Looking after school: a critical analysis of personalisation in education

Maarten Simons & Jan Masschelein

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Foreword to the English translation

In tempore suspecto

This book is a translation and limited reworking of a report which was published in Dutch a few years ago. For many, the COVID-19 pandemic heralds a radical break in thinking about education. If so, then this book was written *in tempore non suspecto*, which might imply that the book cannot stand the test of time since it does not account for all the profound pandemic transformations which have taken place over the past year. But it is probably too early to assess the impact in a precise way, and to know whether the 'new normal' differs (or will differ) much from the 'old normal'. However, it is not too early to see that during the health crisis, education, and in particular, schools, were the focus of attention.

On the one hand, with the closure of schools in many countries, there was a massive mobilisation of digital technology to enable distance learning. Education became home delivery. Education entered the family space through small or large screens, and, not infrequently, in a pre-programmed, adaptive, and personalised learning environment. For some, the pandemic served as a catalyst for an evolution which had been growing for some time and was now getting a serious push. Some even claim that the pandemic should be welcomed to finally update or outdate the school. But at the same time, there was and is also doubt. It has become clear that families differ in terms of the learning opportunities they provide. That efficient and effective digital learning does not necessarily honour principles of equality. That digital distance learning may allow students to choose where and when to learn, but that this freedom of choice gets in the way of another freedom - of attentive and sustained practice and study. With the demise of school, we have, one could say, also rediscovered school. We have become aware of how this inclination to make learning digital, which was already at work in pre-COVID times and has

now been strengthened by the digital home delivery of learning, is actually de-schooling school.

This report describes how the tendency to personalisation – the focus on the person of the student - which took over from the former tendency towards normalisation, actually removes the elements of freedom, equality, and formation from school learning. By this, we do not mean that our report was prophetic - *in illo tempore*. At most, it indicates that when the book appeared in Dutch in the pre-COVID period it was contemporary, that it was indeed a report, and that today's crisis developments which have been growing for some time are now clearly manifesting themselves. We think, thus, that we were already writing the book *in tempore suspecto*, or rather, that we were reporting on already 'suspect times'; therefore, we hope the book has its meaning today and might find a public audience. It is also the reason why we have not taken the opportunity with this translation to rework the book thoroughly or extensively.

Our thinking did not stand still in recent years, so a light reworking has taken place in some of the chapters; however, there was no intention of adding COVID-19 references simply to make the book more 'relevant'. In fact, we think it is relevant as it is, now maybe even more than when first published in Dutch. Hopefully, this claim will not be read as a form of arrogance or self-aggrandisement, because our belief is exactly the opposite: to claim to know now the impact of the COVID-19 crisis would only show a lack of intellectual modesty and honesty. What we do think, is that we should be a little more reluctant to look (out) to the future in terms of normality - in a new form or again as that 'old normal'. We believe that even before the health crisis, 'normality' was already disappearing as a reference for our (educational) thinking and acting, or at least was being overshadowed by something else: the glorification of the figure of the unique person and the mass profiling drive required to do so. The understandable yearning and urge for normality can make this development away from normalisation and towards personalisation disappear from view. Since in this book we report precisely on the transition from normalisation to personalisation, and the limits of both, the book may yet have a post-COVID relevance: the re-discovery of a pedagogical optimism that wants children and the world to go back to school.

Introduction

Placing the student at the centre of the educational system is a high priority of educational policies worldwide. Many countries, as well as international organisations, share a particular concern about the position of the student in education. This varies from a concern with the student's freedom in the educational system, to their role in school, or to their position in the pedagogical process. There are a number of different terminologies and descriptions circulating in this context which come to mind: differentiation, tailor-made education, customised education, appropriate education, personalised education, personal learning, individualised approaches, personalised assessment, and personal learning pathways, for example. These various terms differ in meaning, yet all express a shift of attention towards the student, and imply that contemporary education is not, or at least not sufficiently, concerned with the student.

This shift towards a more central positioning of the student is not new. Recall for instance the efforts of reform pedagogy at the end of the 19th and the beginning of the 20th century. In line with the adage "vom Kinde aus" and the idea of "child-centred education" this reform movement debated the educational system of the time and plead for new methods and new schools. Reform educators like Parkhurst (Dalton), Petersen (Jena-plan), Freinet, Montessori and Decroly shared the idea that the 'old school' inadequately addressed the child, their experiences, lifeworld, and potential. The starting point should not be the institute, the curriculum, or the teacher, but the student. Similar movements appeared in the period after the Second World War. Skinner's behaviourist theory (1953) laid the foundation for new learning theories, which influenced the development of instructional design. This form of instruction - with its well-known or infamous learning machines - envisioned a partial automatisation of pedagogy, but also an individualisation of the process of instruction. In this context even the term 'personalisation' arises, such as in Keller's (1968) Personalised

system of instruction. Another example arose in the 1960's, namely the anti-authoritarian educational movement. This movement goes back to the Summerhill School of Alexander Neill, which originated in the beginning of the 20th century and, in line with the more general social and intellectual movements of those days, questioned the ways authority takes shape within educational and other institutions. Another well-known example is Ivan Illich's plea for "deschooling society", and for concentrating on the child instead of following the institutional logic of the school (Illich, 1970). At the beginning of the 1980's, the term 'personalised education' was finally introduced by Victor Garcia Hoz, the Spanish catholic educator and Opus-Dei adept (Roith, 2015, p. 177).

From this brief historical review, we might conclude that there is nothing new going on today. Some even claim that these developments are merely affirming the presence of a single swinging pendulum which has long characterised the "grammar of schooling": an increase in attention for the student eventually takes turn for an increase in attention for the teacher; attention for concrete experiences alternates with attention for the curriculum; more freedom relieves more authority (Tyack & Tobin, 1994). According to this line of reasoning, this grammar (understood as organisational structures and rules) took shape in the middle of the 18th century and continues to be the foundation onto which our educational institutions are built to this day (Depaepe, 1999). This implies that the grammar of schooling – which elevates the holy trinity of student, teacher, and curriculum - has in itself never been questioned during the past century. What has taken place is a shift in the centre of gravitation, due to one of the corners of the trinity (student, teacher, curriculum) reclaiming attention. The message is clear: due to the grammar of schooling, there are no fundamental changes, everything remains the same. It seems, then, as if this perspective on the grammar of schooling allows for only two trains of thought. The first is the almost cynical conclusion that the current plea to centre the place of the student is nothing more than empty rhetoric and may disappear as swiftly as it appeared. The second is the more extreme viewpoint that today's pleas for student centred education indicate that the so-called grammar of schooling is finally being fundamentally questioned. According to us, both trains of thought jump to conclusions. When arguments such as these impose themselves

on us, we believe that further study is needed. For this purpose, we will use the following questions as a guideline: what exactly is at stake *today* in placing the student at the centre of education? Why would someone *nowadays* appeal to focus more on the student? What are the consequences for the *school*? These are the questions that will be explored in this book.

Before diving into these questions, however, it is relevant to take pause and reflect on a remarkable shift. Reform pedagogy was mostly a grassroots movement (that, to be sure, wanted to influence policy), and the post-war claims on student-centeredness were mostly concerned with the translation of new scientific insights on learning and teaching. Today, however, the pushing of the student forward as the centre of educational affairs is foremost a priority for policymakers. The ambition to focus more on the student is today mostly a directive of policydriven educational reforms (see also Mincu, 2012). For that matter, this ambition is not only visible in educational policy, as there are similar reform movements in other domains and sectors: think of customised care in welfare services, personalised employment counselling, personalised empowerment in poverty reduction, and so on. We should thus engage with the contemporary *policy* discourse to understand why it is so important to give the individual student (but also client, patient, labourer...) centre stage today.

As might be expected, the content of this book also touches on concrete developments. We use Belgium (Flemish Community) and the Netherlands as examples, but these developments have taken place – and often much earlier - in many other countries. In Belgium and the Netherlands, thorough educational reforms specifically targeted towards the dismantling of special education have recently been carried out. Placing each student back, or more, in the spotlight has been a guiding principle for these reforms. For example, the aim of the so-called M-decree (2014) in Belgium (Flemish Community) is to give students who were previously oriented to special schools a place in the regular system. Appropriate care and support are provided in order to meet their special needs within mainstream schools. This policy is regarded as an important step towards inclusive education. Similarly, Appropriate Education ("passend onderwijs") in the Netherlands aims to place every student (as much as possible) within the regular educational system. This means that the school has a duty of care that meets the specific needs of its students. These recent reforms symbolise the continued positioning of the student at the centre of education.

This book covers more terrain than is outlined by these policy initiatives towards inclusive education. In fact, we want to make the case that there is far more at stake: that placing the student at the centre is not merely driven by educational motives; that there are indications of a thorough transformation of what education is; and, that the meanings of school, freedom, and equality within schools are being radically called into question today. Although the focus of this book is rather general and does not directly address specific reforms towards inclusive education, we do hope that it succeeds in offering a number of perspectives and touchstones that are of use to discuss the opportunities and limitations of these and other concrete initiatives.

In the first chapter, we will examine policy discourse in search of the problems that are expected to be solved by centring on the student. The question is: how, and from what perspective, are the problems defined for which focusing on the student is expected to offer a solution? This inventory of perspectives forms the base for the second chapter, in which we will clarify that today there is, indeed, something more at stake than a century ago. We will argue that traditional educational institutions are concerned with normalisation, whilst the common denominator for contemporary learning environments is personalisation. Here, noticeable shifts have occurred, from being an individual to being a person, from norms to profiles, and from disciplinary power to feedback power. Our ambition, however, is not to oppose one system against another. Above all, we want to clarify what is at stake today, and scrutinise the implications of personalisation and the power of feedback. Therefore, we offer pedagogical touchstones in the analysis of the third chapter: what makes a school into a school, and when is the scholastic condition under pressure? These touchstones consequently allow us to evaluate the focus on the student and to critically examine the limits of personalisation amid today's power mechanisms. Today it seems evident that the student is the main centre. After all, who could be against such an idea? In this book, we try to make clear that there is also a serious drawback to personalisation: namely, that personalisation risks to de-school the school from within. This means that the scholastic form of learning - learning which is about freedom, equality, and formation - is under fire.¹

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Chapter 1. Today's discourse: why should the student be at the centre of education?

A discourse is much more than just language or vocabulary. It is a way of speaking and of naming, of going through steps of argumentation and moving through lines of reasoning, but it is also more: it is a way of looking, of seeing things in a certain way. In a discourse we can always unravel a number of perspectives that are used to envision the world of education, and that enable us to speak about its past and future in particular ways. It could easily be said, for example, that there is a market or economical perspective on education, as well as a technological perspective. Every perspective has its own specific definitions for the challenges and the problems education faces, and each also suggests (future) solutions through these definitions for the problems at hand. This first chapter is an inventory of these perspectives, including their respective definitions of problems, the solutions they offer, and how each perspective understands the figure of the student. To be sure, our inventory targets the domain of education and learning, but it also extends beyond; these perspectives also apply, for instance, to the domain of social work or policies on migration. We discern seven problem definitions for which giving central attention to the student is seen as the solution (see table I at the end of this chapter for an overview).

Insufficiently utilising the talent of each student - a socio-economic perspective

At the beginning of the 21st century, quite a number of countries and regions grew concerned with both the quality of, and the equality within, education. The *No Child Left Behind Act* (2001, NCLB) from the United States of America is one well-known example. It was rooted in the assumption that the standard of American schools was too low, and that socially weaker students and minorities, especially, were being left behind. The proposed solutions were to introduce stan-

dardised testing and implement effective educational methods (based on scientific, mostly quantitative evidence), new forms of accountability (for output), and initiatives that target specific groups. Under the Obama administration this act was replaced by the Every Student Succeeds Act (2015). The principles of NCLB still applied, but the states and the schools were granted more autonomy to develop strategies of improvement. The basic tenet of their argument was that the educational system was not being successful in bringing all students to a high enough level. As the names of these acts clarify, education has to do more to put itself in the service of all students. This is not just an issue of social equality; it demonstrates, perhaps above all, a dual economic concern. On the one hand, the concern that numerous talents are not being turned into employable competencies and are, therefore, being insufficiently put to use in the labour market. On the other hand, the educational system is being challenged to organise itself in a more effective and efficient manner.

A similar combination of a social and economic perspective is at work across the European continent. In the educational programs of the Lisbon Strategy, such as Education and Training 2010 and 2020, the European Union calls upon the member states to invest as much as possible in a competitive and high-performing system of education. These programs express a social concern but are at the same time prompted by the development of a strong European knowledge economy. In such an economy, knowledge and competencies are the raw material, thus giving education, training, and lifelong learning immediate economic relevance. The movement towards the individual student can be spotted here as well: educational systems must adapt to the differences between students in order to enhance the outcomes for everybody. Flexible learning paths, modernisation of institutions and programs, adjusted systems of assessment, and quality assurance are just some of the solutions which are suggested. The main argument is that the student is central in so far as they stand for a unique demand, and that the available programs should sufficiently adapt themselves to the diverse needs of the demands made. The implications of this approach are explicitly addressed in the communication of the European Commission, Rethinking Education: Investing in skills for better socio-economic outcomes (2012):

"Across the EU, reforms have streamlined curricula. They have introduced national standardised tests; established an infrastructure of literacy, maths, and science centres; created teacher networks and continuing professional development; and stepped-up action to improve digital and media literacy. Nevertheless, underperformance remains and addressing low achievement is now urgent. The share of 15-year-olds in Europe that have not acquired basic skills is around 20%, while five countries have over 25% low achievers in reading. Member States need to introduce new systemic reforms to strengthen early screening and intervention for learning difficulties and to replace repetition or ability grouping with increased learning support." (European Commission, 2012, p. 4)

This quote clarifies that education is considered an essential element in building a competitive European knowledge economy; it also states, however, that the major challenge in this regard is overcoming the lack of efficiency and effectiveness in educational institutions. Europe problematises grade retention, or forms of streaming (making fixed class groups according to the level of students) and setting (differentiation according to subjects) because these institutional strategies are not effective and efficient; they do not develop (fast) enough the potential of all young people. We are however not dealing with a social problematisation of 'hidden talents', as was the case in progressive policies during the 1960s (van Heek, 1968). The contemporary talent projects clearly originate from an economic stance. Educational institutions are called upon to realise a maximum output for the knowledge economy, which means that they must target the potential of every student more than they do presently. The student's potential, in this line of argumentation, is the source of human capital.

A similar socio-economic problematisation of education, which may or may not be influenced by these programs and projects, appears throughout European member states. Tony Blair, former Prime Minister of the United Kingdom, set the stage in 2001 with his expression "education, education, education":

"Our top priority was, is and always will be education, education, education. To overcome decades of neglect and make Britain a learning society, developing the talents and raising the ambitions of all our young people." Following the European programs, the agenda of the Flemish administration of Frank Vandenbroucke (2005 - 2009) was all about competencies: mobilise all the available talents the best we can, meaning we must turn all talents into competencies that can be employed. Expressions such as "every talent matters" and "no talent may remain unused" showcase the double problematisation of education: everybody must have equal opportunities to develop their talent or potential, and, from an economic stance, we cannot allow talents to not be developed into productive competencies. This perspective on education is also clearly at work for instance in the Netherlands. The investment plan 2011-2015 *Space for Everybody's Talent (Ruimte voor ieders talent* 2010) from the Dutch association of secondary schools formulates the matter as follows:

"We strive to achieve a better use of the talents of every student by customising education, and in order to realise this, we ask a liberalisation of school regulations to be able to deliver more flexibility in processes and organisation." (2010, p. 8, trans.)

The report *Towards a learning economy* (2014) from the Dutch Scientific Council for Government Policy (WRR) states:

"The relative scarcity of human resources and the associated challenge of improving productivity mean that the Netherlands will have to do more with less. But it can only do so if it makes the most of everyone's talent and skills." (WRR, 2014, p. 25)

One of the strategies that is suggested here is the "management of talents":

"To do more with less implies that education is first of all a matter of talent management: to make sure that the possibilities of people are developed maximally." (WRR, 2013, p. 264, trans.)

Thus, the ultimate goal is to construct an effective educational system that gets the most out of its students in both a cost and time efficient way. This then also creates an educational system that delivers relevant input to the knowledge economy. In light of this, the optimal guidance of talent towards STEM education (science, technology, engineering, and mathematics) receives special attention in a lot of countries around the world.

To summarise, from this *socio-economic perspective*, shifting the gaze towards the student is first the consequence of the economic problematisation of education in terms of maximising output for the job market and/or the development of the knowledge economy. This goes hand in hand with a social problematisation, in so far as this maximisation implies that every talent and thus all students are of importance. Every student should be our main concern because they each represent raw material or an economic resource.

The need for open learning pathways - an institutional perspective

The socio-economic approach to education is an approach aimed at mobilising talents and competencies. As such, it is inseparable from a concern with the effective and efficient organisation of education or, perhaps better, with that of learning. Looking at the solutions which are proposed at a European level, we find a relatively new approach of the organisation of learning:

"Education and training can only contribute to growth and job-creation if learning is focused on the knowledge, skills and competences to be acquired by students (learning outcomes) through the learning process, rather than on completing a specific stage or on time spent in school." (European Commission, 2012, p. 7)

In this plea for learning outcomes, a vision of education emerges in which the institution is no longer the point of departure. What is of interest here are learning outcomes, adequate systems of evaluation and validation that 'translate' the learning outcomes of all learners into qualifications. In traditional educational settings, learning, goaloriented teaching, evaluation, and the authority of qualification are joined in time and space, which means that they are institutionalised. In this discourse we can see a dismantling of these traditional educational institutions. This de-institutionalisation is clearly expressed in the choice of words: it is about the learner (not the student), about the input of support (not the organisation of education), about supervision of learning (not the teacher), about learning pathways (not the curriculum) and about testing and assessment (not examination, in which evaluation coincides with qualification). The solutions that are suggested leave no doubt about what is at stake here.

The main ambition is the efficient and effective realisation of learning outcomes for all. Everything else, such as the place and time of learning or the didactic and pedagogic support, must be attuned to this aim. These learning outcomes are the raw material for the knowledge economy. In this sense, immediate economic interests are at stake when developing efficient and effective education is positioned as the major challenge. There is a disconnect between, on the one hand, learning processes and outcomes (the 'process' and the 'output') and institutions and support of education (the 'input') on the other. Stated otherwise: what matters most are the learning processes and learning outcomes of the individual learner, not, or not anymore, the educational institution. It is important who learns and what is learned, not as much where and when. The European Commission is clear here:

"While the learning outcomes approach is already the basis of the European Qualifications Framework and national qualification frameworks, this fundamental shift has not yet fully percolated through to teaching and assessment. Institutions at all levels of education and training still need to adapt in order to increase the relevance and quality of their educational input to students and the labour market, to widen access and to facilitate transitions between different education and training pathways." (European Commission, 2012, p. 7)

In other words, concentrating on the learner and their learning outcomes presents a major challenge to developing adequate forms of testing:

"What is assessed can often determine what is valued and what is taught. While many Member States have reformed curricula, it remains a challenge to modernise assessment to support learning." (European Commission, 2012, p. 7) The more traditional form of examination controls to which degree learners or students achieve the goals set out by the educational institution and the teachers. Here, alternatively, we read a plea for a system of formative evaluation that supports the learning process and is coupled with forms of testing (or assessment) that awards qualifications based on learning outcomes that are really achieved (summative evaluation).

The shift towards learning outcomes implies that, alongside the disconnect between learning outcomes and educational institutions, there is also a disconnect, or at least a loosening of the connection, between the educational institution (issues of support, guidance, and formative evaluations) and qualification (the issue of summative evaluation). There is a clear call here to not confide the function of qualification exclusively to official educational institutions. In the communication *Opening up Education: Innovative teaching and learning for all through new Technologies and Open Educational Resources* (2013) the European Commission finds that:

"Learners expect their skills to be recognised by potential employers or for further learning and seek out education and training providers who can award relevant qualifications. [...] Some providers have started to offer 'open badges' certifying that a learner has completed a given course or acquired a certain skill. However, these are not yet recognised by qualifying authorities and are often unknown in the labour market." (European Commission, 2013, p. 6)

The exclusive, often closed and institutionalised connection between educational institutions and qualifications, is no longer self-evident. To ensure that the necessity of qualification for the learner is properly maintained, the message is the following:

"Validation and recognition instruments used in formal education must adapt to the emergence of a much more diversified educational offer, including new education providers and the new forms of learning made possible by technology. In parallel, new tools may need to be created both to ensure that technology-supported learning taking place outside formal education is validated and to encourage learners to become more engaged in open practices." (European Commission, 2013, p. 7) The figure of the student that is envisaged here has freed themself from educational institutions and needs more flexible and open systems which will acknowledge and qualify their learning outcomes. Through this perspective, the student actually becomes a *learner*. The European Union, and subsequently its member states, wants to adjust its policy to capitalise on the learning outcomes of all learners; not merely in the best interest of the learners themselves, but also (and perhaps most importantly) to have an optimal supply of human resources for a competitive labour market.

In sum, this *institutional perspective* problematises the exclusiveness of educational institutions: on the one hand, the restraint of learning in time and place, and on the other, the monopoly on guidance, evaluation, and qualification. The focus has now shifted from the institution to the student or (better) the learner. The point of departure is the learner's need for flexible and customised learning paths and personalised guidance, for open systems that recognise and validate learning outcomes. This is based on the following reasoning: if competencies or learning outcomes are the raw material for the knowledge economy, and educational institutions are no longer the sole producers thereof, then it is of strategic importance to maximise the recognition of this human capital.

The student as customer - a service perspective

The problematisation of institutions is part of a more general trend to reform the public sector, one which started at the end of the twentieth century. Two points are under debate here: first, the bureaucratic model of organisation on the basis of which the public sector functions, and second, the power of professionals in that public sector. Obviously, education, which is often seen as a professional bureaucracy and thus a combination of both, will not evade this reform movement. Explicitly stated or not, the ideal of this reform movement is the implementation of (free) market coordination: competition, choice, and free enterprise are supposed to guarantee an optimal (read: efficient and effective) production and allocation of public goods.

In the second half of the 20th century, many Western European countries built a welfare state in which the private and public sector, including education and numerous other institutions, went hand in hand. While the organisation of the private sector is based on the principles of the free market (ownership, competition, choice...), the public sector is mostly based on a bureaucratic model of organisation. This means that public service, in view of equal service for all citizens, is organised by uniform rules and procedures, and is structured hierarchically with vertical relations of accountability.

From the middle of the 1980s, and especially during the 1990s, this bureaucratic organisation of the public sector was no longer taken for granted and became a matter of serious debate. Fuelled by the economic crisis and inspired by neoliberal restructuring theories such as Public Choice Theory and Transactional Cost Theory, policy makers began to problematise the fundamental premises of bureaucratic organisation (see also Olssen et al., 2004). The debate closes in on the financing of the public sector in so far as it would take up too much of the private sector. Public service is also criticised for barely attending to the needs of citizens (and even serving mostly itself). The criticism towards an absence of mechanisms to control the effects and the efficiency of public services, and of the way that time and money are spent, should also be viewed in this light. Next to this economic criticism, the strongly developed public sector and welfare state are criticised out of worry for an all-too paternalistic government. There is, for instance, the question of whether the offered services (especially in health care and poverty prevention) actually succeed in helping those that need them the most (e.g., the Matthew effect), and the observation that a system with extensive social security may create citizens that become too dependent on those services.

This problematisation is at work all over the world. For many countries this has caused a thorough reform of the public sector, including education and the central administration of higher and lower governments. We must situate the umbrella term *New Public Management* in this context. This concerns the reform of the public sector and its administration, starting from the premise that models, principles, and forms of organisation from the private sector are well-suited to organise the efficient and effective provision of public services (Hood, 1989). Of course, this reform movement reaches quite far: from privatisation of numerous services (such as public transport or mail delivery), to starting quasi-autonomous entities and (internal) reform of public organisations or institutions.

