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INITIAL TEACHER EDUCATION FRAMEWORK REPORT

Authored by Mario Vötsch

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WELCOME TO PIETE!

To reach new horizons in pursuit of economic growth and innovation, European education institutions need to ignite an entrepreneurial spirit among learners of all age. As a matter of fact, entrepreneurial competences are no longer considered to be only relevant for starting new businesses. Rather, they are considered to be both, applicable in “all walks of life” (Entrepreneurship Education. A guide for Educators, 2014, p.7) and key for mastering the challenge of lifelong learning, as EU policy makers have repeatedly emphasized.

Our Erasmus+ funded project **“Partnership for Initial Entrepreneurship Teacher Education” (PIETE)** has been inspired by this new scope for Entrepreneurship Education. PIETE will foster entrepreneurial competence deliverance within Higher Education Institutions (HEIs) that are responsible for pre-service teacher training. It does so by relying on the European

Entrepreneurship Competence Framework (EntreComp) as well as on institutional tandem constellations between experts of entrepreneurship and initial teacher training. These features make PIETE a unique pan-European pilot initiative with high impact potentials on pre-service teacher students who will soon become part of a new generation of entrepreneurial school teachers.

Univations strongly believes in the European idea and is very proud to be leading the PIETE partner consortium. We will do our best to make PIETE a source of inspiration for those who want to start equally minded initiatives and are keen to foster entrepreneurial thinking beyond known scopes.

*Yours,
Daniel Worch*



DANIEL WORCH
CEO OF UNIVATIONS GMBH

Univations is the Lead partner of the PIETE Project consortium

TABLE OF CONTENTS

INTRODUCTION	6
1. EDUCATION SYSTEM	7
Initial Teacher Education	7
2. ACTORS	9
ITE Providers	9
School authorities	11
Schools	11
General agents	12
3. ARTEFACTS	14
Teaching standards and regulations	14
Curricula	15
National Strategies and Initiatives of Entrepreneurship Education	16
4. PRACTICES	17
Teaching: skills and practices	18
Knowing: forms of knowledge and research orientation	19
Organizing: codes of conduct and organizational ethics	20
Levels of competence	20
5. MAPPING ITE	22
APPENDIX	25
Literature and Sources	25
Tables	26
Abbreviations	26

INTRODUCTION

This methodological framework allows for a coherent mapping of actors, artefacts, and practices involved in the pre-service teacher training within education systems. As such, the framework provides a basis to understand the functionality of Teacher Training Center (TTCs) in terms of institutional circumstances, curricular focus, and responsibilities of educators involved in ISCED 3-4 teacher development. By raising awareness for given necessities within and capacities of Initial Teacher Education (ITE), the framework allows to identify areas in which elements of Entrepreneurship Education (EE) – as understood under the European Entrepreneurship Competence Framework (EntreComp) – can be most efficiently and suitably integrated.

The framework contains two basic dimensions: On the one hand, it explains how ITE works from a systemic perspective, on the other hand it asks where EE can be found within this perspective already. With this two-fold orientation in mind, the text is structured as follows: **Chapter 1** delivers a methodology that allows to briefly introduce any given Education system, i.e. provision of an overview about different levels and tracks of education. In addition, this chapter maps the ITE system by relying on a conceptual framework, which differentiates between actors and artefacts to reveal underlying structures and dynamics. **Chapter 2** describes the main *actors* of the ITE system as there are ITE providers, school authorities, schools, teacher educators and teacher candidates

etc. These actors are described with regards to their function and relevance within the system. **Chapter 3** looks at the *artefacts* of ITE systems by analyzing educational policy documents and how they are being implemented by TTCs. Here we especially focus on curricular issues to explore the modes in which EE could be addressed. The last section of this chapter asks for national strategies and initiatives for EE. **Chapter 4** explores the concrete *practices* of ITE actors as they are displayed within fields of teaching, knowing and organizing. Here we take a closer look into the institution of TTCs and asks for defining criteria of the ITE educators' job. **Chapter 5**, finally, systemizes the findings of the framework by mapping the main elements of ITE alongside macro-, meso- and micro-levels.

In sum and for the purpose of the European project *Partnership for Initial Entrepreneurship Teacher Education (PIETE)*, these results facilitate the identification of relevant structural and institutional elements that are barriers to the integration of EE. Furthermore, they reveal potentials on how to activate educators as catalysts to foster entrepreneurial acting and thinking within ITE.

This framework aims to be easily applicable to different national or regional contexts. Its functionality will be showcased by applying it onto the educational contexts of PIETE partner institutions in Austria (PHT), Poland (UBB), and Hungary (USZ). The cases will be presented as separate reports in the respective national languages. However, the Austrian case will also be made in English to demonstrate the full potential of this framework to all readers.



1. EDUCATION SYSTEM

This chapter presents a methodology that allows to briefly introduce a country's education system to individuals who are not familiar with it. It does so by providing guidance on which fundamental information is needed to display its main features. Hence, this mainly concerns the provision of insights that allow to get a fair overview on existent levels and tracks of education¹. To add, such an overview naturally also compiles information on how many years of education each level requires and which educational options pupils (at schools) or students (at colleges, universities) have at certain points ("tracking"). In general, candidates for ITE have to graduate upper secondary education (ISCED 4) before starting ITE study programs, which in most countries comprises 3-4 years Bachelor and 1-2 years Master programs.

