Excellence in education: a question of talent and engagement

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Introduction

Thank you for the invitation to speak here. It is an honour and a pleasure for me to be here. The theme of this seminar is an important theme. It is widely agreed that excellence in education, an optimal development of young people's talents is necessary to solve the problems our societies are facing at this moment. It is therefore very relevant to discuss what we mean by excellence and how it can be achieved in our schools.

In my talk I will focus on the student level. And in particular I will make a plea to conceptualize 'excellence' at this level in a broad way and to include an element of 'engagement' in its definition. I hope to make clear what I mean by this in my talk.

As a first step, I want to take you - imaginarily - into some of the schools that I have been working with during the past few years, and show how they are working on their students' talents.
Then I will argue that in our country's educational policy there has been a growing emphasis on excellence and talent in terms of individual achievement over the past few years. Maybe some of you will recognize this for your own countries. I will argue that this emphasis on individual achievement is a limited and even risky ideal and I will discuss the undesirable sides of it.
I will then advocate another challenge to education than increasing achievement levels. When we strive for excellence, not only the level of achievement is important but also its quality, and the quality that I will address is related to engagement. Educational theory has provided a lot of knowledge about engaging students with school and learning. I will briefly discuss what we know about students' engagement and how it can be stimulated. What we know, however, is mainly about 'engagement as a quality of learning *processes*'; much less attention is paid to 'engagement as a quality of learning *results*'. I will explain why I think attention to engagement as a quality of learning results is important in terms of excellence, and how schools can work on this quality with their students.

I am partly going to read my talk, but please interrupt me when you have questions or if you want to make a comment. We have an hour. I won't be talking for an hour, so either we will have some time left at the end or we can do bits of discussion during the talk.

Excellence - Talent

It seems self-evident that 'developing talent' is a main concern for schools. However, this is not always how schools perceive their task. Too many teachers consider talent as a more or less fixed characteristic of students which determines how far they will get in their educational career.

It is widely agreed that the concept of 'talent' refers to an aptitude or disposition of a person. Usually such an aptitude is linked to a specific domain; one can be talented in finding creative solutions, one can be socially talented, etc.. Talent cannot be learned. However, being talented is not enough for reaching excellence, talent needs to be developed. If a stimulating environment and other personal attributes like perseverance are lacking, talents may not flourish.

Last year I co-authored a volume in which we described eleven projects in secondary schools aimed at 'developing talent'. In the projects in our volume, researchers and secondary schools had been collaborating for three years. They developed, implemented and evaluated innovations in these schools: for example special attention to gifted students, offering a curriculum that stimulated creative talents, or the development of a whole school concept aimed at an optimal development for all students.

All schools made efforts to support their students in making their talents visible and develop them. We saw – roughly - three types of developing talent:
- achieving according to one's abilities
- developing diverse talents
- discovering one's talents

In the first interpretation of developing talent– achieving according to one's abilities – the emphasis was on the cognitive domain, and the focus was on improving the achievements of students with a risk of underachievement. There could be many reasons for this: social background, language, a learning disorder but also a lack of challenge at school for example for gifted students.

One of the schools investigated how a school concept centred around thematic learning could benefit students at all levels. Another school developed a learning biography as a tool for teachers and mentors to better understand and stimulate their students to optimal achievements.

In the second case – developing diverse talents - the idea was that school should contribute to the development of a broad range of talents, in the cognitive domain but also social, creative and sportive talents. One of the schools explicitly worked on societal goals, another school organized the curriculum around art and cultural heritage.

The third interpretation focused on helping students to discover their talents; those schools offered activities that enabled students to discover what they were able to and what fitted them. These schools also tried to enhance their students' insight in their strong and weak points. One of the schools made students work with portfolios, another school organized more choice in the curriculum.

Many schools combined these interpretations. And many schools managed to realize what they intended: a higher educational level for students than they initially thought they were able to, but also self-confidence, collaborative and communicative skills, autonomy, planning and organisation skills, self knowledge. The researchers supported the schools in making these achievements visible. However, the development of talent in the non-cognitive domain – a central goal in many of the projects - remained difficult to prove and to measure.

