becoming more volatile and less predictable, the LCR perspective *sheds light on the ability of policymakers to respond and react to the new challenges* and changes of expectations of young people, as well as *to integrate young people's voices* into the design and implementation of the policies.

WP5 conducts qualitative research with young people and looks at the impact of opportunity structures on young people's life opportunities and their ability to exercise

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agency in their life courses. In WP5, the LCR perspective is the core theoretical lens. It *places young people's life courses centre stage* and seeks to understand their capacities in dealing with failures and successes alongside their life courses. Further on, it *shifts the focus on the bounded and individual agency* of young people, in particular on their ability to interpret, design, change or reframe and imagine anew their life courses in times of misfortune as much as in times of success. Following the logic of linked lives, the LCR perspective *embeds the individual life courses in the complex networks of relationships*, be it on personal, professional or any other level, which, to a different degree, affect the actual and perceived capacity to reach certain learning outcomes.

WP6 designs and implements expert survey on future scenarios of educational disadvantage, with the aim to assess policy priorities and the preferred coordination options portrayed by policy experts. In WP6, the LCR approach *installs a time perspective on life courses*, as it asks the policy experts to develop scenarios on future challenges and their possible consequences for learning outcomes. Moreover, it *helps to assess the inclusion of young people* in the design of educational policies, particularly given the readiness of policy experts to hear and listed to their needs, visions, and demands. The LCR perspective also *enlightens the policy construction of preferred life courses and life skills* for coping with unplanned and sudden changes.

In summarizing this section, the Life Course Research perspective offers us vital theoretical instruments for reaching our main objective – examining the multiple factors (institutional arrangements, spatial and socio-economic determinants, discursive and socio-cultural influences, individual experiences, dispositions, and abilities) that affect the construction of learning outcomes –, as it envisions the latter as embedded in a lifelong perspective, with plenitude of factors shaping and institutionalising individual life courses and, as a derivate, the individual learning outcomes and achievements.

2.2 Intersectionality

The theoretical perspective of intersectionality has only very recently entered the research debate on social injustice, discrimination, and exclusion. As a concept, it refers to the modes through which social and political identities (e.g., gender, ethnicity, religion, age, sexual orientation, disability) combine to produce specific positions in terms of privilege and discrimination, empowerment and oppression, acceptance or relegation (Cho et al., 2013; Järvinen & Silvennoinen, 2022). The history of the term goes back to the US-American legal scholar and activist Kimberlé Crenshaw.

Crenshaw first coined the term in 1989 in order to frame inequality and discrimination faced by Afro-American women, which were at that time invisible to the judicial system in the USA and elsewhere in the world (Crenshaw, 1989). With the term intersectionality she sought to give name to discriminatory practices based on intersection, and indeed cumulation and multiplication, of different forms of oppression. Afro-American women were discriminated and marginalised not solely because of their ethnicity or gender, but

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indeed due to the specific intersection of both – being black and being a woman. It was the intertwining, or inter-section, of these vulnerabilities that created a qualitatively different, intensified, and hidden form of discrimination. The theoretical lenses of intersectionality have since then been applied to analyse unequal positions of both individuals and groups. At first, they helped to unveil the discriminating processes acting between the categories of race and gender. However, as intersectional approach entered the sociological debate and developed its own methodological instruments (Angelucci, 2017), other categories, such as social class, sexual orientation, age, religion, but also citizenship, colonial origin, bodily disability and, more recently, space, were included into the intersectional analysis (Hill Collins & Bilge, 2016).

Intersectionality quickly became a popular term among academic and political circles, in particular within the post-structuralist feminist debates (Hill Collins, 1990) and critical and political movements, such as *black feminism* and *Movimiento Chicano* (Roth, 2004). The concept serves not only as a heuristic device (Anthias, 1998) or a research paradigm (Hancock, 2007) that addresses the complexity and intersection of social relations, but it also functions as an analytical approach (Walgenbach, 2011), one that goes beyond the simple addition of discriminatory categories and posits instead an interactive, mutually constitutive relationship among them. More recently, the concept has gained currency as a critical tool for resistance against oppression and social injustice, both in theory and practice (Hill Collins, 2019; Hutchinson & Underwood, 2022). However, as many authors point out, despite the growing use of the concept, it often becomes a label or *rhetorical device* (Lykke, 2016, p. 210) that does not account for the interconnected nature of exclusionary practices and does not clearly signal political action. Moreover, it is argued that even well-intentioned policies often fall short in that they assume all inequalities share the same ontological history and internal logic and, thus, fail to frame policy issues as intersectional phenomena that need intersectional solutions (Smooth, 2013). For this reason, some researchers call for addressing intersectionality through a critical realist approach able to capture the nature (or ontology) of social relations by which inequalities operate (Walby et al., 2012). According to critical realism, a distinction needs to be made between the *real* world, which exists independently of human perception, and the *observable* world, which is the result of human construction, theorising, and experiences (see Bhaskar, 2008). In this regard, we do not understand intersectionality as the inequality itself, as if having an ontological nature of the kind of real world, but rather as a theoretical lens, through which the overlapping and intensification of individually and collectively experienced inequalities can be observed and framed.

Intersectionality also refers to the social inclusion or membership of individuals and groups. By membership we understand the degree, in which individuals and social groups have or have not the access to the rights, entitlements, resources and opportunities to participate in the political, social, economic, and cultural spheres of a community. Intersectionality is therefore equally related to the exclusion from and/or

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inclusion in political system, social relations, economic and labour market system, but also education and training. At the policy level, the excluded groups of population are often targeted according to their vulnerable status as, for example, (long-term) unemployed, NEETs (Not in Education, Employment or Training), ESLs (Early School Leavers), refugees, undocumented youth, etc. At the individual level, these vulnerabilities lead to social exclusion as a result of accumulating different excluding disadvantages in a person's life course (Järvinen & Jahnukainen, 2016), which not only intensify person's negative experiences, but also make it more difficult to disentangle the complex network of mutually depending factors that lead to its social exclusion. Among the factors that facilitate social disadvantages are physical and mental disabilities, difficult family constellations, low social support and individual resilience, critical life events (illness, sudden loss of close persons, abuse, legal problems, substance addiction), lack of skills and intrinsic motivations, irregular migration status, ethnic discrimination or discrimination based on sexual orientation etc. (see Bendit & Stokes, 2003, p. 265). The intersectional approach further shows that young people in multi-disadvantaged positions experience also greater exposure to future risks, and not only to current conditions. School-to-work transitions, setting a family, taking up leading positions in the society and other challenges might be accompanied by negative feelings of distrust, frustration, anxiety and discomfort, which result from struggle with multiple interwoven disadvantages.

When turning the theoretical scope of intersectionality to education, there are several conclusions that can be drawn. *First*, as the research on the use of intersectional approach in Higher Education studies shows, intersectionality is a flexible approach, which can be "productively combined with other theoretical approaches to more fully understand the operations of systems of inequity and advantage on student and staff experiences and outcomes in higher education contexts" (Nichols & Stahl, 2019, p. 1264). *Second*, intersectionality questions the researcher's positionality and identity during the research:

> Arguably, intersectionality in qualitative inquiry would require that we examine our own identities to discover how they play out in the research process, in addition to grappling with how interlocking systems of oppression like white supremacy, patriarchy, heterosexism, capitalism, and imperialism impede the everyday lives of those whom we study and the cultural context where the study takes place (e.g., schools, institutions of higher education, urban or sub-urban neighborhoods, workplaces, etc.) (Evans-Winters & Esposito, 2019, p. 54).

Third, the intersectional approach helps to better understand the situation of young people in multi-disadvantaged and/or vulnerable positions in the education systems. While a single axis of social inequality (e.g., being a migrant, a woman etc.) is insufficient to explain different educational outcomes, the combination of various sources of disadvantage helps to better understand and frame the actual cases. In this respect, the intersections between "being *male*, being from *migrant backgrounds* and the *lower social classes* have repeatedly been found to be disadvantageous for the attainment of

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educational qualifications" (Gross et al., 2016, p. 51 [original emphasis]). *Fourth*, intersectionality does not only show the sources of discrimination, but it also delivers tools for action, resistance and emancipation. As a critical, rather than solely analytical perspective, it questions sedimented modes of oppression and inequality in education, identifies the intersection of disadvantages and leads to actions on individual and group level, in particular when informed by other resistant knowledge projects, such as Critical Race Theory, Post- and De-Colonial Theory, Feminist Theory, etc. (see Hill Collins, 2019).

In CLEAR, the intersectional perspective helps us to:

- **place the relational and multidimensional nature of inequalities centre stage, conceptualising different sources of discrimination as intrinsically and mutually interrelated, not as dissociated and detached from one another;**
- **question the socio-cultural, contextual and historical origins of inequalities and analyse their interplay at the level of individual subjects, social and material structures, and discursive and symbolic representations;**
- **connect the macro dimension of social inequalities with the micro dimension of their embodied realizations, showing how historical narratives continue to persist as materialised forms of power and oppression;**
- **contrast the instrumentalist position and a *rhetoric of diversity*, which seeks to improve measurable learning outcomes, and bring instead the agency of persons with multiple disadvantages into the focus.**

With regard to the operationalisation of intersectionality in the CLEAR research project, we apply it in our empirical WPs as follows:

In **WP3**, which provides descriptive and explorative analyses on the connection between learning outcomes, labour market and socio-economic conditions at national and regional level, intersectionality is actively applied. Intersectionality *helps to select and combine indicators* for the quantitative analysis of learning outcomes to account for the groups in vulnerable and/or multi-disadvantaged positions. The indicators include data on education, labour market and demographic situation, but focus also on gender-based differences, socio-economic status or migration background of young people. Intersectionality is further applied during the analytical phase where it *supports the investigation of (quantifiable) differences in the educational performance* of groups of population, taking into account its individual, contextual, and institutional characteristics. Finally, intersectionality *informs the analysis of opportunity structures of young people*, as it brings the interplay between family situation, education and labour market, as much as place, gender and ethnicity to the foreground.

In **WP4**, in which we review educational policies and map out processes of skills formation and skills utilisation, intersectionality informs the whole research process. It *guides the selection and analysis of academic and grey literature* as it places the focus on the representation of young people in vulnerable and/or multi-disadvantaged positions in the literature studied. It further *supports the designing of interviews with key policy actors*

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and participants. Here it is deployed to develop the interview questionnaire with a particular attention to the policy perception of exclusionary and/or discriminatory factors affecting young people. Finally, it *informs the analysis of skills formation and skills utilisation* on how intersectional factors enter the processes of obtaining and deploying skills and competencies.

In **WP5**, which focuses on qualitative research with young people, while looking at the impact of opportunity structures on their life courses and abilities to exercise agency in their life projects, intersectionality is placed centre stage. It *frames the choice of participants for qualitative analyses*, particularly by addressing their unequal representation in terms of gender, ethnicity, age, social class etc. It also *structures and designs the research questions* in order to account for the invisible forms of discrimination and exclusion. It finally *supports the analysis of the research results*, especially by questioning the impact of exclusionary practices on young people's choices and their readiness to act.

In **WP6**, in which we design and implement expert survey on future scenarios of educational disadvantages, intersectionality is a helpful theoretical tool. It *supports the construction of the expert survey*, particularly by integrating different expert categories and multiple voices and representations (diverse genders, minorities, representations of political orientation) into the design of the survey. It also *provides theoretical underpinnings for the structure of the survey* as it poses questions on intersectional factors affecting young people's life opportunities. Finally, it *informs the analysis of the expert surveys*, especially through the focus on the perception of social inequalities by the policy experts.

In summarizing this section, the theoretical perspective of intersectionality provides us with a comprehensive guide through the variety of mechanisms that produce and amplify social inequalities and marginalise certain groups of population. It particularly supports us in uncovering and understanding the experiences of individuals and groups in vulnerable and/or multi-disadvantaged positions, especially those connected with low academic achievement or struggling to cope with standard and institutionalised expectations on learning outcomes.

2.3 Spatial Justice

Spatial Justice is a relatively new, yet very promising theoretical perspective in the study of social change. While the concept of *justice* has its roots in moral and political philosophy, the adjective *spatial* emerges in social sciences in relation with the so-called *spatial turn* or *spatialisation* of social problems, which describes the rising importance of space in determining social life (Massey, 2005). On the one hand, the notion of a space expresses a deep experience of dwelling, rather than a single point in global geometric space (Corbett, 2020, p. 280). It is therefore distinctively related to the sense of belonging and understanding of the outer world. On the other hand, it is shaped and co-created by a vast variety of factors that decide upon the distribution of rights, resources, and

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opportunities, but also burdens and limitations on individual and group level (Weckroth & Moisio, 2020, p. 190f). The power of space and its impact on life courses are the scope of the Spatial Justice approach.

The Spatial Justice approach has been first developed and applied in domains such as urban development and spatial planning, developmental studies, environmental studies, critical urban studies or critical geography (Morange & Quentin, 2018, p. 2). Especially the last two domains have been fruitful in bridging human geography with critical social studies and political philosophy. Scholars such as David Harvey (1973), Edward W. Soja (2009, 2013) or Susan Fainstein (2010) sought to develop a standpoint for supporting actions to improve social equality in disadvantaged locales and sites. Inspired by Henry Lefebvre's concept of *right to the city* (1968) and John Rawls' *theory of justice* (1971) and its subsequent critiques, they examined the spatial dimension of social inequalities in contemporary societies, seeking to conceptualize the socio-spatial differentiation in the fair distribution of opportunities, access to rights and public goods, and – in general – of positive and negative outcomes of social and institutional processes. In this respect, the concept of Spatial Justice entails a representation of space that goes beyond being a mere container of social relations, as it instead depicts the complex socio-spatial relations, in which the space both influences and is influenced by social agents. The novelty of Spatial Justice is that it considers space as both the producer and the product of social and political power relations (Soja, 2013; Williams, 2013). Such *spatialized* relations can have negative but also positive effects on individuals and groups, depending on the different, often unfair and unequal distribution of opportunities. As Edward W. Soja has put it, the "locational discrimination created through the biases imposed on certain populations because of their geographical location is fundamental in the production of spatial injustice and the creation of lasting spatial structures of privilege and advantage" (Soja, 2009, p. 3). Given this, Spatial Justice is strongly articulated with the notions of segregation, marginalisation and discrimination which reflect a given spatial order, i.e., the spatial distribution of socially valued resources and opportunities.

Since the concept of Spatial Justice encompasses a variety of different, and often diverging disciplinary assumptions and meanings, it is not without a difficulty to establish its working definition. In this respect, Israel & Frenkel (2018) have outlined few questions, which are helpful in the process of thinking through the possibilities and limits of the Spatial Justice approach:

> Would a theory of justice in space encompass the city, the metropolis, the region, or the globe? Or could it function over other forms of scalar structuration, such as place-making, localization and network formation (Brenner, 2001)? [...] One should ask also what would be the theme of justice? Is it distributive in nature, or is it critical, emphasizing matters of discrimination, oppression, and political access? [...] Would a spatial theory of justice emphasize the outcomes of injustice processes or the process that leads to unjust situations? Or would it include both? (Israel & Frenkel, 2018, p. 650)

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In CLEAR, we have dealt with these questions reflecting the project's objectives as well as the large body of research literature which applied Spatial Justice as a theoretical lens.

Contrary to the large amount of research works focusing primarily on cities – as specific sites of inequalities – and urban planning (see Caruso, 2017; Watson, 2020; Nombuso Dlamini & Stienen, 2022), our understanding of the concept is that cities are not the one and only key site where spatial injustice takes place. Other spatial and regional cleavages and forms of uneven development – between urban and rural sites, inner and marginal areas, periphery and core, competitive (economically thriving) and lagging (economically declining) regions – are key in affecting and differentiating life courses, chances and opportunities of young people, as well as in generating varying interactions with educational, training and labour market policies. The sites selected for the subsequent analyses in the project will therefore encompass regions with different degree of development and dependency.

Further on, two strands of foci can be distinguished in the research literature – first, a *distributive* approach that considers how public goods are allocated, accessible and available in different spaces, with the aim to achieve a fair redistribution of educational, health and labour opportunities; and, second, a *procedural* approach that considers how policy- and decision-making processes represent, design and manage measures – and their intended or unintended outcomes – in different locales, with the aim of disentangling representations of space in and spatially differentiated outcomes of (multilevel) arrangements and decisions. In CLEAR, we seek to conduct analyses which cover both the distributive and the procedural aspects of spatial justice, since the inter-regional spatial disparities are considered a major source of social and political instability for the European Union (Iammarino et al., 2019). In this respect, a cohesive policy-making can be strengthened by and profit from the diverse set of constituents of spatial justice, such as "equitable distribution of resources, functioning local and regional mechanisms for participation, individual and collective capacities to act, the existence of a safe and clean environment, and access to various services" (Weckroth & Moisio, 2020, p. 190), including education and training.

When we turn to the educational process, learning outcomes may be affected by spatial dimensions before, during and after schooling. As Felicity Armstrong has put it, "spaces have histories; they are constantly changing in response to the flow and interruptions of conditions and relationships" (Armstrong, 2012, p. 623). Neighbourhoods and locales may cumulate economic, social, environmental and cultural disadvantages, with negative consequences on a range of individual life chances, which are usually reinforced (if not caused) by institutional dimensions. In this regard, different locales receive unequal educational resources due to wealth, power, and connectedness factors that impact on the quality of teachers, school programs, or out-of-school opportunities that students might experience (Beach et al., 2018; Kettunen & Prokkola, 2022). More so, what severely affects individual learning outcomes is the failing of institutions to provide adequate

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schooling facilities and learning opportunities which leads to the production of exclusionary residential segregation and disadvantageous educational zoning. Educational institutions and their spatial distribution are, however, not solely accountable for spatial injustices (Amos et al., 2016). There are plenty of other factors, including the immediate environment (air pollution, water and soil quality), welfare services (healthcare, transportation, housing, social services), forms of spatial organization (level and type of local autonomy), characteristics of economy and labour market (economic productivity and dominant economic sectors), demographic trends (migration, family arrangements, social stratification) etc., which, though to a various degree, influence the learning ecology of formal, non-formal, and informal education. All together they shape learners' opportunities, priorities and successes (Jones et al., 2016), as much as their choices and decisions (Bæck, 2019).

In CLEAR, the Spatial Justice approach helps us to:

- **consider spaces both as products and as producers of social and power relations, which actively shape the possibilities and limits of reaching and following certain life courses;**
- **view schools, educational institutions and learning sites through their spatiality, i.e., their ability to affect educational performances, achievements, and decision-making in relation to their spatial distribution;**
- **perceive learning outcomes as co-produced by spatial distribution of opportunities, rights, and resources, as much as by spatialised forms of exclusion, oppression, and marginalisation.**

With regard to the operationalisation of Spatial Justice in the CLEAR research project, we apply it in our empirical WPs as follows.