Initial Teacher Education

Each ITE system contains a variety of different actors and artefacts on different levels. However, the set-up and interdependencies of these parts substantially vary among countries and sometimes even regions. Despite the latter, it is our goal to provide a common framework, which allows to coherently map these elements. Thus, while the framework foremost helps to create a general understanding of characteristic features of each system (e.g. regulations, rules, and relationships) it may also be exploited for comparative exercises and, consequently, shed light upon national or regional differences and similarities.

¹ Information in this section is based on official data from national institutions as well as from international country reports (e.g. OECD, Eurydice). https://eacea.ec.europa.eu/national-policies/eurydice/national-description_en

To describe the systemic view of ITE in more detail, we refer to another framework, which differentiates between *actors* (e.g. teacher candidates) and *artefacts* (e.g. teaching standards) in order to reveal the underlying structures and dynamics (see Figure 1).

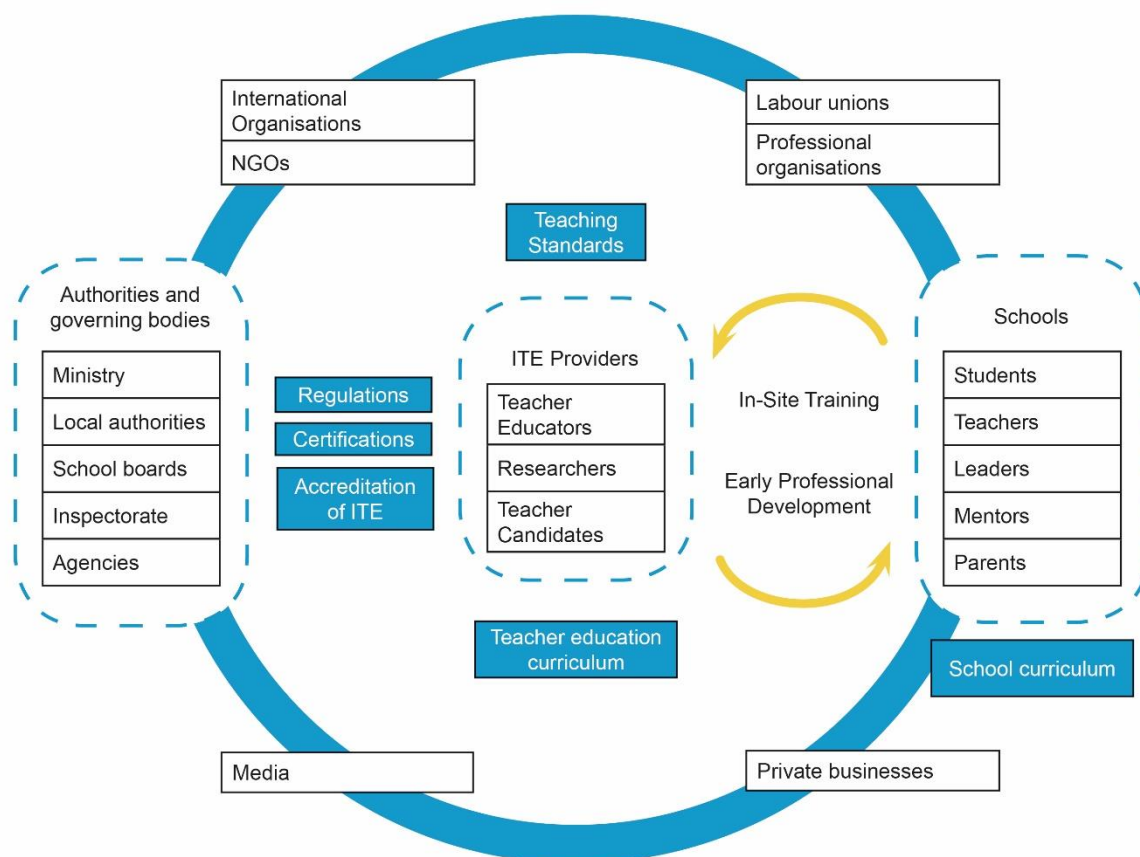


Figure 1: Potential actors and artefacts in ITE systems (OECD, 2019b, p. 20)

Both categories, actors and artefacts, can be perceived as *agents* because both can “act” in the sense of influencing the system.

Agents thus could be institutions, organizations, authorities or individual human actors as well as material structures, programs or documents (Burns & Köster, 2016, pp. 25).



2. ACTORS:

Providers, Authorities and other Agents

Actors can be *national, regional or local authorities, schools, ITE providers, teacher educators and teacher candidates* etc. In the following, they will be described with regards to their function and relevance as well as their interactions (e.g. collaboration between schools and TTCs).

