The Importance of Soft Skills: Education beyond academic knowledge

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Abstract

This paper makes a survey of the importance of soft skills in students' lives both at college and after college. It discusses how soft skills complement hard skills, which are the technical requirements of a job the student is trained to do. The paper exhorts educators to take special responsibility regarding soft skills, because during students' university time, educators have major influence on the development of their students' soft skills. Embedding the training of soft skills into hard skills courses is a very effective and efficient method of achieving both an attractive way of teaching a particular content and an enhancement of soft skills. Soft skills fulfil an important role in shaping an individual's personality. It is of high importance for every student to acquire adequate skills beyond academic or technical knowledge.

Introduction

For decades employers as well as educators frequently complain about a lack in soft skills among graduates from tertiary education institutions. Predominantly missed are communication skills, but additional knowledge in business or project management is also ranking highly on the list of missing skills desirable for graduates entering the business world. This problem is in no way restricted to developing nations like Namibia; it is also well known to industrial countries around the world. A recent outcry in this regard came from the British Association of Graduate Recruiters (AGR), which recently reported that "Employers say many graduates lack 'soft skills', such as team working" and "They go on to explain that candidates are normally academically proficient but lacking in soft skills such as communication as well as verbal and numerical reasoning." (AGR, 2007) Already more than 40 years ago the German Engineering Association (VDI) recommended that 20% of courses of the engineering curricula should be soft skills. Engineering graduates should bring along knowledge of foreign languages, cultural awareness, should be team workers, and should perhaps have attended a Rhetoric course (Ihsen, 2003). And indeed, the situation seems to be particularly bad in science and engineering programmes. Comparing the levels of soft skills between a fictitious graduate of Mechanical Engineering and a graduate of History of Arts, both freshly coming from university, the German Professor Dietrich Schwanitz rated the mechanical engineer at the level of a caveman (Schwanitz, 1999:482). Obvious

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reasons are that non-scientific academic programmes in general put more emphasise onto soft skills, or they are themselves by nature very soft skill related.

The English scientist and novelist C.P. Snow basically established this fact in his acclaimed speech titled "The Two Cultures", in which he defined but at the same time regretted the separation of liberal education into a philosophical-humanistic hemisphere and a technical-scientific hemisphere, where the former is perceived as superior (Snow, 1968).

What are soft skills?

Before going any further in debating the importance of soft skills we have to clarify the question "What exactly are soft skills?" This basic question is not easy to answer, because the perception of what is a soft skill differs from context to context. A subject may be considered a soft skill in one particular area, and may be considered a hard skill in another. On top of it the understanding of what should be recognised as a soft skill varies widely. Knowledge in project management for instance is "nice to have" for an electrical engineer, but it is a "must to have" for a civil engineer. Training in cultural awareness might be useful for a chemist, but it is an absolute necessity for public or human resources management in societies of diverse cultures.

Interesting enough the internationally renowned encyclopaedias have little to say about soft skills. The online encyclopaedia "Wikipedia" gives a very broad definition of soft skills, which leaves much room for discussion:

"Soft skills refer to the cluster of personality traits, social graces, facility with language, personal habits, friendliness, and optimism that mark people to varying degrees. Soft skills complement hard skills, which are the technical requirements of a job." (Wikipedia, 2007)

Table 1: Examples of soft skills

• Communication skills	• Responsibility
• Critical and structured thinking	• Etiquette and good manners
• Problem solving skills	• Courtesy
• Creativity	• Self-esteem
• Teamwork capability	• Sociability
• Negotiating skills	• Integrity / Honesty
• Self-management	• Empathy
• Time management	• Work ethic
• Conflict management	• Project management
• Cultural awareness	• Business management
• Common knowledge	

Table 1 offers a list of examples of soft skills based on the Wikipedia definition. The list is by far not complete. For instance under personal traits characteristics like imagination, curiosity, determination, passion, or persistence could be added. In January 2007 the career management consultant Challa Ram Phani published an article under the headline "The top 60 soft skills at work", listing and discussing those 60 skills which according to his study are "the personal traits and skills that employers state are the most important when selecting employees for jobs of any

type" (Phani, 2007)
However to keep things simple, from the definition and the list in Table 1 it becomes immediately clear that we are looking at three very different skill categories, i.e.
• Personal qualities,
• Interpersonal skills, and
• Additional skills / knowledge

