DEAN'S DIGEST

"Talent wins games, but teamwork and intelligence wins championships."

Michael Jordan

Talent: what is the name of the game in ITU education?

One of our students invited me for a panel debate on talent in education at the Digital Tech Summit on Nov. 30. This is a welcomed opportunity to initiate a debate at ITU on "Talent", as it may evoke unnecessary negative associations with "elite university", "privileged students" clashing with the Danish school culture. It also touches upon the "talent vs. luck, skill, or hard work" discussion, which is highly relevant in an education context: what does it take to strengthen the capacity of digital competencies in Denmark?

In my view, "talent" is multi-faceted. It expresses the discovery of achievement through dedication, meticulousness, passion, as well as vision. In other words, the outcome of personal efforts combined with the right guidance and support. I believe that ITU can do much to nurture talent through a thriving learning environment that can empower, engage, embrace, and evoke the passion of our students. This is also the fastest route to employability, thus relating to our concept of "Ideal education".

Can Empower & Engage learning in a thriving learning environment be the ITU way of nurturing talent?

Key to talent development is being able to accept the struggles and celebrate successes, a supportive network, as well as good coaching. Students who are engaged, curious, and passionate about what they do are more likely to accomplish whatever they hope to accomplish. This is because passion and engagement allow us to deal with the challenges and the obstacles that inevitably occur during a hard study. But no matter how much dedication, hard work, and passion they may have, it is also valuable to stay true to oneself and keep the vision of what is the difference one wants to make with the skills and competencies that a study can help the student develop.

Talented students can also contribute to the ITU community while boosting their own learning. For instance, our TAs are given the responsibility for guiding the students in the training part, assisting the students in solving assignments and correcting compulsory assignments. The use of TAs can be a unique way of fostering digital talents, as teaching others boosts learning (provides maximum knowledge retention). But it would demand that the tasks of the TA will depend on the TAs learning aspirations rather than just depending on the course manager's needs and choice.

The professor's reflections on talent and elite

Professor Dan Witzner Hansen, Head of the Study Programme for BSc Software Development (BSWU), is dedicated to this topic.

In my opinion, ITU has been developing student talent since 1999 and we have become better at it over the years. Our alumni are working in large software houses and have developed strong international companies. These are good indicators of a well-functioning talent infrastructure, but we can do much better.

I am not an expert in talent development, but I have been exposed to it in different contexts (teaching, research, and high performing sports). In accordance with the general ITU strategy, I aim to change ITU and BSWU to become even better at developing talents. I agree that there are many aspects of talent development, yet there are several aspects that need to be considered carefully for a talent programme to become strong, operational and without "hot air". I will try to briefly comment on what ITU is currently doing to develop talents and where we may need additional work. The list is far from exhaustive. I will naturally focus on my experience from BSWU and the computer science corner of ITU.

Very often we think of a talent as a person who has easily become good at something. This is a misconception. People who achieve good performance with ease only have a head start. Talents may be hidden and only revealed after a long time working with a given topic. Very few have become really good at what they do without good people around them (e.g., coaches, colleagues, competitors), good training facilities, dedication, time, and a strong mindset. This is irrespective of whether we talk about sport talents, scientific talents, art talents or talents in programming. Talent development not only aims for the elite. Talent is about moving people towards the best of their capabilities whether this means becoming "good enough" or eventually becoming elite. In general, ITU should not be afraid of seeking elite levels - on the contrary. Talent and elite should be part of the diversity agenda yet without associating elite with extra privilege.

Students, TAs, teachers and ITU can always get better and several aspects of the "talent" environment at ITU can be improved. Some of these may be hard to solve in practice due to a multifaceted set of constraints. For example, economic incentives, Safetyism and various internal and external metrics work against improved talent programmes. To achieve a strong talent environment requires ambition, respect, dedication, collaboration and lots of hard work.

The premise for talent is a good student population that possess passion, perseverance, and resilience and who are willing to put in the time and efforts into developing their individual talents. Our education programmes have been getting more popular over the years and hence we have ever more talented students. This should be embraced and reflected in our education programmes. We should allow that competences and ambitions are part of the diversity of our student population

– but we should constantly ensure high quality and battle the factors that negatively influence perseverance and resilience.

We educate students, give them competences, and prepare them for a work life after ITU. At BSWU, we aim to develop first-class software developers where our job is to prepare the students for the road (and not the reverse, prepare the road for the students). In developing IT talents, I find it important to distinguish between intellectual challenge and discomfort (which are good) and an environment where students generally feel ill at ease or misplaced. Compared to many other educations, ITU puts significant resources into supporting the students at many levels e.g., the high number of teaching contact hours, exercise sessions, Studylab, the BSWU's BootIT onboarding, etc.

The purpose of Studylab, when it was introduced on BSWU more than five years ago, was to ensure a better learning environment and promote talent by providing a place where any student can become better. It works well (at least) on BSWU but the ambition is to develop Studylab further to become key in our talent development efforts. That is, Studylab should facilitate a "training" environment which can strike a nice balance between ambition, peer support and individual development.

It is key and a fact that we have highly competent teachers and TAs that put hard work into delivering top quality and ambitious teaching to challenge the students at individual levels. Increased student diversity makes this harder but that does not mean worse. I think many students develop a passion for software development while studying at BSWU, but more should be done to ensure perseverance and resilience.

Experiencing failure is a part of developing talent – just ask any Olympic champion. How good an athlete was as a child often has very little to do with how good they become. What makes a difference in developing talent is excellent coaches, teachers, dedication, passion, prioritization, time and perseverance. ITU should not be afraid to give students time to develop their talents and let them experience failure. Forced progression can be counterproductive if the students work to the best of their capabilities. On the other hand, we should also accept that not all students will meet our ambition and levels of quality. I hope we can teach our students (and ourselves) to say "yet" such as in "I cannot solve this problem, YET!"

ITU already has a strong talent infrastructure and has the potential to change how talents are developed at higher educations. We need to build on the existing infrastructure such that, ITU as an institution, will develop the passion and perseverance to improve its own talent development strategy and has the resilience to avoid the "hot-air" and counterproductive measures. So how do we know that we have succeeded?

There are many unknown-unknowns and it remains unclear how we should define success criteria for talent development. How and when has success been achieved? What is then our next step? My hope is that students will be marginally better prepared for the future than the previous generation – but there is no free lunch!

As Dan points out, talent may not need a common method or definition at ITU and can be open to interpretation and experimentation, so I invite you to air your different views and approaches.

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