ITE Providers

In this section, we present (1) **the institutional setting** of ITE providers. In most countries the responsible institutions are universities and/or other higher education institutions like colleges. However, how are ITE providers organized across the country? Are they public or private? How much autonomy do they have in relation to superior agencies like federal ministries? On another level, we also ask about the organization of ITE providers (hierarchy, decisionmaking boards, personnel structure, administration) as well as their connectedness to other actors and levels.

Another important element is (2) **the education program**, which these ITE providers pursue. In their global analysis of teacher education systems, Darling-Hammond & Liebermann (2012) differentiate two forms of education programs, which also serve as reference points for our analysis. Firstly, they define *academic programs*, which are research oriented and refer to academic knowledge, mainly being located in universities. Secondly, they define *professional programs*, which refer to vocational competencies and focus on practical education, thus mainly being located at other higher education institutions like *PH* (*“Pädagogische Hochschule”*) in Austria and Switzerland or *hogskoler* in Sweden or *hogescholen* in the Netherlands (Swennen & Snoek, 2012, p. 22). According to these different *programs*, the organizational cultures, personal identities and professional practices vary from case to case, e.g. in Austria educators of *professional programs* may have a stronger sense of identity for being a teacher than university researchers. This is because they are trained teachers in the first place and often teach at the same time at schools and at ITE providers. At university, however, teaching has a different appreciation in terms of career opportunities and, thus, sometimes is being seen as imposition.

The next element of analysis are (3) **the identities and roles** of the individual actors. Who are the educators, researchers and teacher candidates? What are their roles and identities inside and outside of the organization? How about the attractiveness of their profession (compared to others in the same area)? How popular and how worthwhile is it to become a teacher? Are salaries attractive and what career stages and opportunities do teachers have?

In general, teacher educators have different roles and identities. They can be educators, lecturers, researchers or practitioners, to name just the most common categories. A practical method to analyse their role of teaching is to define their relation to practice in terms of *first order practitioners* or *second order practitioners* (Murray & Male, 2005). First order practitioners teach students in a specific subject with specific content (e.g. physics) – we label them as teachers. Second order practitioners teach students who are to become teachers, they teach teaching (e.g. subject-related didactics and teaching methodology) – we label them as *educators*. In general, pre-service teacher educators are second-order-practitioners, they teach teaching. However, they can also be first order practitioners at the same time, e.g. when they are teaching a specific subject in a school. One important conclusion which research has drawn from this differentiation is the lack of professionalization and the lack of identity of second-order practitioners (as educators) (Izadinia, 2014, Swennen et al., 2010). The reasons therefor are interconnected: on the one hand, their profession (as educators) is not linked to traditional institutions like schools or universities. Thus, it has not the same level of institutionalization and legitimation. That is also why these practitioners struggle with other identities which may be more powerful and representative in terms of institutionalized background and traditional legitimation, e.g. being a lecturer at university or a teacher at school (Swennen & Snoek, 2012, p. 25).

Another way to explore the role of initial teacher educators is through their relation to research. Those who work at university and are required to fulfil performance targets in research may conceive themselves primarily as researchers, in contrast to those who never have worked in any research oriented environment. At the same time, a process of “academization” of higher education institutions can recently be observed in several countries, which transforms not only their organizational cultures but also their employees’ identities.

Finally – and as we focus on the teacher educators, to a less extent – we also may ask, who (4) the **teacher candidates** are and how they successfully apply for the study programs. Here we present basic demographic information and ask, where the students are coming from, whether most of them are following a continuous education pathway or if there are also “career changers” (i.e. educational background and qualification different to “classic” teachers). As ITE has changed over the years, e.g. due to changing job requirements for teachers or paradigm shifts of pedagogical methods (like cooperative learning), so have also changed the roles and identities of ITE students. Thus, it will be relevant to ask for the TTC strategies of attracting and selecting the candidates: Who are the target groups for attracting potential students? Are there specific criteria for selection? What chances and opportunities of employment are offered to the candidates?

School authorities

In this section we analyse the role and responsibility of school authorities. First, we have to identify the relevant (1) **actors** and their (2) **responsibilities**. The actors might be bureaucratic institutions at the federal (e.g. ministries), provincial (e.g. school boards or inspectorate) or local (e.g. municipalities) level. Next to these public authorities, there might be other agencies, which need to be considered on a structural level, inasmuch as they have legally compulsive mandates. Such agencies could be consultancies or advisers for political institutions or performing monitoring functions.

The responsibilities of these actors vary in scope and issue and can be related to questions like the following: Who is in charge of recruiting and employing the teacher workforce for which school-level? Are there mentoring programs for new teachers? What forms of quality assurance do exist? Who decides upon accreditation procedures? Which authority does the inspection of schools? In many contexts, a transparent allocation of responsibilities is not easy. This is especially the case, if a task or service has been outsourced, and thus the actor, who makes a decision, is not necessarily the same as being responsible for it.

In a second step of analysis, after identifying the relevant actors and their responsibilities, we ask for their (3) **interconnectedness**. In many education systems (e.g. Austria), decision-making about many issues is shared across central government, the provinces, municipalities, and schools. Within this divided responsibility, questions of autonomy arise: Which processes are standardized and which not? Who is depending on whom? What hierarchies between actors do emerge? School boards are a prominent example of convergence of rights and duties from different levels, as they commonly administrate education systems. In fact, they often construct a link between the federal and the local level. Depending on the context, school boards have a wide realm of responsibility, ranging from the execution of educational duties to inspection, quality assurance and education controlling.

