Mind the Academia-Industry Gap

Supported by the strategy and quality policy of ITU, we steadily focus on the careers and high employability of graduates. We measure our success by the extent to which we help students develop their diverse talents and skills in a way that make them able to access industries and finding their career paths. Likewise, the value of each programme is largely measured by its employability, also called “Employment tickets”. Though we strive to educate and train competent graduates that the market will find truly attractive, it is equally important to communicate their attractiveness and the unique value they bring to industry in a language that practitioners can understand. This is not always an easy task, especially not if we keep an “inside-out” perspective, making ITU the center of our world. An “outside-in” perspective will help us better understand how ITU educations contribute to the larger ecosystem of which we are only a minor actor. An ongoing and systematic dialogue with companies and across employers’ panels requires a “lingua franca” of competencies. Better sensemaking across academia and labor market means meaningful matchmaking between the skills and attributes of our graduates and the demand and workplace scenarios of a broad range of industries and sectors.

Different worlds – different languages
Faculty knows the difference between addressing academics versus practitioners when publishing a paper to a journal outlet. The same principle applies when communicating knowledge, skills, and competencies to practitioners in a fast and comprehensible way. To do so, requires a common frame of reference – or lingua franca - of specific and generic skills. The Executive Employer’s panel drafted such one, based on six pillars of generic competencies in demand across industries, called “the competency canvas” (illustrated below). Competency Canvas denotes a strong, rough knowledge base for the candidate to ‘paint’ his/her unique career path.
art piece. ITU programmes brings unique perspectives, compositions of skillsets and, hence, solutions to each pillar of the canvas. Though it may seem like business lingo at first glance, the pillars are reflecting the organization perspective with its various functions, moving from digital integrator functions like Digital business development, digital accounting, digital services and production, digital administration, marketing and sales to specialist fields of software development, IT security, AI, BI, and Big Data.

Heads of Study Programme are now testing this communication tool: can it help us bridge the academia-industry gap? Their efforts to define the unique skills of their programmes within the same frame of reference may be easier to some than others. Therefore, HoSPs also bring suggestions for adjustments as well as detecting critical issues. Martin Pichlmair, Head of the study programme, applied the employment ticket text for Games and we use this as an illustrative example.

<table>
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<tr>
<th>THE MARKET</th>
<th>THE BUSINESS</th>
<th>THE INTERACTION</th>
<th>THE TECHNOLOGY</th>
<th>THE PEOPLE</th>
<th>THE PLANET</th>
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<td>Strategic agility skills</td>
<td>Innovation skills</td>
<td>Design skills</td>
<td>IT-skills</td>
<td>Management skills</td>
<td>Sustainability skills</td>
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<td>Identifying stakeholder needs and context and being able to adapt swiftly to rapidly shifting trends in a changing ecosystem.</td>
<td>&quot;Virtuosity&quot; Knowing what is the right business model and what products &amp; services to develop to build a viable and profitable business.</td>
<td>&quot;Experience&quot; Being able to design digital services that meet customer needs and create user value, engagement, and allow for flow experiences.</td>
<td>&quot;Accessibility&quot; Applying platforms and technologies relevant for the task, the users, and context and utilizing them in an optimal way.</td>
<td>&quot;Manoeuvrability&quot; Knowing what skills to develop and where. Being able to lead deployment of IT and cultural and structural change in organizations.</td>
<td>&quot;Sustainability&quot; Being aware of the long-term consequences and potential of digitalization. Knowing how to address sustainability issues (17 SDGs) with IT technology.</td>
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Prototyping – including the evaluation of prototypes – is a key aspect of game design and development. Understanding design-driven processes is key.

Data-driven approaches to design and development as well as experimental design further innovation.

Understanding the psychadelic, history, and culture of play combined with prototyping and testing skills.

We teach programming skills that allow for applying as well as crafting and innovating with technologies.

Students have ample opportunity to take up leadership positions in classes and at GDAG.

We are teaching a lot of transferable skills and skills that can be used in a wide array of application areas including sustainable goals.

| Game Designer, Producer | Producer, Game Designer | Game Designer, Level Designer, Gameplay Programmer | Programmer, AI programmer | Creative Lead, Tech lead | Certification expert, Producer, Creative Lead |

Luckily, the unemployment rate of most ITU study programs is below average and many candidates are employed soon after graduation. Though the executive employer’s panel is convinced that the Danish labor market can soak even more candidates from ITU, we find it important to tell what value our graduates bring though it can be challenging to convert advanced languages of various IT disciplines into simple speech to ease comprehension for those who do not understand.

An ITU employability “pitch” must, therefore, answer “How can a graduate with this profile solve our problem?” A typical advice for a newly job applicant is to communicate how he/she/they? can apply the acquired skills in the particular company context and help solve the company’s challenges instead of just listing their academic skills out of contexts. This also goes for transferable (employability) skills within learning, problem-solving, collaboration, interdisciplinary skills and creative skills, etc. But we should consider making a conceptual shift from “employment tickets” allowing candidates to “get on a job bus” driven by the employer to empowered and attractive candidates who can even start their own company if they want.

Moreover, with a common frame of reference we can also help answering the questions of students: “what can I become when I graduate? What problems can I help solving?” During their studies, the candidates experience different forms of
industry collaborations: case studies, project work, guest speakers, study jobs, matchmaking and competition events and research collaborations. But some students aren’t aware of their own skills and experience or what different jobs there may be for them or what they require.

The canvas may also be able to help management develop the programmes: Benchmarking of the individual programmes can detect gaps and potentials for cross-fertilizations across programmes. It can help positioning ITU and provide a visual overview through a generic profiling of ITU’s unique DNA combined with specific education program profiles. Work is in progress on building a strong bridge of understanding between ITU and industry, but please feel free to bring us ideas and suggestions.

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