These various reforms are based on the idea that the provision of service should be viewed through a model of economic transaction, meaning that public services should approach their users as clients or as customers. This posits that the offices and desks of municipalities, cities, and towns, but also those of hospitals and schools, are opened for customers. These customers are the beginning and end for organising the transaction of services, such as social work, medicine, or education. Numerous instruments, procedures and principles surface in this context: forms of outsourcing (contracting out) and contractualism (encouraging competition for best price and quality); forms of specialisation and organisation of labour aimed at efficiency and output (new division of labour); an emphasis on management (envisioning efficient and effective administration) instead of, or alongside, leadership; replacing bureaucratic organisations (rule-oriented management) by forms of output-based management; decentralisation and deconcentration combined with new forms of output and performance accountability; and emphasis on financial incentives (such as bonuses) to highlight just a few examples (also see Olssen et al., 2004). Without going into the consequences or into the differences between countries, we clearly see a policy discourse that problematises education in economic terms as an in-efficient, in-effective public service. This means that the student and their parents come to the foreground as customers that are offered service. Customer satisfaction and meeting specific needs of the student and parents are here then indications of quality, and thus also criteria for the efficacy of the service.

The public sector is not only reformed in the name of the customer. In the same period, we can also hear reforms based on criticisms of the power of professionals and experts, such as doctors, social workers, welfare workers, and therapists, but also teachers. Already by the end of the 1960s, the authority of experts was being challenged. The emphasis, then, was on how professional authority could block or counter emancipation (see for instance Achterhuis, 1979; Illich, 1970). At the end of the 20th century, this develops more into an economic problematisation of power held by experts and professionals. In order to situate this, it is well worth considering the broader policy context.

From the 19th century onwards, there was an alliance of sorts between state governments and certain professions that (in)directly served a general interest. The public standing of so called 'liberal professions' such as doctors, lawyers, or architects, expresses this clearly; they were granted a high level of autonomy and self-regulation in exchange for serving the public good. To be sure, being a teacher is often not considered to be a liberal profession. Education is often organised as a professional bureaucracy, which can be understood as a combination of professionalism (with autonomy and responsibility) and central regulation (for instance through curriculum and learning standards) (Mintzberg, 1979). In this respect, teachers belonged at least partly to the group of experts and professionals that receive a specific statute through this alliance. The alliance consisted of the delegation of several tasks from the government to these professions, thus giving them greater autonomy, in exchange for those professions taking responsibility to organise and control themselves, always oriented on the general or public interest. From the 1980s onwards, and in line with the earlier mentioned neoliberal restructuring theories, the power of these professionals is continually questioned from the perspective of the free market. The main point of contention is that experts and professionals, especially those that operate in the public sector or other state funded organisations, are driven by self-interest just like everyone else. It is thus claimed that professionals will try to use policy or bureaucracy to safeguard their own interests rather than serve the general interest or that of the citizen as customer. Several strategies in this context are being criticised for sabotaging optimal market mechanisms, such as: forms of provider capture (the interest of the provider prevails instead of that of the consumer), forms of rent-seeking behaviour (resources which in fact only benefit experts/professionals instead of a more efficient and effective service) and related forms of 'professional' monopolies (Buchanan & Tullock, 1962).

In summary, the *service perspective* problematises the current organisation of education in economic terms. More specifically, this perspective problematises the professionalism of teachers in so far as they take their interests (the supply side) to be first a priority before the interests of students or parents (the demand side). This discourse then also implies that we should focus on the student as our main concern. The figure of the student that arises here is the figure of a customer in need of a service, which is then modelled as an economic transaction.

The learner as user and co-producer - a market economic perspective

The criticism directed at the bureaucratic organisation of public service, among which we should and must include education, is related to another perspective on the main role of the learner: the discourse on the new economy, especially the discourse about marketing in which the person and their experience take central stage.

A good articulation of this new vision on the economy is the thesis of Pine and Gilmore (1999) about the rise of the experience economy. Briefly summarised, these authors see shifts from an agrarian economy which is based on raw material and core products to an industrial economy that is based on manufactured products. This industrial economy is in turn followed by a service economy based on development and sales, and, finally, by an experience economy that immediately places focus on the customer who buys into personal, memorable experiences. This means that mass produced articles are no longer the standard, and the customer is no longer satisfied by them. According to Pine and Gilmore, focusing on services was already a first recompense of mass production and a way to meet the personal needs of customers. But in the experience economy, customisation goes a step further: it is not products or adapted services that are being sold, but personal experiences.

"Mass customising any good turns that good automatically into a service; and mass customising any service turns that service automatically into an experience." (Pine & Gilmore, 2011, p. XIV)

Even though the perspective of these authors is very specific, it provides us with the words that we can use to clearly describe the problematisation of educational service in the name of the student as *person*.

The indications of Pine and Gilmore about how organising the experience economy are guiding principles. The authors claim that experiences lead to transformations and that fees should be charged for "the demonstrated outcomes that result from the underlying experiences" (p. XVI):

"And colleges and universities, which graduate barely half those who enrol (would we ever tolerate such dismal performance from any other industry?), should focus on the actual educational, personal, and societal outcomes achieved, collecting all or part of the tuition only when those outcomes become clear at graduation and beyond. To do otherwise, in each of these fields, does a disservice to all." (2011, p. XVII)

From this perspective, education is not simply a service which takes the needs of the customer into account as quality indicators. Education here is a service in which funding is based on the successful experience of a concrete student. Not only are the needs of the student of central importance, but also experience, and the actual transformations which result from this experience.

This focus on customer experience and personal transformation implies another view on how the public sector should be organised. The line of argumentation goes as follows: a personalised service is only possible if the customer becomes co-producer and (preferably) co-funder of the service. This means that the customer, which in our case would be the learner, has a part to play in the development of the service from the very onset. In the framework of public service, personalisation should not merely benefit the quality of that service but also, as Hartley stresses in his critical study, implies cuts:

"That is to say, the perceived need to reduce public-sector expenditure in response to economic globalisation requires an anticipatory rhetoric which will prepare the 'consumer' to be as much a co-funder as a coproducer of services. The notions of co-producer and (less prominently stated) of co-funder are central to a policy which seeks to manage public expenditure. So, a new mode of regulation is being sought, one that can purportedly 'deliver' excellence whilst at the same time resonate with the culture of consumerism and 'enjoyment'." (Hartley, 2007, p. 634) Besides the fact that personalised service is efficient and productive, it also plays into the very personal aspects of experience, satisfaction, and participation. It is against this backdrop that advocates such as Leadbeater (2004; 2008) emphasise how personalised services like inclusive education go a step further than New Public Management. As stated earlier, New Public Management is already attentive for the abstract customer by using numerous techniques, such as evaluating customer satisfaction and promoting freedom of choice. But the starting point for personalised services is still offering a service in the form of a product, of course with user or customer support. In personalised service the user is the main character, and that user will actually produce the service, together with the expert, which meets their personal demand. The point of reference then is not the customer, but the coproducer or even the co-funder. Leadbeater also laid the foundations of the broad movement of personalised education that was initiated by David Miliband in the UK (see below).

To summarise, the *market economic perspective* envisions personalised service as the core business of the economy. This is also noticeable in other more regular sectors, such as car production and sales. Education then is criticised in so far as it focusses on its own provision of services instead of co-producing or co-creating with a specific buyer or user. In this context, the term 'personalisation' refers to a policy or a reform strategy that aims to produce services with individual buyers or users, and no longer operates merely through taking into account the customer perspective. The student is in this case not the abstract figure of the customer, but a concrete, unique person with his own needs and experiences.

The learner as a creative person – an innovation perspective

A concept we hear quite often in arguments that are in favour of a strong, competitive knowledge economy is that of the so-called *creative economy*. This concept relates to a perspective that stresses the constant need for innovation and flexibility, and the advocacy for diversity and imagination instead of uniformity and the carrying out of operational tasks. From this perspective on innovation and creativity, both the

goals and the organisation of (traditional) education become matters of critical discussion.

The proposal for a decision of the European Parliament and of the Council (2008) which formed the basis for the European year of creativity and innovation is exemplary for this innovation perspective and its goals:

"Europe needs to boost its capacity for creativity and innovation for both social and economic reasons. The European Council has repeatedly recognised innovation as crucial to Europe's ability to respond effectively to the challenges and opportunities of globalisation. [...] The modern economy, with its emphasis on adding value by means of better use of knowledge and rapid innovation, requires a broadening of the creative skills base involving the whole population. [...] Innovative capacity is closely linked with creativity as a personal attribute based on cultural and interpersonal skills and values. [...] Innovation is the successful realisation of new ideas; creativity is the *sine qua non* of innovation. New products, services, processes, strategies, and organisations require people to generate new ideas and associations between them. Competences such as creative thinking and advanced problem-solving are therefore as essential in economic and social as in artistic fields." (European Commission, 2008, pp. 2-3)

This perspective on innovation emphasises the economic relevance of features like creativity and creative thinking which have traditionally been more associated with the cultural elite and localised outside of the economy. According to this line of thinking, tapping into these creative capabilities and skills must be done on a broad scale for economic reasons. It is pointed out that "education and training [is] a determining factor in enhancing creativity, innovation performance and competitiveness" (p. 2). Education of the future must thus set creativity and related skills as its goals. The maximal development of individual creative skills is essential, not merely for the innovative knowledge economy, but for functioning in such an unpredictable world. At the same time there is a strong feeling of doubt whether the current organisation of education is capable of meeting these needs: "The mounting pressure to develop creative, innovative and critical skills implies that traditional teaching approaches based on direct instruction or lecturing are no longer adequate. They are being replaced by more learner-focused models that are based on the learner's active involvement in the process of reflection and interpretation" (European Commission, 2008, p. 4)

This perspective reproaches education for not offering enough opportunities for the development of creative potentials and problem-solving abilities, positioning children as 'naturally' out of the box thinkers. This perspective advocates for the fundamental reform, or even the total reinvention, of education, and the following principles continuously recur: the importance of learning by doing (with a close intertwining of theory and practice), the active involvement of students, teachers, and parents (through projects in which creativity and innovation are brought together), and the orientation towards lifelong learning. What is considered problematic in the current educational system is the lack of life-like or real-life situations, and most of all the use of standardised curricula and testing. One of the biggest problems is thus the manner of assessment. Creativity is hard to standardise and is often associated with taking risks. This is why we need innovative ways of providing feedback and assessments, and new forms of problembased learning. Grounded on the idea that living and learning will be one and the same in a complex society, and that learning takes place 24/7, the traditional division of courses and subjects as well as the traditional difference between theory and application become problematic. This perspective argues for learning activities that are structured around meaningful projects (with real clients, such as care centres, cultural and welfare organisations, companies, cities, and communities...) and leisure activities which are closer to the 'real' world of tomorrow. Such a project-driven learning environment expects students, according to a report of the King Baudouin Foundation in Belgium, "to be given every opportunity to make their own choices for their learning pathways" (Bouwen et al., 2014, p. 17). This calls on facilitators, project managers, and coaches to replace the former classroom organisation via "learning families".

This perspective on innovation and creativity challenges the current educational system on two fronts: the overly academic orientation of education and its outdated model of organisation. This explains the absence of creativity and the appetite for initiative in education, today.

In line with the first, a link is often made between education and the arts. In the field of the arts, creative abilities are centred and given the opportunity to develop. The TED talk Do schools kill creativity? by Ken Robinson, which ranks as one of the most viewed talks, is exemplary in this case (Robinson, 2006). He calls for the abolition of a worn-out Fordist school system - schools as exam factories - in favour of a personal, organic (non-mechanic) approach that appeals to the creative potential of students. In his widely read book Creative school (2015) he argues against standardised testing and curricula, in direct contrast to the No Child Left Behind Act in the United States. He emphasises the responsibility of schools and teachers to nurture the curiosity and creativity of their students. According to Robinson, this is the only way to prepare the youth for the unpredictability of the future, and he argues for a robust personalisation effort which takes different forms of intelligence and variable learning speeds into account. This form of personalisation develops the preferences and the strengths of everyone by injecting a strong dose of art education in the curriculum.

A second emphasis is put on the cooperation between education, the business world, and scientists. This is often linked with an emphasis on STEM-education (Science, Technology, Engineering, Mathematics) and recently also STEAM (including the Arts). It is a widespread perspective that is also supported by economic and scientific institutions, and by governments. In *Vision 2050: a long-term strategy for Flanders*, we read:

"The school, the educational organisation or the provider of education of the future is also a place of innovation where education, training, the voluntary sector and the business community meet each other and cooperate in order to build both precise scientific knowledge as humanistic expertise and turn these into more competitive strengths, sustainable careers, flexible citizens and a better society with a good quality of life [...]. To take the changes and challenges of society into account, we take interest in learning flexibility, problem solving skills, resilience, and stress-management skills [...]. Personal learning paths that dovetail with the diversity of Flanders make sure that all members of society participate both socially and economically in society, for the entire duration of their lives." (Vlaamse Regering, 2016, pp. 65, 79, trans.)

In the context of educational innovation, we should also refer to the rapid rise and spread of FabLabs (short for fabrication laboratory), learning and design labs, creative labs, learning parks, and sustainable manufacturing environments. These new entities place a strong emphasis on the cooperation between the business world (with its entrepreneurs), education, science, and technology, as well as the development of creative potentials and (social, cultural, economic) entrepreneurship. All of this is deeply interwoven with the fabric of lifelong learning, starting from an early age to a continuous and lifelong realisation. The Creative Laboratory FabLab+ of the municipal schools of Antwerp, for instance, presents itself as a "creative workplace for creative people". With support of Flanders Make, FabLab Genk organises workshops for children ages 10 to 14 in order to spark their enthusiasm in STEM-education. Another example is the Dutch FabLab BeNeLux which says that their work is not about the transmission of knowledge, but about the confrontation of problems, in which learning amounts to making something creative. In other words: this is a plea for a creative, trans-disciplinary learning environment in which learning and working, experimentation and fabrication, creativity, and entrepreneurship, study, and impact, are closely intertwined.

From the perspective of an *innovative economy*, the concern with the learner and the development of personalised learning paths are consequences of the emphasis on personal creative abilities. These abilities are crucial for continuous innovation, which is considered necessary for both the economy and for society at large. Addressing and developing creative abilities implies learning environments that acknowledge diversity and spark enthusiasm. Learning environments with personalised learning paths and with a focus on entrepreneurship and societal impact also do away with (academic) boredom.

Technology adapted to the learner - a technological perspective

The next perspective that plays a part in the growing attention for the 'learner' is rooted in the opportunities provided by new technology.

The long-held assumption here is that the ambition of education has always been to focus on the student, but due to a lack of available means and technology this dream was never fully realised. The new digital information and communication technologies, however, could succeed.

The problem that is denounced time and again is that modern schools, and thus also modern forms of learning, are always bound by predetermined times and locations, and that education and learning are indiscernible. According to this view, it is primarily a cost-efficient way to organise education in large groups in schools and classrooms, and to centralise the knowledge in the teacher. One-on-one education may be the best option from a pedagogic view, but it was too costly and difficult to organise, and thus not realistic in the *physical* world.

A *digital* world, however, alters the conditions. Very striking for this discourse is the already mentioned communication of the European Commission Opening up Education: Innovative teaching and learning for all through new Technologies and Open Educational Resources:

"The potential benefits of the digital revolution in education are multiple: individuals can easily seek and acquire knowledge from sources other than their teachers and institutions, often for free; new groups of learners can be reached because learning is no longer confined to specific classroom timetables or methods and can be personalised; new education providers emerge; teachers may easily share and create content with colleagues and learners from different countries; and a much wider range of educational resources can be accessed. Open technologies allow *All individuals to learn, Anywhere, Anytime, through Any device, with the support of Anyone.*" (European Commission, 2013, p. 3, italics taken from original)

It is stressed that the digital world, especially the internet, is able to take over many of the basic functions of education (and does this mostly free of charge): it makes knowledge available, with easy access, so that distance and transport do not matter; it allows students to choose the time and the methods for learning, and to choose between different education providers. In so far as the traditional teacher still has a function, they can make use of the digital world in order to extend their means and to find resources and support. Its argument is that physical technology is always exclusive (and, for instance, excludes students from the possibility to learn), whilst digital technology functions inclusively, or could at least function inclusively in so far as the conditions of access, openness and digital literacy are fulfilled.

It is relevant to note that, in the eyes of this perspective, focusing on the learner is not just possible but central. The user- and student-centred approach is inherent to the digital. In this respect, the terminology 'personal computer' is of course most telling. The ambition is that the computer is not a shared device, which would impose limits on the user in terms of when and where to use it, but a personal piece of property. Making use of it is thus, ideally, entirely disconnected from time and space - which is obvious in laptops and handheld devices which are individually owned and used. This also counts for the applications themselves. Programs and apps can be adjusted to or selected based on the preferences of the individual user. Search engines are also usercentred: foremost because the internet revolves largely around searching and thus offers the possibility to search in your own terms, but also because search engines like Google personalise search results by, for instance, taking previous individual searches and search profiles into account (Feuz et al., 2011). Google thus offers a personalised service, and, as such, Google does not only consider the satisfaction of its customers, but also produces the service, itself, with the user.

This perspective on the intrinsic, personalising qualities of technology is also prevalent in discussions about online learning environments and criticisms of ways of learning which are bound in space and time. The European Commission takes the floor once again:

"Technology also allows for new ways of learning and assessing, focusing more on what the learner is capable of doing rather than on the mere acquisition of information or on what the learner is capable of repeating. [...] Technology makes it possible to develop new solutions for better personalised learning, by allowing teachers to have a more accurate and up to date follow up of each learner. Through learning analytics, new and more learner-centred teaching methods can emerge since the evolution of learners who use ICT regularly can be closely monitored: teachers may know the exact learning outcomes of each individual and identify needs for additional support depending on each individual's learning style." (European Commission, 2013, p. 5)

Technology thus opens a route towards a new, personalised organisation of learning and evaluation. In this respect, the objective is not only a tailor-made curriculum, but an educational offer that continuously tracks down new demands and learning needs to which it can adapt itself. In other words, under the direction of learning analytics, new technologies produce an 'experience education' in analogy with the experience economy of Pine and Gilmore (1999).

The recent discourse thus also houses a *technological perspective*. On the one hand, this perspective presents itself as a practical solution for the need, as formulated by the other perspectives, to build education around each student; on the other hand, it brings about a learning environment that is no longer bound to time and space and is continuously adapted to the user.

The student and their needs for learning and education - an educational perspective

There are a range of perspectives which argue for centring the student or the learner, and which are explicitly connected to education and learning. In the context of this report, we limit ourselves to a number of recent, relatively discernible approaches: learning psychology, differentiation, talent development, inclusive education and *Universal Design for Learning*, the ethical-pedagogical approach, and the learning citizen.

Learning functions, learning capacity

There is a perspective within (applied) learning psychology in which so-called teacher-centred forms of education are criticised. This criticism is tightly connected to new insights into the processes of learning. In line with cognitive psychology and social-constructivist notions, learning is described as a cognitive, active, constructive, and cumulative process that leads to changes (see for instance Shuell, 1988). From a traditional educational view, this means that if we have insight into (and can direct) those learning processes, then we can also direct those changes (Van Parreren, 1976, pp. 16-17). It is important here to discern between the processes and the results of learning because this distinction allows us to begin with (desired) learning outcomes in order to map the corresponding learning processes and their necessary prerequisites (see for instance Gagné, 1970). From this perspective, attention is directed toward the so-called learning functions which must be fulfilled for effective learning (Verschaffel, 1995). These functions can be taken up by the teacher (teacher-centred education), can be distributed among the teacher and the students (shared direction), or they can be fulfilled by the students themselves (learner-centred learning). In this context, the model of information and knowledge transfer is criticised for ignoring the fact that knowledge is always constructed, which implies certain (meta)cognitive processes on the part of the learner that must be taken into consideration. Powerful learning environments are needed in which all learning functions are fulfilled as much as possible, in order to stimulate a learning process which will result in pre-defined learning outcomes. Within this perspective of applied learning psychology, this is the first movement towards a more central role of students: the learning process, not teaching, is of primary importance. It is not about 'providing education', but about the fulfilment of learning functions by organising effective learning environments.

What this perspective implies, is that teacher-centred education is not necessarily problematic as such, but that instruction and the organisation of education should also always take specific characteristics of the learner into consideration, arguing that students learn in different ways. Teachers should thus take the following aspects into account: learning styles, available metacognitive abilities, learning capacity, and learning motivation. Learning capacity may refer to "the independent execution of learning functions" and depending on this capacity the distribution of tasks among teacher and student will differ (Simons, 1995, p. 26). Next to focusing on the learning process (and on understanding instruction as the fulfilment of learning functions), education and instruction are considered problematic in so far as these insufficiently take the differences between students and the differences between kinds of learners into account. In other words, not only should the learning process become the main concern, but also the (differences in) ability of the students to steer their learning process. This means, to summarise, that education is problematised in so far as it approaches students as passive receivers and does not discern students in terms of learning capacity and other learning characteristics.

Differentiation

Connected to the above, this current discourse of education also houses a perspective on forms of differentiation (see also Vandecandelaere et al., 2016). Differentiation among students can refer to a number of things, from distinguishing levels of education and the use of adapted teaching methods to the composition of class groups (think for instance of forms of streaming and setting). These ideas of differentiation are usually based on particular aspects such as differences in learning performance, age, and interests. It centralises the student because education is adapted to the specific characteristics of the student. There are also other forms of differentiation based on the psychology of learning and related didactical perspectives, such as differentiation in learning time, levels of objective, method, instruction, and evaluation (also see Standaert, 2010). The necessity of differentiation is always connected to the problematisation of teaching methods and educational institutions which assume that there is no difference between students. In other words: the support, the guidance, and the organisation of education should take the differences between students, or between kinds of students, into account and should adapt to them.

The current discourse of differentiation typically expands the notion of differentiation to the point that every student is considered different or unique, and claims that education should be based on those individual differences. In these more radical scenarios, we can no longer speak of differentiation in a strict sense, but rather of learning paths that from the onset are already differentiated or individualised. In their plea for personalisation, Bray and McClaskey (2015) make a strict distinction between personalisation on the one hand and individualisation and differentiation to the learning needs of different students: the goals are the same for everyone, but the approach or the method is adjusted to the specific learning needs of different students. Individualisation then means that the needs of the students are the starting points, from which individual learning paths can be designed in order to reach outcomes that are the same for everyone. On the contrary, they argue that personalisation starts from the learner: it leads to a co-production of the learning environment and to formulating and evaluating personal goals in dialogue with the teacher. Terms like personalised education or personalised learning express the idea that this is not another variant of differentiation or individualisation, but rather a new vision on education and learning. Often, different findings from neurological research which have shown that the brain activity and networks which are activated during learning processes are as diverse and unique as DNA or fingerprints (Bray & McClaskey, 2015).

A good example of personalised learning and personalisation in education can be found in the educational policies of the United Kingdom. It is no coincidence that there are many similarities between personalisation as we have described it in context of the experience economy and the reforms of the public sector. According to Hartley (2007), personalised learning is not only an educational concept that was developed by Charles Leadbeater and David Hargreaves, among others, but it is clearly a key component of a radical reform of education in the public sector. And indeed, former UK minister of education David Miliband does not deny that personalised learning is for education what customisation is for the private sector and for other forms of service. Personalised education reshapes the organisation of education by taking the experiences, preferences and needs of the learner into account.

"It means building the organisation of schooling around the needs, interests and aptitudes of individual pupils; it means shaping teaching around the way different youngsters learn; it means taking the care to nurture the unique talents of every pupil. [...] Personalised learning is not a return to child-centred theories; it is not about separating pupils to learn on their own; it is not the abandonment of a national curriculum; and it is not a license to let pupils coast at their own preferred pace of learning. The rationale for personalised learning is clear: it is to raise standards by focusing teaching and learning on the aptitudes and interests of pupils. Personalised learning is the way in which our best schools tailor education to ensure that every pupil achieves the highest standard possible." (Miliband, 2004, pp. 23 - 24)

On the one hand, personalised learning is about achieving the highest possible objectives; but on the other hand, the focus is placed on involving students from the onset in the organisation of their learning process and motivating them to realise as much as possible. The starting point is that students must be addressed as unique persons who participate in all the phases of the learning process, including in processes of goal setting as well as determining where and when these goals will be realised and evaluated. Thus, the entire learning process is personalised. There is a double intention here: raising motivation and wellbeing, but also ensuring that every person achieves the highest possible goals. Taking the unique traits of the person as a starting point encourages an orientation towards achievement.