In **WP3**, which provides descriptive and explorative analyses on the connection between learning outcomes, labour market and socio-economic conditions at national and regional level, the Spatial Justice approach is well-integrated. During the analytical phase, it *helps to overcome the primarily geographic and territorialised representation of regions* by searching for indicators beyond the regional and/or national framework to account for the more fine-grained socio-spatial characteristics of the educational sites. Furthermore, it *informs the contextualised analysis of national cases* by connecting the data indicators with the specificities of the locales and regions, such as dispersion and/or concentration of learning opportunities, labour market capacities, housing options etc. Finally, it *directs the view on spatially determined opportunity structures* of young people in vulnerable and/or multi-disadvantaged positions and *helps to work out the structural constellations of disadvantage* that lead to unequal and, thus, unjust opportunities to choose and perform the preferred learning outcomes.

In **WP4**, in which we review educational policies and map out processes of skills formation and skills utilisation, the Spatial Justice approach plays an important role. It *informs the guidelines for literature review as well as the interview questions* on how to reflect the impact

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of space on the formation and utilisation of skills. It further *helps to understand how policy actors and practitioners consider and integrate spatiality* in the design, implementation, and provision of educational policies. In particular, the approach informs the analysis of the interviews with policy actors on whether, and if so, how they perceive spatial distribution of learning opportunities. Finally, it *helps to examine how spatiality impinges upon or forwards the coordination* of local/regional governmental bodies.

In **WP5**, which focuses on qualitative research with young people, while looking at the impact of opportunity structures on their life courses and abilities to exercise agency in their life projects, Spatial Justice is a relevant theoretical tool. It *supports the integration of spatial perspective into the study,* especially in the sampling of participants and design of interview questions. In doing so, it raises the awareness of spaces (schools, educational sites) as producers and products of social and power relations. The Spatial Justice approach also *re-interprets the analytical perspective on the agency of young people* and their ability to shape their learning environment and better navigate their life courses. Finally, with regard to young people in vulnerable and/or multi-disadvantaged positions, it *helps to view them in light of the spatialised forms of exclusion and discrimination*, which open or close their possibilities and opportunity structures.

In **WP6**, in which we design and implement expert survey on future scenarios of educational disadvantage, the Spatial Justice approach is centrally placed. It *helps to generate questions for the expert survey*, which reflect the spatial distribution of resources, rights, and opportunities of young people. It further *integrates the spatial context in the scenario analysis of policy coordination*, particularly by considering the distribution of educational opportunities in the analysed sites. Furthermore, it *helps to evaluate the importance of space for the educational policymaking*, as the analysis of the experts' opinions includes also future scenarios and, thus, their assessment of space as an inequality factor.

In summarizing this section, the Spatial Justice approach has a dynamic potential to address spatial factors that affect learning outcomes and educational (under)achievement. The perspective enables us to include spaces into the analytical and participatory design of our project. In particular, the approach helps us to conceptualise the research sites through their changing spatial dynamics and effects it has on inequality and injustice. In addition, Spatial Justice deepens our understanding of exclusionary practices affecting young people in vulnerable and/or multi-disadvantaged positions, as it shows how spaces can open or close the possibilities to participate, perform, and, in the result, to define what should and can be the desired learning outcomes.

2.4 Summary

In this section, we have presented the theoretical perspectives applied in CLEAR, with a particular focus on their application in the project's empirical Work Packages 3, 4, 5, and 6. As the presentation has shown, the chosen theoretical perspectives have a great

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potential to inform the study of learning outcomes and (under)achievement. The formulation of guiding research questions has demonstrated the depth and dynamics of these concepts. In CLEAR, the chosen combination of theories is unique in scope and application. There are few intersections of the theories that can be found in the research literature so far.

A growing interest for combining Spatial Justice approach and Intersectionality has found its expression in the attempt to raise *racial spatial awareness,* a term showing "what is possible for people of color in contexts governed by the overlapping systems of oppression of neoliberalism and the racialization of space (Blaisdell, 2020, p. 168). Others have instead introduced a version of *spatialised intersectionality*, which stresses that "hegemonic ideologies, epistemologies, and actions have variously coconstructed contemporary spaces and each life lived in relation to them" (Morell & Blackwell, 2022, p. 33). These and similar other attempts once again underscore the flexibility, adaptability and mutual contribution of both approaches.

In addition, Intersectionality and Life Course Research have also been fruitful in combining their theoretical instruments, for example by examining the

> categorical boundaries such as race, class, gender, and age that are constructed as interlocking systems of oppression and must be negotiated as people (who are raced, classed, and gendered) navigate those boundaries as they move through the lifecourse (Byfield, 2014, p. 48f).

In this vein, Anette Eva-Fasang and Silke Aisenbrey have made first steps to combine both approaches into one "intersectional life course perspective on gendered and racialized combinations of work and family lives from early adulthood to mid-life (ages 22–44)" (Fasang & Aisenbrey, 2021, p. 576), trying to explore the interdependencies between work and family lives in different intersectional groups.

So far, however, very little is known about the combination of Spatial Justice and Life Course Research, with only few exceptions focusing either on *life course spatial adaptability* in architecture and design studies (Braide, 2020) or on the connection between *spatial justice and well-being* (Jones et al., 2019), er else on the intersection of *lifestyle mobilities with spatial inequalities* (Goodwin-Hawkins et al., 2022).

In CLEAR, we seek to further explore the potentials of combining these three theoretical perspectives in order to better approach our research object, which is presented and contextualised in the next section.

3. Contextualisation of the research object

In this section, we discuss and specify our research object, present the analytical dimensions to approach it and develop a foundational grid for the empirical fieldwork and comparative analyses.

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Since the introduction of various forms of measurement and assessment of education, the debate on learning outcomes has gained currency and worldwide attention. However, education is often equated only with formal and compulsory schooling, leaving aside non-formal and informal learning of a person taking place at home, in peer-groups, at work or during leisure time. Moreover, the widespread idea of education as a *human right* and as an essentially good project to be implemented in modern societies have contributed to the development of so-called *educationism*, attributing an absolute value to education without questioning what it actually is and can be. In a similar vein, in CLEAR, we depart from the observation that the concept of learning outcomes is often taken for granted and perceived as a self-evident, statistically measurable and politically governable outcome of educational processes. We claim that there is little discussion on how learning outcomes can be further interpreted, understood and imagined, what facets and aspects of education, which cannot be statistically captured, fall under the same category, and what other learning outcomes (non-formal/informal, extra-educational/extra-curricular) are overlooked and/or neglected in research and practice. To apply and forward Robertson and Dale's *Education Questions* (2008, p. 27), particularly the fourth level on outcomes, we frame our study from educational viewpoint by asking:

- How and by whom are learning outcomes defined, measured and evaluated?
- How is the measurement of learning outcomes justified and legitimated?
- Who's learning outcomes are assessed and evaluated?
- What are the (statistically) visible and invisible learning outcomes?
- How do various factors interact to produce expectations on learning outcomes?
- How do the discourses on learning outcomes shape the subjectivities of learners?
- To what extent does the assessment of learning outcomes foster social division?
- How can learning be imagined beyond measurement?

Against this background, we counter the prevalent understanding of learning outcomes as quantifiable and measurable outcomes of education and inquire into the processes of their construction.

To be clear at the outset, we do not seek to disregard or ignore the prevalent perception on learning outcomes, but consider its reducibility of learning as highly problematic and, at some point, as the initial root cause of conceptualising academic (under)achievement as a solely individual matter. For this reason, we take a step back and seek to extend the scope of analysis of learning outcomes by inquiring into the complexity of factors involved in their construction. While defining learning outcomes as a research object, we necessarily relate to a certain understanding of academic (under)achievement. In CLEAR we perceive

- *learning outcomes* as resulting from the intersection of manifold factors at the level of young people, educational and training institutions and organisations, labour market, economic, and socio-cultural determinants, educational spaces and sites,

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as well as at the level of interconnections and mutual dependencies between the factors mentioned;
- academic *(under)achievement* as resulting from the discursively shaped categorisation of individuals in achievers, over-achievers and low-achievers and use the concept with the prefix under- in brackets to highlight its selective character and hidden normative value judgements.

Both learning outcomes and academic (under)achievement have been a matter of research and policy debates in the countries studied (see the section *Research on learning outcomes and (under)achievement*). In order to dismantle the various meanings and understandings of the terms and describe the interplay of multiple factors involved in their construction, we apply five analytical levels.

3.1 Analytical levels

In the CLEAR research project, we analyse our research object at five interrelated levels:

- The *individual* level refers both to identifying and describing what happens to an individual from external (what statistical/structural/institutional categorisations tell us about individual behaviour and decision-making) and internal standpoint (how individuals perceive themselves, narrate their life stories, utilise their agency etc.).
- The *institutional* level points to a systems' local/regional/national arrangement and functioning of infrastructures, settings, organizations, but also rationalities, policies, and practices that embody its formal organization as a social and political entity.
- The *structural* level includes the region's/country's socio-cultural, economic, labour market and historical features that enable making sense of systems within broader societal contexts and geographical settings.
- The *spatial* level aims at assessing the impact of spaces as materialised products and, at the same time, dynamic producers of social, political and power relations on the interplay of institutional, structural and individual factors on a given territory.
- The *relational* level seeks to explore the multiple relations, dependencies, connections, tensions, and dynamics that actively shape and are shaped by actors involved in the construction of learning outcomes.

The five analytical levels are productively deployed during the empirical and analytical phases of the project, leaving enough space to extend them whenever it is necessary for the contextualisation of the cases or application of diverse sets of comparisons (horizontal, vertical, transversal). We apply our analytical dimensions from three theoretical perspectives. When crossed together, the analytical dimensions open new horizons and place focus on different set of issues related to learning outcomes. As the table shows (see Table 1), the focus of our theoretical perspectives changes every when applied on different analytical levels and enables us to assess the multiplicity of factors involved in the construction of learning outcomes from various angles. In more detail, the combination of theoretical perspectives and analytical dimensions is described in the next section.

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Table 1 – Implementing theory and analysis

Analytical level	Theoretical perspective		
	Life Course Research	**Intersectionality**	**Spatial Justice**
individual	Focus on individuals' agency to navigate their life courses.	Focus on the capacity of individuals to resist and emancipate themselves.	Focus on the ability of individuals to shape their spatial learning settings.
institutional	Focus on the support of groups with low educational achievement.	Focus on the equal inclusion of various identity groups.	Focus on the just distribution of resources, rights, and opportunities.
structural	Focus on the socio-cultural expectations on achievements.	Focus on the learning outcomes of young people in vulnerable positions.	Focus on the spatial distribution of opportunity structures.
spatial	Focus on the impact of spaces on young people's transition regimes.	Focus on spaces as co-producers and aggravators of vulnerable conditions.	Focus on spaces as catalysators of social transformation.
relational	Focus on linked lives and (inter-/intra-)generational dependencies.	Focus on intersecting and mutually interrelated modes of oppression.	Focus on the connection between spaces and justice(s).

Source: WP2 Team own elaboration

3.2 Foundational grid for the collection of contextual information

The foundational grid for the collection of contextual information is an intersection of the project's *three theoretical* (What (can) we see?), *five analytical* (What do we want to know?), and *four empirical* (How do we (aim to) proceed?) levels. All three levels are articulated in form of research questions that guide and inform the research progress and stage of analysis (see Tables 2 to 6). The questions of the foundational grid are formulated as concisely as necessary, but as adjustably as possible, so that, whenever necessary, we can expand them to collect new information or to pose more fine-grained questions during the empirical fieldwork or analysis. With the foundational grid, we are not seeking to mechanically answer every question one by one. Instead, the questions themselves lead our research inquiry and help us to embrace the complexity of the research object by connecting the separate pieces into one coherent image.

Table 2 – Individual level of analysis

Work Package	Theoretical perspective		
	Life Course Research	**Intersectionality**	**Spatial Justice**
WP3	How do young people perceive their opportunity structures? How do they construct their own life courses through the choices and actions they take within these structures? To what extent do young people seek to criticise	How are young people in vulnerable and/or multi-disadvantaged positions represented in the national/regional datasets? What chances do young people in disadvantaged positions have to make use of their voices and be	To what extent are young people enabled or disabled by their spatial circumstances to make use of their skills and abilities? In what ways do young people respond to the spatially conditioned

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Work Package	Theoretical perspective		
	Life Course Research	**Intersectionality**	**Spatial Justice**
	and/or change their opportunity structures?	listened to during the collection of contextual data?	opportunity structures they have at their disposal? How do young people assess spaces as influencers of their learning outcomes?
WP4	How are young people's transitions constructed during the design and implementation of educational policies? To what extent do young people seek to influence the educational policymaking? Are young people merely receivers or co-designers of educational policies?	How do young people in multi-disadvantaged positions perceive the potential of educational policies to enhance their socio-economic status? To what extent do young people in vulnerable positions conceive educational policymaking as responsible for their current situation?	In how far do young people distinguish between policy programmes based on their spatial affiliation and outreach? To what extent are young people's educational and training choices determined by the spatial distribution of education and training opportunities?
WP5	What understandings of learning outcomes and (under)achievement do young people have? How do young people perceive and interpret expectations on achieving certain levels of learning outcomes? To what extent do young people differentiate between individual and societal expectations on learning outcomes? What techniques do young people develop to cope with societal expectations on reaching certain level of educational attainment? How do young people experience and make use of their agency and ability to change their current status? What do young people undertake to overcome their proclaimed and experienced barriers, disadvantages and limitations to education?	How do young people in vulnerable and/or multi-disadvantaged positions perceive their educational success? How do young learners in vulnerable positions experience, interpret and manage the obstacles they face? How do young people with multiple disadvantages respond to the expectations on standard or desired learning outcomes? How do young people in vulnerable positions consider their situation and what do they perceive as disadvantageous? In how far do young people in vulnerable positions make use of their agency? How do young people in vulnerable and/or multi-disadvantaged positions perceive their chances to reach certain educational outcomes? How do young people with multiple disadvantages respond to various policy measures seeking to	How do young people perceive spatial justice and what do they understand by it? How do young people frame their learning outcomes as part of their own positionality? What role does the spatial characteristic of a region play in young people's decision making about future education and/or employment? To what extent do young people conceptualise their life courses as embedded in specific spatial relations and structures? How do young people consider and feel about their region and/or country – as prosperous, promising, liveable, or unappealing and with poor living chances? In how far are young people willing to leave their learning/working space? How do young people perceive their region/locale in terms of learning and working opportunities? What life and self-realisation opportunities do young

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Work Package	Theoretical perspective		
	Life Course Research	**Intersectionality**	**Spatial Justice**
		enhance their employability or activate their potential? What do young people with multiple disadvantages consider the main hindrances in pursuing their life goals?	people associate with different spatial sites?
WP6	What individual capabilities do policy experts consider crucial for improving the quality of learning outcomes? What skills and competencies do policy experts include in the desired learning outcomes? Based on the scenario of sudden changes, what do policy experts consider the key set of skills that young people need to develop? How do policy experts perceive young people's role in commenting/designing targeted policy solutions?	How do policy experts differentiate between various groups of young people? What categories/typology do the policy experts use for the differentiation of individuals and groups? In the future scenario, in how far will the identity backgrounds play a role in achieving desired learning outcomes? To what extent do policy experts include young people in vulnerable positions in their assessment of future education systems?	How do policy experts assess the impact of spaces on individual learning outcomes? What do policy experts consider necessary in order to restore and sustain spatial justice in access to quality education? What agency do policy experts assign young people in combating spatial hindrances and limitations? What understanding of spaces do policy experts expect from young people to have?

Table 3 – Institutional level of analysis

Work Package	Theoretical perspective		
	Life Course Research	**Intersectionality**	**Spatial Justice**
WP3	To what extent do the existing national/regional datasets mirror the root causes of (under)achievement in different life course phases? What data is missing on better estimating the factors that affect the construction of learning outcomes, especially in transition regimes?	In how far are the indicators of identity (gender, ethnicity, social class) included in the regional/national databases? What institutional opportunities do young people in vulnerable positions lack to make full use of their individual abilities?	How do institutions operating at different spatial levels share and protect the data among themselves? To what extent are schools, training centres and other educational sites spatially constructed and how does their distribution affect the existing opportunity structures?
WP4	How do policy actors perceive and envisage learning outcomes of young people? What skills and competencies do policy actors consider inevitable and desired?	How are young people in vulnerable positions targeted/framed in the policy papers and academic literature? How do policy actors cooperate with young	What do policy actors and practitioners think about spatial justice in terms of educational opportunities? How are the quality and the impact of spaces reflected in

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Work Package	Theoretical perspective		
	Life Course Research	**Intersectionality**	**Spatial Justice**
	How are voices of young people recognised, heard and listened to during the design, implementation and evaluation of educational policies? How is the variety of individual life courses perceived by the policy actors? How is the process of de-standardisation of life courses integrated in the local/regional policymaking? To what extent do life course de-standardisation processes serve as justification for policy interventions? To what extent are processes of re-regulation and re-standardisation of life courses observable in the policymaking? What are the dominant and underlying assumptions, objectives and goals of lifelong learning policies? How do policy actors and practitioners differentiate between perceived and actual learning outcomes of young people? Which preferred/standard visions of individual development do educational policies bring about?	people in vulnerable positions? How do policy actors and practitioners develop and design policies targeting young people with low educational achievements? How does the policy provision for young people in vulnerable and/or multi-disadvantaged positions look like? How are young people with multiple disadvantages supported in enhancing and utilising their skill sets? Which dimensions of young peoples' lives are defined in policies as central for enhancing their situation? Which of them are neglected or relegated? How do education policies frame young peoples' previous, situated knowledge in the definition of learning outcomes? How are young people with different backgrounds included in the design and implementation of policy measures? What solutions do policy actors envision if young people fail to attain the expected learning outcomes? To what extent are the different socio-economic and identity backgrounds of young people included in the policy solutions for educational low achievers?	the educational policymaking? How is the spatial dispersion of educational opportunities included in the policy design and implementation? How do policy actors and practitioners think about the impact of educational spaces on learning achievements? Which spatial levels (local, regional, nationwide, supranational) do policy actors consider during policymaking? What impacts are policies supposed to have at the national, regional and local levels? How do policies targeting educational low achievers reflect their spatial conditions and limitations?
WP5	To what extent are lifelong learning policies successful in supporting young people in their school-to-school or school-to-work transition?	How are young people in vulnerable and/or multi-disadvantaged positions targeted and depicted in the educational policies?	How does the spatial distribution of educational provision affect the chances of young people to make

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Work Package	Theoretical perspective		
	Life Course Research	**Intersectionality**	**Spatial Justice**
	What type of policies do young people report as helpful and useful in overcoming their learning challenges? How do different institutions (schools, labour market agencies) frame the expectations on learning outcomes?	To what extent are school and training programmes designed to integrate and include different identity minorities? What options do young people in vulnerable positions have to plan and follow their studies?	use of their individual resources? How do schools and training sites consider young people's spatiality? How do educational providers cooperate to reduce the impact of spatiality (infrastructure, limits, costs) on young people's learning outcomes?
WP6	What understandings of learning outcomes do policy experts have and how are these understandings translated in the lifelong learning policymaking? What role do policy experts ascribe to young people's agency? How do policy experts perceive (under)achievement and how do they frame it in the context of young people's life courses? What type of educational provision do policy experts foresee as decisive in navigating young people's life courses?	How do policy experts perceive institutionally conditioned inequalities and discriminatory practices? How do the policymakers define their target groups and to what extent do they consider young people with multiple disadvantages? How do the policy experts frame young peoples' vulnerabilities – as individual deficiencies or as socially-bounded and temporary effects? What future challenges do the policy experts foresee for designing targeted policies for marginalised groups?	Wo what extent does the question of spatial justice emerge in the vocabulary and practice of policy experts? How are different spaces with their respective demands integrated in the design and implementation of educational policies? How do educational policies account for the spatial diversity of schools and other educational and training sites? To what extent do policy experts include the spatial changes in their estimation of future education?