Starting with the last item, the additional skills and knowledge category refers to skills that can be learned by undergoing training, often in connection with a formal assessment, and in this way acquiring an additional qualification or certification. Even so additional formal qualifications like Accounting or Legal Studies are a very important factor for increasing a person's employability, they are generally not readily recognised as soft skills. In the classical sense and according to the Wikipedia definition the term "soft skills" primarily refers to the first two categories of personal qualities and interpersonal skills including language skills. "The Human Resources Glossary" even limits the definition of soft skills to interpersonal skills (Tracey, 2004). Therefore, I will restrict the scope of this article to the two categories of personal traits and interpersonal skills.

What are the most important soft skills?
Again the answer regarding the importance of soft skills depends very much on the context and one's personal perception. However, there is one property that immediately comes to most people's mind when soft skills are mentioned: those are the communication skills. And indeed, it is the talent of communication skills,
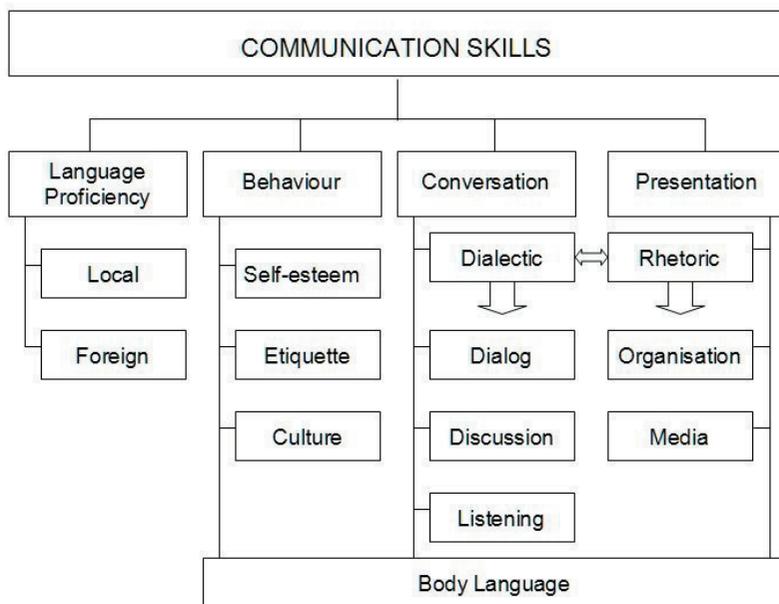

Figure 1 Communication skills

which is mostly lacking among graduates from colleges and universities.

When asking people what exactly they understand to be communication skills, one will receive a wide range of answers, because communication skills include a lot of different aspects. Figure 1 offers an overview of important factors shaping a person's communication skills.

The collection of aspects spans from basic language proficiency, which in multi-lingual societies like Namibia may not be taken for granted, to advanced topics like Dialectic or Rhetoric, which are sophisticated skills in their own right. Minimum requirements for a graduate of a tertiary institution should be ample proficiency in spoken and written language, a certain amount of self-esteem that will be reflected in conversation skills and body language, adequate discussion skills, and of major importance, good presentation skills in order to be able to market oneself and one's ideas. However, communication skills are not only necessary for a person's professional career, but are even more contributing to one's so-called social competence, a fact which applies to many other soft skills, too. Good social skills are also reflected at the working place and hence recursively further the career.

However, if we continue drilling down deeper into Communication skills the issue will become even more complex. In the English speaking world "Language proficiency is the ability to speak, read, and write Standard English in a businesslike way. One may have the 'hard' skill of knowing what usage is correct and what is incorrect, but lack the 'soft' skills of knowing when to use only standard forms and in what tone to use them." (Waggoner, 2002). In this definition our basic soft skill "Communication Skills" itself is divided into a "soft" and a "hard" part.