A specific perspective which is closely related to personal learning and personalised education, at least in terms of its problematisation, is that of 'accelerated learning' (Rose, 1985). The starting point here is that everybody has a proper learning style, and that learning is natural when you use techniques and methods that fit that learning style. This natural progress of learning runs an easy course and is then, consequently, also faster. This perspective, like many others which focus primarily on the individual learner, gives a neurological underpinning to its vision on learning and education. Inspiration is frequently found through insights from neuropsychology and educational neuroscience into brain functions, but also in the well-known theory of Gardner (1995) about multiple intelligences (even though he has relatively different views himself; Gardner, 1995, 2011). In accelerated *learning* it is assumed that there are differences in intelligence between students and that everybody also has different sensory preferences. This determines the personal learning style, which should direct the choice of teaching methods and techniques. This perspective problematises maladjusted techniques because they are discouraging and non-efficient.

To summarise, the *perspective of differentiation* problematises every form of education that does not take individual needs, or even every

design of a learning environment that does not begin with or build on the learner, into account. Focusing on the person as co-producer increases, according to this discourse, not only motivation and wellbeing, but also learning speed and outcomes.

Development of talent

A double orientation, that of the individuality of the student and of high achievement, can be spotted in the 'talent approach' which has found its way into education and educational policy not only in Belgium and the Netherlands (Dewulf, 2009; Walma van der Molen, 2014), but also around the globe. Discourses about talents problematise forms of education and management which start from the idea of a deficit, from that which students and employees are unable to do. A deficit, however, is usually the result of having to do a task, function or assignment that does not align with what an individual is actually good or talented at; the already mentioned theory of Gardner on multiple intelligences is a source of inspiration for this perspective on talents, since students differ based on which intelligences are more - or less - present. Traditional education in this sense is reproached for reducing intelligence to, for instance, an IQ-score. Education which aims to develop talent acknowledges the existence of multiple intelligences and related talents, and states that there are significant differences concerning the talents of each student. Starting from what students actually can do, is not only a way to enhance and stimulate motivation but also a way to increase achievement, based on the suggestion that individuals are likely more talented at things they enjoy doing and enjoy doing things they are good at. Emphasis is first placed on the discovery of talent(s) in a student; the next step, then, is the development of competencies that fit the student's talents by attuning the learning environment as much as possible to those talents. Education as talent development starts then from the individuality of the student in so far that talent is what distinguishes students, and states that education and teacher guidance should direct itself towards personal talent development.

It is of great importance to underline that the talent-based approach - and to a certain degree also varieties of personalised education does not really start from learning processes, but from processes of development. Talent refers to a potential that is present as a seed, often dormant, which should be nurtured (for instance as concrete skills or competencies). Such a perspective does not as much focus on the learner or the student, but on the person in development. At its very core this discourse problematises the result and outcome orientation of learning processes. It thus questions the assumption that learning is a process that can be used for a number of predefined outcomes or results. The talent-based approach problematises this assumption because this goal-orientation is already given in somebody's talent. The matter at hand is then to develop that potential, or to translate it into concrete skills or competencies. In this perspective the student is also the main concern, but the student as the carrier of potential that can be realised in skills and competencies.

Inclusive education

The *perspective on inclusive education* is partly connected to the already mentioned perspectives on student-centred education, but it is important to deal with it separately because it addresses yet another problem: that of the separation of students in the educational system based on their 'normality'. In many countries, especially Belgium and the Netherlands, there exists an elaborate provision of special needs education which runs parallel to mainstream education. The difference between both systems of education and the implied difference in its population has been debated for quite some time. The development of special education in the 19th century had at first mostly a positive connotation, since it was about offering education to children that, due to physical or other limitations (or because of deviation from the norm), had no place in regular education. In a way, this was already about giving attention to the students themselves, albeit a very specific type of student or group of students. During the 1960s and 1970s, the impetus of special needs education was becoming increasingly challenged, and the necessity of sending students to these schools for special education became less and less evident. One argument that was

(and is) often used in this case is that having separate educational systems impedes social integration. This idea hopes to avoid "the delinquency of general education" and to place 'special' students as much as possible in a normal setting where their special educational needs are considered as much as possible (Dunn, 1968). This forms the basis for policies of integration which broaden the scope of care and support at schools (mainstreaming). Exclusion from regular education thus becomes something which needs justification. In a way, it is only legitimised as a last resort, for instance when the purpose of regular education is impacted too greatly.

In the 1980s and 1990s there was a more radical discussion on segregation due to the rise of the 'inclusive schools movement' (Fuchs & Fuchs, 1994). In contrast to a segregated school system, support grew in favour for the development of a single educational system (Gartner & Lipsky, 1987, p. 387). This would mean that special education would have to be phased out and eventually closed, which would also necessitate reforms of the regular school system so that it could accommodate every student. The starting point for a system such as this is the "uniqueness of individuals - the premise that all students are unique individuals, each with his/her own set of physical, intellectual, and psychological characteristics, and, as such, institutions should consider the educational needs related to this uniqueness." (Stainback & Stainback, 1984, p. 103) Typical for this perspective is that it no longer starts from a group of students that can be divided into normal/regular and abnormal/special. The idea that we should take special educational needs into account next to regular educational needs is replaced by the idea that every student has specific, unique needs. The building blocks of this form of educational organisation are an adaptable curriculum, tailored instruction, and individualised strategies of teaching.

This perspective thus challenges the use of the norm that categorises students of being less or more normal from the outset and which then assigns these students to separate learning paths, groups, or systems of education. This perspective also blurs the lines between education and care, between being a student and being someone in need of care, and between learning and developing; since everybody has specific needs, there will always be a need for care of some sort. Using a single norm as starting point is thus questioned. On the one hand, this is based on the idea that a norm is a social construct, and that the appearance of abnormality is a consequence of the way in which education is organised. On the other hand, and related to the previous, the existence of a single norm is also challenged, based on the assumption that we should start from learning needs and that these are different and unique for every individual. Students with a disability have specific learning needs, and the argument continues that these are not reasons for exclusion, but in fact the starting point for the organisation of education and instruction. The perspective on inclusive education in this respect is also intertwined with the already mentioned perspectives on individualised and personalised education.

Closely tied to this attention to inclusive education is the Universal Design for Learning (UDL) movement. This movement has its roots in architecture: under the headings of Universal Design and Design for All, special attention arose at the end of the 20th century towards the accessibility of buildings and spaces. The idea here is that certain physical and mental 'disabilities' are only considered as problematic because the spaces which the students inhabit are shaped in a certain way. The idea is then to design buildings and spaces that are accessible for as many different people, and need as little adjustment, as possible, in order to accommodate specific target groups. In other words, the goal is to maximise accessibility by taking diversity into account in the design process itself. UDL applies the same philosophy to designing learning environments and to building curricula. On the website of the well-known *Center on Universal Design for Learning* (NCUDL), we read the following description:

"Universal Design for Learning is a set of principles for curriculum development that give all individuals equal opportunities to learn. UDL provides a blueprint for creating instructional goals, methods, materials, and assessments that work for everyone -not a single, one-size-fitsall solution but rather flexible approaches that can be customised and adjusted for individual needs. Why is UDL necessary? Individuals bring a huge variety of skills, needs, and interests to learning. Neuroscience reveals that these differences are as varied and unique as our DNA or fingerprints." (UDL, s.d.) UDL is, among other things, based on brain research; it starts from the idea that students learn and are motivated in different ways, that they treat content and instruction in different manners, and that learning outcomes have different manifestations. UDL is about designing learning environments so that the goals, methods, contents, and forms of assessment are diverse enough to meet the full spectrum of needs of the learners. It is possible to diversify the way in which content is delivered, the forms of assessment, and the learning environment in such a way that certain physical or mental limitations will not lead to falling behind or having a deficit. UDL can thus be seen as an integrative design approach which fully assumes that students learn in different ways and that the learning environment should, from the very onset, be designed so that everybody can learn at their best. Ideally, this means that adjustments for specific groups are no longer necessary.

The student as the Other

Strictly speaking, this ethical perspective may not truly be an educational perspective. It does, however, often show up in relation to matters of schooling and has its own specific method of pushing the student towards the centre. It is thus relevant to briefly mention it.

This perspective assumes that a pedagogical relationship is always an intersubjective or interpersonal relationship. Very much like the relationship between child and parent, the relationship between student and teacher is also considered an interpersonal relationship. Inspired by authors like Martin Buber, Emmanuel Levinas, and Jacques Derrida, but also in line with religious or secular meanings of personalism, the instrumentality of relationships in education is questioned; doubt is raised about forms of goal-oriented thinking in which education is presented as the utilisation of the right means in order to reach goals efficiently and effectively. The non-instrumental and ethical aspects of the pedagogical relationship are emphasised, as this perspective posits that an instrumental relationship reduces the student to an object or an instrument in the hands of the teacher or school system. According to this ethical-pedagogical approach, both the student and the teacher are then de-personalised or de-humanised. The reference to the personhood of being human is thus a reference towards human responsibility, ethical action, and being related to each other. In this relationship, the student is 'the Other' that claims the care and attention of the teacher and faces them with the responsibility to do justice to the unique person of the student.

This perspective - and we make abstraction from several varieties tries to explain that the student, as 'the Other', continuously reminds teachers that they have a personal responsibility. Ethics here is mostly understood as a form of doing justice to the other. The other is represented as a singularity that cannot be understood or encapsulated by categories or standardised actions. In so far as education is associated with standardisation, normalisation, and categorisation, it is to be expected that this ethical approach has a relatively strong voice in debates over education. This perspective is used to bring attention to the lack of space for inter-personal relationships in educational settings as they are currently being organised.

Closely connected is the perspective in which the personal development of the student is brought to the fore as a key aim of education, and where focus is also placed on the personhood of the teacher. 'Forming' a person, it is said, is not merely the teaching of knowledge, skills, and competencies, but also the development of values, norms, identity, and ethical understanding. To realise this, every student has to be addressed in his or her personhood. This also means that the personhood of the teacher must come to the fore. It is not only of importance what the teacher does, but also who they are as an individual and what they embody. The interpersonal relationship is presented in this perspective as a necessary condition for the education of character or moral development as a person. The not-yet 'formed' but unique person of the student is, in this perspective, both the beginning and end of education.

The learning citizen

A last perspective which takes the student or (better) the learner as its main concern is of a different order. It concerns the discourse of the learning society and the learning citizen which questions the idea that learning is limited to age (children and youth), and that learning ends when those learners leave dedicated institutions (school and university). This discourse asserts that learning is a lifelong process in a continuously changing society. In this context, the figure of the learning citizen emerges as someone who is capable of learning for the full duration of their life and who also takes on the responsibility of doing so. This discourse emphasises the societal importance of learning and the responsibility of the learning citizen in that regard. Historically there are four main perspectives which make up this discourse (Simons & Masschelein, 2008).

Firstly, there is the idea that learning is a process that produces knowledge and skills, which are considered the raw materials of the modern knowledge economy or a form the capital which can guarantee an income. This means that education, and really any form of learning, is considered an investment in human capital (Schultz, 1971). Learning capacity is, in other words, treated as capital which adds value. Next to this perspective of the *capitalisation* of learning, there is a perspective on learning which emphasises that the learner is supposed to take their learning process into their own hands; this is closely connected to discourse from the end of the 1960s, in which the autonomy over one's own life is viewed as the one-true guarantee for self-realisation and self-development. Learning is not only thought of as something which adds value, but also something that guarantees freedom and self-realisation, and something for which the individual citizen, alone, is responsible for realising (Faure et al., 1972). A third perspective, in line with the already mentioned theories of learning, emphasises that learning is a constructive and active process that has to be managed or taken charge of by the learner (Knowles, 1975). The image which is being sculpted here is that of a learning citizen that is a manager of their own learning process. Lastly, and more recent, is the perspective on the employability of learning outcomes. This concerns the idea that the learning citizen must be capable of acquiring those competencies which will give them access to, and allows them to perform actions in, a number of crucial areas (economic, but also social, cultural...). The assumption is that the learning citizen, to a large extent, has control over their own inclusion or exclusion through learning. This also supposes that the learning citizen's output of these learning processes immediately becomes the input for their ability to perform in daily life.

The discourse of the learning citizen combines these four perspectives. It considers the individual learning process as a production process that has to be managed by the individual learner, in view of concrete learning outcomes which (in the form of skills or competencies) form the basis for their employability. The downside is that the citizen who cannot learn or who does not want to learn subsequently excludes themselves. If we return to the European Commission, it is precisely this perspective that is most pervasive:

"Education and training can only contribute to growth and job-creation if learning is focused on the knowledge, skills and competences to be acquired by students (learning outcomes) through the learning process, rather than on completing a specific stage or on time spent in school." (European Commission, 2012, p. 7)

In schooling, which is only one particular time and place of learning, the focus is not really on the acquisition of degrees, but on the actual learning outcomes that one has (or has not) attained. It is not the degrees, but rather the specific learning outcomes which have an immediate economic, social, and personal relevance for the learner. The figure of the learning citizen also gives learning a strategic function from a political standpoint. This gives rise to an all-embracing 'learning policy' which understands the acquisition of competencies as a solution to problems in numerous domains, such as poverty reduction, integration, and cultural participation. Or the other way around: numerous challenges are now framed as individual learning problems (Simons & Masschelein, 2008).

The perspective of the learning citizen also assumes that learning processes are always results-orientated. Consequently, added value and efficiency are the main quality indicators when the learning process is understood as a production process. In other words: the learning citizen is a citizen who needs to think in terms of profit (where is this course or this learning path leading to?) and has to keep track of time and cost-efficiency (how can I reach profitable learning outcomes as fast and cheap as possible?).

As we have seen, this educational perspective (which we discussed rather limitedly) is quite diverse and has a number of different arguments for centring the individual student as the main concern. The recurring assertions are that the learning process (and thus the personal activity of the student) is of central importance, that students differ in their learning processes, and that these differences should precipitate the organisation of education. This could be done by changing the method of instruction and adjusting goals to the personhood of the student. Moreover, this perspective is obviously aimed at increasing learning performance, meaning that both the 'weaker' and the 'stronger' students come into focus for support.

Conclusion: from individualisation to personalisation

There is not only one perspective which focuses on the individual student as their main concern, and there are a number of different motives and descriptions of who this student is (see table I for an overview). Notwithstanding these differences, there are several recurring elements.

First of all, the term 'student' in 'placing the student at the centre' does not refer to a general or abstract figure of a student which should be taken into account, nor to categories of students that we should take into consideration. In contrast, the starting point of these different perspectives is that all students differ from each other, and education and learning should start from these inter-individual differences. The vocabulary that is used to refer to these differences varies: different talents, but also emotions, feelings, experiences, or developmental needs. In general terms this means that the *person* of the student becomes the main concern. 'Personhood' refers here to the specific characteristics that distinguish one student from another. This new assumption could also be summarised as follows: 'we are all individuals, but different persons'.

A second recurring point is that the organisation of education (and learning itself) is questioned. Of course, this is not new, but there is a clear shift. In the 1960s, institutions and their authority were criticised in the name of 'individual freedom'. The critical reactions back then can be summarised by the following: 'we are not here for the school; the school is here for us'. This criticism 'in name of the student' did not refer to differences between individuals, but to an abstract

idea of individual freedom in the context of institutionalised forms of power (State, Education, Church...). The current criticism may be summarised as follows: 'everybody his own school; a custom school for all'. The starting point is that differences between people are larger than their (abstract or concrete) similarities, and that differences, not similarities, should be the guiding principle for the organisation of education and learning.

A third point is that putting the person of the student at the heart of the system is always an interconnected entanglement of two basic motives. Firstly, the internal educational motive that tries to do justice to the uniqueness of every student in order to optimise their learning process or learning outcomes. The main drive is to improve the learning process, or to make sure that the student really reaches the results or the goals that makes them ready for participation in society (access to jobs, cultural life, further education). For this perspective from the inside of education, primary concern is placed upon each individual student and their best possible learning outcomes. There is also an external societal perspective that is concerned with the student in view of societal considerations. Instituting a more efficient and effective learning process for each student is relevant to society because it reduces the cost of education (e.g., a reduction of students that fail, or a schooling system that performs better). But, next to these financial interests, there are also specific social or economic interests which can be served through the external approach. A better degree of qualification can, for instance, reduce inequality, or can ensure a maximal input for the development of the knowledge economy. The internal perspective corresponds with putting the interest of the learner, themselves, at the centre (as a didactic starting point), while the societal perspective takes social, financial, or economic interests as a point of departure. For the last, the student who is placed in centre stage also immediately becomes a means for other ends.

We thus find that, despite obvious differences between perspectives, there are also clear similarities. In what follows, we will build on these findings by developing the argument that there is an important transformation taking place in the architecture of education and learning: we move from an *educational institution* to a *learning environment*.

Table 1. Placing the learner at the centre: inventory of per	rspectives
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	Problem	Solution	Figure of the student
Socio-economic perspective	Talents are insufficiently used, which is an economic and social problem	Maximisation of the output of education Efficient organisation of education	The student as a source of unique potential/capital
Institutional perspective	Exclusivity of educational institutions: • A monopoly on learning • A monopoly on qualification	Flexible learning paths Open systems of qualification	The independent learner that needs flexibility and open certification/ qualification
Service perspective	The bureaucratic mode of organisation is inefficient and ineffective Teachers, as professionals, are not responsive to the demand side	Customer orientation in education	The student as a customer
Market-economic perspective	Education, as a service, insufficiently takes the user/person of the customer into account	Build education as a service around, and together with, the person of the user and their experiences	The student as a user and coproducer (possibly co- financer)
Innovation perspective	Based on class groups and subjects, education is too industrially (fordist) organised The culture of education is homogenous, closed, and academic (boring)	An organic, flexible and familial organisation, based on projects Learning environments built for diversity, openness, and impact (relevance)	The learner as a source of creativity The learner as a (social, cultural, economic) entrepreneur

1. Today's discourse: why should the student be at the center of education?

Technological perspective	Education is/has outdated technology Physical educational technology is always exclusionary	Personalised educational technology Inclusive, adaptive, digital learning environments	The individual learner as user The individual learner as personalised user and coproducer
Educational perspective	Knowledge transfer, passive receiver, goal- oriented education	Construction of knowledge, active producer, outcome- orientation	The student and her characteristics and capacities as didactical starting point
	Differentiation as adjustment of the offer/supply	Individualisation, personalisation, acceleration of learning	A person with her own (learning) needs
	Goal-oriented and uniform learning, starting from shortcomings	Learning as developing competencies, starting from talents	The student as person with a potential to be developed
	Special needs education, normality	Inclusive education, adaptation to personal needs	The student with specific learning and care needs
	Instrumental educational action, means/ends reasoning	Ethical and exemplary action, doing justice to	The student as the Other, as a unique person
	The educated citizen, direction towards the achievement of goals and degrees	The learning citizen, direction towards the achievement of results and qualifications	Learner as the main responsible for employability

Chapter 2. The architecture: from the educational institution to the learning environment

In many countries, the increased focus on the individual student has been, and still is, a high priority for several educational policies. This policy focus, however, can also be understood as an indication of a new organisation of education and of learning. What comes up for discussion here is truly a transformation of the architecture of education and of learning. Our argument goes as follows: there has been a shift from the architecture of the modern *educational institution* to the current-day learning environment. As we will show, this shift means that we are gradually moving away from an educational organisation that is based on the 'normality' of the student (without claiming that this has disappeared completely), and that there are clear indications of an organisation of education and of learning in which the 'employability' of the learner is now of central importance. In other words: it is no longer the individuality of the student that is of importance, but instead it is the personhood and the uniqueness (or unicity) of the learner. It is important to stress that this uniqueness does not automatically appear once all normalising barriers have been lifted. This unicity - 'I, as a person with my own unique needs' - is not something waiting to be discovered but is itself also a construction. It appears as part of what we could call a new diagram of power, or a new configuration of power. Before going into this power diagram, we will sketch the architecture based on two aspects: the building blocks (or the raw material), and the principles of organisation (for an overview, see table 2 at the end of this section).

The architecture of the educational institution

Examination is the first important building block of educational institutions. The exam determines the normality of a student with respect to a certain norm (Foucault, 1975). Thus, a level of knowledge or skill is usually standardised for specific age groups and subsequently becomes a norm. The norm has a double function, which also clarifies the double function of exams. The norm sets out what should be acquired in order to gain access to a different grade, to the next level of education, or to the job market (Depaepe, 1999). It has the status of a socially recognised standard. The exam is then above all the instrument that regulates access to the job market or to further education through socially recognised *degrees*. But the teacher also uses the exam to collect knowledge about the student. By using norms in this way, teachers are able to judge the development or the learning progress of every student in terms of degrees of normality (Hacking, 1990). Every exam (in)explicitly shows whether what a student of a certain age knows, and what they are capable of, is (more or less) normal. In addition to this examination, it becomes possible to determine for every student what sanctions, exercises, instructions, or extra effort is required to achieve normality. In so far as the norm is set by the subject matter that is acquired at a certain age, the ultimate disciplinary sanction for the student is to have to repeat or be held back a grade (which means to double a year or, in more contemporary vocabulary, a differentiation in time to learn). In the educational institution, students get to know themselves in relation to the norm. Often, this is based on class averages: 'am I more or less normal as a student?' This selfknowledge as a student, and also the positive or negative self-image that is inextricably linked to it, always passes through one or another social norm and often implies the comparison of oneself to others. Through the school report, the parents also get to know their child as a good or bad student, and thus as more normal or less normal. In this way, the architecture of educational institutions instils also a sense of responsibility in parents for supporting the normal course of a school career (Donzelot, 1977).

Schooling and learning, as well as examination and qualification, are inseparable in the architecture of the educational institution. As such, they are almost indistinguishable. After all, the starting point for both notions is that meaningful learning, both societal and individually, only takes place in an *educational* institution as a consequence of *teaching*. The government authorises schools, as officially recognised *institutions*, to take on the function of qualification by examining and awarding degrees (unless of course governments partly take the

matter in their own hands by issuing national examinations). In this architecture, a *degree* (or certification) is a normalised and validated (socially recognised) admission ticket into other educational institutions or into the job market. Within institutions these degrees are often translated into curricula for different levels of education (primary, secondary, higher) and for different forms or orientations of education (general, vocational). Curricula, through general subjects and course content, both shape and fulfil what is needed for students to function normally in society. Society leaves its normalising mark on education through not only elementary knowledge and basic skills (reading, writing, math), but also through course subjects (language, mathematics). Those subjects are the disciplinary building blocks of the curriculum and express a societal norm in one way or another. What is of importance in this architecture is thus the *degree*. It functions as a means of communication between different institutions (for instance, between primary and secondary education, between higher education and the business world, or between higher education and other governmental institutions). A degree is the recognised proof of successfully passing a curriculum, and thus essentially refers to a duration, a level, a set of courses, or a discipline. In this manner, a degree is an indication of education and schooling rather than an expression of specific learning outcomes that an individual student has obtained, which is the case in what we call the architecture of the learning environment.

In the architecture of the educational institution, the student runs through one or more *curricula* during their school career. This means that they follow fixed roads that run from the family into society (including the job market or higher education). There are indeed alternate roads, and it is possible to change roads, but the map is drawn, and the destinations are set in advance. In other words, as soon as young people leave their family and enter the institutional architecture of education, they set foot on a more-or-less normalised system of roads. By means of the school *report*, the student (but also the parent and the teacher) always has an instrument at hand to orient themselves with, and to steer through the curriculum turn by turn. The degree, then, proves the socially recognised maturity of the student and plays a key role in the regulation of access. In this architecture, there is also special attention paid towards the school career of young people; this career can be judged as more or less normal, and because of the connection of course content and age, the abnormality of *a school career* often refers to delays (or accelerations) or to dropping out of school.

