

Assessing and Training Social Media Skills in Vocational Education supported by TEL Instruments

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Abstract. The use of social media has become popular in the professional IT sector, requiring specific skills to exploit their full potential. Based on our model on relevant social media skills we report on a study testing related proficiencies of IT vocational students. From this we derive three technology-enhanced training instruments to foster the skills in vocational education processes.¹

Keywords: social media education, skill model, skill testing, TEL instruments

1 Assessing Social Media Skills

Social media, such as blogs, online forums, wikis, and social networking sites, increasingly become an integral part of young adults' personal as well as school or working life. Particularly in the IT sector the use of social media has become popular for both knowledge consumption and production. A competent and reflective use of social media, however, not only requires technical skills (e.g., how to set up a wiki page) but even more a set of cognitive and social skills for learning and knowledge exchange. On the basis of existing models about general ICT literacy (e.g., [1]) as well as models from educational psychology about information problem solving on the internet (e.g., [2]) and collaborative problem solving [3] we derived four skill facets that form the basis for an adequate receptive or productive use of social media in educational or business contexts: *A. select and manage information, B. comprehend and evaluate information, C. communicate and comment on information, D. create and edit information*. The facets are part of our more comprehensive skill model [4].

In order to test students' proficiency regarding the identified skill facets we developed a set of 10 exemplary tasks. For example in one task (testing facet B) students were asked to read a blog article about health risks of laser printers and to argue whether or not they would use this website for a school assignment. All tasks required free text entry and were presented on individual laptops in a classroom. **Table 1** summarizes the results of our study, cf. [4]. Dark grey areas mark the percentage of

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students who achieved at least half of the maximally possible points according to our detailed assessment matrix. The results indicate training needs for facets A, B, and D.

Task (T)	Skill	Points (P) achieved wrt. assessment matrix										max. P
		0	0.5	1	1.5	2	2.5	3	4	5	6	
1. Point out strategies to keep oneself up to date	A	25%		51%			24%			-	-	4 P
2. Evaluate credibility of blog article	B	21%	39%		30%		10%			-		5 P
3. Identify inappropriate Facebook posts	C	8%		8%		14%			70%			6 P
4. Anticipate problems when collaboratively writing a Wiki article	D	15%		50%		31%			4%			6 P

Table 1. Study results (Sample: 124 vocational students from IT sector, M=20.4y, 93.5% male)

2 Training Social Media Skills

Based on the skill model and the results of our study we are currently realizing three different technology-enhanced training instruments to foster the identified skills.

Web-based training modules for students. We are developing two web-based self-study training modules (20-30 min learning time) which train the skills “Keep oneself up-to-date” (skill of facet A) and “Evaluate the quality and credibility of information” (skill of facet B). For each module we have defined a set of learning goals (e.g., separate relevant from irrelevant information, evaluate author’s expertise, etc.) and train them using real world IT relevant scenarios (e.g., “Bring your own device”).

Social Navigator. We are developing the Social Navigator, cf. [5], an open online resource and collaboration platform, which provides internal and external free educational resources about the topic social media education for teachers, trainers, as well as students of vocational IT education.

Open Online Course for teachers. We are currently devising an open online course for teachers and trainers of vocational IT education, which guides them how to integrate and train the respective skill facets into the classroom or workplace.

3 References

1. Katz, I. R. (2007). Testing information literacy in digital environments: ETS’s iSkills assessment. *Information Technology and Libraries*, 26, 3-12.
2. Brand-Gruwel, S., Wopereis, I., & Walraven, A. (2009). A descriptive model of information problem solving while using internet. *Computers & Education*, 53, 1207-1217.
3. Hesse, F.W., Buder, J., & Sassenberg, K. (2011). A framework for teachable collaborative problem solving skills. *European Conference on Educational Research (ECER)*. Berlin.
4. Kammerer, Y., Oloff, C., & Gerjets, P. (in press). Erfassung von Fertigkeiten im Umgang mit dem Social Web. In: A.-K. Mayer (Ed.). *Informationskompetenz im Hochschulkontext – Interdisziplinäre Forschungsperspektiven*. Lengerich: Pabst.
5. Schmidt, M., Di Valentin, C., Emrich, A., Schwertel, U., Oloff C., & Kammerer, Y. (2014). A social and personalized learning platform for vocational social media education. In: D. Kundisch, L. Suhl & L. Beckmann (Eds.). *Proceedings of MKWI 2014*, 26-28 February 2014, p. 820-832. University of Paderborn, Deutschland.