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# Improving a self-assessment tool to monitor generic skills development in an active learning environment

Afke Groen<sup>1,2</sup> · Patrick Bijsmans<sup>1</sup> · Johan Adriaensen<sup>1</sup>

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## Abstract

While typical academic skills such as research and writing are commonly monitored in Higher Education, generic skills such as teamwork, critical thinking or communication receive less attention. This is problematic in light of discussions on students' further career development. It is often said that active learning environments facilitate the training of such skills. Having a tool to monitor skills progression is an important prerequisite to properly test such claims. At Maastricht University, we developed a self-assessment tool to raise awareness about skills required to take full advantage of the active learning environment, and to initiate self-reflection on the side of students. While the current tool achieves these objectives, it is less suited as an instrument for measuring skills development. In this article, we propose a re-developed self-assessment tool and test its merits through a quasi-experimental study. A group of sixty-two students was asked to complete both the old and new version of the tool. Students and mentors were subsequently asked to evaluate which score represents students' skills level best. We evaluate if the new self-assessment tool provides a better insight into students' generic skills development in an active learning environment.

**Keywords** Active learning · Generic skills · Portfolio · Problem-based learning · Self-reflection · Skills measurement

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✉ Afke Groen  
afke.groen@d66.nl

Patrick Bijsmans  
patrick.bijsmans@maastrichtuniversity.nl

Johan Adriaensen  
j.adriaensen@maastrichtuniversity.nl

<sup>1</sup> Maastricht University, P.O. Box 616, 6200 MD Maastricht, The Netherlands

<sup>2</sup> Present Address: Mr. Hans Van Mierlo Stichting, Lange Houtstraat 11, 2511 CV Den Haag, The Netherlands



## Introduction

Generic skills feature prominently in debates about the career development of university students. Students need to acquire not just expertise in a specific discipline, but also a range of skills that make them attractive employees in various fields (e.g. Béjean and Monthubert 2015; European Commission/EACEA/Eurydice 2018; Government of the Netherlands 2018; Office for Students 2018). In response to this agenda, universities have integrated the training of relevant generic skills into curricula (e.g. Lee et al. 2016). Yet, there has been less attention for monitoring the development of these skills over time.

While there is much debate about what generic skills entail (Green et al. 2009; Suleman 2017), they are generally understood as skills that are relevant in any discipline (Dunne et al. 2000: 108). Active learning environments, in which students carry greater responsibility in managing their own learning process, may particularly facilitate the training of students' generic skills. In the literature on active learning, some progress has been made on showing its positive effect on students' cognitive abilities and motivation (e.g. Duchatelet et al. 2018; McCarthy and Anderson 2000). However, little scholarly work assesses the effect of active learning on students' generic skills. There is some consideration of cognitive skills (e.g. Dochy et al. 2003; Severiens and Schmidt 2009), but an important aspect of generic skills also concerns students' ability to regulate their learning activities, including to organise and monitor their studies (e.g. Panadero et al. 2017; Torenbeek et al. 2013). As Bursens et al. (this symposium) argue, 'this process of learning has thus far not directly been studied in the field of political science teaching and learning'.

One reason for the lack of research into how learning environments affect generic skills is that it is challenging to monitor these, as this requires a good measurement tool. We previously looked into the opportunities that a portfolio—and, more specifically, a self-assessment tool—offers to monitor generic skills development in a problem-based learning (PBL) environment (Adriaensen et al. 2019). PBL rests on the idea that learning should be a collaborative, constructive, contextual and self-directed process. Interaction between students, who play a key role in structuring and leading the process, is of central importance (Dolmans et al. 2005). This requires students to train generic skills (Moust et al. 2007). From our previous research, we concluded that the existing PBL self-assessment tool met its original aims of stimulating reflection but had some flaws from a research perspective (cf. Booth and Woollacott 2018).

The purpose of this article is to present and test a revised self-assessment tool that is transferable to other programmes and that minimises the chances of socially desirable answers. We evaluate this revised tool's potential contribution to monitoring students' generic skills development in an active learning environment. To this end, we conduct a quasi-experiment with a group of students and mentors in the Bachelor in European Studies (BA ES) at Maastricht University.

To contextualise our approach, the following section discusses existing literature on generic skills and how we may measure them. In the second section, we introduce the old version of the self-assessment tool and propose a revised tool. The third



and fourth sections present the design and the findings of the study. We conclude with an evaluation of the new tool.