The basic principle of this modern educational institution is the observation of students and, in accordance, the normalisation of interventions and corrections. Surveillance, correction, and uniform subject matter intertwine in an educational institution, and correcting measures (rewards, punishments, extra exercises) are justified by its goal: normal development within a socially normalised curriculum. Today, however, norms and the idea of normality are under fire. The most obvious indications of this are proposed alternatives to linking age, content level, and learning time (in a class group) and the steps which have been taken towards inclusive education. Naturally, we tend to see this moving away from the norm immediately as a positive and liberating development: at last, students are freed from the strangulation of the norm and at last we can do justice to each and every student! Before expressing such an appreciation, however, it is important to sketch in more detail the architecture of the organisation of education and learning that comes to replace the former, or that is - at least - embraced more and more as an ideal today.

The architecture of the learning environment

The new architecture of education and of learning has different building blocks and organisational principles. The main building blocks of this new architecture are *competencies*. On the one hand competencies are *learning outcomes*, which are results of learning processes that can be unambiguously identified and evaluated. On the other hand, they express a specific or generic *performance level* or level of proficiency. Competencies refer thus to the concrete learning outcomes that are needed in order to gain access to another educational institution or to the job market. The assumptions of the European qualification framework – implemented in most member states of European Union - clearly exemplify what we mean:

"The EQF uses 8 reference levels based on learning outcomes (defined in terms of knowledge, skills and competences). The EQF shifts the focus from input (lengths of a learning experience, type of institution) to what

a person holding a particular qualification actually knows and is able to do. Shifting the focus to learning outcomes supports a better match between the needs of the labour market (for knowledge, skills, and competences) and education and training pro- vision; it facilitates the validation of non-formal and informal learning; facilitates the transfer and use of qualifications across different countries and education and training systems. It also recognises that Europe's education systems are so diverse that comparisons based on inputs, say length of study, are impracticable." (European Commission, 2010, p. 4)

In this context, qualification does not refer to successfully passing a curriculum and obtaining a degree, but to having competencies of a certain level. A qualification, based on acknowledged and validated learning outcomes, is a direct indication of the employability of the learner. It is something that they can use to be competent or to perform in one or more domains (such as another learning environment or the job market). Degrees refer to the duration, the level, and the domain of schooling. A qualification framework, however, starts from learning outcomes, which means that the emphasis is on what specific competencies are owned by a specific individual. The assumption of this qualification culture is that people learn throughout their lives, that formal learning (which takes place in an institution) is only one avenue alongside informal and non-formal learning, and that it is learning outcomes which matter (not the duration or the location of learning). What is needed from this starting point is an open and flexible system with very clear standards; those standards are needed in order to recognise and validate any learning outcome that an individual may achieve, and wherever they may achieve it. In European terms, this means that a qualification framework functions as a 'single currency' for competencies or human capital. This does not mean, however, that there is no trace of degrees in the architecture of the learning environment. What changes is that authority shifts from the degree and the issuing institution to the competencies or learning outcomes which it contains. This implies, of course, that the job market - and further education- will, rather than only taking degrees into account, increasingly start to recognise these now-identifiable competencies. For the learner, this means that their attention should go to acquiring, accumulating, and validating competencies which can be employed, Looking after school: a critical analysis of personalisation in education

instead of striving for the longest possible schooling and the highest degrees.

The building block of employability thus replaces the social standard or norm. Now, instead of the student deriving individuality from the social norm (how one relates to the norm), it is about the student's learning outcomes which they have actually attained that determine their performance level. The personhood of the learner - or (even better) their identity as a person - is not really shown in a degree, but in what the learner actually knows and can do. It is about accumulation, and thus always about individual results rather than a normal development and (normalised) attainment of targets or goals. This is why an instrument like the *portfolio*² is of central importance in this architecture: it gives a snapshot of accumulated competencies. In this respect, it is a representation of what somebody 'carries in his pocket' or what is somebody's 'worth' in light of their employability. The portfolio shows the learner as a learner, as a profile. Making a curriculum vitae implies that somebody thinks about their school and job career in a chronological order, which is usually underlined by referring to degrees and to when and through which institution the graduation took place. A portfolio, in contrast, forces somebody to profile themselves in the present, based on the competencies they have in hand, contouring their personal profile of what competencies are applicable and can be put to use in order to perform. In general, this means that the learner who shows themself through a profile is by the same gesture also publicly recognisable. This is from a different order than a student file, which is made by experts in an educational institution to note when something out of the ordinary or 'abnormal' happens and which has restricted access.

Whilst young people in the modern educational institution leave the family and pass through the curriculum as a student, people as learners tread one or more learning environments. Within those learning environments they follow learning paths and modules in which they find support, in order to reach predefined learning outcomes to guarantee (or at least enhance) employability. The societal expectations of

² The word is derived from the Italian *portafoglio*, which is a case for carrying loose sheets. We also recognise the word in the French word *portefeuille*, which is a wallet.

education are translated here into competencies that are required to perform in several domains of society, and governments can decide on a minimal expected proficiency level for all learners. The expected outcomes could concern basic and general competencies (social, cultural, political, scientific...) or specific competencies (in specific scientific domains or professions). The architecture of the learning environment makes it possible to translate these competencies to different proficiency levels and to design learning trajectories, accordingly. The architecture of the educational institution, in contrast, is not focused on getting results but on working towards goals. In light of these goals, the educational institution bases its decisions - often through means of deliberations - on standard proficiency levels. In a way, there are also different levels of proficiency within the architecture of the educational institution, but these are organisationally translated into different streams, programs, and grades. The learning environment, in contrast, is directed towards obtaining outcomes: the proficiency level of learning outcomes is determined as an indication of the competency level required to perform in a certain domain. Education or learning is then an organised and formalised offer of learning paths which, on the one hand, is adjusted to the expected competencies, and, on the other, is customised for the learner who wants to realise a certain level of competence within a certain domain.

In this architecture, a learning path is considered efficient and effective in so far as all *learning functions* are attuned to the achievement of predefined learning outcomes. The teacher no longer integrates and embodies these learning functions, as is the case in the educational institution; here, the teacher is often a member of a multidisciplinary design team and becomes more and more the designer of learning environments and the coach of learning processes. Personalisation of the learner – in order to customise the learning environments - seems to coincide here with a de-personalisation of the teacher. The integrated assignment of the teacher breaks up into a number of learning functions which are now to be performed by numerous technologies or experts, depending on what or who is most efficient in taking up the required functions. The customised offer can include several different components: support, length of time, learning means, methods of assessment, moment of evaluation... But this customised offer is essentially always an answer to the gap between the current level of performance and the desired or chosen level of performance. This means that the fixed connection of age, subject matter, and proficiency level is no longer of value here, and neither is the organisational translation into, for instance, grades and class groups. Age, grades, and classes could very well still have a part to play in the outcome-oriented learning environment, but only for pragmatic reasons. This means that they are only maintained in so far as they are functional for the learning process and support the orientation towards outcomes of individual learners.

Next to the focus on competency-based employability, the principle of selection and choice might very well play a role in learning environments. The word talent, and the discourse on enabling learners to discover their talents, refers to a disposition that is at least partly innate, one that will 'naturally' orient the learner towards a domain in which they want to be employable. In a way, this focus on developing talents into competences installs a regime of 'self-selection' based on what somebody is 'naturally' good at. Whatever may be, in this architecture, everyone's longing for employability is translated into personal learning needs, and tailored education can be offered by basing itself on these needs. For reasons of efficiency, but also in order to make personalised learning paths technically possible, these learning environments are to a great extent digital. Digital environments transgress the boundaries of physical spaces and the prescribed time schedules. This means ideally that the learner also becomes the organiser and manager of their own learning path (as much as possible) and becomes thus the co-producer or the co-designer of their own learning environment.

Since learning environments are focused on outcomes, there are very specific quality indicators for these environments and learning paths: effectiveness (achieving learning outcomes), efficiency (achieving outcomes in as little time as possible, and as cheap as possible), performativity (producing as much output with as little input as possible) and productivity (paths with added value that guarantee real employability). It is always about *learning gain*: in time, price, output, or added value. One consequence of this architecture is that education and the teacher - from the perspective of the supply side - can always be evaluated and judged by the learner (or the financing government) based on

the above-mentioned quality indicators. In other words: in so far as the goals of education are expressed in terms of outcomes, education, but also the teacher, becomes accountable for whether or not these outcomes are achieved. An additional consequence is that, in this architecture, the 'qualification function' (and the recognition and validation of learning outcomes) is outsourced ideally to external entities (which may or may not be approved by the government). Educational institutions which have to guarantee these learning outcomes and have the authority to acknowledge and validate these, serve as both judge and interested party. This can become also additionally problematic when learning outcomes can be achieved anywhere. The new architecture, thus, needs the disconnection of formative evaluation (as feedback and learning support) and summative evaluation (in view of qualification which is, for instance, done by approved assessment centres). In an educational institution, which is focused on achieving goals and handing out degrees, this disconnect is not under consideration.

The exam, degree, and corrective sanctions have important roles to fulfil in the modern configuration of education. They provide institutional signposts for the student to orient themself. A learning environment, on the other hand, is built around the learning process and around learning outcomes, so the learner above all needs to be monitored and coached. In an open learning environment, and thus without predefined paths and with a variable destination (in terms of performance level and/or domain), it becomes necessary for the learner to have information that they can use to position themself. There is, then, a need for information about the required proficiency level in order to gain access to a certain module or path, such as concrete information about the learning outcomes, the estimated learning time, expected added value, and returns; but also, there is the need of constant information about the current status of the learner in the learning process (thus information about the preliminary level of performance) and about any needed adjustments (up or down a level according to proficiency). Continuing Foucault's (1975) strand of thought, this could be formulated as follows: while the norm asks for discipline and for normalising sanctions, employability asks for monitoring and personalised feedback.

Monitoring, as done through progress reports in learning management systems or with numerous systems of formative assessment, implies a meticulous and constant focus on processes with the intention to constantly have the information on hand to make adjustments at any time. Permanent monitoring assesses the gap between the current and desired learning outcomes with respect to employability and future performance. It is through monitoring that the student appears as 'a person', meaning that they can think of themself (or can be thought about) as someone with highly individual needs which differentiates them from others. Those needs are always the consequence of yetunrealised potentialities (and thus are not indications of (ab)normality, as is the case in the educational institutions).

Through permanent monitoring of the learning process, the learner can always know what they are capable of and where they stand in comparison to their performance level and in respect to their related individual needs. Monitoring systems thus always make a preliminary overview or a balance sheet (of accumulated learning outcomes and/ or performance levels). Instead of *orientation* based on a norm, this is a form of *positioning* in accordance with a performance level (and the related degree of employability). Stated differently: the written and fixed curriculum functions as a map with signposts for students, whilst monitoring systems function as a GPS or navigation system for the learner, that can be used to plan and adjust their personal route.

The central mechanism of the learning environment is not the power of corrective or normalising sanctions, but the power of continuous *personalising feedback*: loops of feedback to optimise the learning process and achieved outcomes (Bröckling, 2006). In so far as the learning environment is a digital environment, *learning analytics* can (partly) automate the focus on personal performance/employability, monitoring, and feedback. Based on evaluations of the efficiency and effectiveness of certain learning paths and other learning traces, and through more and more refined learning profiles, learning paths can continuously be customised to each learner. In the architecture of the learning environment, it is no longer the visible educational expert who carries out educational reform and embodies modernisation; instead, invisible tracking systems, profiling, and feedback loops, make constant innovation and re-design (or better, a constant focus on improvement) become an inherent part of the organisation of the (online) learning environment. The learner also becomes a co-designer of this learning environment and its learning paths through the learning traces they leave behind, which form the input for permanent adjustments.

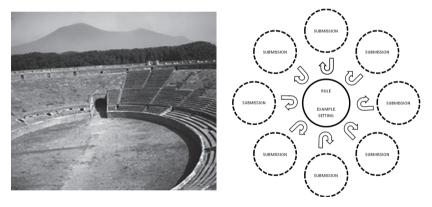
Architecture of the educational institution	Architecture of the learning environment
Building blocks	Building blocks
Student	Learner
Teacher	Learning functions
Teaching	Instruction
Examination	Assessment
Curriculum	Learning paths
Educational goals	Learning outcomes
Goal attainment	Proficiency level
Subjects	Competencies
Disciplines	Domains/environments
Proof of ability	Performance level
Degree	Qualification (certificates)
School career	Learning gain
Curriculum vitae	Portfolio
Educational expert	Learning analytics
Intelligence	Talent
File	Profile
Principles of organisation	Principles of organisation
Normality, connects • goal of education and • societal proof of ability	Employability, connects learning outcomes and societal required performance levels
Normalising and corrective measures, in view of a normal development	Personalising and optimising feedback, in view of learning profit
Disciplining: surveillance based on rules and norms in view of goal orientation (degrees)	Monitoring: permanent evaluation of processes in view of outcome orientation (qualifications/certificates)

Table 2. Architecture of the educational institution and the learning environment:
building blocks and principles.

Architectures and power diagrams

This description of the building blocks and principles of the educational institution and the learning environment brings one aspect of their architecture to the fore, namely the power configuration which pertains to a certain architecture. Every configuration of power can be described as a diagram or an abstract machine which presents the mutual relationship of its main parts (Simons, 2014a; 2014b). A power diagram thus shows or expresses the architecture in its most refined or simplest form; but a diagram also clarifies that a power configuration - in different shapes - is also visible in other domains of social life, and not merely in education. Before going into the power diagrams of the educational institution and the learning environment, it is important to reflect upon the older but still well-known (sovereign) power diagram of juridical rules.

Figure 1. The synoptic diagram



The main instrument of the juridical configuration of power is the law, or the rule. A law or administrative rule prescribes or prohibits actions which should be maintained in one way or another. Furthermore, everybody is equal in the eyes of the law; law enforcement, legal jurisdiction, or administrative sanctions in principle do not judge the individuality of the law breaker, but instead focus on the alleged actions which must be punished to maintain order (and thus the law). A law or a rule works in so far as there is obedience or compliance. The paradigmatic expression of the power of law is the synopticon as can be seen at work in public punishment or in the (Greco-Roman) arena (Mathiesen, 1997). The synopticon is shaped like a circle where the crowd observes an individual in the centre. The main intention of punishment (or glorification) of a single person is to enforce obedience to the law, and thus to maintain or repair lawful order. Essentially this 'power of the example' or 'power of the exception' is about making the consequences of breaking the law visible. This is an old exertion of power, but it can still be seen at work today. Next to the obvious juridical practices, we can think here of the teacher who wants to maintain order in the classroom by setting an example and punishing or rewarding a student in front of the class. But even in the functioning of international comparative assessment studies, such as the PISA, there are synoptic elements. The (un)successful countries are put into the centre of attention and other countries are reminded, as spectators, about their submission to the rule in effect. The motivation in this international arena is the desire to be, one day, at the centre of attention as a top performer, or the fear of ending up in the centre of the arena alongside the other bad performing countries. Of course, the case of these public rankings is not about maintaining of a juridical law or an administrative rule; there is a kind of 'law of performance' at work here: (wanting) more is better.

As is the case with other institutions, in educational institutions power has a different configuration, one which has been described by Michel Foucault as disciplinary power. In this configuration, it is not the law or the rule but the norm that is the foremost instrument of power. The norm refers to the desired, empirical situation of human features or activities (behaviours, thoughts, bodily features). It allows the comparison of human beings, and thus to individualise in terms of normality: (ab)normal behaviour, (ab)normal development, (ab)normal sexuality, (ab)normal mental health. In contrast to the law, the norm does not ask submission, jurisdiction, or penalty. A norm needs disciplining, judgment, and correction; for instance: judging and inspecting how children (but also workers) behave in terms of normality and taking corrective measures in light of that normality. According to Foucault, in modern society, social life is organised not only on the basis of laws and rules (supported by jurisprudence and law enforcement) but also increasingly by a number of norms. Think for instance of norms

and normality which are associated with a (physically and mentally) healthy, economically viable, productive, and moral life.

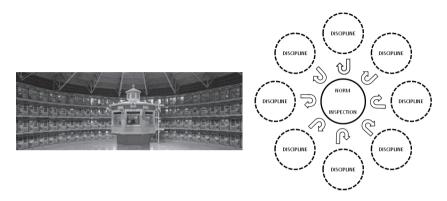


Figure 2. Panoptic diagram

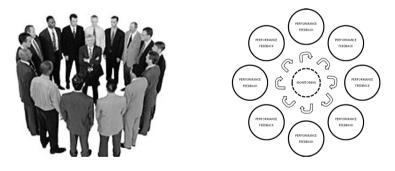
It is in those typical modern institutions - such as the family, the hospital, the factory, and, of course, the school - that the norm can do its work. Under a normalising gaze, and the disciplining actions of teachers, parents, foremen, and doctors, a normalised individuality of human being takes form. Modern man, then, is not just asking himself 'is this allowed?' or 'is this legal?', but also 'is this way of thinking, acting, judging, and dreaming normal?' or simply 'am I normal?' (Hacking, 1990). The paradigmatic expression of the power of the norm is the panopticon: the generally applicable architectural model of an inspection house, that was designed in 1791 by Jeremy Bentham. In a way, the logic of the panopticon is the opposite of that of the synopticon. Singular humans in the middle of the circle supervise a group of individuals (in cells) at the exterior, without this group knowing whether there actually is surveillance at that instant. The guiding principle is that they must have the feeling of being under constant surveillance. Panoptic power is thus permanent in its effect, but discontinuous in its exertion; a current day example is the school inspectorate. Here, the few (school inspectors) observe and inspect the many (schools and teachers), but without the many actually knowing when there will be

the inspection. The power of the inspection is thus continuous, without a constant de facto inspection of every school or every teacher. This example of the inspectorate also clarifies that fixed norms are being used and that schools and teachers are expected to discipline themselves according to these norms, without there being a need for permanent surveillance.

The juridical and the disciplinary diagram fall short in explaining architectures that we see at work today, like that of the learning environment. Therefore, we will try here to elicit a new configuration of power. A basic instrument of today is that of the *profile*: the visible expression of certain characteristics of somebody or of something. A profile is an instrument which expresses proper or special aspects of a person in such a way that it makes them recognisable, in the double sense of being publicly knowable and of being acknowledged. A profile thus presents a public identity by using different distinguishing or determining features. Somebody is not shown 'frontally', but 'in profile'.

A profile only works in so far as there are points of recognition or variables, such as: gender, nationality, occupation, health, hobbies, family, as well as emotional, financial, or relationship status. In principle, everything is eligible for profiling, so long as it is possible to express certain distinctive or determining features. It is of vital importance for recognition that there be a stage or a platform on which visibility can be created. That visibility is, in effect, for both yourself and for the spectator/viewer. A personal profile allows to see yourself 'in profile' on a platform and to become, alongside others, your own spectator or audience. Usually this takes place on a virtual platform with a virtual audience; social media is exemplary here. On social media, you make yourself or some aspects of yourself visible, create your profile, and become, like others, a viewer of your profile. Your profile only has meaning or any sense of reality when it has viewers who recognise and acknowledge you. This recognition can be expressed in number of views, acknowledgement through shares, likes, emoji's, etc. Thus, it is about visibility (to be known or recognised) which is confirmed (to be acknowledged). In other words, it is public recognition (including your own recognition) that grants your existence, makes you tangible, and gives you real value. In this configuration, the main concern is a kind of constant reality check: monitoring the balance of how you see yourself and how others perceive you. The ideal, and this is a constant pursuit, is to profile yourself in such a way that how you see yourself and how others perceive you correspond with each other. The term 'person' and its derivatives, such as unicity, identity, and authenticity, refer exactly to this ideal. There can therefore be no 'I as a person' without that (public) profiling, and without the match between how you recognise/ acknowledge yourself and how others recognise/acknowledge you. Personalisation thus refers to the following mechanism: the constant attempt to search for a profile or a 'personage' in which you are recognised/acknowledged both by others and by yourself. Personalisation is thus always about the level of (social) recognition/acknowledgment. We can see this at work in how a learning portfolio – representing the learning achievements which make someone unique - profiles the learner, but also in other profiles that are made by or for a virtual learning environment.

Figure 3. 360° feedback diagram



This mechanism that we are describing is different from the other power diagrams. Whilst the law asks for submission, and the norm for discipline, the profile requires constant monitoring, which means both constant assessment and visibility. The profile thus requires a monitor that constantly observes in order to be able to warn or caution swiftly when something is amiss. It is precisely here that *feedback* appears as the reigning technique of power. Wiener, one of the founders of cybernetics, describes feedback as "the property of being able to adjust future conduct by past performance" (Wiener, 1950/1989, p. 33). And, he adds that this requires mechanisms to "perform the function of tell-tales or monitors - that is, of elements which indicate a performance" (ibid., p. 24). In order to know who you are and how you continue to profile yourself, you constantly need a reaction to your profile. This could be a 'like' on social media, reactions to a new post, new followers... But this could, at the very least, also be a provoked reaction which confirms your existence: sending or posting a message with the primary intent of receiving a sign of recognition. This is a conscious mobilisation of the other in order to confirm your existence. Wiener writes that applause is actually the first basal form of feedback. In this power configuration, and as soon as it is about profiles and not norms or rules, searching for applause is not (merely) a sign of narcissism, but an essential part of being somebody (as a person). You can search for applause by profiling yourself or by looking for enthusiastic audiences. In this configuration you are literally nobody without a profile, but also not without a stage or a platform, or without friends or a network. It is not the need for rules and order nor the need for normality, which is determinant here, but rather the need for recognition/acknowledgement; and that need is permanent. This is also why there is a permanent need for connection and constant availability within this configuration.

The paradigmatic expression of this power configuration is not the synopticon or the panopticon. The technique of 360° feedback, which stems from human resource management, is a suitable articulation. During 360° feedback, the employee is put in the middle of the feedback circle, around which all the relevant actors from the environment of the employee take their place: managers and subordinates, but also customers, friends, and family... In the ideal situation, the self-assessment of the employee coincides with the evaluation of others. Monitoring of the discrepancy, the difference, between how the employee sees themself and how they are perceived by others, continuously delivers feedback with which they then reprofile themselves. This is about personalisation: you have to want to know how others perceive you, you have to want to profile yourself, and you have to want to be recognisable (and acknowledgeable).

The 360° power diagram (profile, monitoring, feedback, recognition, personalisation) sheds a different light on a number of social trends

and tendencies. Several phenomena that are usually understood as 'natural' within the context of social or developmental psychology (think of the desire for recognition/acknowledgment, or the search for identity) can be seen in light of a very specific configuration of techniques, instruments, and mechanisms. The desire to be recognised, or the need thereof, is most likely not an innate desire, but a desire that is both the effect and instrument of a power structure. Furthermore, this configuration and the need for recognition are shaped in a very specific way within the architecture of the learning environment. The learner will profile themself mostly in terms of their profile of competencies (the learner and the acquired competencies which personalise them). But also, several other features of the profile can be decisive in so far as they influence the efficiency and effectiveness of the learning process. When it is about someone's competence profile, the need for recognition first of all relates to the need for societal validation of the acquired competencies. Stated simply, the learner wants to know what competencies have (added) value. The acknowledgment of competencies refers in other words to the degree of employability or added value of these competencies. When the competencies that are acquired by the learner coincide with validated competencies, the societal employability of the person is guaranteed. The recognition/acknowledgment of competencies is made possible today by all sorts of qualifications and specific criteria of qualification, as well as several types of earned badges. Qualification refers in this sense to a formalised procedure of recognition/acknowledgment, and the systems of open badges are the result of creating markets for qualification. The desire for recognition/acknowledgment by the learner is shown in the desire for employability, and thus in the need for qualifications or for other recognised proof such as badges. For the learner, qualifications and badges take on the role of applause.

	Instrument	Relation	Technique	Result	Mechanism
Synopticon	law/rule	submission	jurisdiction, setting an example	level of obedience (subject)	juridification
Panopticon	norm	discipline	inspection, correction	level of normality (individual)	normalisation
360° feedback	profile	monitor	feedback, incentive	level of recognition (person)	personalisation

Table 3. Power diagrams: synopticon, panopticon, 360° feedback

Conclusion: from the student to the learner

With our thesis on the shift of the architecture of the educational institution to that of the learning environment, we want to point out a change in the blueprint that has occurred concerning the concrete ways in which the organisation of education and learning is devised. This does not mean that there are only learning environments now, and that educational institutions have all disappeared; it does mean, however, that there have been shifts in the ideals and imaginaries circling the world of education, in the materials which are considered necessary, in the demanded functions and societal embedding, and also in the building plans which are used for policy making. As a conclusion, we would like to emphasise three aspects: what it means to focus on the student, the possible tensions that may arise within each architecture, and the tensions which may arise between architectures.