Table 4 – Structural level of analysis

Work Package	Theoretical perspective		
	Life Course Research	**Intersectionality**	**Spatial Justice**
WP3	What are the quantifiable differences in the individual learning performances? What (possibly new) structural factors and indicators influence the construction of and the expectation on learning outcomes? How do opportunity structures change the life courses of young people in	What are the core indicators related to educational achievement and in how far do they account for the various identity groups? How are the socio-economic background and special status of young people in vulnerable and/or multi-disadvantaged positions represented in the data sets?	What data indicators are key in representing the spatiality of learning outcomes? How do statistics account for diverse research sites – urban and rural, thriving and declining regions, densely populated and nearly depopulated sites etc.? How are spaces reflected as relevant source of opportunity structures in research and practice?

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Work Package	Theoretical perspective		
	Life Course Research	**Intersectionality**	**Spatial Justice**
	the events of economic, societal or health crises? To what extent does the measuring and quantifying of learning outcomes help to understand the individual life courses of young people? What is the added value and what are the limitations of measuring and quantifying learning outcomes? How do local/regional opportunity structures constrain or enable the agency of young people? How do the local/regional socio-economic conditions affect the school-to-school and school-to-work transitions of young people?	How do local/regional opportunity structures open or close the possibilities for young people in vulnerable positions to achieve their desired learning outcomes? How does the accessibility of marginalised groups of population to educational attainment change over time, especially during economic and social crises? What has been the impact of the COVID-19 pandemic on the educational programmes most associated with discrimination and oppression?	What has been the impact of the COVID-19 pandemic on opportunities to access quality learning in different regions? How are spatial changes reflected in the establishment of more appropriate data sets?
WP4	How do policy actors and practitioners take the structural conditions of young people into account when implementing lifelong learning policies? What skills and competencies are over- and/or under-represented in the policymaking design and how do they reflect young people's agency? To what extent does the skills formation reflect the possibilities and limitations of local/regional economic and labour market structures?	How do key policy actors and practitioners perceive social inequality and disadvantage in terms of structural accessibility to educational attainment? Where do policy actors localise disadvantaging structural factors in educational achievement and how do they proceed in changing them? How are structural factors taken into account when designing policies for marginalised and oppressed groups of population?	To what extent do skills formation and skills utilisation depend on the spatial distribution of learning, working, and living opportunities of young people? How do various educational policies adapt their scope to the spatial specificities of certain regions and locales? To what extent do policy actors consider the structural quality of a region to cope with sudden challenges, such as the COVID-19 pandemic, refugee crisis or wars?
WP5	What has been the impact of the COVID-19 pandemic on the elaboration of life goals of young people? What structural factors do young people consider relevant for their educational achievements? What factors enable or disable young people to make a full use of their abilities and opportunities?	How do structural conditions lead to discrimination and marginalisation of certain groups of young people? To what extent do structural conditions lead to invisibility and unreachability of certain groups of population? How do global crises like the COVID-19 pandemic affect the accessibility of young people in vulnerable	How do young people in different spatial sites respond to global structural challenges, such as the COVID-19 pandemic? With what results? What impact does the economic activity of a region or locale have on young people's learning outcomes? Is any correlation observable?

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Work Package	Theoretical perspective		
	Life Course Research	**Intersectionality**	**Spatial Justice**
	How do the economic, labour market and societal changes influence young people's agency and capacity to influence their life courses?	positions to quality education and work? To what extent do local/regional job opportunities account for the diversity of young people's identities and abilities?	What differences in the understanding and use of individual agency can be observed in different spatial sites? To what extent does the economic productivity of a region/locale enable young people to achieve their life goals?
WP6	What structural factors do policy experts foresee as crucial in defining future educational needs? Based on what indicators do policy experts estimate the importance and influence of local/regional structures on young people's life courses? What structural constellation helps to prepare young people for sudden and unforeseen changes on the labour market?	How are various identity backgrounds included in the pool of national/regional policy experts? What are the underlying assumptions of policy experts in terms of structural roots and causes of low achievement of certain groups of population? How do policy experts consider the impact of opportunity structures on the unequal learning and working chances for young people?	What future role do policy experts foresee for different educational sites? In case of sudden crises, which sites do policy experts consider the most vital and which the most endangered ones? To what extent do spatial conditions determine the importance and actuality of various educational provisions? How are the changes in spatial planning included in the policymaking?

Table 5 – Spatial level of analysis

Work Package	Theoretical perspective		
	Life Course Research	**Intersectionality**	**Spatial Justice**
WP3	What spatially conditioned factors exercise impact over educational opportunity structures of young people? To what extent is the spatial distribution of educational and training sites reflected in the national/regional data sets on young people's life opportunities (distance to school, travel burden, time shortage)? How do structural conditions, including the spatiality of learning sites, affect the agency of young people?	What groups of population experience more disadvantages in terms of unjust spatial opportunities? How are young people in vulnerable positions spatially localised? Are any structural patterns observable? How are youth vulnerabilities affected by the spatial distribution of local/regional opportunity structures? To what extent do spaces promote vulnerable learning conditions?	What data sets are missing or incomplete in order to restore a spatial characteristic of locale or region? What data is needed to overcome the purely geographic and territorialised conception of locales and regions? To what extent are opportunity structures justly distributed in the regions/locales studied? What are the observable factors of spatial injustice?

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Work Package	Theoretical perspective		
	Life Course Research	**Intersectionality**	**Spatial Justice**
WP4	What do policy actors think about the spatialisation of schools and other educational sites? To what extent do policy practitioners reflect about the role of spaces in affecting young people's life courses? How do policy actors reflect the spatially conditioned transition regimes of young people? How is the spatiality of learning sites taken into account during the skills formation and skills utilisation?	How do policy actors perceive the spatially conditioned opportunity structures of young people in vulnerable positions? What spatial factors do policy practitioners considers central in reducing educational inequality? How are spaces included in the design of educational policies seeking to improve the situation of young people in vulnerable and/or multi-disadvantaged positions?	How do policy practitioners deal with spatially conditioned learning environments? What do policy actors think about spatial justice? How is this perspective integrated in policy design? What policy steps are necessary to establish and safeguard spatial justice for all learners? How do policy actors handle different demands and expectations on spatial justice?
WP5	How do young people's life courses differ in various spatial sites? What do young people think about the spaces they live in? What spatial status do young people in different regions/locales have? To what extent do young people use their spatial localisation as excuse/impetus for developing their life courses? How do young people act to change their spatial status? Do, and if so, how do young people reflect upon the relation between their spatial positioning and their educational achievements?	How do young people with different identity backgrounds reflect upon their spatial accessibility to quality education? How do young people in vulnerable positions perceive their spatial opportunity structures? How do young people in vulnerable positions reflect upon the spatiality (localisation, distances, opportunities) of their learning environments? To what extent do young people see spaces as root causes and/or part of their multiple disadvantages?	How do spaces affect young people's ability and willingness to learn and work? How do spatial settings affect the choices and decisions of young people? How do spaces affect young people's sense of justice and equality? What is the impact of spaces and spatiality of educational sites on learning outcomes? To what extent are spaces integrated in young people's planning and designing of their life courses? What role do spaces play in managing young people's successful transition?
WP6	What do policy experts think about the impact of spaces on young people's life courses? How do policy experts estimate the future spatial transformation of schools and its impact on achieving certain levels of educational attainment? To what extent do policy experts calculate with the spatially conditioned agency of young people?	To what extent do policy experts consider spaces as producers and facilitators of discrimination and marginalisation of certain groups of young people? What do policy experts consider the main factor influencing the unequal spatial access to opportunity structures? What chances of social and spatial upward mobility do	In how far do policy experts consider spaces as decisive factors in reaching certain levels of learning outcomes? What do policy experts think about the capacities of different spatial sites in creating just learning environments? How should future educational sites look like in terms of just spatial

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Work Package	Theoretical perspective		
	Life Course Research	Intersectionality	Spatial Justice
	How do policy experts perceive the transformative power of young people to shape their spatial environment?	policy experts foresee for young people in vulnerable positions?	distribution of learning opportunities? How do policy experts conceptualise educational sites according to their spatiality?

Table 6 – Relational level of analysis

Work Package	Theoretical perspective		
	Life Course Research	Intersectionality	Spatial Justice
WP3	To what extent do life courses of young people correlate with the quality of regional/local opportunity structures? What is the relation between learning outcomes and economic prosperity of a region/locale? How do different life domains interact in producing and distributing local/regional opportunity structures for young people? How does the access to education correlate with young people's ability to develop successful life projects? How do educational and employment opportunities connect with young people's agency?	How is social inequality related to the economic prosperity of a region/locale? How do labour market and economic activity of a region correlate with educational provision of young people in vulnerable positions? How are local/regional opportunity structures related to the perceived and documented social inequality? To what extent are the indicators of the quality of learning outcomes correlated with the unequal educational opportunities of disadvantaged young people? To what extent are the structural factors facilitating social inequality findable in the local/regional data sets?	To what extent do spaces shape the local/regional opportunity structures? How do spaces enter the interplay of multiple factors creating opportunities for young people and affecting the quality of their learning outcomes? How is the spatial distribution of (formal/non-formal) educational provision related to the region's prosperity? Is any correlation observable? What differences in learning outcomes can be observed between thriving and declining regions? What is the relation between various educational sites and local/regional labour market?
WP4	How do skills formation and skills utilisation connect in different regions? How do various policy actors coordinate to foster the potential of young people? How do different institutions cooperate over or get into conflict about diverse understandings of what is a good learner and (under)achiever? How do the expectations of policy actors on learning outcomes correlate with the	How are low educational achievements conceptualised in the policymaking and related to the different groups of young people? How does the process of skills formation reflect the diverse possibilities and abilities of young people in vulnerable positions? To what extent do the policy actors associate low levels of learning outcomes with	How are spaces connected to the opportunities of young people to learn and make use of new skills and competencies? To what extent do policy actors conceive of learning outcomes as spatially bounded and conditioned? What options of policy coordination do policy actors foresee to overcome the spatially unjust distribution of learning and working opportunities?

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Work Package	Theoretical perspective		
	Life Course Research	**Intersectionality**	**Spatial Justice**
	regional socio-structural dynamics?	learners' social and identity backgrounds?	
WP5	How do the perceived and actual learning outcomes of young people correlate? How do young people relate their expectations on learning outcomes to their own life courses? What role do young people's social networks play in reaching certain levels of educational attainment? How do young people perceive the relationship between their ability to learn and their learning environment?	How do young people in vulnerable positions construct their life courses in relation to their desired learning outcomes? How do young people in vulnerable positions conceptualise their learning disadvantages in relation to their existing structural opportunities? What do young people with multiple disadvantages perceive as root cause of their situation? Are any commonalities observable?	How do spaces affect individual learning outcomes? What is the relationship between individual learning outcomes and spatial segregation? How do young people frame schools and educational and training sites in relation to their spatial characteristics (distance, localisation, connectedness, etc.)? How do young people connect with and transform their learning environments?
WP6	How do policy experts relate their understanding of learning outcomes to the actual life courses of young people? How do policy experts assess the tension between structure and agency? To what extent do policy experts calculate with the processes of de-/re-standardisation of life courses?	In how far do policy experts connect low achievement with social inequality? What combination of factors do policy experts consider central for enabling social upward mobility of young people in vulnerable positions? To what structural factors do policy experts relate youth's vulnerability?	What connection do policy experts see between the educational sites and the quality of learning outcomes? To what extent do policy experts relate spatial justice to education? What connection do the policy experts see between the spatiality and the quality of educational sites?

Source: WP2 Team own elaboration

The foundational grid informs the research procedures in the subsequent WPs as follows:

- In **WP3**, it supports the selection of national/regional indicators and categories for establishing the structural settings and analysing the local/regional opportunity structures at the sites selected.
- In **WP4**, it organises the review of the policy and academic literature on national/regional policies targeting low-achievement and guides the analyses of skills formation and skills utilisation in the interviews with key policy actors.
- In **WP5**, it structures the design and implementation of qualitative studies with young people, particularly by informing the interview questionnaires, selecting the participants, and analysing the relation between opportunity structures and young people's agency.

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- In **WP6**, it supports the construction of the online questionnaires, including selection and formulation of the questions, for national expert surveys and frames the analyses of the empirical results of the survey.
- In **WP7**, it lays ground for the cross-regional and cross-national comparative analyses by addressing the multiple theoretical and analytical levels in one coherent strategy.

3.3 Summary

In the first part of this section, we have presented our research object – learning outcomes – in contrast to the dominant understanding, which frames them as quantifiable and measurable units legitimated by large-scale surveys on learning performances. Instead of perceiving learning outcomes as self-evident, scalable and governable phenomena, we contextualise them as resulting from the dynamic interplay between multiple factors on individual, structural, but also institutional and spatial levels.

We have further presented how we aim to integrate our three theoretical perspectives, five analytical dimensions and four empirical Work Packages and developed a robust foundational grid for the collection of contextual information. The foundational grid guides our empirical fieldwork and structures the subsequent comparative analyses, helping us to productively and creatively approach our research object, which is embedded in research and policy debates in the following section.

4. Research on learning outcomes and academic (under)achievement

The following section simultaneously builds on and narrows down the overall analytical framework. It builds on the previous section by considering the five intersecting analytical dimensions of the foundational grid. At the same time, it narrows it down by focusing on the specific topics of learning outcomes and academic (under)achievement, which are addressed via both theoretical and empirical research.

The section develops along three subsections: while in the first two subsections, devoted to *learning outcomes and (under)achievement,* we seek to map the main axes and modes of operationalizing research on these two concepts, the third subsection focuses on *scholarly and public debate on learning outcomes and (under)achievement* in our countries studied and brings into analysis the topics and prevalent understandings on the concepts at the national level. These three sections, then, are integral to the task of looking at the research that focuses on learning outcomes and (under)achievement with the aim of disentangling the abundant meanings and understandings that different actors ascribe to them; in this sense, the section on the national debates held in each of the participating countries offers a clear insight into the diversity of *epistemological* and methodological approaches applied, also considering their varying ability to weigh in extra-educational dimensions. The aim of the section is to frame the current state of the art on research and policymaking related to learning outcomes. This state of the art on learning outcomes shall reconstruct the dominant debates and meanings attached to learning outcomes and

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"highlight an area in need of further research" (Grant & Booth, 2009, p. 101), which CLEAR aspires to explore.

4.1 Learning outcomes

Before debating the concept of learning outcomes, we want to frame more broadly what is understood by the process of learning itself. Learning is often equated with attending the institutionalised system of (compulsory) *formal education*, from kindergarten up to university. There are, however, other forms of learning, including the non-formal and informal education. By *non-formal education* we refer to non-compulsory learning with educational objectives, including lifelong learning, open youth work or community-based programmes. By *informal education* we refer to unplanned and unstructured learning processes which occur in different environments and which are usually not intended by the learners. In the course of informal learning, mass media, including digital devices, play an increasing role in developing new, yet uncertified skills and competencies.

Against this background, the term learning outcomes gained currency during the past decades to refer to a specific understanding of learning/teaching as modelled in a process-product approach. As such, learning outcomes focus specifically intentional activities in teaching/learning and those that can be measured/quantified.

According to Hussey & Smith, learning outcomes are the "observable products of the activities of the educators", that is, "the products of the learning process within the pupil" (2002, p. 223). Learning outcomes are indissociable from their assessment, both conceptually and historically. Indeed, CLEAR departs from the assumption that learning outcomes are not natural and self-evident phenomena, but rather the result of manifold intersecting factors and people: institutional arrangements, spatial and socio-economic determinants, discursive and socio-cultural influences, as well as individual experiences, dispositions, and cognitive and psycho-emotional abilities. Therefore, we stress that learning outcomes are products of the activities of multiple actors (learners, significant others, experts, etc.), and not only educators. Given this focus on the processes of constructing learning outcomes, which are interpreted as the result of manifold intersecting factors and people, we need to account for the fact that they are multifunctional tools, serving the purposes of defining the levels of qualifications frameworks, setting qualification standards, describing programmes and courses, orienting curricula, and defining assessment specifications, therefore "influencing teaching methods, learning environments and assessment practices" (Cedefop, 2017, p. 14). This multi-dimensional perspective also needs to consider the use of learning outcomes as both *pedagogical and managerial devices*, particularly since these specific student-focused expectations follow a unit of instruction, usually stated in observable and measurable terms.

The pioneering work by Bloom et al. (1956) set the stage for decades of objectives' definition and description across all education levels, even if the notion of learning

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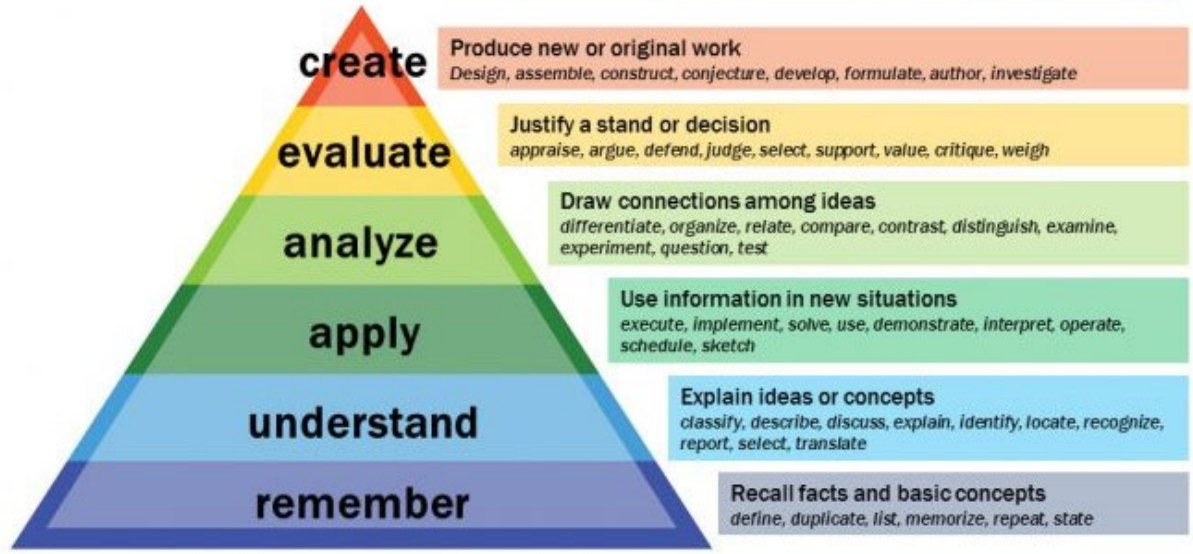
outcomes developed mostly in close articulation with the significant expansion of secondary and tertiary education from the 1950's onwards. It can therefore be said that it already has a rather long history in the fields of educational and psychological research (Murtonen, 2017). Essentially, it was behaviourism that emphasized the advantages of a clear identification and measurement of learning and the need to produce observable and measurable outcomes. For learning outcomes to be observable and measurable, they require detailed definitions, namely the use of specific verbs to describe targeted behaviours (see Figure 4). The figure shows how the production of learning outcomes grows from acquiring basic skills to creating new works and how it is accompanied by expectations on knowledge comprehension. Learning outcomes are, therefore, very often tied to a taxonomy or hierarchy of learning levels: knowledge, comprehension, application, analysis, synthesis, and evaluation (Bloom et al, 1956).