Furthermore, adequate communication skills are a prerequisite for a range of other soft skills like moderating discussions or conflict management.

Another pair of soft skills frequently lacking in tertiary education is critical and structured thinking. Both go hand in hand with problem solving abilities. Especially in today's information society it is of high importance to critically filter the endless stream of incoming data, analyse it, and make informed decisions based on it. Analytical skills also form the base for developing solutions to any kind of problem. And also in this case the soft skills are of equal usefulness in a person's professional and private life.

A last soft skill that should be highlighted here is creativity. This skill is often misinterpreted as being only useful for artists, whereas in the science or business arena only structured logical thinking should be applied. However, this perception is wrong. Applying creativity results in "thinking out of the box", which means that given conventional rules and restrictions are left aside in order to find innovative approaches to problem solving. If Albert Einstein had not bypassed the guidelines of Newton's old established physics, and even discarded a bit of common sense, he probably would not have arrived at his revolutionary new view on physics. Brainstorming and mind mapping are well known applications of creativity in the business world.

Can personal traits and habits be changed?

As we recognised earlier, a large part of soft skills relates to personal traits and habits. Thus, an interesting question to ask is whether a person's traits and habits

can be changed or improved. Anybody raising children or living with a partner who has irritating habits, might be tempted to answer that the task of changing personal traits is extremely difficult, if not impossible. The corporate trainer and instructional designer Rukmini Iyer has a strikingly simple answer to this question: "There is a lot of argument in industry as to whether it is possible to enhance soft skills in a few hours of training, especially when one considers the fact that a person has lived with those traits all his life. To this, the answer is harsh but real -- a professional who wants to do well in his / her career does not really have a choice." (Iyer, 2005)

A key aspect in this regard is a person's ability to recognise and acknowledge certain behavioural shortfalls or plain bad habits. As a German proverb states: "Self-recognition is the first step towards improvement". As soon as a deficit has been identified, one can start working on its elimination.

For example many people are not fond of doing small talk, a common characteristic among those working in a scientific or technical environment. The reasons might vary: shyness, introverted character, lack of "how to", boredom, etc. However, small talk is an important part of communication skills necessary to display social competence. Once having acknowledged this truth, a person can undergo a simple self-training or guided training to improve the lacking skill. There are for instance many books available on the issue of "Small Talk". Forthwith, the person can make it a habit at parties or social gatherings to initiate a conversation with at least three strangers. While the first times might require quite an effort, after a few months the frequent chatting with strangers will become a second nature. With such and similar easy exercises even a very introverted person can appear reasonably sociable.

In summary it means that negatively perceived personal traits could be changed or successfully covered by undergoing self-imposed training. Only prerequisite is that one acknowledges one's weakness and takes the decision to change it. Training will most likely be unsuccessful if one is not fully convinced that it will lead to any improvement or that the improvement will be beneficial.

Why are soft skills important?

After having elaborated so much on soft skills, the answer to why they are considered as being so important is still open. There are numerous reasons for having a critical look at a person's soft skills.

One straightforward reason is today's job-market, which in many fields is becoming ever increasingly competitive. To be successful in this tough environment, candidates for jobs have to bring along a "competitive edge" that distinguishes them from other candidates with similar qualifications and comparable evaluation results. And where do they find this competitive advantage? In bringing along additional knowledge and skills, added up by convincing personal traits and habits. This sounds familiar.

Understandably, employers prefer to take in job candidates who will be productive from a very early stage on. If a graduate from university first has to be trained on putting more than three sentences together, how to do a proper presentation, or how to chat in a pleasant and winning manner with colleagues and customers,

this graduate will not qualify as a quick starter. Also basic knowledge in business management, project management and general economy will improve the chances of a job candidate considerably.

Already during the job interview itself good communication skills are invaluable. They can even serve to successfully cover up weaknesses on the hard skills side. Don't we all know colleagues who are splendid talkers, but there is no action forthcoming from their side? The advantages of displaying positive traits like courtesy, honesty, flexibility, common sense, flawless appearance, etc. during a job interview have not even to be discussed.