Firstly, it is relevant to point out that like in the architecture of the learning environment, the student also became the main concern of the educational institution, even though it is probably not experienced as such today (see table 4.). The year-systems based on subject matter and differentiation through norms/age allow differences between students to be brought to the surface, and to make adaptations as necessary. Hopefully this sketch also shows that making the person of the student the cornerstone does not simply imply that the student is liberated from the organisational structures which define them, or that they appear in their authentic singularity (at last). Instead, another organisational structure has replaced the former (i.e. the institution). In the architecture of the learning environment, the student is of course no longer categorised on the basis of a norm and is thus free from processes of normalisation. But the organisation of the learning environment has new systems and techniques, and aiming for actual employable learning outcomes now takes up office. The figure of the 'institutional' student is replaced by the figure of the 'profiled' learner. The personage of the learner should not be equalled to the student who has at last been liberated from the shackles of normality and can now expose their true, authentic self. It is precisely the new techniques and procedures of profiling, recognition, and feedback which show somebody as a unique person. For that reason, it is important to be cautious about the stories of liberation that accompany these recent reforms.

Secondly, we also like to point to some tensions within the new architecture, thus within the learning environment. First and foremost, the learner - and we mean the learner who has their eye on outcomes and becomes a learner because of it - is confronted with ambivalence. This was and is, coincidentally, also the case for normalisation. The norm allows for somebody to claim individuality for themselves, but at the same time it means they must expose themselves to surveillance and the corrective measures of an expert. There is thus, on the one hand, an individual freedom, but on the other hand, a being at the mercy of supervision and correction in the name of social order and security. This means that normalisation combines a perspective internal to education (in the interest of the student) with an external, societal perspective (to guarantee a normal, social order). Personalisation causes a similar ambivalence in the learning environment. If you orient yourself to learning outcomes which you must accumulate yourself, this means that you see yourself as a person with a unique added value that you have control over (by learning). But this also means that the value or the validation of who you are as a person is determined by what is valued by society (and, for instance, also what is valued in the job market). The value of competencies is thus decided externally to the learner and the

learning environment. Of course, this external validation can create a lot of tension. The price that the learner pays for the freedom to engage in learning and to add value is that they lose control over the final validation of that value. The learner can be confronted directly with the conjunctures of an exchange economy of personal capital. In the architecture of the educational institution there can, of course, also be a sort of inflation of the value of a degree or of an educational achievement. The difference, however, is that the diploma offers institutional protection to groups of individuals, whilst a qualification expresses directly and explicitly what a specific person actually knows and what they can really do. In other words, it directly affects the person of the learner.

Lastly, there are also tensions between both architectures. These tensions are the result of using building blocks of the educational institution in the learning environment, or the other way around; the following example may elucidate this. In the architecture of the educational institution, it is to be expected that the student can be directed by corrective measures, punishments, and rewards. In so far as marks (of an exam) are indicative for a degree of normality (and thus also the social selfimage), they can be very (de)motivational for the student. In contrast, it can be expected that the learner in the architecture of the learning environment is more susceptible to all sorts of *incentives*. The pattern of choices and the effort of the learner, thus someone that is oriented on added value, can be steered relatively fast and easily by acting on the already described quality criteria: make the learning process more efficient, achieve more output with less input, enhance profits and outcomes, speed up courses or create 'short cuts' for getting results, bonus systems... In so far as somebody other than the learner, themselves, has an interest in certain choices, we could, in this context, speak simply of manipulation. Directing the learner becomes a matter of manipulation, where the authority of the directing party is less important than the intended effect, and the means justify the ends.

Tensions are to be expected when a teacher wants to motivate the learner, for whom learning is about having or not having learning outcomes, with marks or other normative rewards which act on the normalised self-image of a student. The learner who wants to realise learning outcomes is probably satisfied with a pass or a fail, an indi cation that the outcomes are realised or not. Similarly, think of the learner that continuously needs feedback and that has to deal with only a numeric pat on the back; a grade hardly gives feedback. But also, inversely, the student who thinks that every exam includes a normalising judgment, will undoubtedly have difficulties with the abundance of formative assessments that make up a learning environment. It is to be expected that the learner wants their personage to be done justice to, with the expectation that there is no social norm which can or should be applied, but that they should receive 'custom' treatment. The logical consequence is that, from the viewpoint of the learner, the enforcement of uniform rules or working with a norm can always be criticised as a 'personal injustice': 'I can or don't want to follow this rule because it doesn't meet my personal needs' or 'this offer is adapted to an abstract idea of a normal student and does injustice to my personal needs'. This is a logical reaction because a rule or a norm is (by definition) not directed towards a singular person. Rules and norms function only because they make abstraction from differences among individuals and always do injustice to the unique person. Consequently, in a learning environment, any educational administration which works on the basis of uniform rules is under pressure. They will most likely be forced to change in order to offer personalised services. Educational regulation, as well, is not self-evident in the architecture of the learning environment, unless it is the rule to inventory and formalise all exceptions.

This brings us to asking how we can relate to these new (and old) power configurations. This is the focus of the third chapter.

Architecture of the educational institution	Architecture of the learning environment		
Resident	Resident		
Individual, with individuality based on level of normality	Person, with identity based one degree of employability		
Concern with the student	Concern with the student		
 Methods of differentiation based on: age (by grades, year groups) learning time (by repeating school year) normalised exam (by educational corrections, directions, specialisations, classroom setting) tests (in view of mainstream or special education) 	 Methods of personalisation based on: content/kind of learning outcomes (by qualification or open badges) level of learning outcomes (by proficiency levels) learning time (by flexible moments of qualification) learning styles (by learning trajectories, didactic methods) outcome-oriented (by talent development) 		

Table 4. Architecture of the educational institution and the learning environment: the residents

Chapter 3. Touchstones: schoolpedagogical articulations

Placing the learner at the centre is part of a larger discourse, and also serves as an indication of a new organisation of education and of learning. In this new educational organisation, considerations about the best methods of learning are closely intertwined with societal expectations of education. This probably explains (at least in part) why the focus on the student is so convincing today: everybody seems to have an interest in placing the learner at the centre. It is striking, however, that in these discourses, hardly any attention is paid to the actual meaning of the school. Of course, the school is mentioned, but only in a functional or instrumental way. The school only comes up in so far as it is a *place* for learning, and in so far as it serves society. In this line of reasoning, optimal learning processes and relevant learning outcomes are the starting point, not the school. The school itself is an empty box; it should adapt itself to avoid becoming redundant, organise itself so that learning processes are optimised in every way possible, and be held accountable for supporting learning outcomes which are relevant for society. If the school fails to do so, it becomes expendable - and for many critics today, that is indeed the case. In this functional and instrumental reasoning there is hardly any attention for what makes the school precisely a school, nor to what is typical for the sort of learning which takes place in schools. In order to bring the school itself into focus, we will attempt to articulate a 'scholastic' or pedagogical perspective in this chapter. This perspective allows us to formulate touchstones which can be used to scrutinise other perspectives, but also to investigate the architecture of the learning environment and its power dynamics.

A (school-)pedagogical perspective

For the sake of convenience, we can say that the school occupies a place in between family and society. In light of this simple image, it is striking how often we understand the reasons for the school's existence strictly from the vantage point of either the family or society. Regarding the former, the school is often presented as an additional place for raising children, by either expanding the reach of the family or remedying its shortcomings; the latter can be seen whenever the school is approached as the place where youths are prepared for full participation in society as citizens and workers. What stands out is that these approaches define the finality or the goal of school from the outside, as if we can only describe the meaning of school as outsiders. This is also true for both architectures that we have described above. Whether the emphasis is on the social norm and normality, or on employability and performance, in both cases the principles for the (re)organisation of education are derived from society. Both the organisation of the educational institution and that of the learning environment are functional or instrumental for the needs and expectations of society. Also in the academic literature, we most often encounter external perspectives to school education that try to grasp the school from the outside. Examples are sociological, economic, cultural, or psychological approaches to the school. Each of these approaches has its own idea of what the school is or should be, and subsequently has its own definitions of (school) education and learning.³

First, there are distinctive sociological approaches to education in schools. In line with Emile Durkheim, education is often seen as an "organised and professionalised socialisation" (Peschar & Wesselingh, 1995, trans.). Education, from this point of view, is a goal-oriented, systematically organised, professional transmission of culture which is needed to guarantee participation in society. The methods and the contents of this socialisation change according to changes which occur in society. The explicitly functional variant of this sociological approach can be read, for instance, in the work of Talcott Parsons, who understands the goal of education strictly from its functions. School, as an institute of socialisation, is about the allocation of your position in society according to your merits (Parsons, 1959). In the classroom, this is translated through the following processes: emancipation (detaching from the family), internalisation (of social norms), differen-

³ For a detailed elaboration of this perspective on the school, see Masschelein & Simons (2010, 2013), and Simons & Masschelein (2015).

tiation (based on merit of achievement), and selection/allocation (of human potential in function of the social needs) (Parsons, 1959). More in general, and despite differences among authors, the sociological approach of education views education as an institutionalised process of socialisation which *reproduces* the social order through various functions: qualification (granting access to the job market), selection and allocation (allocating a status based on merit), and integration and legitimisation (guarantee participation into society and legitimising it) (Peschar & Wesselingh, 1995). For the sake of completeness, we should also mention the sociological approaches which contest the social reproduction of the school and, implicitly or explicitly, underline the possible productive function of schools (Bourdieu & Passeron, 1970; Apple, 1979). These productive approaches, however, also define the goal of the school from an outsider's perspective. Here, the school appears as a political instrument to produce a new and more just society. Even though it is acknowledged that both the meaning and the role of the school do not coincide with the prevailing expectations of society, in these approaches the school is still understood as a function of society. There is thus a limited attention for the school's own 'nature'.

Next to sociological approaches, there are also other approaches which have this outsider perspective on the school. With the cultural approach, the starting point is that young people are (and must be) part of a cultural community that has particular values, habits, and ways of life. The school is, above all, a matter of *initiation*, meant to lead young people into a broader cultural community. The role and meaning of school here is defined from the perspective of this culture. There is also an economic approach, which understands the school as the place for *investing* in human capital, an investment that has both individual and social rates of return (Schultz, 1971; Becker, 1976). Stated differently, school is the time and place into which parents or/ and the whole of society invest in knowledge and skills, in order to gain (social-)economic return. The school is thus understood in terms of investment and production of human capital, and as such is also defined externally by contributions to the job market, rise of income, and economic growth.

Another external approach is rooted in learning psychology and understands what takes place at school in terms of processes of growth and *development* in young children and adolescents (see for instance Kohlberg & Mayer, 1972). This is an external perspective in so far that understanding what takes place within education (or expressions of what should take place within the confines of the school) is derived from processes, laws, or (natural) stages taken from learning, developmental, and (more recently) neurological psychology. We are not claiming that these psychological insights have nothing to say about education or cannot play a role in education; we are saying, however, that they provide an external approach to school education and deal with the school as just a place or context of learning, understood solely through the concepts of growth and development.

These sociological, cultural, economic, or psychological approaches do more than simply provide a reason for the school's existence from an outside perspective. Each perspective also introduces its own vision about learning at school: learning as *socialisation*, learning as *initiation*, learning as *investment* and *production*, learning as *growth*, *development*, and *identification*. Each of these concepts has come to belong to the vocabulary that we use daily to speak about education and its goals, even though an explicit reference to the underlying approaches is often absent. We do not want to question this vocabulary in any fundamental way, nor do we want to abolish these external perspectives; this would be presumptuous on our accord. What we would like to try, instead, is to articulate the school from within.

What we propose is a school-pedagogical perspective that we believe cannot be traced to a sociological, cultural, economic, or psychological perspective. In our attempt to formulate this school-pedagogical perspective, we assume there is something typical or specific about forms of learning that take place in schools, which we could call *scholastic* learning. This concerns characteristics of the school which cannot be explained by the family or societal functions. We would like to stress that this perspective from within, from the inside of the school, is not just a theoretical exercise; it has an important consequence, namely that this perspective can provide an indication on which points the family and society should take the particularity of the school into account, thus providing a reversal of the dominant view.

The basis of our school-pedagogical perspective is made up of three assumptions: freedom, equality, and formation.

School and freedom

We start from the point that schooling is a form of learning which revolves around freedom. There are, of course, numerous forms of learning. In the words of Hannah Arendt (1958/2006), every society has the responsibility to come to terms with the future generation. Taking on this responsibility can lead to many different educational forms. Some societies will emphasise initiation and install a sort of learning process which everybody must go through in order to be accepted into a certain group or community; in other societies, the emphasis might be on training by master-apprentice systems (or modes of on-the-job learning in today's vocabulary); the family, as well, can house its own pedagogical form related to child rearing. What most of these forms of learning have in common is that they take place in service of reproducing the social order. In other words, these forms of learning have a sort of pre-determination, a predefined outcome. The future generation, often based on careful selection or on natural predisposition, is engaged in the existing society or brought into it (into a certain social rank, order, class, or profession). For these forms of learning, the future is, in a way, already set or predefined.

The scholastic form of learning breaks away from this idea of predetermination. This principle was already given in the old Greek meaning of scholé, from which our conception of school is derived. Scholé means free time (see also Kohan & Kennedy 2014). It refers to the concrete and tangible spacetime outside of the productive order of both economy and politics, of both the oikos and the polis. It involves freedom in both the positive and negative sense. On the one hand, it means to be *free from* productivity, to be detached from productivity, which is a suspension of the logic of economic or social profit; on the other hand, it means to be *free for* activities of study and practice. This means that the time is freed for 'formation', which can be understood in its literal sense as working on 'your own form', on your being in form or in (good) 'shape'. This double freedom implies that what young people have to learn or become is not predefined by nature or heritage, but that study and exercise through the school makes it possible to give oneself an own destination in life, in contrast to other educational forms which assume some sort of pre-determination in

social or natural terms. Stated differently: the school starts from the assumption that there is no presumed link between a body and its capacities, that young people are not preordained in any way but must be given the (free) time and space to find their own destiny.

School and equality

Besides freedom, school is also about equality. Scholastic equality follows from the typical freedom of the school. If the future (social) position of young people is not defined from the onset, this means that everybody, regardless of where they are from, must have the chance to give shape to their own life, and thus must be able to find their own destiny. In contrast to other forms of learning, schooling is based on the idea that it is not the family, nature, or employability - not descent, origin, or defined future - which determine the content and the direction of someone's study and practice. In other words, we speak of school where learning departs from equality and freedom. To again borrow the words of Hannah Arendt (1958/2006): the school sees to it that every generation can experience itself as a new generation. This means that the future generation is given the opportunity to renew society by giving itself a new destination in school. The consequence is that school can always be a risk for the existing societal order. In so far as the school allows everybody, independent of their origin and their descent, to work on their own destination, the existing order, with its social, cultural, and economic inequalities, is also always at stake. It is then understandable that the old Greek elite already questioned the school and wanted to limit access to 'free time' or force people in a certain direction based on their descent, origin, or determined positions. Not everybody, they reasoned, deserves this freedom. We want to emphasise here that the school is seen as a potential threat for the existing order, and thus also for the ruling elite who has a vested interest in maintaining that order and being selective in school equality. There is a striking analogy here to another Greek invention: namely, democracy. As Jacques Rancière (2007) shows, democracy was a kind of scandal when it came into existence. Democracy, in principle, gave power to everybody, regardless of competency, qualification, or expertise. According to Rancière, this gives rise to a certain hatred against democracy, or, at least, to the ambivalent attitude that we see even

to this day. Democracy is considered valuable, but sometimes other political forms (often the more aristocratic forms) are considered more effective and more efficient; however, to choose only effectiveness and efficiency means to give up the radical and potentially revolutionary democratic principles of freedom and equality. We can make a similar observation concerning the school. Undoubtedly, other forms of learning are more efficient and more effective, but neutralising or doing away with the school because of this suggests that the starting points of freedom and equality should be done away with.

School and formation

A third assumption is that - because of the conditions of freedom and equality - scholastic learning is always a matter of 'formation'.4 Formation is an interesting term to use since it carries the double meaning of 'bringing oneself into form' (namely giving oneself a form based on given contents) and on the other hand, and precisely because of it, working on one's own shape or basic fitness/condition. This is closely connected to terms such as preparation, exercise, and practise', which is also where we find the often-heard analogy with the athlete who undertakes certain activities to work on their condition and get themselves into shape (also see Foucault, 2001; Sloterdijk, 2013). Formation is about getting oneself, physically but also cognitively, affectively, and emotionally, into a good shape: working on your own 'form of life', your own condition humaine, by utilising several learning activities (such as exercises, study, potentially games or other activities) and different contents in order to be prepared (that is, able and ready to think, act, work...). The school offers young people the place and time, as well as exercises and practices to work on the self and on their basic shape. Of course, the school and the students often hope that the exercising and practicing – as part of the preparations - will lead to spectacular performances; but realising successful performances in society cannot be the finality of the school, notwithstanding the contemporary (and unfortunate) tendency to assess schools and teachers

⁴ We use the notion of 'formation' for what in Dutch is called 'vorming' and in English is sometimes also called 'edification' or 'giving shape'.

based on their top performances (often based thus on the outcomes of their students). A lot more is needed to achieve peak performance; even the wind has to blow in the right direction, as the athlete knows very well. Not everything can possibly lay in the hands of the school or of the student, but what does lay in the hand of the student at school is the formation of oneself in order to be prepared.

So, what does it mean to be prepared? What is this basic shape? Someone who is prepared, on the one hand, is able to relate to things (linguistic actions, physical actions, concrete matters, or problems) but also keeps a certain distance (in order to be able to make proper use of these actions in specific situations and circumstances). It is someone who can take a step backwards, precisely in order to see what matters. This combination of distance and involvement, of detachment and reattachment is what 'being able to relate to' is about: you are able to relate to nature, to the digital world, to technology, to car mechanics... Not to be determined by nature or technology, but also not to rise above it; formation is about learning to relate to the worlds of, for example, nature or technology. This means that formation always has a *worldly* dimension. The subjects that are addressed at school always have a connection to society: they disclose worlds. Contents in school are always taken (how could it be otherwise?) from our daily world. But the school is the place where young people are offered the opportunity to relate to this worldly matter in a new way. If the finality of the school is formation, then it is about giving young people the opportunity to relate to that which influences them or that which determines them (also see Verbeek, 2011). In this context we can speak of a 'worldly formation', if we consider that this formation always also contains a worldly involvement, a formation of the self in relation to matters which matter. When scholastic learning is understood as worldly formation, the 'form' or 'shape' is not given beforehand, in contrast to traditional approaches to 'personal formation' which start from an ideal of the well-educated subject and transforms or de-forms the school into a site for initiation, socialisation, or (moral) development.

Often, we consider the school from the external perspective of the family or the society. The internal, pedagogical perspective offers the opportunity to turn this around: we can look at the family and at society from within the school, and start from scholastic freedom, equality,

and formation in order to formulate expectations for the family and for society. Furthermore, it is possible to look also at the teacher from within the school. We will discuss these three issues in the following sections.

The family as seen from within the school

The school makes it possible to take children out of the family, out of its warmth and protective values, but also out of its inequalities. Sons and daughters suddenly become students, and that means that they always receive a collective mark that makes them both free and equal (and Rancière (1988) would add that this is a democratic mark). Even though it does not always coincide with the experiences that we have today, it is this mark that can be freeing and equalising as soon as young people walk through the school gates: 'I, like everybody else here, am given the space and the time for learning'. No matter how different, at school everybody is first a student. We do not mean to romanticise or to idealise, but we do want to point to the simplicity, and, perhaps because of it, the often-forgotten pragmatism of the school: it frees and equalises. You leave the family and you are no longer first of all a son or a daughter, nor are you immediately absorbed or merged into society as a citizen or an employee. As a student, you are somebody who can give shape or form to yourself through exercising and practicing. It is important to emphasise that this concerns a pedagogical freedom, and not the kind of entrepreneurial freedom or the freedom of choice that we see in some political doctrines. The shortest description of this freedom - in exercises and practices - is probably the experience of 'being able to' (do something), being capable of something. The learning child can very strongly live through this experience: something new becomes possible, becomes meaningful. Of course, this experience can turn into an experience of 'not being able to' (do something), and school education is unfortunately often associated with this negative experience. We often forget, however, that school education's first movement, in so far as the school works as a school, is to put young people in the situation of 'being able to' (do something), and thus it gives them all - disregarding past or future - the experience of 'I can...'. And the pedagogical challenge is precisely to put and keep young people in the position of being able to

do something, to allow them to become and to remain students, and thus to avoid a turn towards the fatalistic, non-pedagogical experience of 'being incapable of' something. Part of this challenge is to remind young people that they are not at home, that school life is not the same as family life, and that living a life as student is living a life of freedom and equality.

Society as seen from within the school

In so far as society organises scholastic learning, and thus does not determine the destination of the coming generation, the school calls for a specific kind of societal responsibility. The first question to ask is not what the school should do for society, but what society can do for the school (Bachelard, 1934/1967). It is up to society to determine what 'contents' or 'materials' are eligible for young people to shape their lives. Taking the school seriously as a school forces the societal debate about school content to go to 'the basics', and thus transcend private interests. A very uncomplicated way of speaking of the curriculum in this sense are the terms 'literacy' and 'grammar' (also see Stiegler, 2010).

Society expects different types of literacy from young people: linguistic literacy (national and foreign languages), but also digital, technological, practical, and scientific literacy. Being literate means that you have enough distance to this linguistic, technologic, or digital world in order to be able to relate it, that is, to use it independently, with care and creativity. Literate people are people who are not determined by what influences them, but who instead have learned how to relate themselves to those influences by making distinctions, naming them, and acting upon them. Digital literacy means, for instance, that you are not determined by what Google automatically does, that you know what the search algorithm does for you, that the basic practices of Google can be talked about, that you can distance yourself from it and use it 'critically' and 'with care'. An indifferent, careless relation now becomes a relation which acknowledges and attempts to name differences that matter and require concern. Literacy here means that certain 'letters' have been inscribed and become part of one's way of talking, looking, moving, and writing. One could speak here about

embodied forms of knowledge and skills. In this sense, literacy is not an elitist ideal but refers to 'the right' of everyone to 'the basics'. The school, therefore, is not about the selective training of writers, programmers, or engineers, but about a basic formation which allows everyone to become literate in the basics of language, programming, and engineering.

What does one need for this literacy, and what is the school expecting from society at this point? Here we could speak of the basic grammars of societal life. This could be the grammar of language, but also the grammar of digital life, of technology, of nature, perhaps even of domestic work. The term *world* may be most telling in this context: it is about what matters in the world of language, the world of technology, the natural world, the world of domestic work, the world of economy... It is through grammatisation that these worlds are disclosed; distinctions are made, naming becomes possible, and these worlds can be talked about, discussed, acted upon, and taken care of. In order to arrive at a basic formation (or to be able to relate to what influences you) these grammars are necessary, as are specific study practices and exercises through which knowledge and skills are inscribed (in terms of becoming literate) and give shape to one's form of life.