Figure 4 – Bloom's taxonomy



Source: Armstrong, 2010

The approach's simple but persuasive idea is that clearly stated objectives will guide teachers and students and explain how student achievement will be measured (Melton, 1997). To be sure, there has been a move from the – more frequent in the past – conflation between instructional objectives and learning outcomes, as the latter have begun, even if often only tentatively, distance themselves from behaviouristic approaches (see Murtonen, 2017) and acknowledged the complexity of the relationship between knowledge, skills and attitudes (originally understood mostly as separate dimensions), the role of motivation and the distinction between higher and lower order thinking skills and learning processes (see Harden, 2002). Yet, there remains among researchers, practitioners and, as will be discussed later, policymakers, and attraction for the broad assertion that clearly stated objectives can indeed guide teachers and students in their activities. This postulation has been upheld by authors originating from different academic disciplines and speaking about different topics. Harden (2002), from a medical research perspective, highlights how learning outcomes may play a guiding role: "They

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provide an intuitive, user-friendly and transparent framework for curriculum planning, teaching and learning and assessment (…) Teachers identify with the outcomes and students take more responsibility for their own learning" (2002, p. 152). From the perspective of Higher Education, Allan (2006) makes the following observation:

> learning outcomes are clearly expressed, in a form which enables learners to know at the commencement of a course or module, what it is they are expected to achieve in relation to subject content, personal transferable skills and academic outcomes (Allan, 2006, p. 104).

Similarly, Phillips et al., "present a framework for describing learning outcomes that should help citizen science practitioners, researchers, and evaluators in designing projects and in studying and evaluating their impacts" (2018, p. 1). It is therefore undeniable, according to Adam (2006), that

> learning outcomes are at the forefront of educational change. They represent an adjustment in emphasis from *teaching* to *learning* typified by what is known as the adoption of a student-centred approach in contrast to the traditional teacher-centred viewpoint. Student-centred learning produces a focus on the teaching – learning – assessment relationship and the fundamental links between the design, delivery and measurement of learning (Adam, 2006, 3f [original emphasis]).

This change has been linked to the requirement for more precise curriculum design and the recognition that more effective and varied learning methods benefit students. This has increased the requirement to convey knowledge, understanding, skills, and other traits inside qualifications and their components through learning outcomes (Otter, 1995). In parallel, as stated by Hussey and Smith, "The greatly increased public expenditure [on education at this time] encouraged the feeling that educators had to make their practices more *scientific* and accountable" (2002, p. 222 [original emphasis]), which led to the development of quantifiable assessment criteria of the educators' work. It is then clear that, from the very start, learning outcomes are not strictly pedagogical apparatuses, "statements of what a learner is expected to know, understand and/or be able to demonstrate at the end of a period of learning" (Adam, 2006, p. 2). They are also managerial tools of performance management that currently encompass all subject areas and most (if not all) education and training levels. For example, as argued by Adam, they became "a fundamental building block in the Bologna educational reform process" (2006, p. 3).

Indeed, there is perhaps no clearer area than higher education to ascertain the double role of learning outcomes as pedagogical and managerial tools. To be sure, this is very much indebted to the Bologna process and the establishment of the European Higher Education Area (EHEA) (Cumming & Ross, 2008; Karseth & Solbrekke, 2016; Byrne, 2012), even if there were similar movements in other parts of the globe – pushed forward, for instance, by the National Institute for Learning Outcomes Assessment (NILOA) in the USA and the Australian Government led Tertiary Education Quality and Standards Agency (Murtonen, 2017). According to the Bologna Working Group on Qualifications Framework

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(2005), learning outcomes are one of the building blocks of the architecture of the EHEA, together with qualifications frameworks, cycles, quality assurance, credits, recognition and lifelong learning. The so-called London Communiqué, which resulted from a Conference of European Ministers Responsible for Higher Education, held in London in May 2007, stated that

> Qualifications frameworks are important instruments in achieving comparability and transparency within the EHEA and facilitating the movement of learners within, as well as between, higher education systems. They should also help HEIs [Higher Education Institutes, authors] to develop modules and study programmes based on learning outcomes and credits, and improve the recognition of qualifications as well as all forms of prior learning (Conference of European Ministers Responsible for Higher Education, 2007).

That is, the Bologna process was designed to serve several purposes at once: *pedagogical* (a supposedly better way of teaching and learning), *managerial* (enhancing academic mobility and comparability between courses and higher education institutions across Europe), and *socioeconomic* development (strengthening European economy and identity) (see Cumming, 2008; Karseth & Solbrekke, 2010). Yet, there are also at least two major realms in which criticism is addressed to learning outcomes: the ideological and the pedagogical-scientific (interestingly, there is a degree of overlap between them). These critiques are well developed in Murtonen's 2017 review of studies on learning outcomes. On broad pedagogical terms, the potential trouble with learning outcomes is that

> if students are successful in achieving exactly the predetermined learning objectives and nothing else, the university has failed in its mission. The goal of university education is to produce something new and open opportunities of novel thinking that cannot be stated in advance (Murtonen, 2017, p. 124).

Furthermore, while the cognitive turn has given rise to substantial critiques of behaviourist approaches, Murtonen's recent review reveals that the proportion of publications that endorse the behaviourist approach to learning outcomes is more than four times larger than that of those that are critical of such approach. There is a particularly noteworthy criticism of the behaviourist approach to learning, which is rooted in behaviourist epistemology and its conception of "knowledge as separate units, or [...] as repertoire of behaviour, without active construction of meaningful structures of knowledge" (Murtonen, 2017, p. 117). These premises render behaviourist approaches to learning incapable of accounting for longer, more complex and abstract learning processes, due to the fact that they reduce knowledge to external behaviour – that is, more easily observable and measurable phenomena. Therefore, a behaviourist approach appears to be ill-suited to provide definitions of all learning outcomes, particularly those of higher order learning (Murtonen, 2017). Also, at a more technical level, it is hard to see how each and every potentially relevant learning outcome might be assessed in order to satisfy the psychometric premises of reliability (meaning that they are consistent and

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stable over time and across different contexts), validity (meaning that they measure what they are intended to measure); objectivity (meaning that they are not influenced by the biases or subjective judgments of the assessors); sensitivity (meaning that they are able to detect meaningful differences between individuals or groups) and responsiveness (meaning that they are able to detect changes in learning over time or in response to educational interventions).

In their turn, critiques of learning outcomes at the ideological level articulate clearly with managerialism. As stated by Bennett & Brady (2012),

> the roots of the LOA [Learning Outcomes Assessment, authors] movement, as opposed to engaged learning practices, can be tracked back to Taylorism and the theories of scientific management. LOA is really another manifestation of the standards movement, which emerged alongside the efficacy movement at the turn of the 20th century (Bennett & Brady, 2012, p. 147)

One dimension in which this trend is visible is that of employability. Clarke, for instance, observes that:

> As a result of policy decisions, and despite an overall decline in public funding for higher education, policy-makers want to see measurable outcomes from their investment (Holmes, 2013) which means that graduates are expected to exit their studies in work-ready mode and with demonstrable levels of employability (Clarke, 2018, p. 1923).

At the intersection of both realms – pedagogical and ideological – is the critical understanding that, while learning outcomes may have been instrumental in developing management modes that ensure the comparability of courses and degrees, they have yet to produce substantial changes in the way the teaching-learning processes are carried out in practice (Friedrich, 2016).

Learning outcomes, however, do not refer only to higher education. Byrne (2012, p. 141f), for example, points out that "it may not be feasible or desirable to attain greater alignment of the third level system unless the primary and secondary education systems across Europe are also aligned and possible cultural differences can be accommodated". Despite not being specifically focused, at least for now, on creating something akin to the European Higher Education Area, PISA is clearly the most ambitious initiative regarding the definition and measurement of learning outcomes. Its current coverage extends well beyond Europe, encompassing a growing number of countries across the world (85 countries in its 2022 round). As stated by Andreas Schleicher, its initiator and Director for Education and Skills at the OECD,

> Up to the end of the 1990s, the OECD's comparisons of education outcomes were mainly based on measures of years of schooling, which are not reliable indicators of what people actually know and can do. The Programme for International Student Assessment (PISA) changed this. The idea behind PISA lay in testing the knowledge and skills of students directly, through a metric that was internationally agreed upon; linking that with data from students, teachers, schools and systems to understand performance differences; and then

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> harnessing the power of collaboration to act on the data, both by creating shared points of reference and by leveraging peer pressure (Schleicher, 2019, p. 3).

And he adds that

> Over the past two decades, PISA has become the world's premier yardstick for comparing quality, equity and efficiency in learning outcomes across countries, and an influential force for education reform. It has helped policy makers lower the cost of political action by backing difficult decisions with evidence – but it has also raised the political cost of inaction by exposing areas where policy and practice have been unsatisfactory (Schleicher, 2019, p. 4).

These two rather long quotations are used to portray the ambition and breadth of PISA, in the words of its key figure. Even if one is not a staunch defender of PISA, it is undeniable that it has indeed become a benchmarking device for many education agents around the world. However, as argued by Gorur (2016), PISA has become more than a simple yardstick that provides descriptions of the educational *status quo* of a given set of countries: it also plays a performative function, creating new educational conditions, and, more strikingly, it has become a *project of legibility* –, in Gorur's words, the *seeing like PISA* phenomenon: that is, "standardisation, the development of a narrow field of vision focused on literacy and numeracy outcomes, abstraction, and the generation of standardised templates and protocols to guide practices" (2016, p. 608). The core of Gorur's argument is that the application of sophisticated measurement techniques has enabled the development of international indicators that, while used in wide-ranging comparative assessments, are actually quite reductionist in their understanding of reality:

> By *flattening* education into a standardised, decontextualised phenomenon, education à la PISA has become portable. Its ideas and philosophies are seen as being readily and easily transportable across the world, so that lessons from Shanghai and Singapore can be implemented in Azerbaijan or Peru. [...] PISA has influenced the very fundamentals of education – curricula and assessment. A new normativity – a morality, even – has come to be imposed by PISA, and absorbed by PISA participants. This is not just about adopting a specific policy [...] it is about putting in place an ongoing system of ever-increasing monitoring and data generation, and about fundamentally changing the structures and systems of administering and governing schools. It is about changing the very culture of a society by influencing the curriculum (Gorur, 2016, p. 607f [original emphasis]).

Or, in Biesta's understanding, the "common sense view about the purpose of education is the idea that what matters most is academic achievement in a small number of curricular domains, particularly language, science and mathematics" (2009, p. 37) both feeds into and is fed by large-scale international assessments, above all PISA. That is, the notion of education is narrowed down to learning for measurable results in a small set of subjects. This results in what Biesta calls the "the *learnification* of education: the transformation of everything there is to say about education in terms of learning and learners" (2009, p. 38 [original emphasis]). The measurement of educational outcomes becomes the norm with which to direct and assess educational policies and practices. In Biesta's words, it risks valuing what is measured rather than measuring what is valued

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(2009, p. 43). This, of course, is closely articulated with the next section, which focuses on achievement and underachievement. However, at a deeper, more structural level, it articulates with what Tröhler (2013) identifies as the movement towards the establishment of a technocratic and technological educational culture that, based on the ideals of *programmed instruction* and human capital enhancement, would be able to strengthen countries' position in the world order.

Yet, in addition to these more critical stances towards learning outcomes and their usage, there are also more positive stances on the matter. Campos (2010) and Sousa-Pereira & Leite (2019), for example, discuss the relationship between students' profiles – the elaboration of which is very much dependent on learning outcomes – and initial teacher training, and put forward pedagogical proposals that are not strictly measurement-minded. With a focus on pedagogy, Adam (2006) argues that

> student-centred learning necessitates the use of learning outcomes as the only logical approach. This produces an automatic focus on how learners learn and the design of effective learning environments. There is a cascade effect that links the use of learning outcomes, the selection of appropriate teaching strategies and the development of suitable assessment techniques (Adam, 2006, p. 12f).

Thus, despite the fact that the relationship between learning outcomes and achievement has typically been approached from a narrow, quantitative perspective, it is nonetheless reasonable to suggest that

> we need a barometer of what works best, and such a barometer can also establish guidelines as to what is excellent – too often we shy from using this word thinking that excellence is unattainable in schools. Excellence is attainable: there are many instances of excellence, some of it fleeting, some of it aplenty. We need better evaluation to acknowledge and esteem it when it occurs—as it does (Hattie, 2009, p. ix).

Although the term *excellence* may be, in itself, subject to criticism, being able to differentiate between causes and consequences – in our case definitions of learning outcomes, modes of teaching and academic results – is undeniably important to understand what is going on in any given educational system:

> In the field of education, one of the most enduring messages is that *everything seems to work*. It is hard to find teachers who say they are *below average* teachers, and everyone (parent, politician, school leader) has a reason why their particular view about teaching or school innovation is likely to be successful. Indeed, rhetoric and game-play about teaching and learning seems to justify *everything goes* (Hattie, 2009, p. 1 [original emphasis]).

4.2 Achievement and (under)achievement

In this section, we focus on the concept of (under)achievement, or, more precisely, academic (under)achievement, which has been a focus of research and policymaking at national and European level for many years.

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In the CLEAR project, the term (under)achievement is used in brackets, in order to highlight its selective character and the fact that what counts as academic (under)achievement in one country or region may not apply the same in other contexts. Further, and in accordance with what has been said above, it is our goal to look beyond the simplistic logic of categorising students into achievers, over-achievers and low-achievers, and instead problematise the very construction of the term, its use in policy-making and in various learning environments and skills ecosystems. We look particularly at the manifold intersecting people and factors that cause some portions of students to appear as underachievers, keeping in mind that academic achievement applies to a much broader set of abilities and skills, which are not depicted in quantified and measurable learning outcomes, but can equally contribute to pursuing a successful life course. That is, we acknowledge that issues of intergenerational justice, socioeconomic equity and democratic culture go hand in hand with the definition(s) of (under)achievement and, importantly, the categorization of people into *boxes* as achievers, under-achievers or non-achievers. From a broader perspective, academic (under)achievement is a recurring public discourse crisis and has been called the *predominant rhetoric* in education in recent years (Weiner et al., 1997). According to Whitmore (1980), it was the post-Sputnik self-excoriation in the late 1950s that brought the word to prominence. The concept itself refers to the ability, or rather inability of some students to reach certain levels of school attainment. In order to present the various meanings and understandings of the concept of (under)achievement, we attempt to map – albeit incompletely, given the immensity of the task – the main approaches to the topic.

Scientific approach to (under)achievement

To begin with, there are different types of maps that can be elaborated. One possibility is to elaborate a map based on the differences between scientific disciplines. In this case, the most relevant to the issue at stake are psychology and sociology.

A psychological approach to (under)achievement looks at the difference between actual and predicted attainment of an individual. This branch of research seeks to understand "why persons fail to achieve their potential or fail to meet expectations for performing at a level that they are capable of performing" (Levesque, 2011, p. 3025). In this vein, researchers define underachievement as "a discrepancy between ability or potential (expected performance) and achievement (actual performance) that cannot be explained by learning disability or the documented need for any other category of special education services" (Levesque, 2011, p. 3025). The psychological approach is, thus, interested in the individual's abilities and skills which either match the expected outcomes or not. Hence, the adoption of a quasi-behaviouristic approach to learning outcomes largely overlooks the importance of pedagogical interactions and learners' involvement in the learning activities on academic achievement, which provides useful information for educators. On the one hand, learners should have the opportunity to interact with educators and with other participants in order to increase their learning opportunities. On the other hand,

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educators should provide a learning environment in which participants are motivated and involved in the learning process.

In its turn, a sociological approach looks at the relative performance of groups of population and the differential attainment between them, contrasting, e.g., the performance of (students in given) schools against their socioeconomic background (see OECD, 2010). It seeks to understand why certain groups differ in their academic achievement, explaining it on the ground of their different socio-economic status, religion, gender or geography (Harris et al., 2021, p. 5). Some researchers also see correlations between achievement and ethnicity/culture (Herrera et al., 2020) or between achievement and obesity (Gillies, 2008, p. 2). A core distinction here is made between *achievement* and *attainment*. While educational attainment is limited to the "level of academic performance, often expressed in quantifiable terms" (Gillies, 2008, p. 4), academic achievement is a much broader term transcending schooling and includes skills and abilities that are not quantifiable and visible in testing.

(Under)achievement in variables

Another way of mapping would be to focus on the factors or variables that articulate with (under)achievement. To do so, one might follow the typology advanced by John Hattie on his momentous work on achievement, titled *Visible Learning*, which presents a synthesis of more than 800 meta-analyses related to achievement. Such a map would be organized around the following dimensions: the student; the home; the school; the curricula; the teacher; the approaches to teaching. When Hattie refers to the students, he argues that they "not only bring to school their prior achievement (from preschool, home, and genetics), but also a set of personal dispositions that can have a marked effect on the outcomes of schooling" (2009, p. 40). Regarding the home, what is at stake are the family's resources (e.g., their socioeconomic status), the family structure and environment, television, parental involvement, and home visiting. In what regards the contributions of the school to (under)achievement, Hattie identifies 6 major variables:

> attributes of schools (e.g., finances, types of schools); school compositional effects (e.g., school size, mobility, mainstreaming); leadership; classroom compositional effects (e.g., class size, ability grouping, retention); school curriculum effects (e.g., acceleration, enrichment); classroom influences (e.g., climate, peer influences, disruptive behavior) (Hattie, 2009, p. 73).

The teacher-effect is analysed considering items such as the "teacher education programs, teacher subject matter knowledge, the importance of the quality of teaching, the quality of the teacher-student relationships, professional development, and teacher expectations" (2009, p. 109). In its turn, curricula are assessed both in terms of subjects (literacy, numeracy, arts, values, etc.) and specific programs (e.g., creativity programs, bilingual programs, career interventions, moral education programs, tactile stimulation programs). On the one hand, the contributions of teaching to (under)achievement take into account the goals and success criteria set as well as the fostering student

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involvement. On the other hand, they consider a range of teaching approaches, namely direct instruction, school-wide programs, using technology, and out-of school learning.

Widening the understanding of (under)achievement

A third way of mapping the approaches to the theme of (underachievement) is to differentiate between the strict realm of academic learning and success in school and the realm of issues that, while they may relate with academic learning, go beyond it – here we can consider topics like the social and emotional outcomes of learning, and civic learning outcomes.