Schools

Next to school authorities, the actors *within* schools need to be analysed. Schools are important places of ITE, because here usually happens the first contact between teacher-candidates and pupils. Generally, this takes place in the *pre-service* education during several internships and trainings. The first ongoing and continuous confrontation over a full teaching period takes place during *in-service education* (Induction phase).

Besides explaining the concrete setting of the **practical training** via several pre-service and in-service stages, it will be a question to answer in each country report, if **pupils** at school have a relevant (and observable) role for ITE. Which kind of influence do they have on teacher candidates? The same question concerns **parents**: What is their role? One could assume, that parents directly or indirectly (via the head of school or regular teachers) address specific expectations to the pre-service or in-service-candidates or that they accompany their sons and daughters in evaluation

forums and thus generate some form of pressure to the candidate. This brings us to the more obvious relevance of the other actors involved in schools: teachers, leaders and mentors. **Teachers** are colleagues of the candidates and also have responsibility for their success. What do we know about this responsibility? How much support do they give to candidates (next to organizational and administrative support)? Even more important is the role of school **leaders**, as they usually are the first contact persons to cooperate with school boards and ITE providers and, thus, are responsible for the allocation of graduates as well as, in terms of positive references, for their future career opportunities. Finally – and perhaps the most important school actors in the context of ITE – there are the **mentors**: Are the teacher candidates conducted and accompanied in their practical training? What is the role of mentors (or coaches)? What are their obligations and responsibilities in relation to the candidates?

General agents

As teacher training does not happen in isolated regional or national contexts, a consideration of general agents is useful. General agents are actors, which become relevant at different levels, with different purposes, and at different stages of the process of ITE. Also here we first have to identify these actors and define their specific roles and responsibilities. Then we need to allocate their influence and explain their interconnectedness with the main actors of ITE.

A first category of agents are organizations for **further training and development**. Once in service, which offers of professional development do teachers have? This question is especially interesting with respect to EE, as in many countries EE is not an integral or compulsory part within ITE, rather an option as part of teachers' continuing professional development. As most offers of EE are organized externally, they remain outside the scope of TTCs. "The dominant modes of incorporation of entrepreneurship education are through external actors and as part of specific programs organised by ministries of education." (EC, 2011, p. 17f.) This means that, once they are in service, teachers (and schools) rely on the support from other stakeholders to develop such competencies.

Another category of general agents are **labour unions** (e.g. the Teacher Union in Austria and its strong political influence) and **professional organizations** (e.g. the European Association for Quality Assurance in Higher Education). Next to that, we have the relevance of NGOs and private businesses on national and international level. Especially the influence of **corporations** has increased in some respects, as they cooperate with TTCs, organize business visits, internships and other opportunities of non-formal learning. Then there is the role of **media**: media coverage and media institutionalization are important indicators for the public discourse on ITE.

Finally, there is a range of international organizations whose agendas have influence on ITE on national level. Examples are the **OECD** and its comprehensive research on teaching and learning (e.g. TALIS-surveys), the **UN** and its Sustainable Development Goals, the **EU** and its strategies for Lifelong Learning. Even more compulsive are initiatives for general educational standardization like

the Bologna Process, the framework of the European Higher Education Area, the European Qualifications Framework and other transnational processes (see Symeonidis, 2018).



3. ARTEFACTS:

Curricula, Standards and Strategies

There is a category in our analysis which highlights those elements of ITE, which are not represented by organizations or individuals but still have important influence. These elements are materialized as *artefacts* and thus can “act” in the same sense as human actors.

Teaching standards and regulations

A first category of artefacts are **teaching standards** and practical guidelines. National standards can be important for ITE as they

- provide a competency framework for teachers (e.g. competency areas with activity parameters concerning teachers’ tasks, knowledge required and evaluation methods),
- guide the curriculum of teaching institutions,
- assess graduating teacher candidates².

However, only few European countries have national standards for ITE, e.g. Finland, Sweden, Poland, Ireland, Spain and Turkey (Eurydice, 2012). As a matter of fact, most other European countries have no central guidelines to support teachers, some (like Austria) at least provide teaching materials.

More relevant than (often not existing) teaching standards are **qualification standards**, which define what kind of qualification is required to become a teacher. These requirements mainly refer to curricular requirements (degree, ECTS, practical training), but also professional experience might be a topic (e.g. in vocational education and training). Depending on the personnel categories of ITE providers, different qualification standards need to be considered.

² See the case of Estonia which is a reference here (OECD, 2019b, p. 131)

Further artefacts of this category are **regulations** and **certifications**, which define e.g. quality assurance systems, development plans or evaluation processes. Finally, we should not forget the requirements and regulations for **accreditation** of ITE providers.