This focus on basic formation in terms of literacy and through grammars probably sheds a different light on the ongoing debate about 'skills versus knowledge': should school education become more practical and oriented towards skills, or should it be about knowledge development rather than producing skilled-yet-ignorant students? Both matter, obviously, and it is very hard to distinguish study (in view of knowledge) from practice or rehearsal (in view of skills). The more important question which lies behind this often-heated debate is whether school learning is about basic skills and knowledge (to shape one's life), or concrete and situated skills and knowledge (to perform an action). School is about the first. Of course, concrete and situated skills matter, but we do not need school to teach these. These are best learned by doing. Basic skills and knowledge always require a certain 'abstraction' (in terms of grammars) to allow for combined distance and involvement that is needed in order to be prepared. Think for instance of consciously and purposefully using the algorithm of Google. Denying this kind of 'abstraction' to young people could

imply that they do not have the opportunity to relate to that which acts upon them. Grammatisation is required, as well as specific study practices and exercise. Another example is the knowledge and skills on car mechanics acquired in so-called vocational courses or schools. Often it is argued that learning on the job or learning by doing works best in this context, but there is a difference between learning as a student in a (car)workshop at school and by working as an apprentice in a real garage. The difference is that the tricky customers and the financial pressure are kept at bay in the workshop at school: students receive the freedom to practice and to try. Moreover, they are offered the grammar of (car)mechanics so that they become able to make and name distinctions and master their actions. For young people this can literally make a world of difference: at school, there is breathing space for the student to learn how to relate to what exactly they are doing or making, to learn to perfect themselves through practice, to find a way to relate, and to find a proper form.

The responsibility that the school conveys on society is not the duty of setting the ideal image of an educated citizen or person, which the coming generation must answer to, or the duty to determine the future of young people in a different way; nor can this responsibility be about making youngsters realise dreams which adults no longer think are within their own grasp. The question towards the aims of this basic formation, as given by the school, is the question towards which forms of literacy we place value in, and the question towards the basic subject matter refers to the grammars which are organising and shaping our societal life. This is why the societal responsibility, which is invoked by the school serves to demarcate, in relation to the coming generation, this 'we' and this 'our'. Precisely because of the existence of the school, society has to become and remain conscious of itself in a verv specific way. It has to think about the basics, not in view of protecting them, but in order to set them free for the coming generation. Through these grammars, school exercises and resulting literacies, society is not reproducing itself, nor is it producing the new society adults can not realise for themselves; grammars and related literacies are very different materials than defining norms, values, identities, attitudes, or competences which play a key role in other, reproductive forms of learning. Grammars are part of the school equipment or school objects which

allow the coming generation to become a new generation. For this reason, the question is not just whether we allow the next generation to go to school, but also whether and how we allow the world to go to school.

The teacher as seen from within the school

Much can be said about the teacher when starting from scholastic learning. However, we confine ourselves here to what is typical about 'school talk', and how it has - together with a set of pedagogic arrangements - the transformative power to enact the conditions of freedom, equality, and formation. To understand this power of 'school talk', it might be helpful to refer to what Latour (2010) says about love-talk. He shows how a sentence such as 'I love you' is anything but original (when looking at it as a statement which transmits information) but how, when truly said in a concrete situation, it has the power to affect or transform both the listener and the speaker, to modify time and space. We can now say something similar about school talk. It is a distinctive way of truth telling, a specific kind of speech, including a particular vocabulary, but foremost a distinctive mode of expression and tonality, and a typical way to link people, things, and words. Truly scholastic speech is also affecting space, time, and matter, and creates the conditions to become a school student and a school teacher, and to confront the world. This transformative force of school talk can be captured in variations of a single paradigmatic expression: 'try'. The expression 'try', first, generates a particular experience of freedom; second, the variation 'try again', allows the student to experience equality; and third, 'try this' generates a student that experiences the world.

Try

There are perhaps few other phrases that are used so frequently in a classroom. It is an order, yet at the same time an expression of concern; it expresses authority, but also contains an invitation. The phrase clearly assumes that someone is not yet able to, but it foremost appeals to a becoming able. The expression assumes an ability, or (perhaps more strongly, and when it actually commits the listener) it creates the experience of being able. One could say that someone is turned into a student

when accepting the invitation to try, at least when becoming a student is understood in terms of experiencing an ability to do (something) or to begin (something). The statement 'try' seems to interrupt the chronological timeline by drawing someone into the present time. The student that says 'yes, I will' after being invited to try is drawn into the present moment. When involved in trying, one is no longer experiencing the present moment on a chronological timeline; past and future seem to be dissolved, and the experience of the present moment is about what is (still) possible. An expression such as 'try' not only creates this condition of ability but also acts upon someone's willingness.

While the invitational part of the expression addresses the ability, the authoritative part is oriented towards the will. Someone who says 'try' to someone else is in fact willing that the other be willing to try. Jacques Rancière (1991) would say that a will is imposed on another will. What makes the willing (of the teacher) convincing is probably the belief in the ability (of the student) which rings through the expression. But what exactly is this willing about? To ask someone to try something implies to ask someone to do an effort, and to engage in particular kinds of study activities or exercises. The speaker of 'try' wants the other to become a student, and to get involved in certain activities, but these activities have a sort of lightness to them because they are part of an attempt. Here, we might see how the expression 'try' also has the power to transform the inhabited space. What is created, is a kind of safe space, in the sense that there are no specific consequences attached to whether the effort leads to results or not. In fact, the only consequence would be the invitation to try again. As a student, one inhabits a space where the effort and activities are meaningful in themselves. The terms 'practice' or 'exercise' exactly refer to this study effort, and what is at stake in school practice and exercise is, hence, a particular kind of freedom.

School practice refers to typical schoolwork, such as reading words aloud, preparing and doing a class presentation, learning foreign words by heart, doing body exercises, or making drawings, to name a few examples. This schoolwork requires serious effort, but its meaning cannot be derived or defined from the outcome of the work. From the viewpoint of economic or social utility, the products and hence also the work are somehow useless. It is perceived as just being schoolwork. The value, however, resides on the side of the working student. The expression of "undefined work of freedom" articulates very well what is at stake in schoolwork (Foucault, 2007). School practice or exercise always has this indetermination (it is defined neither by an input nor by an output), it is work which is undefined. ⁵ At this point the engagement with grammar in schoolwork is crucial; a grammar is not defining (like a norm, for example), but opening up possibilities. This is not to say that schoolwork does not have an aim. Schoolwork on writing, reading, calculation, or drawing is about creating conditions for someone to be(come) able to write, to read, to calculate, or to draw; these school specific aims of literacy, however, are different from attempts to produce writers, mathematicians, artists, etc. Schoolwork is about becoming able, and giving oneself a shape, not about predetermining the actualisation of these abilities in view of a defined form or image of the educated subject.

Try again

What is equally important to turn someone into a school student is the expression 'try again'. The expression articulates a sense of optimism, a belief in the student's abilities notwithstanding someone's past. It also expresses patience. 'Try again' is about giving someone a second chance, or even a third or fourth chance. It means reinforcing the belief that everyone can learn everything, and intervening to protect the student from the influence of natural or social forces which seek to determine the student's abilities. The verbal intervention 'try again' interrupts the linear timeline where the student's past determines the student's future; when emptying this space from all sorts of profiles and all traces of success and failure, it creates a spacetime were someone can become a student again, that is, to arrive at the point to experience becoming able to do something. What the instruction 'try again' does is inscribe equality as a condition of school learning.

This equality follows from the typical freedom of school learning. If the (social) position of young people is not defining (the future) from the onset, this means that everybody, regardless of where they come

⁵ For an elaboration see: Simons & Masschelein, 2019.

from or who they are, must have the chance to practice and to find themselves a proper form. The equality created through the expression 'try again' is different from the objectives of both the meritocratic strategies of equality of opportunities and the egalitarian approaches of equality of outcomes. These are the approaches that result in, for instance, initiatives to compensate for social inequalities which prevent someone from fully realising their talents, or support strategies which help disadvantaged students to pass the same finish line. In one way or another, what these approaches do is first make students unequal by re-defining who and what they are in social or natural terms, and second by predefining learning trajectories based on the observed natural or social necessities. The message in 'try again' is not to define or re-define, but to 'undefine'. The traces of someone's past are not ignored or forgotten, but the expression 'try again' makes clear that they no longer cast a shadow on someone's present abilities.

Try this

'Try', 'try again', 'try this'; the latter expression is likewise crucial to see what school learning is about. The expression 'try this', in one way or another, points at something outside, something not-yet part of someone's lifeworld. 'Try this' contradicts the idea that school learning is only about the person of the student. It ensures that giving shape to oneself - through schoolwork - passes always through the outside. The instruction orients the student's effort towards specific schoolwork and specific subject matter. The expression assumes, somehow, that there is not always a natural inclination towards doing something new, thus necessitating an intervention and serious effort. Specifying what should be tried means defining the effort, the activities, and the abilities involved, without actually defining schoolwork. It remains an invitation to give something a try. School learning enables students to read, write, and calculate, but this form of learning does not try to determine the exact usage of this reading, writing, and calculating by trying to shape students according to a predefined form of life (although there have been many attempts to do so). Through school learning, young people are enabled to become attentive to, for instance, their mother tongue, and this provides them a safe space and present moment that makes developing one's relation with the world of language possible. Crucial here is what we already referred to as the disclosure of worlds through grammatisation. Such a grammatisation is not only about making a temporal flow (e.g., of speech) discrete (through writing in letters and words), but often also involves turning something into a two-dimensional flat presentation (think about a diagram on the black board) in order to make it relatable, to allow for a freedom to try and to avoid becoming just part of its functioning. Making the grammars available (for instance, in terms of the alphabet or numbers, but also code and algorithms in case of the world of technology) does not define the work of freedom. These grammars, and the expression 'try this', constitute a milieu for the undefined work of freedom.

This aspect of school learning could be described, with Michel Serres (1997), as a "passage through the third place". He uses the image of the swimmer crossing a river – from one shore to another – passing a third place. School learning is what brings one to the middle, the moment of exposure or the present moment - in the middle of the river - where all directions are possible. Exactly this milieu, this middle or third place is the time and space where freedom is undefined ('no direction') but possible to be defined ('to find all directions'). The grammars at school create this milieu for students. The grammars themselves have no direction - they provide the (middle) space and time from which all directions can be found. Without a doubt, there have been many attempts to impose a particular form of the literate citizen and to turn the 'grammar school' (in the sense of a school that offers grammars of worlds and not to be confused with the actual English grammar schools) into a nationally defined work of freedom (see for instance Popkewitz, 2007). In a similar way, there are attempts to take the grammars out of the school and to make, for instance, learning at the work place the norm for efficient and effective education. The consequence, however, is that students no longer have a milieu in which they can learn how to relate to what they are supposed to do, and that they are, hence, no longer given the chance to become literate; without grammatisation, undefined schoolwork is turned into defined factory work, and students are denied the opportunity to become a new generation.

Pedagogical touchstones

In this pedagogical or scholastic perspective, we brought the school back into prominence. The term 'school' does not refer here to this typical building that we are all familiar with, nor to the well-known organisation of learning into groups and years. With the term 'school' we refer in the first place to a very specific form of learning that revolves around freedom, equality, and formation. Based on this idea, we would like to formulate a number of touchstones which allow for the evaluation of current student-centred discourse and the architecture of the learning environment. We will formulate these touchstones as short questions with a brief explanation.

Is the school relatively autonomous in respect to society?

In so far as school education is first and foremost about formation, it requires a relative autonomy from society. This autonomy implies that the school should prepare young people through grammatisations and literacies for societal life, but that it is not responsible for whether or not young people successfully function or perform in society. This is however the case (at least as ambition) in the architecture of the modern educational institution, which aims for social normalisation, as well as in the architecture of the learning environment which is based on the principle of employability. To contrast with this, our first touchstone is that the goals to be attained at school should not coincide with concretely defined societal requirements (e.g., for employment, for citizenship). School is about preparing oneself in terms of working on one's basic condition, and in that sense the school is clearly related to societal life, but school education is not about deciding, selecting, and controlling what one has to become. Schooled students acquire a basic condition that in a sense allows them to be able to do anything.

Is the school providing preparation for societal life?

The autonomy of the school is always relative because the school's mission of formation has indeed always a worldly orientation. This is only possible in so far as society takes responsibility, reflects upon itself, and investigates its basics in view of the school curriculum. Not reflecting upon itself, and not determining nor offering 'school content' (that is, grammars), deprives the young generation of its possibility to relate to what influences them and work on this form of life. The school can only function as a school as long as it offers the basics in terms of literacies and grammars. Only then can the young generation prepare itself freely and equally. Formation in school has, in other words, always a worldly orientation. This orientation, however, should not be situated at the level of the use value of competencies, the practical relevance of school knowledge and skills, or the compelling vision about humanity and society, but in the 'formative' potential of the school materials and methods.

Is the school relatively autonomous in respect to the family?

The societal role of the school implies an independent position visà-vis the family. In a way, the school has to be unrelated to whatever children have or have not received from their home, neighbourhood, or the community in which they grew up. Children are born in different places and are unequal in so far as their origins and descent are concerned; this inequality can obstruct their freedom to find and shape their own destination. The school does not act as if these differences do not exist, but instead chooses not to see these as starting points. The school thus requires a certain level of autonomy, so that it can guarantee that these differences in descent or origin do not determine the future of young people. The school makes these inequalities irrelevant within the confines of its operations, which is something completely different from denying them. This means that, in school, children are addressed as students. The school can thus only function as a school, and students can only be students, in so far as they are not continuously confronted with what makes them different (through birth or through the environment in which they grew up). The school should then see to it that their young people are not addressed by, or identified with, what they can't control, on their impossibilities, or on what they can't do. The school has in this sense an enormous responsibility: to make sure that children are not addressed on their familial, economic, social, or cultural background, but that they are addressed as (equal) students. Becoming a student then is not so much about acquiring a new social identity but refers to the continuous pedagogical attempt to interrupt all kinds of (social and other) identifications and the pre-defined destinies associated with it.

Does the school make basic formation possible for everyone?

Autonomy in respect to the family is relative because the school of course cannot abstract from differences and consequently must *peda-gogically* compensate the differences between students. This means that it is the responsibility of the school to put them in the same 'initial situation': the school must assess in how far it (in)explicitly imposes certain prerequisites through its organisation, through its methods, and through what it expects from parents; it has to check whether this excludes students from the onset and how it can compensate for this. By failing to do so, the school would actually legitimise social and other inequalities, make them relevant, and thus also ignore the freedom and equality of the coming generation. Consequently, the school cannot outsource its tasks to the family, nor can it, pedagogically speaking, expect everything from families and parents. This would allow the differences among families to weigh on the basic formation of young people. It would not allow them to become students.

Is the school in service of both the student and of society?

From a pedagogical perspective, the school is never only in service of society; the school does not exist to fulfil societal *functions* (such as cultural reproduction, social order, or economic growth...). In this case, students would become mere instruments or means in the function of something else, or in someone else's hands. Other forms of learning (such as specific training) would be more efficient and effective than the school, but the school cannot just be there for the students (as a group or as individuals) either. In this kind of one-sided perspective on the student, society is stripped from the chance to renew itself and give itself a future. The formation of the young generation would be empty, it would lack materials or worldly content to actually shape or form one's life. The school is thus in service of every child just as it is in service of society. Every child is given the possibility to become a student and find their own destination, and society gives the future generation the possibility to renew that society. This double service is another way of saying that school learning is a form of learning *sui generis*, and stressing the importance of looking from within the school to family and societal life instead of the other way around.

Is the teacher in service of both the student and of society?

What matters for the school also matters for the teacher. The teacher has the responsibility for both reaching out to the students and for disclosing the world through grammars. This double responsibility implies a double movement from the teacher: putting something on the table and making students attentive to it. In other words: in a book, on a blackboard, during a movie screening, or through exercise, a teacher must make the world appear and make it possible for student to learn how to relate to that which is shown. This means that students at school can become interested in something that lies beyond their immediate lifeworld. Because of this orientation towards the world, the teacher cannot be in service of students and their needs, alone: the teacher would then only be the coach of their lifeworld, taking away the opportunity for students to leave their lifeworld behind. Inversely, this also means that the teacher cannot be oriented solely on society. The teacher cannot be concerned only with the subject matter. Someone who is only directed on content will most likely miss the connection with the lifeworld of the young people, which is precisely what is needed in order to get them to leave it behind.

Are students more alike than different?

The school operates under the guise of freedom and equality. This is not political freedom (from power or authority), juridical freedom (in the form of rights), nor economic freedom (as freedom of choice), but a *pedagogical* freedom: to not have a (natural or social) predestination and to be able to determine one's own destination through learning. Similarly, equality in school should not be confused with societal equality (to be or to make socially, economically, or culturally equal), juridical equality (treating everybody equally before the law) or an equality of opportunity or results (dealing with social and cultural inequalities in view of equal chances or getting everyone across the same finish line). This is a *pedagogical* equality with a double meaning: the assumption that, as a student, everybody is capable of learning, and the supposition that the basics matter for everybody in working on their form of life. The teacher's pedagogical actions start from this positive assumption of equality and the teacher intervenes (and differentiates) when there are indications of the contrary. This means putting those young people back into an initial situation, a situation of beginning, so that they are a student again.

In this sense, there is a tension between pedagogical action and numerous forms of naturalism which start from a given, unchangeable, or inevitable limitation of the student. School pedagogy does not deny or ignore differences among young people, but also does not use them as points of departure. Seeing these natural characteristics as a starting point would mean that we are not concerning ourselves with formation, but with development: developing that which is naturally present. By contrast, the starting point of the school is to address young people at their learning capacities or (better) their capacity for shaping their lives instead of their natural talents, limitations, or what they are unable to do. This pedagogical understanding of freedom and equality is probably most obvious in the practice of grouping students in 'a grade' and in the experience of being a member of 'a class'. These are formed groups which do not share any pedagogically relevant characteristics, other than that of being students. Of course, there are specific criteria for grouping students (based on capacity, interest, proficiency levels, or age), or conversely for no longer maintaining these groups (and organising personal pathways). The touchstone here is seeing in how far this grouping, classification, or personalisation of students has pedagogical relevance: does it place students in a positive, future-oriented situation of 'being able to learn', or in a negative, past-oriented situation of 'being less able' or 'being unable'? Many of these groupings are of the latter type and result in identifications that go against the pedagogical assumptions of freedom and equality. It is important, however, to recall that a class group based on age - despite its biological underpinnings - can make it possible for students to experience commonality solely through being students, and that often age is the first thing to be omitted if other approaches are needed to continue to address someone as student.

Can the school's role in formation be reconciled with societal functions?

Next to its assignment of formation, the school is expected to take on specific societal functions. We believe it is crucial to attempt to formulate this complex relation between the task of formation and those social functions as precisely as possible. From a pedagogical perspective, school learning coincides with basic formation: to form or bring into shape oneself is the characteristic scholastic method of learning. Critically, however, this formation is not functional to society. Of course, basic formation or preparation is relevant and very meaningful, but by its very definition it cannot be *functional* to society. After all, society itself is always at stake, and even at risk, in this process of basic formation. School education involves the possibility *to renew* society, and thus disturbs society and its social order as it is.

As we said earlier, we should sharply distinguish between the characteristically scholastic form of learning and reproductive forms of learning, such as socialisation and qualification. These latter forms of learning have a function or an external finality; they introduce ruling values, norms, or acquiring competencies which give access to (for instance) the job market or continued education. It is clear that we cannot see qualification and socialisation as two functions appropriate for the school. These are actually (at most) societal, hence external, expectations, vis-à-vis the school and thus vis-à-vis scholastic learning. These external expectations can be very diverse. For instance, they can include the development of citizenship, but they can also be about very practical matters such as expectations about the opening hours of the school (e.g., holiday planning, day care, flexibility towards planned family vacation, or expectations about the use of the spaces in school). All these societal expectations, similar to the externally imposed functions of socialisation and qualification, occupy or appropriate the school in a certain way. The question that we should then ask is how the school should relate to these external expectations. The challenge is consequently to avoid that these expectations which come from outside of school - the expectations of socialisation (e.g., an orientation towards social norms) and of qualification (e.g. an orientation on employable competences) – are translated *within the school* (internally)

into forms of learning which stand in the way of equality, freedom, and formation. In more simple words: the challenge is to avoid that these expectations are translated into learning which is only instrumental for an externally, predetermined, or projected destination.

These matters are particularly challenging for the school when the so-called basic formation is modelled on these functional forms of learning. Formation, then, becomes a kind of personal development; a building of identity or the acquisition of a unique set of social, cultural, and civic competencies that render someone employable. The result of formation, then, is defined beforehand. Understood in this way, formation becomes a *function* of the school, and that formation becomes a function alongside other functions (for instance socialisation and gualification) which is actually the case in the architectures of both the educational institution and the learning environment. In so far as formation is brought to the fore here, it carries the signature of external expectations: the social norm (e.g., the socially well-adjusted person) or societal employability (e.g., the person with adequate citizen competencies). In both cases there is no place for scholastic learning under the sign of equality and freedom. Alongside or on a par with qualification and socialisation, there is at most room for 'functional formation' (e.g., the development of talent, of citizenship, of identity),⁶ and the greatest tension the school faces in all these cases is that it is being made responsible for something that it simply cannot (pedagogically) control. The school is unable to control the ultimate value of qualifications, just as it is unable to make socialisation a deliberate pedagogical task. Forming young people functionally to fit in the same image is also a hopeless task, apart from the fact that it is undesirable. What the school does have in its hands is preparation, and the ability to offer materials and exercise for basic formation, and it may well be called to account for this.

⁶ This is also why the distinction that is made by Biesta (2010, 2013) between the three functions of education - socialisation, qualification, subjectification - is misleading in our eyes.

Does the school limit the 'schoolification' of society?

Not only is the school confronted with the challenge of dealing with external expectations in order to avoid subtle school-internal translations which make scholastic learning impossible; inversely, the school also has to ensure that it does not 'export' its internal matters to society. This especially bears a risk concerning the evaluation of students.

In the educational institution the (final) evaluation usually takes the form of a normalising judgment. In the architecture of the learning environment, the (final) evaluation mostly takes the form of an assessment of acquired competencies. The interpretation and the importance of that evaluation is, in both cases, mostly determined by expectations external to the school: selection, (re)orientation, certification, and, more generally, qualification. What we want to point out here is that in both architectures the evaluation will render differences amongst students visible, be it differences in normality or degrees of employability. The main challenge from a pedagogical perspective is to avoid that differences which appear at school remain in operation after school hours or outside the school gate. This means avoiding the immediate 'naturalisation' or 'socialisation' of differences which come to the surface through a school evaluation, and, in this way, allowing students to begin to live their own lives outside of school.

When *naturalising*, the differences which appear in evaluations are immediately understood as an indication or even as evidence for natural differences in intelligence or talent: 'smarter' and 'dumber' kids. In this case, the school does not merely fix children in school, but often also determines their future. The 'natural' interpretation of smart and dumb which is given in school will then persist long after school is over, and often even lasts a lifetime. When *socialising*, the evaluated differences among children will immediately be seen as indications or determinations of their future: 'failing' and 'successful' children. What students do or do not do at school is interpreted as the immediate prefiguration of the adult life they will lead. In the personalised learning environment, the risk of socialising school-internal differences is very real, more so because the differences have to do with actual differences in competencies among students, and constantly hold a mirror up to the student to show them how they will perform later on. The first question to ask from a pedagogical perspective is what a scholastic form of evaluation would be. It should in any way be a school internal evaluation of formation, and thus more an examination of 'what is learned' rather than a test of 'capacities' or an assessment of 'social employability'. This also means that the evaluation from a pedagogical point of view must always be open: there is the possibility of pedagogical adjustments and, in principle, endless do overs. From this perspective, the characteristic scholastic examination appears as a pedagogical means of exerting pressure or creating a sense of urgency. This kind of 'pedagogic leverage' makes sure that there is enough pressure and creates time to be occupied and concentrated intensively on the subject matter. This pressure is (sometimes) needed to work on the basic condition, and to move the boundaries of one's lifeworld. Examination thus helps to be or become a student, in so far as the process is not reduced to a purely personalising instrument of feedback. Evaluation is then seen as part of practice and study and prompts a deepening of intensive attention and interest. It is, concurrently, a very artificial yet serious pedagogical moment where, as Michel Serres (1991) would say, one is brought into a situation where one is not allowed to make mistakes. Pedagogically, it is also of importance that the student, as a student (not as an individual or a person), receives a degree; for instance, the same degree of secondary education at the end, without pretentious and often determining statements about where and how graduates differ (in view of higher education, for instance). As much as the school can place young people in an equal situation of beginning, by using the degree it can put them in an equal position at the end. This does not mean that there are no differences among students at the end of (for instance) secondary education, but through the degree the school gives the opportunity to put the emphasis on equality, and not on those differences. Lastly, it is of importance that the school is limited in time and space. This means for instance that the school acknowledges other forms of learning (in or out of school) and that it closes off the time in school literally and figuratively. Schooling must have an end.