Regarding the strict realm of academic learning and success in school, there is a wide range of approaches which ultimately tend to share a concern with the efficiency and effectiveness of the learning process, insofar as it translates in academic achievement. These approaches focus mostly – although not exclusively – on the individual level. Here we find research on the benefits of cognitive psychology-based learning techniques and interventions aimed at changing students' mindsets – which also serve the purpose of assisting students in regulating their learning (Yeager, 2011; Dunlosky, 2013). Also, based on a psychological and individualistic approach to academic learning and success, studies on resilience – which can be defined as "good outcomes in spite of serious threats to adaptation or development" (Masten, cit. in Yeager, 2012, p. 303) – have become common in the past couple of decades. Likewise, research on *Gifted Education* has identified several factors commonly associated with underachievement which are connected to the individual. Among them are low academic self-perception, low self-efficacy, low self-motivation, low goal valuation, negative attitudes toward school and teachers, and low self-regulatory or metacognitive skills (see Levesque, 2011, p. 3028). It has, however, pointed out to the fact that the group of underachievers is very heterogenous and that each student "may underachieve for a somewhat unique combination of reasons" (ibid.). In this regard it is difficult to distinguish what exactly leads to the discrepancy between ability and achievement, since "no reason exists to believe that all gifted students should achieve well academically (Janos & Robinson, 1985) or that ability and achievement should be perfectly correlated (Thorndike, 1963)" (Reis & McCoach, 2000, p. 154). At the level of teacher intervention, studies on the differential effects of active and traditional learning are worth mentioning (Freeman, 2014). Related with teacher intervention, but not entirely dependent on it, and also related with learning and academic success, although going beyond it, is the concept of engagement, which has also become a stale in research on (under)achievement. To be sure, it is complex and multifaceted, and can be approached from several angles:

> four relatively distinct approaches to understanding engagement can be identified in the literature: the behavioural perspective, which focuses on effective teaching practice; the psychological perspective, which views engagement as an internal individual process; the socio-cultural perspective, which considers the critical role of socio-cultural context; and finally a holistic perspective, which strives to draw the strands together (Kahu, 2013, p. 758).

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The concept of school climate (or perceptions of school environment) plays an important role in engagement, as highlighted by Wang (2010). The affective qualities of teacher-student relationships are also positively correlated with engagement and achievement, as stated by Roorda (2011). Finally, it is worth mentioning studies on the relationship between school leadership and students' academic achievement (Robinson, 2008).

Moving on to the realm of topics that, while certainly relatable to academic learning, go beyond it, a first, crucial line of research focuses on what can be broadly defined as the *social outcomes of learning*. These are grounded on the acknowledgement that the effects of education are not limited to areas such as labour market earnings and economic growth. Instead, they encompass, for example, health and civic and social engagement (Desjardins et al., 2006). In the same train of thought, Dias & Soares (2018) discuss specifically how the development of civic and social competences is valued by the labour market (and, as mentioned above, strictly academic learning outcomes are also supposed to enhance employability). To be sure, social and emotional competences are not relevant only at the end of secondary or tertiary education, in the transition to the labour market, but are also developed in specific programs from the kindergarten onwards (Durlak, 2011). Finally, there is the classic, fundamental area of research on the ways in which socioeconomic inequalities articulate not with achievement (as already hinted above, when discussing Hattie's work), but also with the agents' relationships with the school as a whole. More recently, this classic topic in the sociology of education and in the educational sciences has been enriched by the intersectional approach (Gillborn, 2015), which enhances the analysis and assessment of educational inequalities through the articulation of individual and collective features – including those that are hardly captured by statistical instruments.

Merit and academic (under)achievement

Finally, a fourth mode of addressing the topic of (under)achievement refers to its relationship to what Sandel (2020) calls *the sorting machine*: the higher education system and the ways in which it, while claiming to operate around merit as a driver of social mobility, actually reinforces inequalities. This points cogently to a potential serious problem in the purportedly common-sensical view that there is – and should be – a relationship between merit and social mobility. The notion of merit, to be sure, currently revolves around the understanding that success is something to be earned through one's own efforts (including academic achievement); that is, as something for which each individual is responsible (Sandel, 2020). It could be argued that, just like we typically fail to realize that the apparently reasonable notion of learning outcomes cannot really be measured in terms that provide the *absolute* answers desired, we typically also fail to realize that the apparently reasonable assumption that merit – specifically, academic merit – and social mobility are strongly articulated does not hold. First, it can be argued that this happens because academic scores and socioeconomic status tend to be positively correlated across cultures and school levels (Sirin, 2005; Sandel, 2020; Nunes

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et al, 2022). Thus, academic trajectories eventually lead students to places that entrench rather than disrupt inequalities. Second, educational policies, organizations and practices also play a fundamental role in this phenomenon, from the definition of *what counts* as knowledge to the definition of tracking models (Sulis, 2020) and access systems to higher education (Nata et al, 2014). In this regard, while the notion of widening access to higher education has been gaining assent (European Education and Culture Executive Agency et al., 2020), Stone's (2013) proposal to resort to the luck of draw to make decisions on access to higher education still sounds like anathema – probably because it goes against the above mentioned the well-established, supposedly reasonable, understanding of the relationship between merit and academic achievement.

To conclude, the issue of (under)achievement contains normative value judgements, as it presupposes that there is a standard or expected outcome against which the student is measured, which may itself cause difficulties to some groups of learners: "Should we identify individuals as underachieving because they choose not to perform in areas that they do not value and that are not of interest to them?" (Siegle, 2018, p. 288). In this regard, every form of reverse intervention, be it counselling or instructional intervention (Levesque, 2011, p. 3030), needs to acknowledge that (under)achievement can occur accidentally, either earlier or later in the academic or occupational career, that it appears as a combination of various selective factors, and that only some students develop a chronic pattern (cf. Levesque, 2011, p. 3027). Further, the focus on (under)achievement needs to be shifted more towards the socioeconomic composition of a school or territory, as well as towards the organization of academic activities (from curricula to pedagogics), to complement the strict individualistic or gender explanation of (under)achievement (see Moreau, 2011). To sum up, there are several conceptual difficulties with the notion of (under)achievement. On the one hand, identifying the criteria for achievement and underachievement is a complex and contested field. On the other hand, identifying (under)achievement or failure to reach one's own potential is similarly awkward. What is more striking, however, is the equation of learning (under)achievement with societal (under)achievement, which risks stigmatising young people as capable of following their life projects despite low academic performance.

4.3 Scholarly and public debate on learning outcomes and (under)achievement

This subsection provides a reconstruction of the public and scholarly debate on learning outcomes and (under)achievement in the national contexts of the countries studied. Its goal is to highlight the prevailing understanding of the topics by exploring the dynamics through which different actors interact shaping the public debate, either supporting or hindering specific approaches in research and policy-making.

To capture the diversity of the debate and the prevalent understanding of learning outcomes and academic (under)achievement at the national level, the National Partners have provided information (on the base of a structured questionnaire) about their contexts, enabling grouping according to various dimensions. Overall, the characteristics

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of the national-level debates have been reconstructed to represent varying degrees of *openness* concerning the involvement of different actors and perspectives, as well as their capacity to influence policy-making processes.

Specifically, the documents produced by the National Partners focused on several aspects, including the institutional profile of the main actors involved, the prevailing views on the topics, the educational contexts studied, related methodologies and target groups, the connections with extra-educational domains (such as skills formation, labour market, and lifelong learning systems), and the characteristics of the National Qualification Frameworks. Finally, the National Partners have indicated the institutional and/or individual actors generally held accountable for low learning outcomes and/or achievement performances in their contexts.

The scenarios surrounding the public debate on learning outcomes and academic (under)achievements at the national level have been reconstructed by paying particular attention to the different kinds of actors leading it and the related differential of power in defining the mainstream readings of the topics and interacting with policy-making processes. Furthermore, the prevalent epistemological and methodological approaches applied by research on these topics have been scrutinized, considering their varying ability to give attention to extra-educational dimensions and thus deepen the understanding of the social and structural factors that intervene in the processes of the construction of learning outcomes. Finally, the features of the public debate have been considered by questioning how they contribute to ascribe the responsibility for low achievements to individuals and/or institutions.

In addition, considering the last ten years, the National Partners were asked to provide a selection and short summaries of four scientific products (books, essays, or papers) which have proved particularly relevant for the debate in their countries. The collection is not meant to approximate a systematic review of literature, rather it aims to provide a further depiction of the debate at the national level, enabling a reflection of the balance between academic and institutional knowledge on the topics, as well as on the different degrees of visibility acquired by research produced by non-standardised approaches.

In following, we present a systematisation of the gathered information through the juxtaposition of the countries studied along the dimensions explored for the reconstruction of the national debates. The summaries are followed by a list of open questions to be potentially tackled by the different research lines of the empirical Work Packages. The collection of the more relevant and selected products in the scientific debate is presented in the Annex (see Annex).

Central topics and prevalent understandings

In the countries studied, the prevalent framing of the notion of learning outcomes draws from different forms of measurement. The *objectifying* and standard-based approach aims to assess the learners' performance by considering the results of large surveys and

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monitoring systems designed at an international level – such as PISA (Austria, Portugal) – or at a national level, although with the aim of international comparison (in Finland, Italy, Germany). Some variability is observable for the objects of measurement as some countries are more oriented towards disciplinary subjects of learning (Finland, Italy, Portugal), while others are more prone to evaluate learning outcomes levels in terms of professional credentials and qualifications (Spain), transversal/social skills (Germany), or professional skills and competencies (Germany).

Against this background, in some countries, the analysis of learning outcomes goes beyond their descriptive understanding by putting the learning performances in relation to the different learners' social backgrounds and, more generally, to the effects of social inequalities. This aim is often pursued by following two main, yet not necessarily mutually exclusive, directions:

- The first direction is the *application of mixed research methods* (Austria, Spain, Finland) aimed at exploring the interplay between disadvantage and learning by enhancing the quantitative view with qualitative research. The issues tackled in this sense are, e.g., the learning gaps of youths in vulnerable conditions such as young school leavers (Finland) and/or migrants (Finland, Austria, Spain). In other countries such as Italy, some qualitative lines of research attempt to support complementary and critical readings of the dynamics underlying the construction of learning outcomes, although their resonance has still a limited impact on the mainstream.
- The second approach entails a shift of the focus of analysis, by *accompanying the quantitative reading of learning outcomes with critical research* on different dimensions of the educational system, from the teachers' professional development (Austria) and curricula (Portugal), to the more general reflection on the capacity of the national systems to contribute to bridge the educational gaps produced by structural inequalities (Portugal, Finland). This latter topic is key in the Portuguese debate, where the assumption of learning outcomes as an objective measure is less prevailing, and more attention is devoted to the processes of their construction, although with limited reasoning on the impact of their recent introduction.

There is very limited evidence of a public debate on learning outcomes in Greece, where the topic is mostly tackled by a top-down institutional approach to their measurement, and no evidence of its presence in the Bulgarian context, where the debate focuses on the overall quality of the national education and training system. In most countries studied (Austria, Italy, Bulgaria, Finland), the debate on (under)achievement overlaps with the one on learning outcomes, thus framing (under)achievement as a dimension measurable through the analysis of learning outcomes. In the contexts where the two topics are more distinguished, the debate on (under)achievement tends to be more critically shaped. For instance, in Greece, it is mostly discussed by a socio-psychological approach, considering the intersectional profiles of learners. In Germany, the dynamics

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shaping (under)achievement are tackled from the perspective of educational justice, considering dimensions such as labour market and economic dynamics, family structure, and social developments. In Portugal, the discussion on (under)achievement is influenced by the recent general improvement of the Portuguese students' performances according to the results of international tests, which is interpreted as a consequence of long-lasting policies aimed at fighting social exclusion through the synergy between the educational and social policy systems. However, attention is devoted to the institutional and political mechanisms producing (under)achievement, and the capacity of the system to tackle inequalities is questioned (e.g., regarding difficulties in improving the educational attainment of the most disadvantaged and their transition to higher education).

Against this background, we can formulate few open questions for further research:

- Is the distinction between the topics of learning outcomes and (under)achievement an indirect expression of the institutional "openness" to overcome the performative and standard-based vision of achievement?
- To what extent is the prevailing statistical quantification of learning outcomes able to inform processes of policy-making targeting educational inequalities?
- Do the standardised approaches focused on the assessment of individual performance produce pressure on the learners who do not reach the expected levels? And does it also influence the attitude as well as the self-evaluation of teachers and other street-level professionals in education?
- In which direction are national education systems moving to address the growing recognition of the importance of soft/relational skills in the successful development of youths' life courses?

Key actors participating in the scholarly and public debate

Some institutional actors recur in leading positions within the debates at national level. Universities and (public and private) research centres are involved in all countries in the analysis of learning outcomes and the processes that determine (under)achievement. Moreover, various state institutions also contribute extensively to the debate. Specifically, institutional bodies working in the field of education and labour market develop reflections and research in the field of learning outcomes and (under)achievement. In this context, in every country, specific organisations are in charge of analysing, researching and defining a policy orientation in this area, also in relation to EU and PISA recommendations. In Spain and Germany, the federal dimension hinders the framing of a homogeneous national approach, as the landers in Germany and the autonomous regions in Spain implement different patterns of educational governance.

Non-governmental bodies – such as non-profit associations, trade unions or informal networks of teachers or students – intervene in the construction of learning outcomes and (under)achievement in all the countries, although with different impacts. Spain and Greece are the countries where they play a more relevant role, and the voices of trade

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unions and non-governmental organisations are taken into consideration by policy-makers in the fields of educational and labour market policies. Differently, in Italy and Bulgaria, notwithstanding the relevant number of non-institutional organisations participating in the public debate, they can only slightly impact policy-making processes. Noteworthy, in Portugal, even informal networks of teachers and pedagogues are able to produce research and claim visibility for their knowledge in this field. Finally, in Finland and Austria, there is no evidence of non-governmental organisations playing a relevant role in this context.

Departing from these observations, we can formulate the following open questions:

- Are the policy-making processes able and/or willing to consider and give value to the research on learning outcomes and (under)achievement produced by non-governmental bodies?
- With respect to dissemination, how can academic research impact more effectively the policy-making processes in this field?
- How can learners be supported in gaining a role in the debate on learning outcomes and (under)achievement?

Main focus of research and related targets

There is a quite a strict relation between the most investigated educational contexts and the main targets on which research processes focus. In this sense, research considers most of the levels of formal education systems, while differences can be identified regarding informal and non-formal dimensions.

For instance, Austria is the only country where research focuses not only on the three main educational contexts, but also on the interplay between them. Conversely, in Italy, Bulgaria, and Portugal, research has recently focused on informal and non-formal educational contexts. In Greece, Germany, Spain, and Finland, research is developed exclusively on formal educational contexts.

In terms of prevailing targets, research processes in all countries aim to observe individuals' educational pathways at all levels, from compulsory schooling to Vocational Training and Education (VET) and lifelong learning dimensions, as well as university students. However, differences can be identified between different contexts. While in Bulgaria, Greece, and Italy, there is a focus on learners emerging, in Austria and Portugal, research also looks at the role and training of teachers and their educational models. In Finland, due to the features of the basic comprehensive school system, research mainly focuses on early childhood education systems, addressing younger age groups.

Notably, in all contexts, and especially in Germany, Portugal, Greece, Italy, and Austria, disadvantaged groups are studied with particular attention to their learning outcomes and to the processes of (under)achievement affecting them. Germany is the only country where the focus is on adults with low literacy.

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From the observed differences, we propose the following open questions:

- How do formal, informal, and non-formal educational systems interplay, and does their interaction affect learning outcomes and (under)achievement?
- What would research that interrogates the interplay between formal, informal and non-formal educational contexts look like?
- With regard to disadvantaged groups, how can research analyse not only their individual performances, but also the shortcomings of the educational systems contributing to their low learning outcomes levels?

Research methodologies

In the most countries studied, quantitative methods prevail and prominent policy research and educational institutes lead this strand of research, also in connection with the EU and PISA recommendations. The data are often further processed through secondary data analysis. However, research groups using qualitative methods are present in most of the countries. Generally, such research focuses mainly on the experiences and perceptions of the actors participating in the education systems from different perspectives (students, educators, stakeholders). They are usually small-scale, and the most research tools are textual and documentary analysis, interviews, and policy analysis. Qualitative research tends to be considered as a complement to quantitative research, and it does not seem to be systematic and widespread enough to impact policy-making. Finally, it is important to underline that the critical approaches to the paradigms defined by the learning outcomes' centrality are more prone to apply qualitative research, as described in the Italian case.

Hence, the following open questions:

- Considering the relevance of quantitative research for policy-making processes, how can qualitative research reach an equal or at least a higher level of influence?
- In terms of sustainability, is it possible to design participatory tools that empower the synergy between qualitative and quantitative research?

Connections with extra-educational domains

In relation to the connections between the topics of learning outcomes and (under)achievement with extra-educational domains, including skills formation and professional competencies, as well as the broader lifelong learning system, we can identify some countries where the effort is to strengthen such connections. In such countries, the debate is focused on the skills mismatch between education and labour market systems, and the synchronization between the two systems is pursued through interventions on the skills ecology at national and regional levels. This concerns both secondary vocational and university education in three countries: Bulgaria, Greece, and Italy. In these contexts, the attempt is to promote cooperation among different institutional stakeholders (employers, industry practitioners, professional organizations, teachers, and educators) to reduce the significant skills mismatch characterizing the

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national level. In Greece, an ongoing process of reform impacts the learning programs, which are shifting from educational contents to competence-based programs. Pilot projects have been implemented together with local or regional companies aiming to adapt students' profiles to the competencies needed by the companies. In Italy, over recent years, several legislative initiatives as part of the reform of the labour market have led to setting two important priorities: developing a national system of competence certification and validation of non-formal and informal learning as key elements of national lifelong learning systems, and implementing the *Atlas of work and qualifications* (https://atlantelavoro.inapp.org/), developed as a methodological tool for the rationalization of the high number and variability of qualifications.

In other countries, the synchronization between education and labour market systems is stronger, showing connections between the topics of learning outcomes and the broader lifelong learning system: it is evident in Austria, Finland, Germany, Portugal and Spain. In Austria and in Finland, there is particular attention to the recognition of informal and non-formal learning outcomes, as well as for the skills acquired outside the formal education system. In Finland, such recognition is considered a key element for the integration of lower achievers (e.g., migrants) in the labour market and to prevent their social exclusion. The focus on the wider benefits of lifelong learning characterizes the debate in Germany too, mainly referring to the inclusion and full civic participation of different parts of the population. Differently from the Austrian and Finnish contexts, in Germany, the recognition of prior learning (non-formal and informal) is rather a marginal topic in the debate. In Austria, various programs have been introduced to promote lifelong learning, adult education, workplace learning with a growing emphasis on upskilling and reskilling through the VET system. Consistently with the dual system, there is a close relationship between educational institutions and employers, also in the design of vocational education and training programs aimed at providing the graduates with skills spendable for specific occupations. Portugal has some initiatives that seek to enhance the training and school qualifications of early school leavers, such as the *Second Opportunity Schools* carried out by non-governmental organisations, as well as government initiatives aimed at creating a national training system, such as the *Institute of Employment and Vocational Training* (IEFP), which provides technological specialisation courses and other training, in order to increase the qualifications of the Portuguese population and enhance their integration into the labour market. Furthermore, adult VET courses targeting under 23 youths (and recognising their prior learning) are available in this context.