## Generic skills development in active learning environments

A first step in the development of any tool to monitor students' generic skills acquisition is an understanding of what generic skills are. There are, however, many different understandings of generic skills and how they relate to other learning outcomes (e.g. Green et al. 2009; Suleman 2017). One way to analytically differentiate between generic skills is to link them to the typology of cognitive, affective and regulative learning outcomes (cf. Bursens et al. this symposium). Cognitive learning outcomes are the result of students' study of the subject matter; affective learning outcomes of the feelings and emotions that arise during the learning process; and regulative learning outcomes of the management of and reflection on the learning process (Vermunt and Vermetten 2004).

We would argue that generic skills can be considered part of students' cognitive and regulative learning outcomes. We exclude affective learning outcomes as they do not easily manifest themselves as trainable skills. Cognitive learning outcomes are about students' *'thinking activities [...]* to process subject matter' (Vermunt and Vermetten 2004: 361; our emphasis). This, for example, includes the generic skills of critical thinking, organising material and analysing it (ibid., 362). Other generic skills are part of students' regulative learning outcomes, that is the *'regulation activities [that] steer the cognitive and affective activities'* (ibidem; our emphasis). This can, for example, be related to planning skills, the ability to formulate questions, and to identify problems (Vermunt 1998: 157–159; cf. Dunne et al. 2000: 111).

A second step in the development of a tool to monitor generic skills development is the formulation of a proper methodology. In his cyclical model of self-regulation, Zimmerman (2008) attributes an important role to self-assessment. Self-assessment is needed to allow for a process of self-regulation. Self-regulation, in Zimmerman's view, refers to students' active reflection on their learning process, identification of possible challenges and hurdles, and decisions regarding interventions to tackle those challenges and hurdles. Panadero et al. (2017) confirm that self-assessment is important for students to become self-directed learners, as well as for their belief in their capabilities. The authors do, however, note that the scholarly community does not agree on how to stimulate self-assessment, nor on how and when it impacts self-regulation.

Most existing tools to measure students' level or improvement of generic skills indeed rely on self-assessment. Scholars from various disciplinary backgrounds have made attempts to study the effectiveness of learning methods to train generic skills, but existing research has a number of limitations. First, some existing research relies on anecdotal evidence. For example, DiCicco (2014) describes skills that students identified after an active learning course, including presentation and communication skills. Yet, he does so only based on students' responses to an open-ended questionnaire that assesses the course (454–455; see also Nealy 2005).



Second, some studies do present more rigorous measurement tools, but they often use questionnaires that include only the skills that are specifically trained within the context of a particular teaching innovation. Elias (2014), for example, describes how students more positively assessed their skills to work independently and in a team after a simulation on the European Union (cf. Jones and Bursens 2015: 261; see also Clark 2011). Because the skills that students are asked to self-assess are part of the learning outcome of the course, a measure that compares students' self-assessment immediately before and after the course may be positively distorted in comparison to longer term learning. The observed outcomes may thus reflect a placebo effect, whereby students' appreciation of the teaching innovation interferes with the measurement of skills acquisition. A programme that continuously tracks student skills independently from the courses and activities specifically geared towards their training will provide more objective measurements.

A few studies have considered the effect of particular university environments as a whole on students' generic skills acquisition, in particular the literature on PBL and generic skills (e.g. Knipprath 2017; Schmidt and van der Molen 2001). This approach implies an awareness that students develop their generic skills not just in a single course, but in their engagement with the university community (Barrie 2007: 449). It considers the process through which students engage with various learning opportunities in- and outside of class hours, including self-study or extra-curricular activities (Clark et al. 2015).

However, this research often focusses on the skills of graduates and, more importantly, works with abstract concepts that are difficult for respondents to properly assess (e.g. Vaatstra and De Vries 2007). Schmidt and van der Molen (2001: 467), for example, use students' self-assessment on the category of 'problem-solving skills', 'interpersonal skills' and 'self-directed learning skills' (see also Kember and Leung 2005: 262–264 on undergraduate students). It is difficult to assume students can provide an accurate self-assessment on such abstract skills. The self-assessment tool we develop treats these concepts as 'latent' and seeks to measure them through students' self-assessment of actions and situations in which generic skills manifest themselves.