Curricula

One of the most important artefacts are **curricula**. On the level of the education system, we differentiate ITE curricula (higher education level for students) and school curricula (primary and secondary schools for pupils). The latter may also have some relevance for ITE, when it comes to the practical training in schools, but are not focus in our framework. We recommend three steps of analysis:

(1) In general, there are two basic curricula-**models** in ITE, towards which our analysis should be oriented to: the concurrent model and the consecutive model, as well as the coexistence of both. In concurrent programs, “academic subjects are studied alongside educational and professional studies throughout the duration of the training, [they] allow a more integrated learning experience, as pedagogical and subject matter (content knowledge) training take place at the same time” (OECD, 2019a, p. 128). The disadvantage is that they allow “little flexibility in entering the teaching profession, especially for those who have studied something other than education” (ibid.). Consecutive programs, on the other hand, “offer specialized courses in pedagogy and in teacher education after completion of another degree in a subject” (ibid.). Generally, this allows for more flexibility when entering the teaching profession but also results in a weakened professional identity, (i.e. more expertise in a specific field or subject, but less competence in pedagogical and didactical issues). In fact, a coexistence of both models may facilitate attracting different profiles of individuals and provide a fair basis to adapt to different circumstances. However to maintain the two training systems simultaneously may also trigger (unbearable) extra costs (ibid.).

(2) Within these basic models, several **core dimensions** of curricula can be distinguished. The OECD differentiates in the TALIS report (2019a) three core dimensions of teacher training which also provide a useful frame for the analysis at hand: (1) content, (2) pedagogy and (3) classroom practice. These dimensions include questions such as whether there are mandatory elements of practical training in ITE (“classroom practice”) and whether they cover all subjects taught by the teachers or just some (see OECD, 2019a). Depending on each national or regional context, there might be a need for further differentiation, as e.g. in Austria where the compulsory “Introduction phase” composes a fourth dimension needing to be added.

(3) A third step of analysis – after defining the basic curricula model and explaining its core dimensions – is aimed at the **relevance of EE** and asks for the quantity and the quality of its integration into the curricula. As the following list shows, this integration can be effected in different ways (Eurydice, 2012):

a) Cross-curricular: “Under this approach, rather than being explicitly mentioned as part of a particular subject, entrepreneurship objectives are expressed as being transversal, horizontal or cross-curricular. They form part of the values and competences to be developed throughout all subjects and curriculum activities.” (Eurydice, 2012, p. 13)

b) Compulsory subject: Entrepreneurial issues are integrated into the curriculum as compulsory separate subjects or integrated into other compulsory subjects.

c) Optional subject: Entrepreneurial issues are integrated as separate optional subjects or integrated into other optional subjects.

d) Educational objectives: There is a range of general educational objectives (e.g. self-confidence, planning, and teamwork) and learning outcomes, which include entrepreneurial dimensions but are not explicitly linked to EE.

These four dimensions refer to a Eurydice-report (2012), where the integration of EE is analysed for compulsory school levels (primary, secondary) of the education system within European countries. Empirical results show that most countries explicitly recognise EE at least to some degree, while the patterns of integration change from one school level to another. Concerning ITE, there do not exist empirical results like this so far. However, defined in the broad terms of EntreComp, there is reason to assume that many existing ITE curricular contents (e.g. learning outcomes) already reflect EE in other terms.

National Strategies and Initiatives of Entrepreneurship Education

In this section, we ask for existing national strategies and initiatives to promote EE. Are there any national strategies, action plans and initiatives, which promote EE, encourage its integration and thus may have influence on the current situation on educational reforms? Different levels of strategies are possible (Eurydice, 2012, p. 7):

- specific strategies/action plans focused exclusively on the integration of EE,
- broader educational or economic strategies which incorporate objectives for EE (e.g. strategies for lifelong learning, youth, employment, formal education),
- individual or multiple initiatives related to EE.

As these strategies and initiatives mainly materialize in official documents, we ask for the levels and modes in which EE is currently being addressed in national educational steering documents in terms of general approaches, guidelines, obligations and/or recommendations.



4. PRACTICES:

Activities, Attitudes and Competences

In a final step of the analysis, we explore the concrete practices of ITE actors as they are displayed in the everyday life **activities** of teaching. These practices, basically, include **attitudes** and **competences**, which are expressed in the performance. Defined in the broad terms of EntreComp, EE already goes hand in hand with many of teachers' existing attitudes and goals as educators, e.g. in terms of fostering creativity, innovation, and humanistic values (EC, 2011, p. 23). For these reasons it is suggested to undertake an audit of existing activities which "helps build understanding and overcome teacher concerns by demonstrating that much of what they already teach and the way in which they teach it has a good fit with the entrepreneurial approach" (ibid., p. 9).

The overall purpose of this section is to ask what it means to be an educator in the ITE-sector. Whereas the former sections helped to get an overview of relevant actors and artefacts at different levels, we will now focus on the institutional insights of TTCs and thus determine defining criteria of educational work done at a micro-level. This is mainly an empirical challenge. In fact, there is a lot of literature about "quality criteria of good teaching", which discusses the subject in normative and programmatic ways. To add, ITE-institutions usually have their own "Vision", "Professional ethics" or "Codes of conduct", which prescribe the ways how professional practice and practitioners should look like (see Figure 2 as an example for the "ideal" entrepreneurial teacher). However, these accounts do not necessarily provide insights into the realities of the practice – its challenges, requirements and problems. Therefore, our criteria strive not so much for normative ideals of teaching, but rather for empirical indicators. They cover different professional, social and cultural fields, which, in sum, constitute the teacher workforce with its practices, attitudes and competences.