In Spain, the new legislation (2022) aims to strengthen the integration of the education and employment subsystems: following the model of *dual VET*, the length of professional internships offered by firms has been extended, and such internships are expected to be implemented in all the branches of training. Private schools are very active in school-based VET, and public services mostly outsource courses to private providers; in addition,

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the Spanish public employment services deliver specific vocational training that leads to professional qualifications.

Against this background, we propose the following open questions:

- How do policies aimed at strengthening the connections between education and labour markets (e.g., apprenticeships, work-based learning, employability schemes, etc.) take into account different individual learning outcome levels and with what results?
- Among the measures aiming at managing young people's transitions, which are considered most suitable for underachievers?
- To what extent does the effectiveness of such policies depend on: I) specific national socio-economic features? II) The institutional context (i.e., attitude to collaboration or fragmentation among the main involved actors)? III) Specific characteristics of the tools/modalities promoted by the policies (i.e., apprenticeships, work-based learning, etc.)?
- To what extent does the growing emphasis on upskilling and reskilling risk reinforcing the discourse of the knowledge economy, according to which the role of education is interpreted as functional to the market? What are the implications for the other understandings of education within society?
- How are the recognition of informal and non-formal learning outcomes, as well as the skills acquired outside the formal education system, affecting post-compulsory education transitions and, more generally, the lifelong learning landscape? What are the implications for social inequalities?

National Qualification Framework (NQF) and credentials

In all countries, the *National Qualification System* (NQS) is focused on learning outcomes and a clear definition of knowledge, skills, and competencies that should be acquired at each level of qualification, according to the *European Qualification Framework* (EQF). However, in some countries, such as Greece and Italy, a gap still exists between formal legislative regulations and practical implementation of learning outcomes orientation. For instance, the Greek authority that developed the NQF links EQF levels to existing qualifications in Greece without any reference to specific learning outcomes that, in any case, were not in use. In Bulgaria, NQS is seen as a significant contribution to the process of modernizing the national educational system, aiming to achieve transferability of qualifications and encourage mobility of workers, students, and educators. The strong relation to lifelong learning and employability is also evident in the NQF in Germany, with the aim of securing the transparency and clarity of competence-oriented qualifications.

The debate on credentials (micro-credentials, credit transfer and accumulation system, open budget) is still ongoing in some countries, such as Finland, Germany, and Italy, while in some cases, it is very weak (Greece) or not relevant (Portugal). In Finland, some documents mention the need for a competence-based approach using micro-credentials

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as part of broader qualifications, but they do not elaborate on them or develop them as part of a national system. In Portugal, the main focus is on the credit system in force within the vocational training sector, which allows credit points awarded depending on the pathway selected to be capitalized. Similarly, in Germany, credits are considered the most suitable instrument for conducting cross-land and cross-national comparisons and evaluation, as well as for the introduction of European standards for the recognition of certificates and credits among German Länder. In Italy, some recent initiatives on Open Badges at the University level have been developed, aiming to certify the achievement of field-specific, soft, and technical skills.

Based on the above-mentioned distinctions, we propose the following open questions:

- Given the strong push towards the adoption of a competence-based approach (2023 has been declared the European Year of Skills), how is it concretely applied in educational contexts and what are its implications for teaching and learning processes, as well as for students' social inequalities. What are the main obstacles in implementing a competence-based approach?
- How well-known and understood is the NQF and its connections to learning outcomes among education and training providers, end-users, and main labour market stakeholders?
- Despite limited visibility in the debate, what are the main challenges for the diffusion of the micro-credential system? What are its main advantages and disadvantages for individuals, employers, and wider society, and what are its impacts on national educational systems and the diffusion of the learning outcome approach?

Accountability for low achievement

The following dimension presents the most difficult one to frame, as it focuses on the mainstream debate on learning outcomes and underachievement. The juxtaposition of the gathered information does not allow for *clear* forms of grouping. However, we can identify a group of countries (Italy, Greece, Bulgaria, and to some extent Spain) where individual actors are mostly held accountable for low performances in learning outcomes and achievement. Students' families (in Italy and Greece) and teachers are indeed at the centre of criticism, which ranges from inadequate teachers' professional skills to the scarce *investment* of families in the educational pathways of their sons and daughters. In addition, the recent introduction of the notion of *merit* in the official name of the Italian Ministry of Education evokes potential further subjective blaming for students whose performance should not reach the expected standards. However, even in these contexts, and although less resonating, critical voices on educational inequalities can be found (with particular attention to the inadequate public funding for education in Bulgaria and Italy).

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In the other contexts, the main targets of criticism are the institutions. In Portugal, the role of policies in fostering educational equity is questioned, similar to Germany, where interesting attention to the impacts of the relationship between teachers and students is also emerging. In Finland, the (progressively reformed) educational system and its ability to cope with social change are criticized, paying attention to the interplay with extra-educational structural and cultural factors such as territorial inequalities.

Austria represents a specific case as there is no evidence of the production of *cultural blaming* in the dominant debate on learning outcomes and underachievement. More room is instead devoted to the discussion of strategies to support underachievers and underemployed overeducated migrant people.

Departing from these observations, we suggest the following open questions:

- Do the contexts, where the dominant accountability targets institutions, produce less performative pressure and reduce individualisation of structural deficiencies?
- To what extent do the processes of policy design embody the dominant views on the main *culprits* for (under)achievement?

4.4 Summary

In this section, we have provided a conceptual debate on learning outcomes and (under)achievement and analysed the scholarly and public debate on both issues in the countries studied.

We have tried to make clear that learning outcomes and (under)achievement are terms that lack a consensual, unequivocal definition, and that mapping and exploring their understandings, uses and tensions is vital to make sense of their multifarious meanings. In general, there is a tendency to objectify and quantify learning outcomes, partially due to better inform policymaking (as a tool of performance management), partially as a pressure on accountability of educators and education systems (as part of quality assurance). In research, the dominant behaviourist approach constructs learning outcomes as observable and measurable phenomena, thus lacking to account for more abstract and irreducible to numbers outcomes. With regard to (under)achievement, which is strictly explained as the result of individual performance, a redefinition of the concept is similarly needed to account for the socio-economic, cultural, organisational, but also spatial and institutional factors that underlie the construction of the term and organise the selection of individuals into various categories based on their academic performances.

We have further analysed the debates surrounding learning outcomes and academic (under)achievement in our countries studied. As the analysis has shown, there is a prevalent standard-based approach to learning outcomes as something objectifiable and comparable based on large-scale studies, most prominently PISA. Although in varying degrees, learning outcomes are gradually put in relation to extra-educational phenomena, such as social inequality, family background, socio-economic conditions etc.

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In terms of the key players of the debate, universities and research centres have a prime role, with various governmental and non-governmental bodies following. The focus of the debate is rather on formal education, although exceptions including informal and non-formal contexts can be found. A prevailing feature of the debate is also the use of quantitative methods, which are in some cases complemented with qualitative studies. This enables to connect various extra-educational domains and to look at learning performances also from the viewpoint of labour market dynamics and lifelong learning. There is also an observable tendency to apply the European Qualification Framework to national contexts and provide a clear definition of expected skills and competencies as learning outcomes. A special topic is the debate on accountability for low levels of educational achievements, which itself is relational and constructed expectation. While in some contexts, individuals and their family backgrounds, but also teachers are held responsible for low achievement, in other contexts the introduction of merit may potentially aggravate the situation and create new lines of division between low and high achievers.

The state of the art on learning outcomes and (under)achievement in the countries studied has provided a first topography of the issue in national contexts, which CLEAR aims to explore in more detail. The next section introduces the main methodological approaches to learning outcomes and gives details on the operationalisation of the study.

5. Methodological bases

The following section presents the methodological bases of the project, which is designed as a mixed-method, multi-level study with participatory elements. In the section, we first present the mixed-method approach applied in CLEAR, describe in the second step the specific methods used in every Work Package, and deliver in third step an overview of how we operationalise our empirical fieldwork.

5.1 Mixed-method approach in CLEAR

In CLEAR we apply a mixed-method approach in order to inquire into the complexity of factors involved in the construction of learning outcomes. In a *convergent* mixed-method design (Cresswell & Plano Clark, 2017), we combine quantitative and institutional analyses, qualitative interviews and expert surveys, but also innovative participatory approaches. Such combination helps us to bring together the results of the various sub-studies and gain a more comprehensive understanding of the construction of learning outcomes. The research on mixed-methods over the last years has shown that the methodology of mixed methods "has been developed into a highly diverse field with different sub-communities, many of which are only loosely connected" (Knappertsbusch et al., 2023). In order to avoid disconnection and instead enable a mutual articulation of the preliminary results into one single, integrated narrative (Tashakkori & Creswell, 2007, p. 4), we have designed an interconnected system of gathering and processing information and data from one Work Package to another, so that no sub-study stands

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alone, but requires and, at the same time, forwards the information (see Figure 5 below). In this regard, the mixed-method approach is integrated at all levels of the study and has different dynamics and intensity depending on the various phases of the project. More so, to secure a smooth cooperation at all research stages, we have developed a Glossary of key terms and definitions with one shared understanding of their application in the project (see *Research Strategy Paper and Glossary*).

With regard to data integration, we distinguish between two research stages in mixed-method design: the *experiential* and the *inferential* stage (Teddlie & Tashakkori, 2009, p. 145f). At the experiential stage, we conduct the studies and collect the data separately in four empirical Work Packages (WPs 3 to 6) to ensure that we capture the different dimensions related to learning outcomes and (under)achievement. At the *inferential* stage, we combine and integrate the results in a comparative cross-case and cross-national analysis (WP7). In this way, we are able to concentrate on the in-depth collection of the data and provide a sound analysis of the preliminary results, but also to keep the separate sub-studies in close contact and dialogue with each other.

In the choice of methodological approaches, we are aware of various criticisms towards and challenges of mixed-method approach, most of them concerning the integration of different worldviews linked to quantitative and qualitative research (positivism/post-positivism and constructionism/interpretivism) (Bryman, 2012). We align with the understanding that mixed-method approach is based on pragmatism, which "debunks concepts such as *truth* and *reality* and focuses instead on *what works*" for the research question (Teddlie & Tashakkori, 2009, p. 14 [original emphasis]). Especially in case of international comparative studies, the mixed-method approach perfectly suits to research the complex phenomena such as learning outcomes. While our quantitative methods help us to gain empirical evidence about the presence and dimension of learning outcomes, our qualitative methods and participatory elements investigate their contextuality and national/regional specificities. The convergence of both methodological approaches, thus, helps us to grasp the diversity of processes and actors involved in the construction of learning outcomes and fosters the explication of general assumptions and understandings.

With regard to the CLEAR project, which tackles the issue of learning outcomes by giving attention to the processual nature of their construction and recognises the limitations of the prevalent institutional approach that relies on quantification and standardization, the mixed-method approach brings a necessary sensitivity and carefulness to the contextual features involved in such processes. Therefore, CLEAR employs mixed research methods that combine quantitative and qualitative approaches to gain a deeper understanding of the analysed phenomena and analyse them from multiple levels and perspectives (see Tables 2-6).

To explore the structural scenarios surrounding the construction of learning outcomes at national (NUTS1) and regional (NUTS2) level, CLEAR uses secondary analysis of data sets

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from various sources, such as EU surveys (e.g., EU-SILC, EU-LFS, EU-AES) and international large-scale assessments (PIAAC, PISA), as well as administrative data at both European and national levels. In addition, web-based expert surveys on policy coordination and innovative participatory strategies are conducted at local (NUTS3) level to analyse the policy frameworks shaping the educational systems. On the qualitative side, institutional analyses and policy reviews are conducted, along with qualitative interviews with key actors, educational practitioners, and young people. A *Transversal Participatory Approach* is integrated into the research and enhances the project's capacity to consider different perspectives and understandings of the issues studied. The participatory strategy serves not only the purpose of data collection but also, more importantly, the goal of stimulating informed decision-making to support policy by enabling young people and other relevant stakeholders to contribute their views, ideas, and experiences, thereby enabling the development of innovative solutions that fit the needs and conditions of young people.

By integrating various research methods, but also interdisciplinary thinking and analysis, CLEAR aims to overcome the limitations of the standardised understanding of learning outcomes as a quantification of learning performances, and aims to provide a more nuanced, multi-layered and contextualized understanding of the process of their construction. Another relevant contribution consists in identifying sparse or missing data at various governance levels and enhancing the data quality of relevant regional and national bodies.

5.2 Methodological design of the project

CLEAR is organized in ten Work Packages, which unwrap in course of three research phases (see Figure 5). The three research phases of the project progress both linearly (i.e., in chronological, sequential order) and cyclically (i.e., through sharing and generative feedback). During the *Launching and Sites Selection* phase, we carefully balance our diverse approaches to establish the project's infrastructure and select the sites for subsequent analyses. In the phase of *Empirical Analyses, Expert Surveys, and Participatory Strategies*, we deploy our methodological approaches in national contexts, prepare and conduct the fieldwork, generate the information and provide preliminary results. In the phase of *Comparisons and Reporting*, all results will be brought together to and translated to broad audiences from research, policy, and practice. As the figure further shows, there are guiding Work Packages 1 and 9, empirical Work Packages 3, 4, 5, and 6, in which we apply most of our methods, analytical Work Package 7, in which we conduct cross-case and cross-national comparative analyses, and participatory Work Package 8, in which we develop and apply participatory strategies. In following, we will briefly present the contents and methodological construct of every Work Package:

WP1, *Management*, is a building block of the project, which ensures and overviews the implementation of the project's infrastructure, logistics and administration. As such, it does not deploy any research methods in a strict sense.

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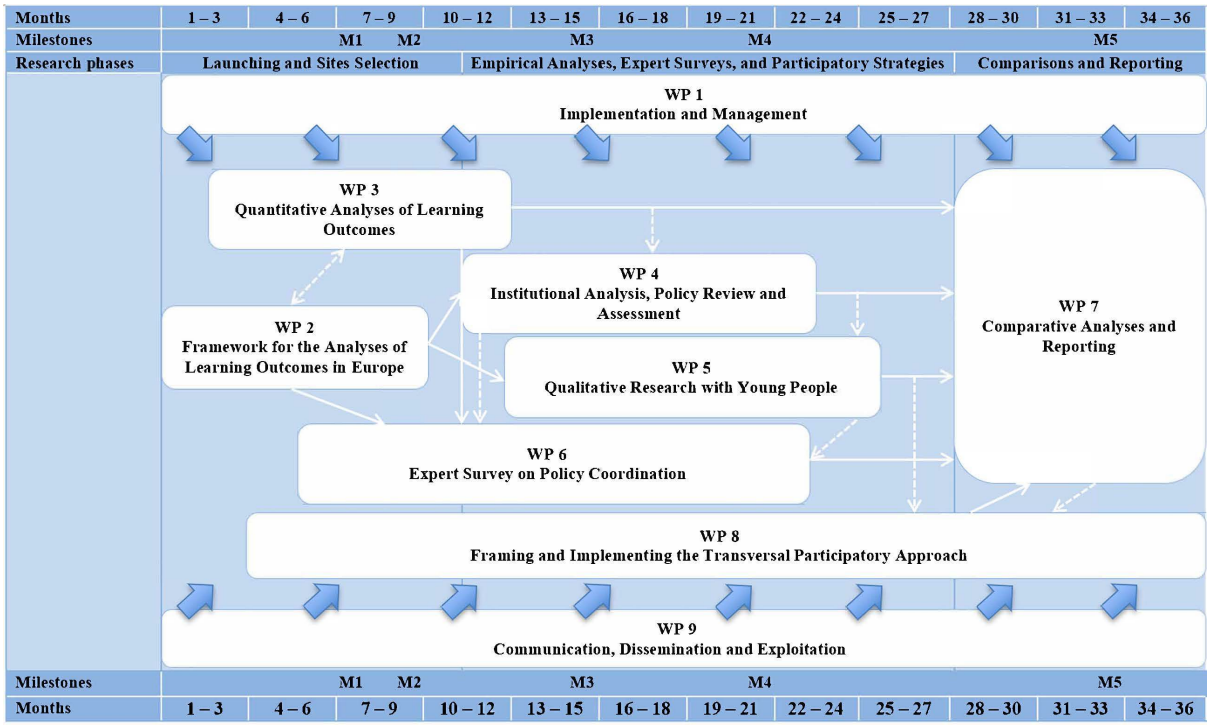
Figure 5 – PERT diagram



Source: WWU's own elaboration[2]

WP2, *Framework for the Analyses of Learning Outcomes in Europe*, sets the core conceptual, methodological, theoretical, and analytical framework for the subsequent empirical and comparative analyses. Operating in a cascade model, it is here that a Glossary of shared definitions and terms used by all Work Packages is defined, so as to enable the intersection and dialogue of theoretical perspectives and overarching hypotheses. This WP also offers a grid for the identification, collection, and systematisation of contextual information on selected sites, as provided in previous sections. In this WP, we develop a holistic outlook over the entire project and address the plurality of analytical methods and levels, which guide the empirical fieldwork and lay ground for the subsequent comparative analyses.

WP3, *Quantitative Analyses of Learning Outcomes*, provides a broad, quantitative description of the connection between learning outcomes, the labour market and socio-economic conditions at the national and regional levels, and also explores correlations between those elements. This requires the identification of clear and relevant sources of comparable data at different levels in different territories (spaces) and encompassing different dimensions to account for the intersectional approach that characterizes CLEAR. The database to be elaborated within WP3 is to be seen as an instrument that materializes clearly the Spatial Justice and the Intersectionality frameworks; as regards the Life Course Research framework, the very nature of the anonymous data collected

[2] Work Package 10 is part of project's management and not displayed in the PERT diagram.

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precludes the development of a more substantial analysis of individual trajectories. As such, the life course framework will be further elaborated in other WPs.

WP4, *Institutional Analysis, Policy Review and Assessment*, articulates documental (policy) analysis with the collection of qualitative data through interviews with key policy actors and participants on the topics of skills formation and skills utilisation, aimed at the elaboration of an International Policy Review Report that integrates both national and regional reviews. This WP, then, is in itself a clear instance of the use of the mixed-methods and multi-level approaches. The fact that it articulates closely with WP6 in seeking to gather insights from policy practitioners' points to the aforementioned cyclical development of the project. WP 4 is anchored in a review of the policies addressing low achievement in basic and digital skills of recent graduates and the adult population. From there, it proceeds to map out the processes of skills formation and skills utilisation in the participating countries, revealing how they articulate with governmental bodies and other policies at national and regional levels.