## **Stimulating self-assessment as a means to monitor generic skills development**

One way to foster self-assessment of actual student development is through portfolios. Research on portfolios stresses that they provide a good insight into students' progress. Paulson et al. (1991: 60) write that a portfolio 'can become a window into the students' heads, a means for both staff and students to understand the educational process at the level of the individual learner'. Good portfolios stimulate self-reflection and turn this reflection into a continuous process (Slepcevic-Zach and Stock 2018). Indeed, specifically referring to the context of PBL, Lähtenmäki and Uhlin (2011: 154–155) call portfolios a 'powerful tool' to stimulate generic skills development.



In an earlier study, we show the potential of a portfolio that was developed for first-year students of Maastricht University's Bachelor in European Studies (BA ES) (Adriaensen et al. 2019). The first year is generally seen as the most important year in terms of students' persistence and study success (e.g. Brahm et al. 2017; Jansen et al. 2017). The portfolio consists of three core elements, which are embedded into the online survey tool Qualtrics. The first part consists of a number of open questions on study choice, motivation and expectations, and challenges and experience related to the programme's content and its learning environment. The second part consists of a self-assessment tool for students to reflect on important PBL-related generic skills—and it is this part that is the focus of our research. The final part is aimed at the identification of strategies to further develop students' generic competences and study skills.

The emphasis of the BA ES portfolio is mostly on acquiring those skills that are necessary for further learning (see also Atlay and Harris 2000: 77–78). It provides a means of guided-reflection on students' participation in tutorials. The portfolio was initially thus not set up with the aim of systematically monitoring generic skills development. Instead, it is meant to have a signalling function to create awareness among students of the skills and attitudes deemed appropriate to create a stimulating PBL environment.

The previous self-assessment tool (see Table 1) presented us with two challenges in light of the systematic monitoring of generic skills development. On the one hand, there is the limited transferability of the tool to other teaching environments. To properly assess whether an active learning environment is better at stimulating certain skills, the derived measures need to be equally applicable in other contexts. Nevertheless, acknowledging that skills are best trained within the context of the broader learning environment (Green et al. 2009: 20; Wingate 2006), one cannot completely avoid taking into account this context. Some statements—marked with an asterisk in Table 1—thus do still refer to particular aspects of PBL that train particular generic skills, such as the analytical skills necessary to formulate a 'problem statement' about an assignment and the time management skills that the 'chair' requires (see Moust et al. 2007).

On the other hand, the selection and formulation of specific questions are sub-optimal for an objective academic assessment. For example, the questions focused on students' *abilities* instead of their *inabilities* or challenges. The absence of negatively framed items may bias responses and reduce variation in our measures. Moreover, several items were prone to social desirability bias, thereby inflating their scores (Adriaensen et al. 2019).

Through the revised self-assessment tool set out in Table 2, we aim to reconcile the educational objectives of the portfolio with scholarly objectives. We kept some of the statements but rewrote others and introduced new ones. The re-designed tool particularly builds on the PBL skills outlined by Moust et al. (2007). Although they do not group various skills into broader conceptual categories, they do identify many specific skills that are necessary to deal with problems, and to work individually and in a group.

In addition to studies on PBL, we have taken into account insights on skills development outside of PBL environments. This includes, in particular, Hambur



**Table 1** Original PBL self-assessment*Communication skills*

- I dare to raise questions in case issues remain unclear
- I am able to communicate my ideas in a clear and succinct way
- I listen carefully to my fellow students; if needed I ask for clarification
- I am able to summarise theories
- I am able to wrap up a discussion
- I am able to chair a meeting, realising a productive, collaborative atmosphere\*

*Analytical skills*

- I am able to distil and communicate relevant topics from a text/assignment\*
- I am able to phrase a clear, to the point and unequivocal problem statement\*
- I am able to highlight relevant examples or counter examples
- I am able to reveal incorrect and unfounded arguments
- I demonstrate reflective insight
- I have the ability to give a discussion analytical depth
- I am able to raise additional questions which highlight issues which are overlooked or taken for granted
- I am able to highlight the analytical/theoretical progress which has been made during a tutorial

*Team work*

- I create room for all students
- I am willing to share my knowledge
- I contribute to making a PBL session into a real group session, also giving room to 'silent' students\*  
(While brainstorming.) I am able to think creatively to bring in new perspectives\*
- I encourage fellow students to come up with additional, complementary or opposing views
- I dare to discuss obstacles to a productive group setting
- I am able to reflect upon the group dynamics and suggest interventions to improve its dynamics
- I show sensitivity for cultural differences
- I am able to discuss diverging insights/perspectives, without jumping to conclusions
- I have the ability to discuss normative/ethical/political issues, showing respect for opposing views