Higher achievement levels: a limited and risky ideal

What these schools do is increasingly under pressure. Since the start of this project, the educational discourse in The Netherlands has changed very fast. 'We' dropped out of the PISA-top, there were concerns about the language and arithmetic skills of teachers in primary education, and in the media 'education bashing' was very popular for a while.
As a result, as I said earlier in my talk, better achievement levels, higher learning outcomes (in a narrow meaning) are currently seen by many people as *the* challenge to education. In the next part of my talk I will make some comments on this trend. During the past few years I have come to feel a bit uncomfortable about the way we are trying to maximize achievement levels. I see eleven year old children attending homework institutes to prepare for the final test at primary school and youngsters of 17 following cramming courses for their school-leaving examination. (And then go on holiday and wash it all out again with a lot of alcohol). And I wonder if this is the way to work towards excellence.

I think that striving for higher achievement levels is in itself a respectable ideal, but it is a limited ideal, and even maybe a risky one. I will explain why I think it is. Striving for higher achievement levels is a limited ideal because realizing learning achievements is only the exterior of what education is for and what schools do. Education is not just about knowing a lot but also about being able to do something with that knowledge and skills, wanting to do something with them and feeling responsible for that. The schools I was just telling about think these are important educational goals. As we just saw they consider the development of talent as more that just producing good grades. It is also the development of self-confidence, creativity, perseverance, independence and curiosity. They work on respect, a feeling of responsibility and a willingness to engage in dialogue. However, these learning results are not expressed in the marks achieved in standardized tests. And some of these schools have a hard time explaining the Inspectorate what they are doing.

So, the ideal of higher achievement is limited. But it can also be risky. One risk is a direct consequence of the limitation I just mentioned - a one-sided emphasis on achievement level and marks detracts attention from what cannot be measured by standardized tests and cannot directly be expressed in marks but is nevertheless important.

A second risk is that the aspiration for higher achievements mainly tends to apply here to the core subjects Dutch, English and Mathematics. I chose this picture because a philosopher recently warned that with the one-sided emphasis on subjects that are considered economically useful, education does not lead to excellence but creates 'contented cows', uncritical citizens. He argues that the school instead should be a place where young people come into contact with culture and history, because these subjects foster independent minds that do not blindly follow the masses without questioning. The American philosopher Martha Nussbaum last year made a similar plea for the humanities.

The third problem with the ideal of higher achievements is associated with the way it is being promoted. It is often thought that measuring, monitoring and accounting for learning achievements invokes the desired behaviour – striving for excellence - in

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schools, teachers and students. That is partly the case. Taking a critical look at language test results has, for example, made some schools realize that they underestimate their students. But putting pressure on schools also encourages tactical behaviour in students, parents and teachers, such as training for the final test at primary school and the school-leaving examination, as we do see here a lot. But also excluding primary-school students from the test, or allocating students to a lower type of secondary education to be on the safe side. This tactical behaviour of course limits the value of the tests; the danger is that they do not measure the results of education but of training for the test. We all know that test training is not a good teaching strategy because students learn tricks and meaningless knowledge, which they have often forgotten when they need it in real life. Test training is also pedagogically undesirable, as we are implicitly saying to students that the marks are important, rather than their effort, or their command of knowledge and skills.

I especially want to discuss an effect that the ideal of high achievement levels can have on students. I am afraid that, while thinking that we are working towards a place in the top five knowledge economies, we run the risk of creating a generation of young people with a lack of engagement with society. At the top of the hierarchy, we may create students who have learnt to focus mainly on their own success; at the other end of the spectrum, frustrated students who are unable to keep up with the aim of high achievements. Because it is difficult for students who do not achieve high marks to perceive their time at school as meaningful. The following question is applicable to both groups: how do we keep them engaged?

Engagement as a quality of learning processes

A lot of educational research focuses on the question of how to foster the engagement of young people with learning and school. Three forms or aspects of engagement are differentiated in the literature.
1. Firstly there is *behavioural engagement*. This can vary from simply being present at school to students concentrating on their work. You can see behavioural engagement - a student paying attention in the lesson or actively participating in a discussion.
2. Secondly we differentiate *emotional engagement*. Do students feel a bond with the school? Do they feel comfortable in the class and do they enjoy their work? This form of engagement is not always immediately apparent. But you can deduce it from students' behaviour - do they attend school cheerfully, do they express curiosity or obvious boredom?
3. Thirdly there is *cognitive engagement*. Are students prepared to make a mental effort to master the subject matter?