Can the school and the teachers reconcile their orientation to formation with student-centrism?

For this touchstone we would like to bring in mind that there are two basic motives for understanding the student as the main concern of education. First, there is the societal rationale for ensuring the optimal employability of everyone to realise social and economic equality; this necessitates having an efficient and effective system of education that gets the most out of everyone, or that provides the highest amount of input for economic growth. The student that takes centre stage is, in this case, positioned from the very beginning as a *means* to an end. In other words: *everyone matters, get the most out of everyone*. The second motive comes from within education and argues that we cannot assume the existence of a 'norm(al) student', when we want to realise the best possible learning processes, outcomes, and choices. In this context, the student that is put in the centre, is always the *starting point*. This means: *everything can contribute to learning gain, so take all specific individual differences into account*.

But also, in the pedagogical perspective that we propose, there is a motive that considers every student of importance, or, better, wants to give all children the opportunity to become students. Briefly summarised, the pedagogical assumption is that everybody is offered the possibility to become someone; no one's future is determined. We are well aware that this is an idealistic or even utopian idea.7 But, before we criticise this pedagogical motive and ask for some realism, it is important to note that the aforementioned societal and educational motives are no strangers to idealism either. Their assumptions are also idealistic, in so far as their assumptions about realising employability through learning and the rational modelling of learning gain are concerned. Anyhow, this pedagogical touchstone asks whether an architecture of learning and education which takes the person of the students as its starting point or as a means can be reconciled with an architecture that wants to enable formation. Or, applied to the teacher: can the teacher enable formation for all students while simultaneously taking

⁷ For an elaboration of the utopian dimension of the school: Verburgh et al., 2016.

the person of the students as their starting or seeing the student as a means to achieve other ends?

Exploratory check of forms of personalisation

We believe that a (school-)pedagogical perspective is often missing in the debate on 'student-centrism'. The debate is mostly about optimising employability or about making the learning process more efficient and more effective. The debate is less often appraised in light of the school: can all variances of student-centrism be reconciled with scholastic forms of learning? How does student-centrism challenge scholastic learning which seeks to materialise the assumptions of freedom, equality, and formation? The following check is not exhaustive or final, and is quite abstract and analytical, but hopefully it provides an indication of the kind of challenges that the school has to face when confronted with personalisation.

Year class system and personal learning pathways

In schools, education and learning are to be *organised*, and there are naturally numerous principles and models of organisation. The architecture of the educational institution uses the system of year groups (mostly alongside grades, school types, and specialisations). Students are grouped in a class, based on their age and according to the subject matter which should be processed during the period of one school year (also see Doornbos, 1969). The subject matter and contents are uniform, and this is usually also the case for the teaching method, even though this is not necessary (the teacher can for instance differentiate among students within the class group). The most common form of differentiation is repeating a year (or skipping a year). One assumption of this system is that age coincides with the somewhat-equal capacity or maturity of students to process all subject matter at more or less the same speed. The critique on this system is often directed at the questionable effectiveness of school year repetition, and at the assumption that every student of the same age has the same learning speed. Inversely, the completely personalised learning environment starts from personal differences in capacity, differences in learning

speed, and (possibly) personally adjusted learning outcomes. This may result in a system of personalised learning pathways and personalised outcomes. The system of learning pathways first of all serves the students, while the expectations of society are secondary; the system of year groups first of all serves the expectations of society, while the perspective of the student is subservient (as is shown in choosing for school year repetition).

From a pedagogical perspective, the year class system is problematic in so far as it calls upon capacity or maturity in order to explain the 'not being able to follow', and in so far as the year group solves the problem (by using school year repetition). In reality, this often comes down to giving up a belief in pedagogical chances and hoping that 'natural growth' (and thus something outside of the school) will solve the problems at hand, whereas differentiation within the class could have solved the problems (fully realising that we do not take costs in terms of financial means and material conditions into account here). The system of learning pathways is problematic in so far as differences in learning potential between students are set from the start. Consequently, the differences in learning duration are taken for granted, as are possibly the learning outcomes that they acquire in light of their differences in potential. Also in this case, then, the belief in pedagogical chances is left behind. The personalisation of learning time and learning outcomes risks placing the responsibility entirely in the hands of the student, and thus no longer (or less) in the hands of the school or the teacher.

Personalising learning goals

In a more extreme version of personalisation, the school no longer uses one set of goals for a specific group of students but starts from personalised learning targets. This personalisation of goals can be related to the content of goals and/or the realisation of certain levels of proficiency. In so far as schools and society take interest in a basic formation for everyone, there will be little societal support for the personalisation of this basic formation; but it is different when the expectation concerns factual learning outcomes and the belief that these outcomes can be realised on different levels of proficiency depending on the student. In this scenario, the same (basic) goals can apply to all or to a group of students, but the specific learning outcomes and/or specific levels are personal matters. This version of personalisation can be at odds with the school's task of basic formation.

First and foremost, formation cannot be organised in view of predefined outcomes. After all, this would imply that this formation can be defined in terms of clear and unambiguous learning outcomes which can be verified, and that they are also equal or equivalent for everybody. Formation is not directed towards outcomes, but towards goals. Yet, this does not mean that it cannot be evaluated. In addition, the (radical) personalisation of goals is at odds with certain aspects of freedom and equality. Personalised goals always imply, in one way or another, that there are reasons from the side of the student to assume that part of basic formation or the proficiency level which is demanded does not apply to them. This also takes in the (at least inexplicit) conviction that more effort, by learning more or by adding pedagogical support, does not make a difference. This may become clear after the 'trying' (post factum) but starting from these differences means that the future of (and what is possible for) a student is set beforehand, often based on tests of abilities, talents, or capacities. Consequently, the pedagogical assumption of freedom and equality is abandoned a priori. This does not mean, however, that other forms of differentiation are undesirable. The point we want to make is that personalisation of outcomes which is based on an estimation of the capacity needed to achieve those outcomes instils a logic that is at odds with the school's role, in view of basic formation and preparation.

Personalisation of exams and qualification

Often in connection with the personalisation of goals, exams (as summative evaluation) can also be personalised. In this case, as well, there are several options, such as: making a custom form of examination, adapting the exam depending on the proficiency level, or adjusting the time for taking the test. In this context, a system of open qualifications can also come to the fore. This system for determining what learning outcomes have been achieved is a form of 'personalised' qualification: all the acquired and present competencies can be exhibited for every student. Obviously, examination is flexible in this system of open qualifications: the learning outcomes, the level that will be qualified, and the form and time of examination can all be chosen.

The already mentioned tension surrounding personalised goals will also arise here. Formation becomes a kind of customised basic qualifi*cation*. It is difficult to reconcile this with the societal expectations of a uniform curriculum which focuses on the basics for each student. Depending on personal characteristics and choices, the student would then be 'formed' more broadly or more specifically, more superficially or more deeply. Also, allowing students to choose (or making them choose, based on their capacities) when they want their learning outcomes to be assessed either means determining beforehand what every student can and must realise, or giving full freedom to all students. In both cases, the duration of learning pathways is personalised. This is not problematic, in itself, unless of course the time that is needed for a certain learner to achieve a certain outcome or level (the time efficiency) will also be used as an indicator for the general level of proficiency: the difference between 'slower' and 'faster' students, then, becomes an indication of 'good' and 'bad' students. A personalised duration of learning can then also be problematic if it becomes an alibi for the lack of means to make everyone reach a certain level. This is also often the case in the year class system: the personal adjustment of learning duration has been anchored in the institution by school year repetition. A flexible moment of examination can thus lead to making the student fully responsible. A flexible form of evaluation, lastly, does not seem to create a tension, but the question who can choose the form of evaluation (and when and how) plays a part, and whether there are guarantees of equivalence.

Personalisation of the learning process

The personalisation of the learning process comes in many different forms. In the architecture of the learning environment, this learning process can relate to several aspects: learning activities, teaching methods, contents, pathways, formative assessments, feedback, learning, teaching functions... In a scenario in which the goals, the exam and/ or the degree are personalised, all the aspects of the learning process will likely be customised as much as possible. Several tensions in this vein have already been briefly sketched. In a scenario in which personalisation only relates to the learning process (and not to the goals or the exam), everything in the personalised offer should be judged on whether it is (im)possible for every student to work with the same basic subject matter and in light of the same goals. From a pedagogical perspective, the use of the same contents and setting the same goals does not intend to normalise (to shape all the students according to the same image) but aims to prepare all children for participation into societal life. We would like to touch on two critical points in this matter.

Differentiation of learning processes is usually carried out based on indications of a student's capacities or individual characteristics (by using formative assessment or a diagnostic tool). The question is: from which perspective are these indications understood? If it is understood from a pedagogical and didactic consideration (e.g., an indication that there may be a need for adjusted or added support of the student) then there is most likely no tension; however, when this indication is from the onset clarified in terms of limited learning or added value, and thus in terms of efficiency and effectivity (or learning gain), then this runs the risk of goals becoming personally adaptable outcomes, and contents becoming interchangeable learning means. This would immediately affect the ambition of a basic formation for everyone. Of course, there is also a tension when the indication is immediately explained in terms of one or another 'natural' characteristic of the student which limits their possibilities, and therefore asks for a learning process with 'limited' contents and outcomes.

A second point of criticism is that personalised learning pathways separate students in time and space, even if they aim towards the same targets. The point is not as much that this could lead to an isolation that would put stress on the socialisation function of education (on socialising by sitting and living together in the same time and space, for instance, in a year group). Prior to this, this separation means that the differences between students are always more visible than that which they share. Differences among students are, then, maybe no longer shown through different scores on a test or through delays, but instead differences in learning speed (often in terms of efficiency and effectivity) or in so-called personal characteristics, come to replace the former. This is problematic in so far as the school starts to function as an exposition of what appears now as natural, fixed differences among students, and no longer as pedagogical and (hopefully) only temporary differences.

Personalisation of the initial situation

Yet another variant of personalisation is attuning the learning process and the learning goals to the person of the student. This comprehensive form of personalisation actually implies that a school is custom made, which implies, in turn, a customised basic formation. Certain versions of talent- and development-oriented schooling seem to go in this direction. In so far as talent is an indication of a certain potential which is present, a natural aptitude, or actual possibilities, these forms of schooling presuppose that who one can become is already set, and that students have thus a kind of natural predestination. The starting points of pedagogical freedom and equality are left aside. Going to school is then learning or developing into who one is 'by nature'. The natural orientation towards the destination which is present in every student receives priority over societal goals and contents in terms of literacies and grammars. Stated otherwise: the development of talent, in this sense, implies 'everybody in their right place, the place that they are naturally entitled to, that is their birth right'. Natural selection, as it were, carries out its work in school. Similarly, development-oriented education will relativise a uniform curriculum from the position of the person of the student, for instance, from their personal needs and experiences and from aspects of personal wellbeing. Aspects that relate to the level or speed of development and to well-being are called upon here to offer tailored education. Learning in school is then supposed to follow the natural development of the child as closely as possible, to imitate or continue it. What students 'are able to' is immediately connected or even made subservient to what the student wants or chooses, and to the subsequent effects on the emotional load. This could create a tension with the societal meaning of school; when it pins students down on their own personal development and well-being in such a way that they have limited exposure to societal expectations and new worlds.

Lastly, we focus on a few tensions and ambivalences in the architecture of the personalised learning environment.⁸

Personal freedom and radical responsibilisation

Personalisation, first of all, means that the learner takes control of their own learning process, and that there is support provided which takes personal needs and desires into account as much as possible. On the one hand, this means that the freedom of the student is highly important, but on the other hand, this can also mean that the responsibility for the success and for achieving learning outcomes through the learning process lays solely in the hands of the student. Inversely, the personal empowerment of the student means that the responsibility for possible failure is also in the hands of the student. In other words, if the person of the student takes central stage, and when there is customised support, there is barely anything left outside the personal world of the learner that can be called upon to explain things that go wrong. There is no longer an outside; nothing or no one to blame except for oneself. The question here is how this affects the student. We can expect that when it does not lead to a complete internalisation of success or failure, such a radical responsibilisation leads to extreme reactions where students do try to contest things which go wrong by any and all means. What remains for them is a 'battle of procedures' and calling upon 'personal injustice'. The ethical-juridical system is then the last refuge outside oneself to which they can resort. Secondly, the problem with this situation is also that – by definition - no rule or law can do justice to 'the person' of the student, and schools and teachers are put in a very difficult position as a consequence. They are constantly called upon to do justice to every single student as being 'the Other', and in staging oneself as the Other, the student can, in principle, condemn every rule, norm, organisation, or even action, as a form of personal injustice. The pedagogical relation to the student, which assumes freedom and equality, can be in conflict here with a personalised form of the service relation, which is guided by an almost ethical claim - 'to do justice to the Other'.

⁸ For an elaboration, see also: Simons 2018, 2020.

Personal matters and/in permanent visibility

In the architecture of the personal learning environment, personal affairs are constantly taken into account. After all, every personal or individual difference can matter. But this also implies that a difference only matters when, and in so far as, it is monitored, documented, and made visible. This constant visibility is often the price that the student pays in order to be treated as a person. We are coming very close to the original meaning of the word 'person', which forms the backbone of the Latin 'persona' and refers to the mask or to the personage on the stage. This person is, in other words, the public or virtual side of someone. What this clarifies, is that someone must want to get on stage and play a part to be recognised and acknowledged as a person; a profile is needed. This means concretely that learners are constantly asked to visualise and verbalise their personal characteristics, their own feelings and expectations, and their own situation. This also means that there must always be a stage or a platform for students on which their personal voice can be heard and their personal performance can be seen. Or, in absence of which, students - in a less or more radical way - can create or demand their own stage or claim attention for their person in another way. The ambivalence is this: personalised education wants to do justice to the person of the student, but in the end, risks only considering the roles, the characters, that students take on or must play in order to be audible and visible. The risk is also that students are addressed in such a way that they (have to) behave as performing actors and that they put all the attention from the school and the teacher on their own role or profile.

Personalised feedback and learned helplessness

The architecture of the learning environment is characterised by permanent feedback loops, and this feedback continuously steers and supports the learning process. As said earlier, according to Wiener (1950/1989), applause is the most basic form of feedback. The risk is that the applause eventually determines who you are as a person or a student, a risk which is far from imaginary when the personalised student actually plays a part and has to perform. This means, concretely, that students become totally depended on feedback and would be completely lost without it. We already pointed out the more extreme version of 360° feedback. The ideal is finding a perfect match between how you evaluate yourself, and how others evaluate you. This often comes down to looking at and evaluating yourself through the eyes of the other, and thus a desire for recognition and acknowledgment or, in extreme cases, a desire to be popular and to be applauded. The risk is of course that students (and this also counts for teachers) are 'nobody' without feedback. Even more, while feedback may have had the intention to give the students more confidence and certainty, when pushed further, feedback loops may lead to insecure students who only dare to act when they know for sure what the specific outcomes, gains, or criteria of evaluation are. When the feedback circle closes, students risk becoming helpless and obsessed with feedback. A step into the unknown - and thus without knowing on beforehand what will be the gain or outcome - is then uncomfortable and unsettling and even becomes something to be avoided at all costs. A step into the unknown is paramount to learning in freedom and equality: 'try this', or becoming exposed to a world or subjects that you, as a student, had no knowledge of before, and of which you could not imagine, is exactly what should arouse interest. In this respect, feedback is at odds with scholastic learning.

The calculating student and being calculated

In a learning environment that emphasises learning gain, there is a possibility of calculating learning time and learning outcomes. It is first the student, themselves, who makes their own balance, and should also calculate what should be learned at what time, at what speed, and when and how the subsequent outcomes should be evaluated. But the student, especially in a digital learning environment, also leaves traces. These are the traces which allow - after analytical operations – for the personalisation and adjustment of the learning path, when needed. But these traces also deliver (big) data to profile students, or make profiles of effective and efficient learning paths, to perfect these learning environments (Williamson, 2015). In other words, forms of learning analytics deliver the input for (algorithmically) modelling learning environments which work almost automatically. Through these systems, the student

who is calculating and always profiling themself will become part of a learning environment that always adapts itself to their person. A possible ambivalence is situated at least in two areas: first, the calculating student will always also have to adjust their calculations because the variables of the learning environment may need to be adapted 'along the way'. In all this, the student will be governed here by algorithms which are mostly out of sight (Rouvroy, 2011). Secondly, in an adapting learning environment, profiling students will always encounter themselves. This is very much like the Google user who encounters themself in the always-personalised search results (Feuz et al., 2011; Casati, 2013). In other words: the personalised student is always reminded of their past, and in the extreme can be made accountable for their past again and again. Everything literally counts and keeps on adding to the account. This condition is completely the opposite of a school condition where freedom and equality are precisely assumed and where pedagogy is about actively avoiding that the past becomes something that determines the future.

Chapter 4. Lessons learned

Placing the student in the centre is part of a broad discourse that permeates numerous contexts. But as we have shown, this discourse has multiple sides. It is made from several perspectives which all have their own arguments for focusing on the student. Furthermore, all these perspectives uphold their own image of 'the student': the student as human resource, as customer, as user and co-producer, as creative source, and as didactic point of departure. It is remarkable that the attention is drawn towards differences between students - even if not always in the same way - and more specifically to the (unique) person of the student who is increasingly called 'the learner'. It also catches the eve that there are more than just educational motives at play here. Today, mostly market economical, technological, socio-economical, and organisational arguments make the plea to do more justice to the person of the learner: no-one can remain un-used or unemployed, everyone must be usable or employable. When economic, social, and financial considerations are at the base of putting the student centre stage, this learner is then also a means for ends which are not pedagogical: economic growth, innovation, social cohesion, efficiency...

As far as this is concerned, we see a clear difference between what appear to be similar arguments for what took place in the past. The start of 20th century, for instance, was mostly about pedagogical reform movements and a kind of counter discourse. It was about rethinking the role of the student and the teacher in education and experimenting with new forms and methods alongside and in response to traditional education. In contrast, today we are confronted with a dominant discourse in which policy considerations are combined with educational arguments: education in which the learner takes central stage is education that is understood as both more relevant and more optimal (faster, more efficient, more effective learning). It is exactly this observation that brings out the question: isn't there more at stake today than a shift of perspectives or a change of discourse? Aren't those shifts and changes indications of a new way of organising education and learning? Are crucial pedagogical considerations at stake because of this? This chapter summarises our main arguments, and also further elaborates on some of the implications.

Making students believe it is about their freedom

Our argument goes as follows: it is no longer the architecture of the educational institution that forms the guideline or the blueprint for education, but the architecture of the learning environment. This does not entail the - often claimed - liberation of the student, but instead a change of regime which the student is subjected to. The architecture of the educational institution is in all respects directed at a social norm: not only do the goals and contents of education refer to a social norm, but also the development of the student and what teachers do revolve around normalisation. Typical, recurring questions in this architecture are then: 'am I developing normally?' and 'do I meet the norm?'. Instead of social normality, the new architecture is about societal employability. The learning environment wants students to acquire the learning outcomes (competencies) which make them proficient and thus employable in all sorts of domains of societal life. Stated differently: the starting point is that society asks for employable people, and not so much people that comply with social norms. This means that the orientation towards goals of the educational institution (of which the exams judge whether and to what degree the goals have been achieved) is replaced by an orientation towards outcomes of the learning environment (where the exam finds whether learning outcomes have been acquired by a learner). Typical questions here are: 'does my learning lead to outcomes?' and 'am I employable?'. A degree which is ascribed by the institution is also based on examined results, but it does not contain a list of individually acquired and inventoried learning outcomes as established in the learning environment. In the architecture of the learning environment, the learner learns with the aim of gaining or profiting (and thus also becomes someone who aims at gain), which means that learning gain is an important indicator of quality. Customised education, or its variants of personalised education, are then mostly aiming for an increase in learning gain and employability.

Additionally, today's student-centrism is often proposed as a liberation of the student. At last, it is said, students are freed from a single normalising denominator and can show themselves as they really are: unique persons! We wanted to show that this understanding of the matter overlooks something critical. It is important to indicate that the personalisation of education is only possible when the student is personalised and is thus made into a unique person (there aren't unique persons by nature). Personalisation, just as normalisation in its time, is a form of power: it is a system of profiling, monitoring, and feedback which renders unique characteristics visible and turns someone into a personalised learner, both for themselves and for others. Learners do not exist without these systems and are thus dependent on, steered, and controlled by them. Even more, the learner is no-one or nothing unless their unique characteristics are profiled and made public. This power configuration of public visibility (being recognisable) and appreciation (to be recognised) makes somebody exist as a unique person.

The consequence is that the personalised student is also the spectator or the viewer of their own profile. They are sensitive to the image that others have of them, someone who has to profile themself in order to be someone, and who has a continuous need for feedback. The personalised student is also someone for whom every rule and norm is a possible source of injustice. Rules and norms always imply a generalisation, and thus by their very definition cannot do justice to unique profiles. In the name of personal injustice, or by a lack of recognition of personal circumstances, rules and norms are now questioned themselves. In short: the personalised student is a self-proclaimed Other, and someone with an insatiable desire for recognition. And just as the 'desire to be normal' is not natural or innate, the 'desire for recognition' only appears in a specific organisation of learning and education. It is this organisational architecture that gives rise to the desire for recognition.

A critical element of the architecture of the learning environment is that the personalised student has control over their own learning process and learning outcomes, but not over the societal appreciation or validation of those learning outcomes, and thus also not over their employability. The learner, in other words, cannot take their eventual recognition into their own hands. Also, in a culture of degrees, the student does not have control over the ultimate value of the degree (the so called 'civil effect' of a diploma). The difference is that in the architecture of the learning environment, the institutional protection (the value of the degree is the responsibility of the institution) is cancelled, and the student is directly confronted with the fluctuating (exchange) value of their unique, personal competencies. The recognition of factually acquired learning outcomes personalises someone, whilst a societally standardised degree individualises someone. A unique person is then both literally and figuratively left by themself without recognition.

De-schooling the school

We assume that now more than ever we need touchstones which examine whether reforms that take place in the name of a more central position of the student are worth pursuing. In order to formulate these touchstones, we used a pedagogical approach. This approach starts from the assumption that today everybody can learn anytime and anywhere, and that, while this is also important, learning in school or scholastic learning has a specific societal relevance. Scholastic learning is fundamentally different from learning, as it takes place today in the forms of socialisation, initiation, learning at work, investment... To clarify this, the term 'basic formation' remains useful. Three characteristics are important: the school is the place and the time in which students can form themselves and their future (freedom); the school presupposes that everybody, wherever they are from and independent of their heritage or their natural features, should in principle be given the chance to give shape to their own life (equality); the school has the mission or duty to prepare young people for societal life (formation). This is about basic formation in the sense of giving students the time and space to work on a 'basic shape', but without the guarantee that they will deliver societal top performances later on. The school does not have control over this last element. What young people learn in school is to relate to the worlds which are influencing or acting upon them and to give shape to this relationship, themselves.

The school consequently imposes the responsibility on society to examine itself, question itself about these influences and forces, and ask which domains are of importance so that young people can prepare themselves. But society cannot use the school to form young people into the image that (groups of) society bears in mind. The school is not here to form students to match the image of the old generation, to match the actual or ideal image of the 'elder'. In so far as this is in effect taking place, the school is being de-schooled. Scholastic learning then becomes a form of socialisation, initiation, imitation, development, or identification.