*Time management skills*

- I am on time
- I demonstrate to have done what is expected from me
- I possess time management skills, e.g. as chair of a meeting\*
- I am time efficient
- I am able to develop strategies to tackle complex problem
- I am able, if needed, to divide tasks and responsibilities

*Professional attitude*

- I communicate in a respectful way with fellow students and the tutor
- I show interest
- I recognise that there are no silly questions
- I am aware of my strengths and weaknesses
- I am able to create synergy between theories, practices, and personal experiences
- I inform my tutor in case of absence
- I am able to recall relevant insights from previous sessions and courses

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Those items that refer to the PBL environment specifically are marked with an asterisk



**Table 2** Revised PBL self-assessment*Communication skills*

- I raise questions in case issues remain unclear
- My fellow students regularly fail to understand my contributions
- I actively listen to my fellow students
- I face difficulties summarising other students' contributions
- I am often nervous to speak up
- As chair, I am able to create a productive, collaborative atmosphere\*

*Analytical skills*

- I am comfortable questioning my assumptions and views
- I find the phrasing of a clear problem statement difficult\*
- I provide relevant examples or counter examples
- I know whether or not the post-discussion has covered all issues raised during the pre-discussion\*
- I link the topic of the assignment to my pre-knowledge
- I find it challenging to critically reflect on what I have read
- I find it challenging to critically reflect on discussions in the tutorial

*Team work*

- I stimulate other students to participate
- I support the group in- and outside of the formal tutor meeting
- I learn more from self-study than from my peers
- I suggest interventions to improve group dynamics
- I encourage fellow students to come up with additional, complementary or opposing views
- I support the role of the chair and the whiteboard worker during classroom discussions\*
- I find it challenging to reflect upon group dynamics
- I am able to draw on cultural differences to improve the quality of the tutorial

*Time management skills*

- I regularly have to work into the night to cover the material
- I sometimes come unprepared to group meetings
- I possess time management skills, for example as chair of a meeting\*
- I find it difficult to set clear priorities in my learning process
- I plan ahead and anticipate future workload
- I divide tasks and responsibilities

*Professional attitude*

- I respect all contributions to the group process
- I find it difficult to confront my weaknesses
- I inform my tutor timely in case of absence or non-preparation
- I inform my fellow students timely in case of absence or non-preparation
- I sometimes show my frustrations about the learning process
- I actively ask for feedback from my peers and my tutor

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Those items that refer to the PBL environment specifically are marked with an asterisk

et al.'s (2002) validity study of the Australian Graduate Skills Assessment and Levant et al.'s (2016) work on the effect of business simulations on what they call soft skills. These scholars have (re-)designed extensive questionnaires that



have been used widely. Levant et al. (2016) present a set of statements based on the work of Bart and Géniaux (2010). These statements show similarities with skills items that are important in the context of a PBL environment. Hambur et al. (2002) refer to five ‘skill domains’ that also include skills that are relevant and can be measured in an active learning context.

## Design of the study

To assess the quality of our new measuring tool, we conducted a quasi-experimental study in which we relied on students’ self-assessment of the two sets of scores. We triangulated their self-assessment by asking their mentors’ opinion as ‘external experts’. Students were selected based on the mentor they were assigned to. Each mentor supervises ten to thirteen first-year students. We approached five experienced mentors. Three of these mentors have many years of experience mentoring first-year students; the two other mentors have somewhat less experience, but both completed dedicated educational Masters before embarking on a university teaching career. All five mentors attended the annual mentor training. As students are randomly allocated to mentors, the resulting sample should not suffer from selection bias.

Sixty-two students were invited to take part in the experiment, which took place in spring 2019. Prior to one of the individual meetings with their mentor, students had to complete their online portfolio, which included, in a randomised order, the statements from the old *and* the re-developed PBL self-assessment tool. Of the sixty-two students, forty-four completed the portfolio. This difference is partly due to students who had already dropped out. Others completed the portfolio later than planned due to illness or other exceptional circumstances.

We prepared a form (see Appendix) for each individual student, indicating two values (old and new) for each of the five groups of skills elaborated above. We also included a ranking for each of these groups. Old and new values and skills were not labelled as such to prevent students from skewing the research findings to support the new or the old self-assessment tool. The order in which old and new scores were presented was also randomised to avoid results from being driven by patterned responses.