These three forms of engagement cannot be separated. For example, if a student feels comfortable at school (emotional engagement), he or she is less like to play truant (behavioural engagement). Further, it is important that engagement is not a personal characteristic but the result of interaction between an individual and her or his environment. That means that engagement can be influenced by changing the environment.
I will briefly discuss two research traditions that focus on the engagement of youngsters with school and learning: the research on engagement with the school as

an institution and the research on engagement with school tasks, the learning motivation research.

Engagement with school
We know from research that engagement with school is very important. Students who feel a bond with the school and see themselves as a member of the school community display less risk behaviour, use less drugs, display less aggressive behaviour and have less chance of dropping out of school. Students who have a good relationship with teachers feel more involved with school and relationships with fellow students are likewise important, sometimes even more important than those with the teacher. Lastly, the perceived relevance of the subject matter has also been found to contribute to engagement with school. According to some researchers emotional engagement also furthers educational achievement but this relationship is more equivocal. Some youngsters do not do well even though they think school is very important, and some youngsters who do achieve do not feel engaged.

Motivation theories on engagement with school tasks
The second research tradition I want to discuss is the research on learning motivation. Researchers of learning motivation are interested in the question how motivated behaviour, for example doing your best to achieve, comes about. This is the famous model of Jacquelynne Eccles. She developed a theoretical model on learning motivation based on the psychological model that explains people's behaviour in relation to their values and expectations. In this model motivated behaviour (referred to here as 'achievement-oriented choices') is determined by the value students attach to a task and their expectations of whether they can successfully complete the task. The value of the task and students' expectations are in turn influenced by goals and self-image which are based on earlier experiences, such as experiences of success or failure at school, but also experiences with what is important to people in their environment.

In recent years motivation has increasingly been seen as the result of the interaction between students and the learning environment and thus as something that can be influenced. Deci and Ryan's self-determination theory shows, for example, that students' valuation of tasks can be furthered by giving students more autonomy. This is possible by offering them choices, such as between subjects and assignments. The goal theory shows that it is good to assess and reward effort and results separately at school, as this stimulates students to pursue task goals rather than ego goals. Theories about intrinsic motivation suggest that it is good to attune to students' personal interests.

Engagement as a quality of learning results

The research I have discussed so far shows that engagement with the school is an important and complex phenomenon. It also indicates what we can do to further the effort students put into school tasks. But in my opinion we have to go further. The motivation model I just described is restricted to individual achievements. Both traditions - the research on engagement with school and the learning motivation research - do not address engagement with meaningful knowledge. The findings seem to be directed at improving students' willingness to attend school and to work on tasks created by adults because this is important for your future. As well as stimulating

students to engage with learning processes, I would like to strive for engagement as a quality of learning results. I will explain this in four steps and an intermezzo.

1. Knowledge and skills as means of dealing with questions
The objective of education is to provide a new generation with the knowledge and skills that will enable them to take over from the previous generation. Education instils youngsters with the knowledge and skills which are the solutions to problems faced by earlier generations and helps them see how earlier generations dealt with questions and problems. Some teachers are very competent at giving lessons of this quality. An example is the English teacher at a high school in Harlem, New York [I often show this video to my students]. She discusses the different types of love that feature in Shakespeare's play King Lear - love between father and child, man and woman, egotistical love and jealous love - and thus she helps her students realize that people then, just like them today, wrestled with friendship, loyalty and love. But this quality can also apply to mathematics. Pythagoras had a problem that he wanted to solve and so he developed his famous theory. As a teacher you can involve students in these dilemmas and questions. This does happen and many teachers do let students experience that what is taught at school is a solution to or a perspective on a question or problem. But often it does not happen and in any case the 'achievements jargon' is far removed from this perspective of education.