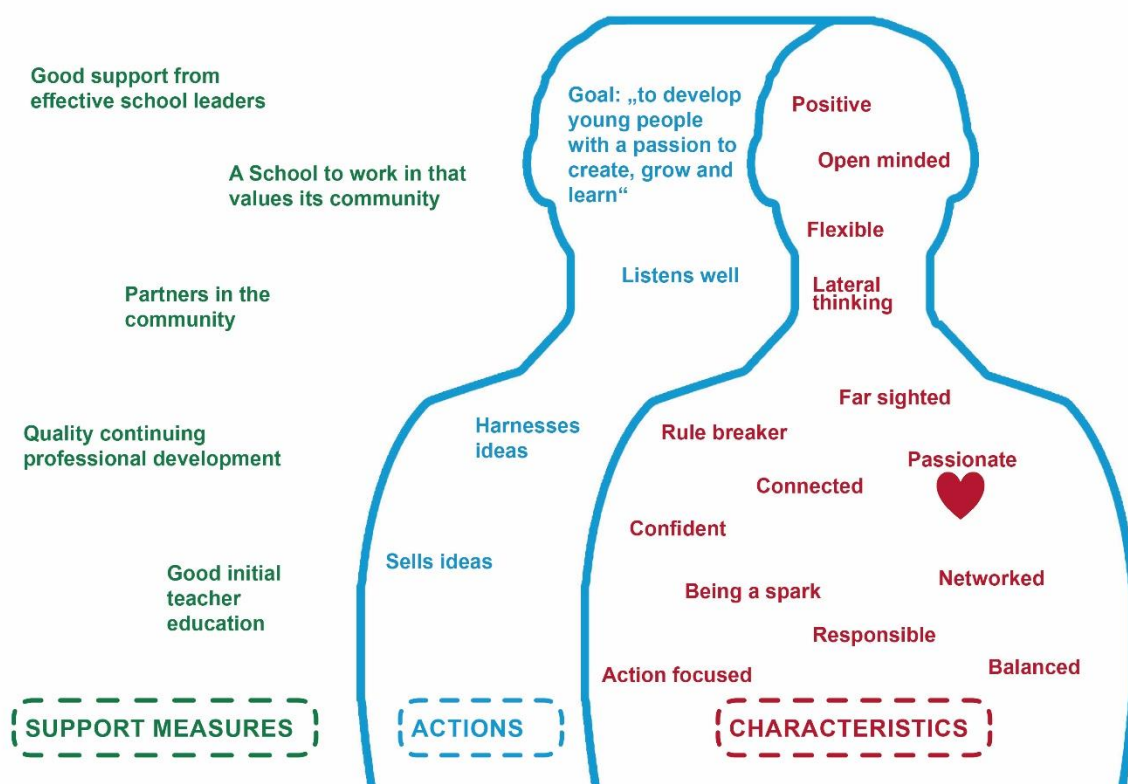


Figure 2: The Entrepreneurial Teacher: Characteristics, Actions and Support Measures (EC, 2011, p. 7).

Teaching: skills and practices

A first set of questions deals with the main variables that define and influence daily practices of teaching. Are there specific **teaching skills** required? Skills can contain categories like planning, designing, performing and managing of the teaching. In more detail we can ask, what professional and what social and emotional competences (e.g. motivational and affective competences) are required. Are classes diverse in the sense of students coming from different study programs and studying for different purposes so that teachers need competence in diversity management? What about individual coaching of the students and other strategies of individualizing?

Besides teaching, it may be relevant that teachers are also involved in **learning activities**. Learning activities foster the learning capacities of students and require teachers to act as a coach or consultant rather than as a traditional instructor. It depends not only on the teachers' skills, but also on the organizations' culture, strategy and leadership whether students are "increasingly encouraged to take on responsibility for their own learning" (EC, 2011, p. 9). They should be challenged in their decision-making and problem-solving skills and ideally work in teams as well as "get involved in 'supported' risk-taking and learning activities that incorporate the possibility of

failure” (EC, 2011, p. 9). In all these activities, the preferred learning styles of students need to be considered and fostered.

Another topic are **assessment methods**: Which assessment practices are carried out? Examples would be learning-oriented assessment, feedback culture (immediate feedback on group-work; written feedback for papers...); written or oral examination, and self-evaluation of the students. In regards to EE, it has to be asked which assessment criteria are appropriate. For example, how to assess “transversal skills and attitudes like those involved in entrepreneurship”? (EC, 2011, p. 9) A specific entrepreneurial form of assessment would be peer-review, meaning students being encouraged to assess their own and others’ work. Outcomes could be systematically included in students’ records, portfolios and progress files. In general, assessment methods do not depend on the individual teachers’ practices only, but also on the ITE providers’ culture. Do teachers e.g. have incentives to engage in rather time-consuming assessment tools, as they are required in EE?