Vice versa, it unfortunately happens very seldom that a job candidate who was rejected because of inadequate soft skills is told the truth about the reason for rejection, e.g. "Your body language showed that you seemed to feel very insecure, and you had problems to express yourself and present yourself in a convincing manner". Even so this evaluation may sound harsh at first glance; this kind of feedback would help a job seeker a lot in improving his/her style for oncoming interviews. However, instead employers usually give no reason or even vague misleading reasons for rejections, which are of no help at all for the unlucky candidates.

Once employed, the success story of people who know how to master soft skills continues because of much better career opportunities. Simple fact, which can be verified in daily business life, is that employers prefer to promote staff members with superior soft skills. Good hard skills alone are not necessarily enough anymore to be a first choice when it comes to promotion.

Soft skills are shaping human beings' personality. Any educator's dream is that graduates, especially from tertiary education institutions, should not only be experts in a certain field but matured personalities with a well balanced, rounded off education. However, this characteristic is reflected in soft skills, not in hard skills.

During the last decades in many societies the opinion on soft skills has changed considerably. Whereas in the past the mastering of hard skills was rated first and soft skills were considered as "nice to have", the perception has been turned upside down. As mentioned before, good communication skills can easily be used to cover up a lack in hard skills. Nowadays in general, people who are extroverted, who are good in marketing themselves, and who are socialising easily are rated superior to others who lack those attributes. The good old technician, an ace in his field, but being introverted and talking less than ten complete sentences a day is not appreciated any longer.

This development is not necessarily positive, and it must be allowed to ask the question, whether today soft skills are overemphasised.
When Germany in 2003 scored a disastrously bad result in the European evaluation of its school learners' knowledge, the so-called PISA study (PISA, 2003), educational experts were quick in explaining that the tests were unfair, because they only probed the hard skills of learners; the fact that the German students might be good in discussing issues and have nice personality traits was not considered in those tests.

However, for a future civil engineer it is not good enough to do acclaimed presentations on how to build bridges, but he must be able to construct a solid bridge that survives a century. Not to mention a medical practitioner or surgeon, from whom we expect a lot more than having appealing communication skills.

In this sense it can only be hoped that the pendulum of perception on soft skills soon moves back to the centre position. Soft skills are playing an important role in shaping a person's personality, they enable social competence, and they complement the hard skills, which are the technical requirements of a job. As such, soft skills stand with equal importance beside hard skills, but they should not be misused to camouflage a person's lack of expertise in particular areas.

Where can soft skills be acquired?

We already identified two methods of learning or improving soft skills. One way is enrolling for formal training, e.g. taking evening classes on Rhetoric, languages, presentation skills, conflict or cultural management. This is a well-proven concept with the advantage of having some kind of certificate at the end of the course, which might come in handy for job applications. The slight sarcasm in the last sentence is intentional, because it is not always guaranteed that a certain course actually successfully enhanced a person's soft skills.

The other way of acquiring soft skills we looked at is self-training, usually based on books. As we saw earlier, changing of personal traits often requires long-term practice and therefore self-training might be more useful regarding the improvement of this category of soft skills. Additionally, during the last decade another method of self-training has become increasingly popular: Electronic Learning, usually abbreviated to e-learning. The article "Yes, web based training can teach soft skills" (Horton, 2007) emphasises the practicality of this approach.

A very pleasant way of self-training one's soft skills is frequent socialising with friends, colleagues and other members of society. This may sound astonishing, but meant here is socialising consciously, i.e. with the purpose in mind to enhance certain soft skills. We know already that in this way we can improve our small talk capabilities, but there are a lot more soft skills especially related to Communication skills, which can be practiced while chatting and discussing with others in an informal manner: e.g. language proficiency in general, listening, discussing, etiquette, self-esteem, or body language.