2. Engagement with subject matter: contributing to answering questions and solving problems
It is even more seldom that youngsters at school are invited to think about old and current questions and problems together and work together on solutions: how to tackle global warming, how do you make a beautiful wood joint or how do you make the last years of an elderly person's life comfortable? In my opinion, we must try to make young people experience more often that being able to tackle such questions and solve this kind of problem is the ultimate purpose of going to school; this is what all those knowledge and skills are meant for. In addition to engagement with the school, task or achievement, we should therefore invite students to engage with the subject matter content. Subject knowledge and skills are meaningful because they are instruments to achieve something of value, for yourself and/or for others. Engagement is then not only a quality of going to school and the learning process but also of the learning results achieved. It is about being able do something and knowing something, having a perspective on the related possibilities for action, and the willingness to use the knowledge and skills acquired.

This picture shows a project that we worked on in the research of one of our PhD students. She worked for two years with teachers in two pre-vocational education departments for care and welfare. With the teachers she developed projects in which students were given the responsibility for devising and implementing a 'care activity'. They organized for example a coffee morning for elderly people and a games day at a primary school. All kinds of professional skills and theory were learned during the preparation of these activities. What are children of five actually capable of? How do you transport someone in a wheelchair? How do you introduce yourself to an older person? In interviews afterwards students said how exciting they had found this. What they had learned had a real effect, they had real responsibility, and it could have gone wrong. They were intensely engaged with the learning process and what they had learned, the learning result, had acquired personal meaning for them.

Intermezzo: socio-cultural theory - practices, activities and motives
The educational approach in the project I just described is based on socio-cultural theory. This theory defines 'learning' in a way that supports what I have just described. Learning is mostly seen as the individual acquisition of knowledge and skills. Socio-cultural theories see learning differently; from this perspective learning is not about merely acquiring knowledge and skills but about improving one's ability to participate in social practices. Social practices are for example the shop, the laboratory and the football match. In such social practices people organize human activities that are essential within a society, because through these activities people pursue important motives together, they are done to meet certain needs, such as the activities represented in these pictures: trade, research or sport (with earning money, acquiring knowledge and relaxation as motives).

The sociocultural scholars Lave and Wenger describe learning as the development from being a peripheral participant in a social-cultural practice to a central participant. An example from my own experience: At the beginning of my daughter's work experience placement in a florist's shop, she was only allowed to change the water and clear up, but at the end she worked on the till and made bouquets. During such a transition from peripheral to central participation, not only your knowledge and skills change, but also your identity. You become a different person through what you can do and that results in you wanting to learn new things. In this sort of learning process the meaning of learning and knowledge acquisition is not questioned; the reason for learning is inherent in the activity itself. From this perspective you look at engagement differently than in the research traditions discussed. While the question in those traditions is a. how can we ensure that students feel a bond with school and b. how can we motivate them to do their school work, in this perspective you try to bring children and youngsters into contact with activities that are important in society and with the motives on which they are founded. In this way you provide motives that can become part of their identity.

3. Participation in social practices as a way of learning
This theoretical perspective has consequences for curricula and educational methods. It means that you can motivate students to learn by introducing them to concrete social practices in which they then experience that knowledge and skills are necessary to participate in a competent way. This can be achieved by organizing opportunities at school for legitimate peripheral participation, but this is difficult. Most social practices in our society are not suitable for peripheral participants (which is precisely why education as we know it originated) and you cannot learn the knowledge and skills needed in many practices by simply imitating and taking part; they are too complex for this. We are all glad that the surgeon does not learn in this way: just by participating in real surgery. It therefore involves organizing students' participation in social practices in such a way that things do not go wrong and that students can learn something.

Part of my research and that of my PhD students comprises finding ways, in cooperation with schools and teachers, of 'learning by participating in social practices' and analysing whether this is a successful way of not only realizing good educational achievements in the narrow sense but also engagement as a quality of the learning process and the learning result. Schools try to achieve this by making their own versions of social-cultural practices (for example, a restaurant in a pre-vocational secondary education department), by working with ICT simulations, and by involving

students in meaningful out-of-school activities and then reflecting in school on the experiences they have gained.

To avoid misunderstanding, in all these examples the objective is not to make education more pleasant. It is about education that tries to achieve better, more meaningful learning results.