Other important categories of teaching are **reflection** and **feedback**: Where does reflection of teaching (and learning) take place? Are there opportunities to “enact” (i.e. practice) teaching? Are there specific mentoring programmes? In which form do students have the opportunity to evaluate the teachers?

Information on all these categories – teaching skills, learning activities, assessment methods, reflection and feedback – shed light on the dominant paradigms of teaching (e.g. action-oriented mode of teaching). Besides, they illustrate the different roles of teachers, which they are required to perform (e.g. as instructor, teacher, facilitator and coach), as well as the nature of the relationship between teachers and students.

Knowing: forms of knowledge and research orientation

This set of questions contains the categories of **knowledge, science and research**. What form of knowledge is required in teaching? This question focuses on the division of content knowledge and pedagogical knowledge, further it problematizes the general relation of theory and practice. Do teachers require professional experience and/or scientific competence? Is teaching generally related to (e.g. educational) research? Is doing research and scientific work part of the job? Is participating in research projects a mandatory task or only a possibility? How much teaching load and how much research load is designed on average? As these questions indicate, the research orientation of the individual teacher is, again, depending on the research culture of the organization. Thus, we have to ask whether there are institutional structures, which support research? Are there grants or excellence programs for teachers (as researchers)? Finally, where does research happen at all – inside or outside the academy of sciences?

One also could ask some of these questions from a curricula perspective: How much freedom do teachers have in conceptualizing their teaching, that is, in adapting the requirements of the curriculum to their own needs and interests? Where, in the curriculum, are links from theory to practice? Who, finally, is responsible for the course content?

Organizing: codes of conduct and organizational ethics

Most of the aforementioned categories are individual practices, which are nonetheless deeply connected to the organizational level of ITE providers. The individual teacher and his or her practices are mainly framed, influenced, fostered or limited by organizational **structures**, its **culture** and **ethics**. This frame, of course, depends from the organizations' history: From where does it originate? Which heritage does it incorporate from the past decades? Apart from these historical accounts, we ask whether there are explicit codes of conduct or standards for being a good teacher at the institution. Does the institution have a clear and shared vision of good teaching? If so, how is it communicated to the teaching personnel? What is the professional responsibility of a teacher and what are corresponding career values? How much do teachers in their professional self-understanding relate to the outlines of their employer? Another issue of organizational culture is whether individuals are encored to become team-players: Are colleagues sharing the same values and understandings about what they are doing? Are there open discussions about the basic understanding of pedagogical or professional approaches? How much do educators have to cooperate with (or connect to) colleagues for preparing the teaching?

With regards to EE, it will be interesting to know if there are any, and if so then how many, EE characterized activities enacted within the organization? Do ITE providers “know” about their own “approach”? Do they have a clear vision and policy for EE, which expresses it as an entitlement for all students (EC, 2011, p. 8)? Such an analysis of organizational practices also should stress the roles of coordinators and leaders. For EE to become a vision of the organization, leadership should entail staff consultation and clear communication of the own understanding and definition of EE³. What role do teachers have in (re-)presenting this vision to the public? Are they designated as coordinators with specific responsibility for EE activities? How much organizational support and resources (e.g. for staff development) are available?

Levels of competence

At the end, all these practices of teaching, knowing and organizing as well as the corresponding activities, skills and attitudes are mapped on different levels of competence, which depend on the concrete setting of the ITE system (see Figure 3). Competences are relevant at the individual student level when it comes to the management of teaching-and-learning-arrangements. At the same time competences are relevant at the classroom level, e.g. when specific strategies for diversity and individualization are required. Another dimension of competence is the school level where teachers are expected to be team players, colleagues, organizers or managers. Finally, we also can detect competences at the community level where teachers are expected to engage in advising and networking with other stakeholders. Figure 3 exemplifies one possible tableau with

³ For more information on the leader's or principal's role in EE see <http://ee-hub.eu/monitor/>

the different levels of competences, which of course needs to be adapted to each institutional context.

Competences for teachers

At the individual student level

- Initiating and managing learning processes
- Responding effectively to the learning needs of individual learners
- Integrating formative and summative assessment

At the classroom level

- Teaching in multicultural classrooms
- New cross-curricular emphases
- Integrating students with special needs

At the school level

- Working and planning in teams
- Evaluation and systematic improvement planning
- ICT use in teaching and administration
- Projects between schools, and international cooperation
- Management and shared leadership

Figure 3: Competences for teachers on different levels (Snoek & Zogla, 2009, p. 20).



5. MAPPING ITE

After analysing the main actors, artefacts and practices of the ITE system within a common framework, we finally map these elements alongside a table which differentiates macro-, meso- and micro-levels on the vertical axis and the dimensions of Who, What and How on the horizontal axis (see also Snoek & Zogla, 2009, Caena, 2014).