WP5, *Qualitative Research with Young People*, by addressing young people as experts of their own life courses – namely through the use of narrative biographical interviews –, is a privileged arena for the exploration of the Life Course Research framework. To be sure, biographical data is to be regarded as a gateway to understand how policies and local opportunity structures open and/or close young people's life opportunities, as well as to gain insights into how young people exercise their agency in interpreting and dealing with educational failure and success along their life courses. In this manner, the data gathered in this WP also point to the theoretical frameworks of Intersectionality and Spatial Justice, both of them wrapped in a multi-level analysis.

WP6, *Expert Survey on Policy Coordination*, seeks to identify present and forecast future scenarios of educational disadvantages. It does so through an online survey addressing experts located at different levels of governance and coordinating different policy strands dealing with academic (under)achievement. The survey enquires into scenarios on three timeframes: persisting challenges, present challenges, and future challenges, both short-term and long-term. It also reflects upon crisis scenarios, i.e., situations where sudden, unexpected changes occur. Thus, in this WP, multi-level analysis is accompanied by a consideration of multiple timeframes, adding density to the research object. It is expected that CLEAR's three theoretical frameworks are mobilized to elaborate the survey and interpret the resulting data.

WP7, *Comparative Analyses and Reporting*, plays a pivotal role in the project. Fed by both empirical data and participatory results and considering them in addressing the overall research questions, this WP is designed to offer cross-case and cross-national comparisons of the cases analysed. In WP7, the mixed-methods approach is more fully and visibly implemented, as it is required to integrate previously collected data and deliver information for the Innovation Forums. In this WP, we address CLEAR's research overall questions and seek to provide main results and findings, which feed the

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Innovation Forums with local/regional policy-makers, researchers, young people, educational stakeholders, and the wider public.

WP8, *Framing and Implementing the Transversal Participatory Approach*, which extends throughout almost the entire duration of the project, marks one of its most distinctive traits: the development of a participatory approach. In this WP, we expand a more conventional academic notion of mixed-methods to include participatory elements in the very design of the project from an early stage. The development of Participatory Tool Kits for the practical application of participatory methods, as well as capacity-building actions, play a central role in guiding National Partners in the implementation of participatory strategies through the project's life span. In WP8, we will set up Innovation Forums involving professionals active in the formal and non-formal education system, stakeholders of the public and third sector at the local level, and youths in and out of the education system. The Innovation Forums will be key in mainstreaming the research outcomes into general debates about the policy agenda.

Finally, both WP9 – *Communication, Dissemination and Exploitation* – and WP10 – *Ethics Requirements* – run throughout the entire project and, while central to ensure either a broad diffusion and relevant impact (WP9) or compliance with the most up to date ethical demands for research endeavours (WP10), they do not contain strict methodological procedures, but rather strategies for dissemination and publication of the results or for ethical conduct.

5.3 Operationalisation of work in empirical Work Packages

To assess the construction of learning outcomes using our mixed-method, multi-level design, we will conduct empirical fieldwork in four Work Packages. In the following tables (see Tables 7-10), we provide a brief overview of how, when and using what methods and data we aim to implement the empirical studies.

Table 7 – Operationalisation of work in WP3

Responsible Partners	UNIVIE (lead), DIE, UAB
Duration	Months 2-12 (October 2022 – September 2023)
Research objectives	– Provide descriptive and case-centred analysis on the connection between learning outcomes, labour market and socio-economic conditions at national and regional level. – Conduct explorative analysis on the correlations between learning outcomes, labour market and socio-economic conditions; on the changes over the period 2005-2021; and on the cross-country and within-country differentiations. – Identify clusters of regions and *statistical profiles* of countries' contexts based on the combination of labour market and socio-economic characteristics.
Working tasks	– Develop framework for the collection and analysis of quantitative data. – Collect quantitative data.

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		– Conduct contextualised analysis of the different national cases – Conduct cross-national and cross-regional quantitative analysis
Overarching research questions	Life Course Research	How do local/regional opportunity structures influence the social expectations on and the construction of learning outcomes?
	Intersectionality	In how far do the opportunity structures open or close the access to quality education for young people in vulnerable and/or multi-disadvantaged positions?
	Spatial Justice	How does the spatial distribution of educational opportunities in European regions correlate with poor learning outcomes?
Research method		Cross-regional/cross-national quantitative analysis
Type and source of data		Regional indicators collected for this analysis are the EU's hierarchical NUTS (Nomenclature of Territorial Units for Statistics) classification, securing comparable data within the whole EU. The analysis will focus on NUTS 0 (national) and NUTS 2 (regional) levels, with possibilities to complement the main data corpus. The main sources of data collection are: – Eurostat LFS (aggregates at NUTS 0 and 2) – Eurostat SILC (aggregates at NUTS 0 and 2) – Eurostat national and regional accounts (aggregates at NUTS 0 and 2) – UOE database (aggregates at NUTS 0 and 2) Further potential sources: – OECD PISA and PIAAC

Table 8 – Operationalisation of work in WP4

Responsible Partners		UAB (lead), UNIURB, AUTh
Duration		Months 11-22 (August 2023 – July 2024)
Research objectives		– Review policies addressing low-achievement in basic and digital skills of recent graduates and the adult population. – Map out processes of skills formation and skills utilisation in the countries studied. – Analyse different modes of coordination between the relevant policy actors and explore how skills formation and skills utilisation connect.
Working tasks		– Write reviews of national and regional literature. – Interview the key policy actors and participants. – Write the International Policy Review Report.
Overarching research questions	Life Course Research	How does the educational policymaking respond to the de-standardising tendencies in the life course of young people?
	Intersectionality	How are the socially conditioned inequalities of young people in vulnerable positions integrated in the policy design and implementation?
	Spatial Justice	How do policy actors take account of the spatial distribution of opportunities to learn and utilise new skills and competencies?

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Research method	Institutional analysis and policy review
Type and source of data	The review and assessment of academic and grey literature includes policy designs, operational plans, reports of commissioned research, public opinions of experts, declarations of social partners. The data for the institutional analysis come from qualitative interviews with relevant policy actors. We will conduct: – 4 interviews on skills formation per country – 4 interviews on skills utilisation per country Total: 64 interviews in 8 EU-countries.

Table 9 – Operationalisation of work in WP5

Responsible Partners		UTU (lead), ULisboa, PU
Duration		Months 13-25 (October 2023 – October 2024)
Research objectives		– Design and implement qualitative research with young people (N=160) by following ethical procedures and guidelines of highest standards and using narrative biographical interviews on both thriving and declining localities at NUTS-3 level. – Gain an understanding of how policies and local opportunity structures open and close young people's life opportunities. – Attain in-depth information about how young people themselves exercise their agency in interpreting and dealing with educational failure and success along their life courses.
Working tasks		– Develop research framework and procedures for national data collection. – Implement fieldwork at national level. – Produce International Qualitative Analysis Report.
Overarching research questions	Life Course Research	How do young people perceive, cope with and relate learning outcomes to their life courses?
	Intersectionality	How do young people in vulnerable and/or multi-disadvantaged positions relate learning outcomes to their current situation?
	Spatial Justice	How do young people reflect upon the relation between spaces they live in and their educational achievements?
Research method		Qualitative analysis with narrative biographical method
Type and source of data		The qualitative analysis includes conducting interviews with young people aged 18-29 years. Per country, we will conduct: – 10 interviews with young people in thriving regions – 10 interviews with young people in declining regions Total: 160 interviews in 8 EU-countries.

Table 10 – Operationalisation of work in WP6

Responsible Partners	UNIURB (lead), UTU, UPORTO
Duration	Months 5-22 (February 2023 – July 2024)

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Research objectives		– Design and implement the experts survey by choosing experts, establishing contacts to them and constructing and administering the national surveys. – Assess policy priorities and the preferred coordination options portrayed by policy experts. – Analyse the data and produce a European Policy Brief.
Working tasks		– Construct the survey and define experts' profiles. – Administer the survey. – Provide data analysis and reporting.
Overarching research questions	Life Course Research	How do policy experts relate their understanding of learning outcomes to the life courses of young people, especially those in vulnerable positions?
	Intersectionality	How do policy experts perceive and foresee the educational (under)achievement of young people in vulnerable and/or multi-disadvantaged positions?
	Spatial Justice	To what extent do policy experts relate the spatially conditioned learning environments with young people's ability to reach certain educational achievements?
Research method		Online statistical expert survey using scenario analysis
Type and source of data		The online survey will be conducted with relevant experts and stakeholders in policy arenas having impact on the construction of learning outcomes and their life-course consequences. The experts include: – Public actors and policy-makers – Members of academia and policy analysis communities – Market actors – Representatives of social parties We will contact a different number of actors depending on the country size, in particular: – 300 experts in Germany, Italy and Spain – 150 experts in Austria, Bulgaria, Finland, Greece and Portugal

5.4 Summary

In this section, we have presented our methodological tools, which included quantitative analyses, policy surveys, institutional analyses and literature reviews, qualitative studies with young people, comparative analyses, but also participatory tools. We have further showed the application of our methodological tools in our ten Work Packages, as well as their operationalisation during the empirical fieldwork. In summarising the section, we want to underscore that every mixed-method study, including CLEAR, has unique chances to deliver novel information, but also specific pitfalls, which we seek to foresee and avoid (see *Working Paper on Ethical Issues* and *Data Management Plan*). We will therefore constantly monitor and evaluate the methodological proceedings and sharpen our tools whenever it will promise to generate new information.

6. Conclusion

In the concluding part of this Report, we summarise the central results in three steps: first, we provide a synthesis of the contents and preliminary results of all sections;

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second, based on the synthesis, we outline the guiding research assumptions; and conclude in third step with the development of the overarching research questions from the perspective of our three theoretical approaches.

6.1 Synthesis of preliminary results

Following the introductory part, which briefly outlined the aims and objectives of the study and of this Report, we have developed the State-of-the-Art Report in five subsequent steps, the results of which we present in the following sub-sections.

The Report started with a thorough description of our *theoretical perspectives* – the Life Course Research, Intersectionality, and Spatial Justice. The section has discussed the theoretical perspectives, applied them to the empirical Work Packages and resumed their research application. The central finding of this section is the understanding that all three approaches can be productively combined to explore the various factors involved in the construction of learning outcomes. The theories cover diverse facets of learning outcomes and academic (under)achievement. From a *Life Course Research* perspective, the focus is shifted to the long-term, biographically narrated and interlinked implications on individual lives, with a special attention to the opportunity structures and agencies of young people. From the perspective of *Intersectionality*, attention is paid to the socially constructed nature of learning outcomes and the following unequal, marginalising and at times oppressing implications for certain groups of population. Finally, the *Spatial Justice* perspective extends the scope of analysis by focusing on the unjust spatial division and distribution of rights, opportunities and resources necessary to reach certain levels of educational attainment. All three theoretical perspectives sharpen our view on learning outcomes, without creating redundancies and/or discrepancies. With our theoretical choice, we have integrated proven and novel approaches, with empirical, critical and normative stance to account as much as we can for the vast complexity of the issue we seek to explore.

With the theoretical perspectives defined, we have approached and *contextualised our research object* – learning outcomes. As several times stated in this Report, we frame our research object in contrast and in extension to the dominant understanding of learning outcomes present in research and policy, which defines them as statistically measurable units. We do not disregard this dominant understanding, yet consider it incomplete and problematic as far as it displays learning outcomes as self-evident and governable phenomena, a perception which does not account for the vast complexity of interactions involved in their definition and construction. Further on, the measurement of learning outcomes inevitably creates the concerns over (under)achievement, as there will always be some students who fail to achieve the *standard* or desired outcomes and who need various forms of *assistance*. Against such perceptions, we seek to open the discussion on the construction of learning outcomes and contextualise them as resulting from manifold intersecting factors. To enquire into the processes of construction of learning outcomes, we use five analytical entry points – *individual, institutional, structural, spatial, and relational*

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– for the collection of contextual information and integrate them together with our theoretical perspectives into one robust foundational grid. In the foundational grid, we have articulated both analytical levels and theoretical viewpoints in form of guiding research questions, which inform every empirical Work Package. Such articulation has proven the vitality and productivity of combining theory and analysis to explore our research object.

After framing our research object and sharpening our analytical and theoretical tools, we have provided an *in-depth conceptual debate* on learning outcomes and academic (under)achievement with the aim to outline the various meanings, uses and tensions, and to problematise the inflationary use of the concepts and the need to re-conceptualise them. As we have shown in the first two subsections devoted to learning outcomes and (under)achievement, there is a clear tendency to objectify and measure them, with the aim to better inform policymaking and to introduce measures on accountability and quality assurance. The origin of the term goes back to the need of evidence-based knowledge for supporting targeted policy measures, introduced as a reaction to *low* levels of educational performance captured in international student assessment surveys. Parallel to the policy-induced interest on learning outcomes, the behaviourist research on education has led to the identification of observable aspects of learning outcomes, portraying them as measurable phenomena and reducing them to their empirically verifiable and individually-attached quality, lacking to account for their more abstract parameters. Both processes aligned in saturating the dominant discourse on learning outcomes and (under)achievement, which we seek to counter by reflecting upon the unique combination of individual, institutional, but also socio-economic, structural and spatial factors that construct learning outcomes differently in different settings. We have explored these national and regional settings in the analysis of the scholarly and public debate on learning outcomes and academic (under)achievement in the third subsection. As the outcomes of the subsection show, the debates verify the assumption that learning outcomes are mostly treated as something objectifiable and comparable based on large-scale studies, most prominently by PISA. This is further demonstrated by the dominant focus on formal education, excluding other forms of learning (non-formal/informal education) from the assessment of the quality of learning outcomes. Also, accountability in most contexts is placed on individuals and their imminent environment (family, peer groups, teachers), leaving little space for questioning the interplay of institutional and structural aspects, but also the impact of spatiality on learning performances, once again underscoring the need to re-define the assumptions behind its prevalent understanding.

Following the conceptual debate, we have presented our *methodological repertoire* with which we aim to assess our research object and operationalise our study. To account for the complexity of the issue, we have designed a mixed-method study that includes a variety of methodological approaches and tools. The quantitative analyses, policy surveys, institutional analyses and literature reviews, as well as the qualitative studies

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with young people, comparative analyses and participatory tools are put in place at various stages and complementary to each other to ensure the best possible synergy.

6.2 Points of departure

Our research study is based on the long-term assessment of research and public debates on learning outcomes, as well as on the observation of and the scholarly critique on the (individual and educational) difficulties related to the quantified measurement of learning outcomes and the subsequent problematisation of academic (under)achievement. Against this background, in our study we depart from the following understandings:

- Learning outcomes are not self-evident and natural, but rather socially-constructed and contingent phenomena, which vary across time and space and which result from the interplay of manifold intersecting factors on the individual, institutional, structural and spatial levels.
- The construction of learning outcomes is a dynamic and relational process resulting from asymmetric discursive and power relations and favouring certain groups of population over others.
- Academic (under)achievement is not an individual, outcome-oriented and statistically accessible feature, but rather the result of selective processes based on statistically measured learning outcomes categorising young people into high or low achievers.
- Young people are not passive recipients of educational attainment, but active agents capable of shaping their life courses, spatial settings and opportunity structures with their unique experiences, skills, and visions.
- Vulnerability and multiple disadvantages are not essential features of certain individuals, but rather temporal manifestations of unfavourable life circumstances and a result of intersecting social inequalities.
- The coordinated policymaking fails to address the root causes of low levels of educational attainment by focusing on their quantification, rather than on the variability of life courses embedded in unique institutional, spatial and socio-economic settings.

6.3 Overall research questions

CLEAR's overall aim is to examine the combination of multiple factors that shape learning outcomes and affect their quality. For this reason, we focus on the processes involved in what we call the *construction* of learning outcomes, by which we mean the interplay of manifold intersecting institutional arrangements, spatial and socio-economic determinants, discursive and socio-cultural influences, as well as individual experiences, dispositions, cognitive and psycho-emotional abilities. In line with the overall aim, the guiding research assumptions, and the results of this Report, we have specified and formulated our overarching research questions from three theoretical entry points:

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From the perspective of *Life Course Research*, which conceptualises the construction of learning outcomes as institutionalised expectations on individuals capable of action and change, we seek to answer the following question:

What factors are involved in the construction of learning outcomes and how do their interplay shape the expectations on certain levels of learning outcomes? To what extent are young people involved in their construction as active agents?

From the perspective of *Intersectionality*, which problematises the socio-cultural, historical and discursive origins of educational inequalities and their impact on the quality of learning outcomes, we seek to answer the following question:

What do the local/regional opportunity structures of young people look like and how do they affect academic (under)achievement of youth in vulnerable positions? To what extent are social and spatial inequalities embedded in and possibly reproduced by the assessment of learning outcomes?

From the perspective of *Spatial Justice*, which relates learning outcomes to the (un)just spatial distribution of individual opportunities, rights, and resources, we seek to answer the following question:

What is the impact of spatial distribution of educational sites on the quality of learning outcomes? How are spaces affecting (under)achievement and to what extent are they reflected in the educational policymaking?

The research questions structure our approach towards the research object and inform the empirical fieldwork, the participatory strategies, and the comparative analyses. They are further divided into sub-questions that feed the foundational grid and support the analysis of the research object at various levels.

To sum up, the State-of-the-Art Report paves the way for a comprehensive and achievable research study, with clear objectives and well-defined research questions capable of yielding new knowledge to support further research, practice, and policymaking devoted to the study of learning outcomes in Europe and abroad.

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Annex – Selected literature on learning outcomes and (under)achievement

In this Annex, we present a selection of national literature on learning outcomes and (under)achievement for each country studied. In the selection, we have considered the last ten years (from 2010 onwards) and aimed to grasp the variability of the scholarly debates at a national level, showing the prevailing approaches to the topics. This is an assessment of National Partners, not a method-based research result. Each national publication is followed by a brief description in English language.

Austria

Nusche, D., Radinger, T., Busemeyer, M. R., & Theisens, H. (2016). *OECD Reviews of School Resources: Austria 2016.* OECD Publishing.

It gives a brief description of the Austrian school system, governance arrangements, about quality and equity in Austrian schools.

OECD (2016). *The Survey of Adult Skills: Reader's Companion, Second Edition, OECD Skills Studies*, OECD Publishing. http://dx.doi.org/10.1787/9789264258075-en

The 2016 (latest) results showed that Austria's performance in literacy, numeracy, and problem-solving in technology-rich environments was above the OECD average in all three areas, but there were significant differences in performance by age and education level. Younger adults and those with higher levels of education performed better than older adults and those with lower levels of education.

Herzog-Punzenberger, B., & Schnell, P. (2019). Austria: equity research between family background, educational system and language policies. *The Palgrave handbook of race and ethnic inequalities in education*, 105-158.

It is a systematic review of research in Austria on the relationship between race/ethnicity and educational inequality between 1980 and 2016. According to Herzog-Punzenberger & Schnell, there are five major research traditions related to learning outcomes: (1) political arithmetic; (2) family background; (3) structures of educational systems; (4) intercultural education and discrimination and (5) multilinguality.

Federal Ministry of Education, Science and Research (eds) (2021). *National Education Report Austria 2021*. Executive Summary.

It is annually published by the Austrian Federal Ministry of Education, Science and Research. The report provides a comprehensive overview of the Austrian education system, including data on student performance and educational attainment.