4. You can matter!
Does the availability of well-simulated social practice or social practice that has been adapted for learning mean that students spontaneously want to participate competently in those practices? No, unfortunately. Youngsters do not find adult social practices really attractive and are rather inclined to absorb themselves in their own world – conducted via social media – where stars and glamour are the benchmark. I think that many adult social practices are partly unattractive and uninteresting to youngsters because what might be interesting to them is not visible. As I pointed out earlier, it is therefore so important not only to emphasize 'what you must know' but also to show where the problems, questions and differences of opinion lie, and – in addition – to challenge students to formulate their own questions. But I also think that many adult practices do not appeal to youngsters because what is visible invokes a feeling of powerlessness rather than one of 'hey, I want to be part of that': fraud, violence, crisis.

The engagement whereby youngsters develop skills in the context of games has prompted several educational researchers to think about what these games have that school tasks do not. James Gee listed a number of the characteristics of these games. After making a mistake in a game, you can get a new life, thereby keeping the frustration within limits and you can adapt the game to your own pace and wishes. Games also have characteristics such as an interesting character with whom you can identify, there is something at stake and the player's actions have an effect.

I think that the latter indicates that it is important to pay more attention in schools not only to the fact that knowledge and skills are worthwhile, but also to let students experience that what they do with those knowledge and skills matters. That they themselves can and do matter, and I think that it something that students seldom experience at school. Sociologists and educationalists have pointed out for some time that the development of an identity for youngsters in our individualized society today is not easy. How do you want to live, who do you want to be? All this is no longer determined by the family into which you happened to be born. This means that more than ever young people have to think for themselves how they want to make a meaningful contribution. I think that education should and can help them doing so.

Engagement at the top and bottom of the ladder
I will now return to where I began. The emphasis on excellence in terms of high achievements means that children are considered in the perspective of the marks they achieve and look at themselves in the same way. I have witnessed that children of 11 know the test scores of the whole class. Those with a high score are proud and rightly so. Good students, brilliant scientists and clever administrators in the making deserve to be nurtured and it is important that students with this ability have the opportunity to develop it to the full. But these students should also be made aware that it is not only educational achievement that makes you excellent; it is above all what you do with that achievement. Are you a responsible scientist, an honest administrator?

The group that does not achieve well is not proud. The greater the emphasis is on achievement, the more difficult it is for this group to find something from which they can derive self-respect. In a recent PhD thesis it was shown that youngsters in pre-vocational secondary education are very aware that they are at the bottom of the ladder; they develop strategies to live with this. They say that they do not work so hard and give themselves another chance to progress further in the future. But they can scarcely name anything which they themselves think they are good at. Other studies, have shown that some of these youngsters cannot live with this and develop more destructive strategies. They undermine the course of events at school, thereby ultimately undermining their own opportunities.

While the students in pre-university education in the research that I mentioned saw themselves as people who will contribute to society, the students in pre-vocational secondary education did not. I ask myself why we do not let these youngsters experience that what they can do is also a contribution and is appreciated. You can mean something but that does require that you know things and can do things. You can become the assistant in the computer shop whose customers leave the shop happy, or the roofer who thinks of a good solution for draining the rain water, or the carer who brightens the last years of elderly people's lives. Contributions to society can be solutions to technical questions and social problems but also contributions to pleasure, beauty and comfort. Not all students can attain high educational achievements. But the experience of being significant, of being meaningful to others, is within the reach of all students whether they are being educated to be craftsmen or academics.

Summary

To summarize, in the last few years increasing attention has been paid to the question how we can stimulate excellence in education, but in doing so we sometimes tend to focus on a narrow range of talents. I think that excellence asks for valuing and developing a broad range of talents, and asks for doing this with the quality of engagement. We want children and young people to develop their talents and to acquire the knowledge and skills that will equip them to find their place in society and contribute to that society. Engagement as a quality of learning processes and learning results is necessary for this. Knowledge and skills must not only be a means for students to achieve high marks but also to orient themselves in the world, to understand it and want to function in it.
'Engaging youngsters with society' is a task of schools along with developing talent. Therefore excellence in education is in my view a question of talent and engagement.