The macro-level asks for the systemic structures in which ITE takes place, its “embeddedness”. It mainly covers political actors like governments and ministries, bureaucratic actors like school boards and accreditation agencies, furthermore professional associations and teacher unions. These national, regional or local authorities and their dependencies mainly have been described in more detail in chapter 2. The meso-level refers to the organizational level of the TTC and asks for the way how ITE is implemented, managed and planned. It includes the head or faculty board of the TTC, specific departments of teacher education, regional cooperation partners and the like. The micro-level, finally, comprises all elements, decisions and practices which are in the responsibility of the individual teacher educator. It actually looks at the classroom setting and the interaction of teacher educator and teacher student.

After distinguishing these three levels of the ITE system, we identify the relevant elements and allocate them alongside the levels. A rough classification of Who, What and How helps to order the elements according to their function and meaning. The Who identifies the relevant actors on each level as already described above. The What classifies the most important factors which are necessary for the functioning of ITE, e.g. study programs, teacher qualifications, pre-service training and in-service training. The How identifies the way how the different elements of ITE are being accomplished in terms of structural procedures or pedagogical methods.

Depending on the responsibility for each subject matter, a hierarchical classification into macro, meso and micro is not always easy or clear-cut. An example would be the divided responsibility in designing curricula and defining contents (as it is the case in Austria): Study programs might be within the responsibility of national authorities in terms of designing a compulsory framework including requirements, objectives and examination targets. At the same time, the study program can be relevant on meso-level when it is up to the ITE providers to operationalize the given framework within a certain degree of freedom. Another example, where levels and responsibilities might be overlapping, are teaching requirements and standards. Not all countries have compulsive teaching standards on national (macro) level. But who, then, is responsible for unified output requirements? Is it the government represented by a ministry or any other agency on federal or regional level? Who formulates the necessary competencies, attitudes, and values for prospective teachers?

Ultimately, mapping – identifying elements of ITE and classifying them according to different levels – is not an easy task. The resulting framework (see Figure 4 as example) provides a broad overview, which needs to stay rather abstract and somewhat imprecise, as in reality, categories and levels often overlap. Nonetheless, applied to each national context, the resulting framework can illustrate valuable insights like

- *the level of centralization or decentralization in the governance of ITE,*
- *relationships of autonomy and control between several levels and actors,*
- *the educational diversity within a country.*

Comparative Framework of ITE

Levels	Who	What	How
Macro-Level System	Government	Teacher qualification and teaching requirements	<ul style="list-style-type: none"> Teaching licenses Teaching standards Performance targets
	Ministries	Educational program	<ul style="list-style-type: none"> Degree level and workload Curricula: basic requirements
	School boards	Quality Management	<ul style="list-style-type: none"> Inspection Requirements of practical training, e.g. in-service training
	Advisory agencies	Quality assurance	<ul style="list-style-type: none"> Auditing Further training and development
	ITE providers	Study programs of ITE	<ul style="list-style-type: none"> Implementation of curricula Division of responsibilities
	Teacher Unions	Salaries and legal matters	<ul style="list-style-type: none"> Representation in legislative processes
	Various	National strategies	<ul style="list-style-type: none"> Action plans, contests, further training
Meso-Level Organization	Head, Faculty board TTC	Study program	<ul style="list-style-type: none"> Curricula: defining contents Educational goals, learning outcomes
	Faculty board TTC	Professionalization of educators	<ul style="list-style-type: none"> Codes of conduct Further training and development
	Departments of teacher education	Supervision and evaluation	<ul style="list-style-type: none"> Feedback culture Quality criteria
	Schools	Practical training	<ul style="list-style-type: none"> Pre-service and in-service training
	Regional partners	Cooperation	<ul style="list-style-type: none"> Promotion, Sponsorship
Micro-Level Individual	Teacher educators	Teaching practice	<ul style="list-style-type: none"> Practical training Internships Field experiences
	Professional communities	Skills and competences	<ul style="list-style-type: none"> Managing learning processes Planning lessons
	Scientific communities	Subject knowledge	<ul style="list-style-type: none"> Research orientation Research skills & methods
	Teacher Candidates, Pupils, Colleagues, Mentors etc.	Feedback and assessment	<ul style="list-style-type: none"> Peer- and self-assessment Role-taking and role-making
	Teacher Candidates	Reflexivity in practice	<ul style="list-style-type: none"> Cooperative learning Learning-portfolio and other instruments

Figure 4: Comparative Framework of ITE (based on Snoek & Zogla, 2009, p. 13). The Figure presents a general structure, how ITE could be institutionalized and organized across different levels. As this structure varies across countries, the figure at hand exemplifies core elements of the Austrian case.

APPENDIX

Literature and Sources

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Tables

Fig. 1: Potential Actors and Artefacts in ITE Systems (OECD, 2019b).

Fig. 2: The Entrepreneurial Teacher (EC, 2011).

Fig. 3: Competences for teachers on different levels (Snoek & Zogla, 2009).

Fig. 4: Comparative Framework of ITE (based on Snoek & Zogla, 2009).

Abbreviations

EE: Entrepreneurship Education

ISCE: International Standard Classification of Education

ITE: Initial Teacher Education

TTC: Teacher Training Center



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