Organisation for Economic Co-Operation and Development (2022). *Education at a Glance 2022: OECD Indicators*. Organization for Economic.

In the 2018 PISA assessment, Austria's performance was above the OECD average in reading, mathematics, and science. However, Austria's performance had declined slightly compared to the previous assessment in 2015. The results also showed that socio-

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economic status had a significant impact on student performance, with students from disadvantaged backgrounds performing significantly worse than their more advantaged peers.

Bulgaria

Zdravkov, S. (2019). Regional inequalities and educational chances in Bulgaria: comparative analysis on the results from the National External Examination. *Sociological Problems*, N°2, 530-556 (in BG).

The author studies educational (in)equality in terms of the extent to which the success of the students in the education process is dependent on out-of-school factors (e.g. gender and origin). The analysis of the results from the national external examinations (NESE) in all the 28 regions in Bulgaria finds links between student achievement and factors such as the average income, ethnic composition, and types of schools in the regions.

Hristova, A., Tosheva, E., & Stoykova, I. (2020). *Back to School: The Quality of School Life as a pre-condition for student engagement and prevention of school dropout.* https://ire-bg.org/wpsite/wp-content/uploads/2020/12/quality-of-school-life-in-Bulgaria.pdf (in BG).

The report develops the concept of Quality of school life (QSL) as a multi-dimensional construct reflecting the attitudinal or emotional climate at school in terms of students' perceptions of well-being, determined by school-related factors and experiences gained through their involvement in school life. QSL has a significant positive impact on academic results of students even after controlling for student gender and socioeconomic background. This concept in English is developed in Hristova, Assenka & Tosheva, Ekaterina 2021 Quality of School Life and Student Outcomes in Europe. EENEE Analytical Report No.44, prepared for the European Commission.

Boyadjieva, P., Ilieva-Trichkova, P., Milenkova, V., & Stoilova, R. (2020). The local embeddedness of graduates' education-job mismatch and the role of lifelong learning policies for its overcoming. *International Journal of Lifelong Education*, 39:1, 104-118 (In Eng).

Based on both quantitative and qualitative data: results from the Bulgarian Universities Ranking System and interviews with experts and young adults engaged in a lifelong learning programme, the authors argue that the misbalances for highly educated people on the labour market mirror structural problems in the economy and the educational system, in particular the deficiencies of the lifelong learning policies. A major finding is the growing differentiation between national and local levels of lifelong learning policy towards graduates and that regional policies are actively embedded in local contexts.

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Simeonova-Ganeva, R., Ganev, K., & Angelova, R. (2022). Bulgaria: skill imbalances and policy responses, in Tutlys, V., Markowitsch, J., Pavlin, S., & Winterton, J. (eds.). *Skill Formation in Central and Eastern Europe*. Peter Lang Verlag (in Eng).

The chapter explores the skill-formation processes in Bulgaria over four periods: two periods and of the communist regime, the transition to markets and EU integration. A major finding of the study is that for a substantial part of those periods, skill formation policies have been incoherent with technological and sector-specific developments and there is evidence for the recurrence of sizable skill supply and demand imbalances and a lack of systematic and focused policies.

Finland

Kupari, P., Välijärvi, J., Andersson, L., Arffman, I., Nissinen, K., Puhakka, E., & Vettenranta, J. (2013). *PISA 2012 ensituloksia.* Opetus-ja kulttuuriministeriön julkaisuja, n°20. [PISA 2012 first results. Publications of the Ministry of Education and Culture, Helsinki 2013:20]

The PISA 2012 report shows for the first time conclusive results on the deterioration in the skills (especially in mathematics and science) of 15-year-olds in Finland compared to previous measurements. The results also indicate widening gaps in learning outcomes by social and ethnic background and by gender. The report was a turning point in the sense that the issues it raised led the then Minister of Education to set up the project entitled "The Future of Comprehensive School - On the Rise!". The project brought together a team of more than 40 researchers to consider measures to reform the structure and content of the comprehensive school system in order to stop the decline and differentiation in learning outcomes.

Seppänen, P., Kalalahti, M., Rinne, R., & Simola, H. (eds.) (2015). Lohkoutuva peruskoulu: Perheiden kouluvalinnat, yhteiskuntaluokat ja koulutuspolitiikka. Jyväskylä, Suomen Kasvatustieteellinen Seura. *Kasvatusalan tutkimuksia*, 68. [Fragmenting comprehensive school: families' school choices, social classes and education policy. Jyväskylä, Finnish Educational Research Association, *Research in Educational Sciences,* 68].

The report analyses the local and national mechanisms of educational policy through which differentiating learning pathways have been built within the public and free comprehensive school system in larger cities. Because of the administrative decentralisation of education policy, municipalities, cities and schools are making stronger school policies; they can apply and interpret laws with increasing flexibility and freedom. At the same time, parents are increasingly using classes with weighted-curriculum education as a route to school choice for their children and are advocating a moderate differentiation of schools. The study draws on extensive parent interview and

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survey data, as well as statistical and documentary evidence on pupils' school placement and educational choices.

Bernelius,V., & Huilla, H. (2021). *Koulutuksellinen tasa-arvo, alueellinen ja sosiaalinen eriytyminen ja myönteisen erityiskohtelun mahdollisuudet*. Valtioneuvoston julkaisuja n°7. [*Educational equality, regional and social segregation and opportunities for targeted support*. Government Publications n° 7]

The report further deepens the reflections on the segregation of learning outcomes and the growing inequalities it poses. One key conclusion is that increased social and regional segregation in society is challenging the comprehensive and early childhood education systems at both local and national level. The gap between the highest and lowest performing pupils has widened, while the impact of pupils' family background on outcomes has increased. According to the report, a particularly worrying sign is that the gap in outcomes both inside and between schools is widening. The report concludes that a stable, high-quality education system alone is not enough to tackle segregation, but stronger measures are needed, such as the creation of a system for equal opportunity funding.

Kalenius, A. (2023). *Sivistyskatsaus*. Opetus- ja kulttuuriministeriön julkaisuja n° 3. [*Bildung Review.* Publications of the Ministry of Education and Culture n° 3.]

The Bildung Review is the most recent compilation of research on learning outcomes in Finland. The review compiles statistical and other information on the Ministry of Education and Culture's administrative sector, its development and situation in international comparison. The review indicates that the learning outcomes of young people in Finland have deteriorated, and the educational attainment of the working-age population has declined by international standards. In addition, gaps in learning outcomes and educational attainment related to social background and residential area have widened. The results shown by the review have raised much public concern, and the issue of the "collapse" in young people's learning outcomes is rapidly becoming politicised in the run-up to the spring parliamentary elections.

Germany

Avenarius, H., Ditton, H., Döbert, H., Klemm, K., Klieme, E., Rürup, M., Tenorth, H.-E., Weishaupt, H., & Weiß, M. (2003). *Bildungsbericht für Deutschland. Erste Befunde*. Leske + Budrich. [Education Report for Germany: First Results]

The volume is a report on the German Education system prepared by independent research consortium on behalf of the Conference of Ministers of Education. The report focuses on the formal school education and analyses the conditions and effects of education and vocational education in Germany. It is a reflection on the PISA study in

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2000 and has spurred the debate on introducing measures to evaluate learning outcomes.

Klieme, E., Avenarius, H., Blum, W., Böbrich, P., Gruber, H., Prenzel, M., Reiss, K., Riquarts, K., Rost, J., Tenorth, H.-E., & Vollmer, H. J. (2007). *Zur Entwicklung nationaler Bildungsstandards. Eine Expertise.* Bundesministerium für Bildung und Forschung. [About the Development of National Education Standards: An Expertise]

The book is a result of collective expertise on education standards. It frames the introduction of education standards as a reaction to the problems of the education system in Germany, which has been criticised particularly after the PISA and TIMSS survey's results from 1997 and 2000, respectively. The expertise, prepared on behalf of the German Federal Ministry of Education and Research, clarifies the concept of education standards and its integration in the German education system and, thus, lays ground for the research debate on learning outcomes in Germany.

Buddeberg, K., & Grotlüschen, A. (Eds.) (2020). *LEO 2018 – Leben mit geringer Literalität.* wbv. [Living with a Low Literacy]

The LEO report summarises the results of the survey focusing adult literacy in reading and writing. The current report includes also several other competencies, such as digital and financial skills or political and health care practices. The study collects data on adult population from 18 to 64 years in Germany and can be treated as a longitudinal survey on the literacy level in Germany. Its importance is in showing the number of people with low educational outcomes.

Maaz, K., Artelt, C., Brugger, P., Buchholz, S., Kühne, S., Leerhoff, H., Rauschenbach, T., Rockmann, U., Roßbach, H. G., Schrader, J., Seeber, S., Ordemann, J., Baas, M., Baethge-Kinsky, V., Hoßmann-Büttner, I., Kerst, C., Kopp, K., Lochner, S., Mank, S., Mudiappa, M., Richter, M., Rüber, I. E. & Schulz, S. (2020). *Bildung in Deutschland 2020: Ein indikatorengestützter Bericht mit einer Analyse zu Bildung in einer digitalisierten Welt.* wbv. [Education in Germany 2020: An indicator-based Report with an Analysis on the Education in a Digitalised World]

The empirical report on education is built on quantitative indicators focusing the whole spectrum of the education system in Germany, from child education to different programmes for adult education. A special focus of the report is the impact of digitalisation on the education system in Germany. This report is developed in a leading series of studies collecting and analysing data on the quality of learning outcomes.

Greece

Koutouzis, M. (2013). *Dropping out from adult education and lifelong learning*. KANEP-GSEE [in GR]. https://www.kanep-gsee.gr/sitefiles/files/MELETH_2016-01-19.pdf

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This study attempts to assess the phenomenon of dropping-out from the structures of lifelong and adult education and mainly to contribute to the rational development of a field which in several cases was developed with an opportunistic logic.

Fotopoulos, N (2014). Lifelong Learning and the new role of qualifications in the era of crisis - Terms and conditions for the development of active public policies: a critical approach. In A. Kyridis (Ed), *Vulnerable Social Groups and Lifelong Learning*, Gutenberg. [in GR]. https://www.dardanosnet.gr/product/efpathis-kinonikes-omades-ke-dia-viou-mathisi/

Aims to highlight selected aspects of today's existing social and educational inequalities in Greece, to diagnose the contemporary as well as the chronic causes that cause these inequalities.

Zarifis, G., Fotopoulos, N., Zanola, L. & Manavi, H. (2017). *The social dialogue on vocational education and training in Greece: exploring the role and policy proposals of the social partners*. IME-GSEVEE. [in GR]. https://imegsevee.gr/wp-content/uploads/2018/04/KOINONIKOS-DIALOGOS-Final.pdf

Examines the degree of involvement of the institutional social partners representing employees and employers in the establishment of measures related to vocational education and training in Greece.

Stamatopoulou, D. (2019). The course of development of learning outcomes in the Bologna Process: the current situation in Greece in terms of legislation. *ACADEMIA*,15, 115-137. https://doi.org/10.26220/aca.3136. [in GR].

The aim of this study is to critically analyse the learning outcomes as defined at national level and to examine if they develop as a tool to correlate theoretical and practical learning.

Italy

Fondazione Giovanni Agnelli, (2014). *La valutazione della scuola. A che cosa serve e perché è necessaria all'Italia.* Laterza. [School evaluation. What is it for and why is it necessary in Italy]

By providing analysis to understand the weaknesses of Italian education system and the reasons for its delays, the volume discusses the National evaluation system providing an exhaustive picture of school evaluation in Italy and possible solutions to avoid the risk of its decline, starting from the evidence that comes from research, international experience and national experimentation. Among the main questions guiding the volume: Who to evaluate? Individual teachers, schools, the school system as a whole? With what tools? What use to make of the results of the evaluation? How to build consensus and gain the trust of teachers, overcoming their resistance?

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Landri, P., Maccarini, A.M. (Eds.). (2016). *Uno specchio per la valutazione della scuola*. Franco Angeli. [A mirror for school evaluation]

The volume discusses the topic of the evaluation in the Italian school system creating a dialogue between the different scientific positions characterizing the theoretical and empirical debate that animates the Education Section of the Italian Association of Sociology. It punctually examines the controversies that cyclically accompany the administration of the INVALSI tests and the media debate that couples the publication of data from large international surveys (PISA, TIMMS, PIAAC), generating controversies and oppositions, when not "ideological wars" between experts, professional and policy-makers, within the framework of the complex dynamics of the globalization of education.

Barabanti, P. (2018). *Gli studenti eccellenti nella scuola italiana. Opinioni dei docenti e performance degli alunni*. FrancoAngeli. [The excellent students in the Italian school. Teachers' opinions and pupils' performance]

The volume deals with the topic of "excellent students" in Italian public schools, discussing the multidimensional concept of equity and the attention to an ideal school that "does not want to leave anyone behind" and guarantees minimum learning standards for all. It presents the results of empirical research conducted among Italian schools: qualitative interviews with teachers, investigating their opinions on the excellence of their students, and quantitative analysis of INVALSI data, showing the interweaving between learning, skills, relationships, motivation and family background of excellent students. The research results help to answer the following questions: what does it mean to be excellent? Who is an excellent student? Who defines it as such? How can scholastic excellence be valued without falling into an elitist and selective education?

Chiosso, G., Poggi, A.M., Vittadini, G. (Eds.) (2021). *Viaggio nelle character skills. Persone, relazioni, valori*. Il Mulino. [Journey into character skills. People, relationships, values]

The volume deals with the topic of knowledge and learning in school, considered as a process that involves not only cognitive skills, such as remembering, speaking, understanding, making connections, deducing, and evaluating, but also implies transversal qualities, dispositions of personalities called "character skills", such as mental openness, the ability to collaborate, security. The reflections developed by a group of scholars of various backgrounds and with different skills converge in suggesting the multiple perspectives with which to approach the character skills to have full knowledge of them, discussing their role in the future of education and school, as well as in the broader society.

INVALSI (2022). *Rapporto Invalsi 2022.* InvalsiOpen. [Invalsi Report 2022]

The report describes the learning outcomes achieved in 2022 by over 2.4 million Italian students in different schooling levels, providing analysis by different variables: gender,

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geografichal areas, socio-economical-cultural background, migration background. The report is annually published by Invalsi, so that a longitudinal analysis of data accross is discussed. A focus is on the equity of Italian school system, exploring three dimensions: differences between schools and, within them, between classes; b) educational fragility, i.e. the share of students completing secondary school with inadequate learning levels; c) opportunities for students with best results.

Portugal

Lima, L. C. (2020). Autonomia e flexibilidade curricular: quando as escolas são desafiadas pelo governo. *Revista Portuguesa de Investigação Educacional*, n.º especial, 172-192. [in PO]. https://doi.org/10.34632/investigacaoeducacional.2020.8505. [Autonomy and curricular flexibility: when schools are challenged by the government]

Recently, the Portuguese government encouraged primary and secondary schools to use curricular autonomy and flexibility to achieve the learning outcomes for each subject throughout compulsory schooling as well as at its end. The author reflects on the challenges and potentialities that autonomy and curricular flexibility imply for schools but also for policy-makers.

Soares, D., Carvalho, P., & Dias, D. (2020). Designing learning outcomes in design higher education curricula. *International Journal of Art & Design Education*, *39*(2), 392-404. https://doi.org/10.1111/jade.12286.

The authors conducted a lexical and grammar analysis in order to understand how higher education institutions have constructed learning outcomes for study cycles (bachelor, master and doctoral) between 2009 and 2015. The results display the most commonly used words and the differences between study cycles, noting that the skills required become more complex as the level of qualification increases.

Azevedo, J., Oliveira, A., Azevedo, M., & Melo, R. (2021). *Mapeamento do Abandono Escolar Precoce em Portugal*. CEPCEP. [in PO] [Mapping Early School Leavers in Portugal]

In this document, the authors emphasize the need for a broader and more comprehensive analysis in understanding and combating the problem of underachievement and early school leaving in compulsory education. They question the contribution of the school for the processes of exclusion, the absence of mechanisms to monitor and understand the real dimension of the phenomenon, the individual and social effects of school retention, and the role of public policies in combating this problem.

Abrantes, P. (2022). Têm os Territórios Educativos de Intervenção Prioritária mitigado as desigualdades educativas e sociais?. *Cidades. Comunidades e Territórios*,

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(45). [in PO]. https://journals.openedition.org/cidades/6604 [Have the Educational Territories of Priority Intervention mitigated educational and social inequalities?]

The article analyzes the 25 years of the Portuguese compensatory education programme (TEIP), noting that not all schools that integrate the programme are among the most disadvantaged in the Portuguese educational system, and finding frailties in the programme to improve the students' school grades, pointing to the need for reflection.

Spain

Martínez-Roca, C., Martínez, M., & Pineda, P. (2014). The role of Career Guidance in the Development of Competences for Socially fair Employability. *Procedia - Social and Behavioral Sciences*, 139, 343–350. https://doi.org/10.1016/j.sbspro.2014.08.009

Other researchers have explored achievement in VET. Martínez Roca, Martínez and Pineda observed a contradiction in some career guidance programmes, which privileged a quick fit with the existing jobs. This bias neglected students' personal development and reified the current state of the labour market. Marhuenda researched learning in companies that enrol at-risk adult students in order to underpin their integration in mainstream social positions. He also identified important contradictions between task-related and personal competences in this domain.

Valdés, M., Ángel Sancho, M., & Esteban, M. (2021). *Indicadores Comentados Sobre el Estado del Sistema Educativo Español 2021*. Fundación Ramón Areces and European Foundation Society and Education [Annotated Indicators on the State of the Spanish Education System 2021]

The report led by Valdés, Sancho-Gargallo and Esteban Villar (2021) looks at achievement through graduation rates. The graphs show that about half the population above fifty has not achieved basic secondary education. Younger generations are polarised between two big groups, those who completed tertiary education and those who did not complete basic secondary education. The group that left school after upper secondary education has been the smaller one for decades.

Coll, C. & Martín, E. (2021). La LOMLOE, Una oportunidad para la modernización curricular. *Avances en Supervisión Educativa*, 35, 1-22. https://doi.org/10.23824/ase.v0i35.731 [An opportunity for curricular modernization]

Coll and Martín (2021: 15) attempt to underpin LOMLOE with a conceptual distinction of two types of competences and two types of underachievement. In their view, at the end of compulsory education all students should achieve the indispensable competences that they will hardly acquire later on. Otherwise, the education system provokes a serious problem. Although it is desirable that all students also achieve other basic competences,

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further education can compensate for them. Therefore, low achievement of these competences is not a so serious problem.

Tarabini, A., Curran, M. & Castejón, A. (2022). Ability as legitimation of tracking: Teachers' representations of students in vocational and academic tracks. *British Educational Research Journal*, *48*(6), 1049–1064. https://doi.org/10.1002/berj.3808

Tarabini, Curran and Castejón have interviewed secondary education teachers to elicit their views on students' abilities. In their view, these views portray learning in the following terms: "a highly naturalistic conception of students' abilities among teachers; a remarkably dichotomised conception of theoretical and practical abilities that match with the academic and vocational tracks; and a direct association between types of student and types of track based on different types of ability at a cognitive, behavioural and personal level".

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