Students and mentors were subsequently asked to spend part of their planned one-on-one meeting on evaluating which score represents students’ skills level best. Mentors were asked to complete the rest of the form after the meeting and to then return it to us. As we were conducting the experiment as part of the ongoing mentor programme, we made sure to inform mentors that the focus of the meeting was the students’ progress in general, not our experiment. This meant that in a few cases the form was not discussed in detail. In the end, thirty-three students completed all stages of our experiment.



**Table 3** Comparative statistics of the two measures (44 students)

Skills	Mean		Standard deviation		Internal consistency	
	Old measure	New measure	Old measure	New measure	Old measure	New measure
Communication	3.83	3.68	0.63	0.58	0.77	0.45
Analytical thinking	3.57	3.62	0.57	0.53	0.82	0.68
Team work	3.90	3.69	0.56	0.57	0.79	0.71
Time management	3.69	3.54	0.78	0.76	0.87	0.74
Professional attitude	4.20	3.75	0.53	0.52	0.74	0.40

## Findings

The comparative statistics in Table 3 already provide a first glance at the two sets of indicators we constructed. Our initial dissatisfaction with the old measures partly resulted from our observation that students scored themselves extremely high on almost all of the skills surveyed. If skills are measured on a scale from 1 to 5, it would be odd that students would already score above a 4 on average at the start of their training (cf. Goldfinch and Hughes 2007). This meant that the scope for measuring (or explaining) progress over the course of a three-year programme was restricted. The results from Table 3 indicate that the new measure performs better in this regard. In particular, the replacement of statements with a high risk of socially desirable answers with statements that required a higher level of mastery of the concerned skill led to this effect. For example, it is much easier to ‘show an interest’ (mean 4.4) than it is for a student to ‘confront my weaknesses’ (mean 3.4). The inclusion of inversely-worded statements also tempered the inflation of the skill measurements.<sup>1</sup>

We were also interested in the standard deviations of the constructed indicators. In the absence of variation in students’ (initial) skill level, there is limited scope to explain students’ progression on the basis of factors such as gender or country of origin. The same applies to explaining performance in a range of courses or post-graduate career. The analysis revealed that for the skills measured, the standard deviations were not statistically distinct from one another. This means that the new measure does not outperform the previous.

We also mapped the internal consistency of the constructed indicators, as measured by Cronbach’s alpha in the final two columns. The results indicate that this measure—while still relatively high—has also been reduced, in particular for

<sup>1</sup> After inverting the negatively worded statements, we calculated a simple average of these items. A matched t-test showed scores that were, on average, 0.5 lower than a similar index of positively-worded statements.



communication skills and professional attitude. This suggests that not all the items are strongly correlated with each other—a feature we would expect if they measure the same latent concept. Important to keep in mind is the relatively low number of observations used for the calculation. The search for items with a higher threshold may have contributed to this result, as have the inclusion of inversely worded statements.

From our overview of the selected indicators, a nuanced picture emerges. On the one hand, the lower means were anticipated and present an improvement compared to the old self-assessment tool; on the other hand, while we have good explanations for the reduced consistency, we had hoped to find a higher variance in the revised indicators.

For the experiment, we had to rely on a smaller sub-sample. Students and mentors were asked which indicator best described their skill level. We feel, however, that students may find it difficult to assess the adequacy of a score from 1 to 5 for an abstract matter as a generic skill. Therefore, we also provided a relative ranking of the student within the sample (in deciles). In Table 4, we present the percentage of students and mentors that evaluated the newly constructed measure as the one that more accurately describes their skills level.

Preferences were not systematically geared towards one measure. Most of the scores hovered around 50%, implying half of the respondents preferred the old measure whereas an equally sized group preferred the new measure. Moreover, students and mentors slightly favoured the old measure when relying on the absolute values. In part, this may be explained by the lower means we had reported earlier. Indeed, previous research has also shown that students may be overly confident in their level of generic skills (Goldfinch and Hughes 2007). The minimal level of support for the indicator could be found with respect to professional attitude, where the reduction in the means was largest. By contrast, the sole indicator where the mean remained stable—analytical thinking—showcased the largest support for the new measure. This was less pronounced in the mentors' assessments.