Hopefully, at most education institutions at all levels teaching methodology has been changed or will be changed towards more student centred learning. Such a shift goes hand in hand with embedding soft skills into the teaching of hard skills. In other words: students participating in a lecture with the aim of learning a hard skill will inevitably and unconsciously practice a range of soft skills. This comes very close to an ideal way of lecturing.

Many educators will now rightfully intervene, asking whether the shaping of personal traits does not start at a much earlier stage, let's say at a child's cradle? And of course, this is exactly the case. Parents and schoolteachers have superior influence on a young person's aptitude in soft skills. This puts a lot of responsibility in this regard onto the shoulders of a child's family and school. And sociologists will add, not only parents and educators, but also the whole social environment

und upbringing of a child will have major impact on its personal traits.

What can lecturers do to enhance their students' soft skills?

A first step in improving soft skills of students is to raise their awareness about the importance of soft skills and the consequences of shortcomings in this regard. Students should be encouraged to enhance their soft skills by applying the methods we mentioned before, e.g. reading dedicated books, attending courses, and joining clubs or societies to broaden their horizon, like debating societies, Toast Masters who are practicing Rhetoric, or scientific societies who offer presentations and discussions.

A formal approach to the problem would be to incorporate soft skills subjects into a programme's curriculum. On lower levels a course that requires students to do a bit of research and to present their results to the class afterwards has been proven as being quite effective. On graduate level a course on management skills, including e.g. some communication skills together with the management of time, conflict, cultural issues, and of major importance, oneself, has in practice been well received by students.

However, very often the curricula are already overloaded with hard skills courses, making it almost impossible to add or substitute courses. Furthermore, other lecturers might be ignorant of the importance of soft skills and hence, do not support dedicated courses in this regard. A very elegant way of offering soft skills training to students is to embed it into the teaching of hard skills. This way, no changes to a programme's curriculum are necessary; instead the change will be reflected in the lecturers' teaching methodology. An increase in group discussions, letting students do presentations, and using special methodologies like De Bono[1] or Neuro-Linguistic Programming (NPL)[2] can be applied throughout a course. This approach to practicing soft skills requires some re-thinking and re-planning of existing hard skill courses. During a presentation at the Polytechnic of Namibia Professor Rob Krueger[3] offered an interesting approach to the problem by turning the purpose of a lecture upside down, i.e. making the content of a lecture the vehicle to teach soft skills. An example would be a mathematics teacher who plans a lecture by firstly determining what soft skills s/he wishes to enhance on that day, and then secondly considers how the required mathematics content can be arranged to support this goal. Correctly applied, such an approach to teaching will automatically increase the attractiveness and effectiveness of a course regarding both, hard skills and soft skills.

Conclusion

Considering the fact that during the last decades in society the perceived importance of soft skills has increased significantly, it is of high importance for everyone to acquire adequate skills beyond academic or technical knowledge. This is not particularly difficult. Once a shortcoming in a certain area of soft skills has been identified at oneself, there are numerous ways of rectifying such a deficiency.

Educators have a special responsibility regarding soft skills, because during students' School and University time they have major impact on the development of their students' soft skills. Besides raising awareness regarding the importance of soft skills and encouraging students to improve their skills, lecturers should actively

practice soft skills with their students. A very effective and efficient way of doing this is to include soft skills training into the teaching of hard skills. As a positive side effect the lessons will become more attractive, which in turn will increase the success rate of learners.

Soft skills fulfil an important role in shaping an individual's personality by complementing his/her hard skills. However, over-emphasising it to such an extent should not taint the importance of soft skills, that hard skills, i.e. expert knowledge in certain fields, are demoted to secondary importance.

Notes
[1] Edward De Bono, Ph.D., D.Phil., developed a range of thinking methodologies, commonly known under the name "lateral thinking". He has written 62 books with translations into 37 languages.
[2] Neuro-linguistic programming (NLP) is an interpersonal communication model and an alternative approach to psychotherapy based on the subjective study of language, communication and personal change. NLP aims to increase behavioural flexibility (i.e. choice) by the manipulation of subjective experience.
[3] Rob Krueger, Ph.D., Assist. Professor of Geography, Worcester Polytechnic Institute, USA

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