An important point is that the school, as we understand it here, is anti-naturalistic: the pedagogical belief is that all students are capable of a basic formation, and that their abilities or limitations in terms of learning are not given by nature. That is also why it is the responsibility of every school and of every teacher to differentiate when needed, so that everybody can be brought (back) to this point. This can be done through extra effort or by adopting different approaches. This does not mean that the school always succeeds in doing this (far from it), but giving students different or other opportunities from the onset, based on their so-called natural differences simply because we would not succeed in this basic formation for everyone, in fact means that we are giving up on this pedagogical belief. This pedagogical presupposition is not naive, romantic, or unworldly, but expresses faith in what learning and pedagogical actions are capable of, until proven contrary. In this light, it is relevant to make a comparison with democracy. What democracy is to power and politics, school is to learning and education. Democracy may not always be the most efficient or effective organisation of power and politics, but using this as an argument for abolishing or limiting democracy mostly means abandoning the assumption of equality and freedom. Similarly, we can say that other forms and methods of learning have their value and are meaningful, and that they are often more efficient and effective, but they mostly do not serve freedom and equality. These other forms of learning often do not start from the pedagogical premise that all human beings come into this world without societal or natural destinations, that the world belongs to no one, and that they have to get themselves into shape and a find a destination, themselves.

Students without school

This pedagogical perspective on school allowed us to formulate a number of touchstones for assessing developments which concern personalisation. The basic question here is: which forms or versions of personalisation are in conflict with learning in school under the sign of equality, freedom, and formation? We want to bring two points of criticism back to mind here, concerning what we discern as two different versions of personalisation. First, we can speak of personalisation from an external societal perspective, which comes down to 'everyone matters, get as much as possible out of everyone'. We can see this clearly in the claim that talent cannot be wasted. In this version, the unique student is always a means to an end. Second, personalisation can also be understood from within education. Here, it is more about 'everything can improve learning outcomes, take all individual differences into account'. In this version, the unique student is always a (didactic) starting point. In contrast, our pedagogical perspective, can be summarised as follows: 'everyone can become someone, nobody's future is set in advance'. Let us confront both perspectives on personalisation, as well as the combination of these perspectives, with the pedagogical perspective.

If we want to make an equal, worldly-oriented formation possible, to what extent can we honour the principle 'everything can improve learning outcomes, take all individual differences into account'? The risk is that the person of the student is considered, and so many things are being continually personalised, up to the level that it is no longer possible to hold on to equal goals for everybody, or it leads to abandoning (additional) pedagogical effort and patience in order to strive for it. In simpler words: the risk is that differences between students receive all the attention, and that this puts a strain on the worldly preparation of students.

To what extent can the focus on basic formation be reconciled with the 'everyone matters, get the most out of everyone' version of personalisation? Can basic formation be reconciled with the expectation that maximal development of the potential of every student is a means or input for, for example, economic growth or social stability? This comes down to the following: can education which gives students the freedom to form themselves be reconciled with actors in society who want to form students according to their own image? A one-sided focus on qualification risks that young people are being personalised (and even selected) based on their specific talent or potential, and accordingly are no longer able to shape their own life or are no longer given the time and space to do so.

There is also another version in which the external-societal and the internal-educational perspective are combined: 'to get everything out of everybody as fast as possible'. This means that all the interpersonal differences in the initial situation are considered, as well as the so-called need to develop and employ all the potential as much as possible. The architecture of the learning environment is actually an attempt to combine both perspectives. Stated simply: learning in school should be focused on results and outcomes and, in line with this, should be personalised optimally so that learning paths are efficient and effective. The risk is, of course, that students are pinned down in advance according to their so-called different potentials, or to the results that they should achieve that they have no space and time to take their (form of) lives into their own hands.

A second point of criticism is that the actual organisation of personalised education and learning can create tension in its own respect. First of all, there is a real possibility that all responsibility falls into the hands of the student alone, and this raises the question whether and how young people can carry this radical responsibility. Young people that must rely fully on themselves, while constantly receiving the message that their personal needs are being taken into account, no longer have the chance to frame things which do not go as well as part of a bigger picture, beside or outside themselves. They can get personal credit for successes, but also carry full responsibility for failure. This failure also keeps 'counting' in a digital environment, where it is never forgotten because it is always recorded. Another risk is that the student is completely tied up in images and in image building. In either case, the learner will have to play a kind of role and will have to profile themself. This is the only way in which they can be recognised. The power circle closes when those profiles have complete control over what somebody is and what they can and want to do, and when someone can only look at themselves through the eyes of the other. As we have shown, this also entails the risk that the student needs feedback up to the point that they become extremely unsure, rather than becoming more confident. There is a risk that the student will mostly look at themself performing through the evaluating eyes of others and will eventually want to form their self according to the image that others have. Finally, there is a danger that the personalised student is constantly confronted with themself (in the form of a more and more 'automatically' created and fine-tuned profile), and this means that with every customisation the student is reminded of their past (the past, as said, always being something that matters for profiling). In so far as formation is oriented towards an open future, this forced remembering can be a heavy burden.

Can we be against a perspective in which the student is placed in the centre? Student-centrism is almost self-evident today, but we have tried to make this less evident or to introduce at least some hesitation. Personalisation, like normalisation and disciplining before, is indeed a form of power. It is not our intention to debate all forms of differentiation in education; on the contrary, we want to see what forms of differentiation are possible in school without giving up what makes scholastic learning a special form of learning, namely learning under the conditions of freedom, equality, and formation. The starting point here is of course that we believe in school in the same way as we believe in democracy. The argument that we make is then also that scholastic forms of learning cannot simply be replaced by other forms of learning, even when these other forms are more efficient, effective, or profitable. Certain versions of personalisation really challenge scholastic forms of learning. The more extreme forms of personalisation even go further: they de-school the school: freedom, equality, and formation are sacrificed on the altar of learning-profit and societal employability. When education develops in this direction, it is perhaps more obvious that there is reason to object today's student-centrism.

When inclusive education risks to exclude school

The most challenging development today is perhaps inclusive education. The strict separation between regular education and special needs education is being increasingly debated, understandably so given that normality is no longer guiding and legitimising the organisation of education. The question, however, is how this can be understood from the pedagogical perspective which we have sketched. All children, from this perspective, are entitled to school. In other words, the right to schooling is not conditional. The question then is whether there are pedagogical reasonings for discerning types of schools based on the characteristics of students. We have tried to argue here that it is the responsibility of the school to compensate pedagogically for differences in the initial situation. This means that, in the name of pedagogical freedom and equality, these characteristics should never be taken as 'natural' or 'determining'. From this pedagogical viewpoint, the difference between mainstream and special schools, in principle, cannot be defended. But besides these very important principles, there is also the matter of pedagogical pragmatism. We mean that the school also has to be organised, and freedom and equality need to take shape materially, in order to make school for all. It will always be a challenge to consider concrete practices in light of principles of freedom, equality, and formation, but also to keep on looking at these principles in the light of practical, pedagogical possibilities. This also implies not allowing ethical principles or the logic of social justice to overshadow the pedagogical in these situations, because that way we risk denying school to young children. By way of example, and without going into detail here, we would like to bring forward some issues.

Pedagogical pragmatism is clearly at play in the possible tensions between freedom and equality. The material organisation that is needed to place all students in an equal pedagogical situation of beginning can lead to denying many students the freedom to give shape to themselves. These students are then only given the opportunity for a specific form of development, and hence are denied access to school. They no longer have the opportunity to become students and are pinned down to the extra support that they need. Or the other way around, it is of course also possible that the dedication to the freedom is so high - think for instance of education for the gifted - that scholastic equality is under pressure. Another example is the extremely personalised school where everybody is exceptional and where all differences between students are magnified and determine learning in advance. Both freedom and equality are at stake here, and, in a way, we can no longer speak of it as school. All these issues lack an ideal solution or a blueprint that would show us how to deal with the matter, and so they require careful, open-eyed, pedagogical pragmatism. This also plays its part in the design of (more) inclusive schools. Often enough, attention is given to the major emphasis on caring and individual guidance in special needs schools, and how this may be useful within regular schools. This is, of course, viable. But a school for special needs education is first a *school*, and they approach young people first of all as students. Also, within these schools, there is a lot of emphasis placed on 'making school' and on pedagogical expertise concerning teaching methods which are based on freedom and equality in challenging situations. Pedagogical pragmatism can also be brought to the fore here. Yet, another aspect is the risk of confusing pedagogical actions with care, which replaces formation with development. Caretaking of young people in need can then become a sort of compensation, even an excuse for the lack of necessary investments in pedagogical support (hence, in teachers) which can turn these young people into students. This focus on compensatory care and individual development can then come at the expense of making school.

Resources need to be made available in order to make school and. perhaps even more, to reinvent school. This might be the challenge which is so made clear by the movement towards inclusive schools. Too often, the inclusive school is projected as the dream image of an inclusive society; too often it is claimed that within an inclusive school students are socialised to deal with diversity in adult life. In so far as these schools imply radical personalisation, they might realise a strange form of socialisation: a society of unique persons who only share that they are different. But as stated, schools which only socialise or (re)produce societies as they are desired or dreamt by adults are no longer schools. Maybe we should not appeal to socialisation to realise our societal dreams (as adults), but should instead dream of a school, which means dreaming of a time and place for sharing and renewing the world. Maybe this is indeed the challenge today: how can we shape a school of the future, what resources are available for this? But this also means: how can we think about basic formation and about forming a common world in the future? How can we offer children the possibility to form a shared future, themselves?

Formation, not qualification and socialisation

We are well aware that the pedagogical perspective and our views on scholastic freedom and equality can come across as idealistic, or even simply naïve; but it is probably no-less naive or idealistic than an economic theory which assumes we are all homo economicus, that we all make rational cost-benefit analyses, that learning is the production of human capital, or that we can organise society in a rational way. Every approach seems to have its idealistic assumptions, or rather, every approach is perhaps naive in its assumptions. Are all these approaches then equally valuable? Should we place the economical, sociological, and pedagogical approach beside each other at equal height? It would be politically correct if we would, indeed, treat these perspectives equally, which would mean that education has three functions which are as valuable as one another: a function of qualification (economical), of socialisation (sociological) and of formation (pedagogical). The advantage of such a triple divide is that everybody can identify with it, and only the balance of the functions would be a matter of debate. This political correctness reconciles sociologists, economists, and pedagogues concerning matters of education. But still: shouldn't we muster the courage to abandon political correctness? Isn't this reconciliation a way to avoid discussing the truly crucial matter? The pedagogic assumption that everybody has the chance to become somebody, and that nobody's future is set, would then be on the same level as the (economic or sociological) assumption that the future of young people is economically or socially determined. We would then forget about the school itself.

Our point is not that socialisation and qualification have no importance, but instead that these ideals are not what school is about, and that the school, if it wants to operate as a school, has no control over qualification or socialisation. Concerning the importance of the pedagogical perspective in respect to the other perspectives or functions, we are obviously not politically correct. We make a politically incorrect plea for a more central position of the school. And we do not make this plea because - nostalgics as we are - we want to hold on to an old institution, but rather because we see the school as a way of approaching newcomers in light of equality, freedom, and formation. It is an approach that we find indeed worthwhile to defend, but which is made impossible by both the normalising educational institution (of the modern era) and by the personalising learning environment. This scholastic approach of newcomers is not only overshadowed by external, economic, or sociological approaches; these external approaches also rob the school of its powers to change society and open up the future.

Keeping children out of factories

We are well aware that the school can disappear, just as democracy can disappear. A society may no longer chose scholastic forms of learning in light of freedom, equality, and formation. We can imagine a society that chooses resolutely for extreme forms of personalisation, that deschools the school from within. At the same time, we are also aware that a society which does make choices for the school is confronted with a major challenge; after all, the school will always need to be reinvented. The 19th century school is certainly not the model for the school of the future. The 19th century school, itself, was modelled as an industrial factory. Similarly, we should perhaps be careful to use the contemporary FabLabs and other open platforms which want to exploit creativity as models for the school of the future. Those labs and platforms of the creative economy may very well be inclusive and open, as they are immediately in service of the development of talent, production, and innovation; yet these creative workspaces are also factories. The school as a FabLab is a place where the youth discovers and develops their talents whilst fabricating and innovating. This is hardly about pedagogical freedom, equality, and formation, just as little as it is about study and practice. 9 It seems important to us to keep children out of the factories, at least for a while yet. So, a different, more pedagogical imagination is needed when we talk about the school of the future.

The foregoing is often misread as a plea to keep everything that has to do with 'work' out of school. At a time when the meaning of work is becoming less and less clear, it is more necessary than ever to question the relationship between work and school, or rather, how work can

⁹ For an elaboration see: Masschelein, Simons & Larrosa (2019).

find a place in school education (i.e., not only in, for example, vocational education). But giving work a place in school should not be done primarily from the point of view of employment or employability, and not merely as a practical part (alongside theory) or in subservience to the creative process of making and fabricating. In at least two ways, attention to work is important.

First and foremost, the school is perhaps the place where the coming generation has the opportunity to relate to the *world* of work. Work and working then are part of a worldly formation: what does it mean to work, what does it mean to be working, what kind of engagement with the world is established in forms of work, what is specific to working power, what kind of attention is needed for work, but also, what kind of attentiveness and engagement becomes possible through work, ...? We seem to identify work too easily with practicing a particular profession or having a job. Work can also be approached as an essential way of dealing with things of the world (material, earth, matter, ...), as a specific involvement with those things and with each other. At school, then, it is as much about relating to the world of work (its grammar), just as it is about relating to the world of nature, language, economics, ...

But in a second way, it is important to consider how work - and what forms of work - can help to make freedom, equality, and education possible. In this context, it is worthwhile to recall that the reform movement in the first half of last century attached great formative importance to work. Work, not in the first place as a preparation for a profession, but as the shaping of a certain (collective) relation to the world in which our dignity finds its expression as a love and attention to the world and its beauty (see for example the writings and practices of Freinet, Montessori, Dewey). The challenge is actually to develop forms of work - that is, interesting forms of work, relevant schoolwork - that help to make school possible. After all, young people work at school, and a relevant pedagogical method implies forms of 'undefined' work that make freedom, equality, and formation possible. Defined activities which focus exclusively on producing, making, or developing - even if they offer variety - are often insufficient for that purpose. Inventing these pedagogical forms of work - new sorts of schoolwork - seems to us a challenge for the future.

Allowing the world to go to school

If we want to put the school back into the spotlight, perhaps the biggest challenge today is to discern what the world is that we want to prepare young people for. This does not mean speculating about competencies which should be required, but instead to find out which grammars (including the algorithms, code, image culture, ecological footprint,...) determine our lives and our society. We should dare to leave aside the assumption that there are no contents of formation which can keep up with a continuously changing society where everything ages rapidly. At best, this discourse about change shows that school - when it operates as school - indeed never is and never was (merely) about the transmission of knowledge. If there is one thing that digitisation is making clear, it is that we do not need the school to acquire knowledge. Reverting to the rhetoric of permanent change and lifelong learning is a way of ignoring the responsibility that the school imposes on us, the responsibility of daring to undertake a collective inquiry of ourselves. This is not about formulating and projecting expectations of education, as many initiatives have attempted to write down the goals and scenarios of education for the decennia to come but is instead about finding which basic grammars make it possible to live together. A collective inquiry into ourselves is not a debate or a poll through which we create a collective image of an ideal citizen or society, to subsequently mobilise the school to realise this image through the coming generation; it is an inquiry into our contemporary ways of living together with the ambition to arrive at the 'basic forces' or 'a shared base', which means to arrive at the contents of basic formation. Today this demands at least an inquiry into the basic grammar of the internet and of the social relations as mediated by digital tools, as well as the grammar of sharing and inhabiting a planet. This kind of inquiry is the only way in which we can present these grammars and offer the youth the opportunity to relate to them. The means or contents of that basic formation are in this sense perhaps even more important than its goals. The responsibility that is given to us by the school also entails that we put the care of living together and sharing a world at the heart of our concerns.

Indeed, from a pedagogical perspective, the focus on the student is achieved by focusing on the world. And in order to find out what this means, it may be relevant to reinvigorate certain traditional reform educators, and the way in which they have experimented with the school. They were not simply interested in freeing the student, but always meant to bring the world back into focus. Only when we find new ways to disclose the world through grammars, to allow the world to go to the school and to awaken interest for the world, we give young people the chance to forge their own future. This is also the way in which we avoid young people shaping themselves according to our image, and in which we give them the time and space to learn how to relate to what influences them. Putting the school at the centre of our concern means putting the world at the centre, and this means doing justice to the coming generation in a *pedagogical* way: to make it possible for young people to become students and make it possible for the world to be taken care of.

The responsibility that the school places on us is to put the care of living together in our shared world at the centre. Does this mean that the student is not central in school? Of course not: the student is at centre, but not alone, and most importantly, not as a bearer of unique needs but as a student who can relate to the world or as someone to whom the world can speak to (again). Only if we find new ways to also put the world at the centre, to make it speak, and to awaken an interest in the world, will we give young people the chance of a future of their own. Only in this way do we avoid shaping young people in our image and give young people the chance to learn to relate to what influences them. Perhaps we should explicitly mention here that this also means allowing the world (of language, mathematics, code, etc.) to speak, and to inscribe itself. We like to recall here the dangers Plato pointed out when writing was invented, namely that it would make us lazy ('we do not have to remember anything, it is in the books anyway, we do not have to know, as long as we can find it') and, above all, that it would mean that the words we are confronted with in writing, unlike the spoken word, could no longer inscribe themselves in our lives (physically, emotionally and mentally), but remain external and abstract. So, these dangers demand that we develop pedagogical practices for dealing with written words in such a way that they do still mean something, that the words are inscribed, and the school has an important role to play in this.

Literacy - also through writing - always has in some way to do with the fact that letters are inscribed in the body, and that we become able to relate to language precisely because those letters have been inscribed. Perhaps we should ask ourselves what school-based methods (including types of exercise and practice) we can develop so that what reaches us today in digital form and as digital images and what is presented as grammar of the digital could be inscribed and could mean something in terms of becoming something to relate to. Digital literacy, then, implies a kind of formation. Here we are pointing once more at the importance of the basic grammars of the internet, of the digital world, of visual culture (see also Dussel, 2018).

But the importance of basic grammars and literacy is also always accompanied by the importance of *authority*, that is of a specific pedagogical authority. Not institutional or police authority, but authority in the sense that something 'tells' us something, or 'has to tell' us something in the strong sense of the word and thus acquires lasting meaning. Something can only inscribe itself, and play a role in formation, if it has something to say, if it generates a (shared) interest. As with writing, this inscription has not automatically been the case with digital (image) culture. It requires methods and specific schoolwork, and perhaps also teachers who can make something (from the world) speak, to give it authority so that it can be inscribed. Rather than focusing on increasing the (limited) motivation of young people, schools and teachers can focus on new methods that can make the world speak (again), that can arouse interest and that can make what is said and shown also instil a lasting impression (see also Vlieghe & Zamojski 2019).

This also means that the training, and perhaps especially the schooling, of teachers is important. In addition to a training in pedagogy, didactics, and subject matter, perhaps something like *school studies* is also important for teachers. This at least would give them the opportunity to relate to the *world of school*, to be concerned about it, to take care of it, and to thus play a role in the renewal of that world.

Outro

School studies and the grammar of school

If the previous articulations make sense and could pass the test of our concerns with education, the new generation and the world, it is worth exploring the further elaboration of school studies and its focus on the grammar of school. Such a grammar is not to be confused with the 'phenomenology of the school' as sketched by Illich (1970), which, even if thought-provoking, is mainly about recognising in it the characteristics of a religious institution to the point that there seems to be no difference anymore. It is also not to be confused with the 'grammar of schooling' as elaborated by Tyack and Tobin (1994) which is actually a theory (cynically) explaining why institutional elements in the school organisation resist innovation and reform. Their concern is not 'making school', but the history of a social practice from the viewpoint of continuity and the resistance to change. Their ambition is theory development and explanation from the outside, not the articulation of scholastic learning from the inside, and their use of grammar is focusing on what is defined instead of the movement of undefining in the act of grammatisation. The grammar of school we have in mind focuses on the gestures, objects, and arrangements that have been invented to make school, as well as the experiences and assumptions enacted in scholastic learning.¹⁰ Perhaps elaborating on the grammar of school in school studies might provide everyone who is concerned about learning (under the condition of freedom and equality) the scholastic literacy that is required to - as undefined work - invent and re-invent the school (anew). In conclusion, we want to put forward two issues that could be of importance in articulating such a grammar of school.

The first issue concerns the challenge to find a way to articulate the scholastic experience itself. Indeed, instead of narrating about the (good, bad, great, sad) experiences of learning at school, there is the challenge to find a pedagogic language that gives voice to the experi-

¹⁰ For an elaboration, see also the different contributions in: Larrosa(2017)

ence of being engaged in school learning. This is not the experience of a condition where someone is not (vet) being able to, for instance, write or count, but is also not the experience of (already) being able to write or count. The school experience refers to what is experienced at the unique moment that writing or counting becomes a possibility; the experience while learning, before actually being able to write or count, yet not just the experience of (simply) not being able to write or count. Think about the little child who learns to write, about the image of the child to which Jorge Larrosa (2002, 2003) refers time and again, the image of the child with the tongue slightly out of mouth, between the lips, while trying to shape the letters on paper. Before being able to write, the child experiences (probably) not being able, but does not experience learning. When being able to write, perhaps the student remembers themself learning, but does not experience themself learning. The school experience is the experience at the very moment that the ability to write (and hence, not to write) is experienced as such. Perhaps Michel Serres (1997) did attempt to describe exactly these school experiences when he referred to the experience of being-in-the-middle (of things), the experience of an interrupted course of life where new courses become possible. Serres describes how learning is about leaving the house, to become exposed and "to split off from the so-called natural direction", which means arriving at a condition where there is no fixed or predefined direction, and therefore the experience of all directions becomes possible. The experience of school learning, then, would be about experiencing a new world of possibilities in relation to, for instance, language, nature, history, one's own body, our planet etc.

The second issue we should further explore concerns the reasons for the ambivalence, (if not straightforward ridiculing), marginalising or ignoring of the scholastic condition. A first reason for this could be: if school learning in the strong sense is indeed about (trans)forming oneself, and hence, always also about becoming someone else, it is very difficult to remember who one was before (implying also that there is no stable 'one' that would experience the change). Or to put this in another way: it is always from the perspective of who one has become that one returns to one's past. There is a kind of irreversibility at stake, and hence, therefore, the school experience and process itself is difficult to remember. A second reason could be that acknowledging the role of school learning implies acknowledging that who one has become is the result of pedagogic contingencies and the scholastic condition one has been exposed to. This reliance on school contingency is probably not only difficult to accept – and even a scandal for philosophers, but for everyone else who wants to keep their state of independency intact. One could say that school learning, in this sense, comes close to the structure of the trauma and the logic of the unconscious (that is, a disturbing experience that is ignored in some way); but there is a fundamental difference: school learning is perhaps not about painful remembering but about joyful forgetting, and it probably does not need analysis and therapy, but celebration and gratefulness.

But there is maybe a third, possible reason which could be related to our present, which is that schools always organise a 'fundamental disorder'; arranging a middle without direction and accepting that the coming generation can question and challenge the older generation. The deep ambiguity of societies which 'decide' to have schools is related, one could say, to the fact that this is considered a generous act towards the coming generation and the world. But this act is accompanied by a strong fear, and even up to a non-acceptance, that what is valued and taken for granted by the elder becomes, indeed, actually questioned or objected by the 'immature', even without reasons or arguments. This would mean that the ridiculing, marginalisation and instrumentalisation of 'school' is the result of a deep fear of the coming generation actually becoming a new generation and starting to take care of the world themselves. It would mean that personalisation can also be approached as an adequate strategy to take the renewing, or even revolutionary potential, out of education; to avoid the new generation and the world to go to school.

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Placing the student at the center has long been a concern of teachers and educators. Today, however, it is also a concern of policymakers. Various terms point in that direction: customised education, student-centred education, appropriate education, personalised education, personalised learning paths. However, it is not only educational motives that lie at the basis of a more student-centred approach. At the forefront are considerations of efficiency, effectiveness and maximising employability. They are the symptom of fundamental shifts: from an educational institution to a learning environment, from disciplining to monitoring and from normalisation to personalisation.

Using pedagogical touchstones, this report explores the possibilities and limits of personalisation in education. The key questions are: What about freedom? What about equality and education? And above all: what about the school? After all, the challenge is clear: placing the student more central very often means placing the school less central. But, the authors wonder: what if de-schooling is not in the student's interest? What if de-schooling and personalisation puts freedom, equality and education at risk?

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