Motivation and support of employers concerning the implementation of part-time studies for vocationally trained IT workers

by Knut Linke, Michael Städler, André von Zobeltitz, Eva Blochberger
Introduction
The research project Open IT

- Open IT has been existing since 2014
  - Its aim is to construct, test, and evaluate academic programmes in the field of IT studies
  - The designed IT studies courses are aimed at vocationally trained IT employees
  - Take into account and recognise IT workers’ existing competencies to reduce the part-time students’ academic workload.
  - Based on the existing standards for vocational training (EQF levels 4-6), the members of the described target groups need 91 or 120 ECTS credits (originally 180 ECTS credits) for the developed Bachelor program.

- Research within the fields:
  - E-Learning for Part-Time students
  - Influence factors on the (prospect) students regarding the start or the successful finishing of a study
  - Cooperation between Employers, Employees and Universities
Vocational training scheme for IT employees in Germany

1st-level vocational training | IHK certified
Legally protected occupational job titles: IT-Systemelektroniker, Fachinformatiker (Anwendungsentwickler/Systemintegrator), IT-Systemkaufmann, Informatikkaufmann

2nd-level vocational training | IHK certified
Legally protected occupational job titles: Operative Professional (IT Systems Manager, IT Business Manager, IT Business Consultant, IT Marketing Manager)

Entry 2nd-level vocational training | IHK certified
Legally protected occupational job titles: IT-Specialist (6 subdivisions with overall 29 individual specialisations)
Research Design

Research Questions:

- How are IT workers supported by their companies in training and educational development?
- What restrictions and concerns do employers have regarding higher education?
- How companies select employees for training, specifically whether they use certain eligibility criteria to select employees for higher education?

- These research questions were evaluated in separate research steps.
  > Firstly, the field of vocationally trained IT workers in Germany was empirically analysed through an online survey and standardised telephone interviews.
  > Secondly, standardised telephone interviews and additional interviews with decision makers were conducted to gain a deeper business insight.
  > Qualitative and quantitative questions were combined to create a specific research method for each target group: the employees and the employers.
Main findings
Support scheme for IT workers

- Over 75% have five or more years of work experience, mostly with the same employer
  - ~55% of the participants are employed by small or medium-sized companies.
  - 30% of the participants indicated that they work for a company with 2000 or more employees.
    > Nearly all of those participants worked for the Federal Armed Forces.

<table>
<thead>
<tr>
<th>Support</th>
<th>No. respondents</th>
<th>Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support not finally decided yet</td>
<td>8</td>
<td>5.37%</td>
<td>5.37%</td>
</tr>
<tr>
<td>No support requested yet</td>
<td>40</td>
<td>26.85%</td>
<td>32.21%</td>
</tr>
<tr>
<td>Will not receive support from the employer</td>
<td>15</td>
<td>10.07%</td>
<td>42.28%</td>
</tr>
<tr>
<td>Will receive support from the employer</td>
<td>86</td>
<td>57.72%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>
Support scheme for IT workers

- Majority of participants points out that they were offered (paid) leave by their company for HE studies.
- Qualitative telephone interviews with 60 vocationally trained IT workers who have decided to start their HE study program shows that their companies’ support varies in reality.
  > Most of the participants stated that they could not reduce their working time, but that the company was more flexible with their working time and they received more financial support (e.g. travel expenses).
  > None of the survey participants stated that they received internal coaching.
  > 10% of the participants stated that they had not informed their employer about the planned study.

<table>
<thead>
<tr>
<th>Means of support</th>
<th>No. respondents</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation fees</td>
<td>48</td>
<td>57.14%</td>
</tr>
<tr>
<td>Audit fees</td>
<td>49</td>
<td>58.33%</td>
</tr>
<tr>
<td>(Paid) leave</td>
<td>66</td>
<td>78.57%</td>
</tr>
<tr>
<td>Internal coaching</td>
<td>21</td>
<td>25.00%</td>
</tr>
</tbody>
</table>

n=86; multiple answers possible
The Role of the Companies

- 30 companies were interviewed by telephone regarding HE
  - Most companies do not have a general qualification system.
  - There is no relationship between company size and support or training behaviour regarding vocational or professional training.
  - Companies which offer vocational training may deny additional HE and, conversely, companies which currently do not provide general training within the field of IT may offer additional HE.
  - Two main reasons for limiting additional HE were mentioned:
    - Uncertainty of companies of how their educated employees should be used after and during the HE. The education might exceed the company’s requirements.
    - It is uncertain whether a person can fulfil the requirements of HE and of their work at the same time.
  - Trainings are mostly product- or service-oriented and are provided in direct relation to the employee’s work.
  - Companies which want to support future HE offer mainly financial compensation, including a bonus for successful completion of a course of study. Although some companies do offer temporal support, this is compensated in terms of flexibility and the use of holidays or overtime.
The Role of the Companies

- Five IT HR managers working at small and medium-sized companies were interviewed face-to-face focused on the companies’ selection behaviour.
  - Interview partners pointed out that past grades are unimportant and are not criteria for selection.
  - The main selection criteria are the employee’s compatibility with the company, his or her performance at work and recommendations.
  - Performance was mostly defined as a combination of employee competence and motivation.
  - Companies are willing to support their employees without a clear target after the training to keep them during the training as employee.

- Similar findings regarding recommendations were analysed:
  - Team leader and co-workers frequently give recommendations for a person to participate in additional training.
  - The employees are selected individually. That is often backed by a statement by the employee’s department that he/she is able to fulfil such professional training.
  - It is up to the employee to select the training they prefer and which they need to achieve their goals. The companies are only the provider of a support framework.
Conclusion
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- It is shown that the support of employees differs in various ways and that the majority of companies which employ vocationally trained IT workers do not have standardised processes for HE.

- It has been revealed that the selection process of small and medium-sized companies for HE and training are highly flexible and not based on a standardised development process. Additional consultation might be a solution:
  > Offering more in-depth consultation regarding requirements of study, support and future usage may be necessary and must also be discussed.

- The employer should assume the role of a strategic partner, since the valuable IT workers are becoming rarer due to academisation and more difficult to replace due to their vocational practice during the part-time study.

- More research is needed into the selection of employees for training and HE as well as the planned practical application of the content learnt during the HE studies.
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