Although we have greater trust in the rank-based comparison, the findings are quite similar. With an average of 47% preferring the new indicators, opinions are

**Table 4** Percentage of students and mentors indicating the new measure as more accurate (33 students)

Skills	Absolute values comparison		Rank-based comparison <sup>a</sup>	
	Student (%)	Mentor (%)	Student (%)	Mentor (%)
Communication	43.75	43.75	51.20	51.20
Analytical thinking	54.55	48.48	44.44	37.04
Team work	42.42	42.42	55.17	51.72
Time management	36.36	48.48	25.93	40.74
Professional attitude	21.21	36.36	56.67	56.67
Overall assessment	39.66	43.90	46.81	47.60

As ranks were displayed in deciles, it occurred that students had to decide between two equal ranks in the experiment. These 'choices' were left out from the analysis. On average this reduced the sample by 4 observations



basically split. There is, however, quite some divergence to be found between the different skills. While the preference for the new measure in the case of communication skills and professional attitude was not significantly distinct from the toss-up (90% confidence), the preference for the old indicator to measure time management (student) was significant.<sup>2</sup> Still, with twenty-eight observations, the necessary reservations apply as to the generalisation of these findings.

## Discussion and conclusions

While many teaching programmes address the training of generic skills, there is less attention for how to monitor students' development thereof during their studies at university. The aim of our research was to improve a tool that was originally not constructed for scientific purposes, and which we hence considered to be inadequate for more rigorous research on generic skills development that would include looking into how student characteristics, the teaching environment and, in particular, an active learning environment can affect generic skills development.

Generally, setting up a well-designed study to monitor generic skills development is challenging, in particular in light of the different experiences, interests and preferences of the different people and institutions that have to be taken into account (Hambur et al. 2002). Nevertheless, in our view, the fact that we are often confronted by this challenge does not offer sufficient ground for not attempting to work towards more analytically and methodologically sound teaching and learning research.

The experiment that we set up shows that a rewording of the self-assessment tool's statements resulted in students being more critical towards their own level of generic skills. This is a step forward in the development of a tool to monitor student's generic skills development. At the same time, students and their mentors did not ascribe greater bearing to the new self-assessment tool. Two conclusions can be drawn from this.

A first, perhaps counterintuitive conclusion, is that the 'naïve' measures that are often employed in much of the Scholarship of Teaching and Learning might actually be less problematic than we had originally anticipated. In other words, personal experiences and reflections on 'specific aspects of teaching and learning' do not necessarily prohibit 'intensive and rigorous research' (Booth and Woollacott 2018: 541).

A second, alternative conclusion concerns the design of our experiment. Namely, it raises questions about whether or not we can rely on students' and mentors' assessment of the accuracy of the broad (aggregated) generic skills. Perhaps students and their mentors are not able to make an accurate judgement about the absolute or relative level of their skills? As such, the critique raised earlier against the direct measurement of abstract concepts through self-assessment may have also affected our experiment.

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<sup>2</sup> The number of successes from a repeated coin toss-up follows a binomial distribution with a fixed probability of success of 0.5.



Supporting students' self-reflection is an important means towards better academic performance (Zimmerman 2008). Yet, designing a strong self-assessment tool is only a first step towards acquiring a better understanding of students' generic skills development. In a next step, we would like to find out how this development is related to academic performance. For future research we would like to look at additional data, for instance students' course performance and more qualitative features of students' self-reflection in other parts of the portfolio. By limiting ourselves to just one part of the portfolio, namely the PBL self-assessment tool, we may not have been able to sufficiently uncover broader processes of self-assessment and learning. As Panadero et al. (2017: 76) explain, a proper tool to monitor generic skills development must include more than relatively simple forms of self-assessment, such as students scoring themselves. Evaluations based exclusively on surveys have the disadvantage of providing little opportunity for students to reflect on their learning trajectory and adapt accordingly (see also Torenbeek et al. 2013). In addition, we could, for instance, also link our sets of indicators to other, independently measured variables, such as grades (analytical and communication skills), attendance (time management, professional attitude), or peer assessments (teamwork).

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## Appendix

**Student: ...**

**Mentor: ...**

**For the student:**

1. Place a cross next to the score that you feel represents your skills level best. The scores are based on your portfolio and range from a minimum of 1 to a maximum of 5).

Skill	Value 1	Value 2
Communication skills		
Analytical skills		
Team work		
Time management		
Professional attitude		



- Place a cross next to the ranking that you feel corresponds closest to your level when compared to your peers. The rankings are reported in deciles with a value of 1. This means that a ranking with a value of 1 implies that you belong to the top 10%, a ranking of 6 implies that you belong to the bottom 40% (or top 60%), whereas a ranking of 10 suggests you are in the bottom 10%.

Skill	Ranking 1	Ranking 2
Communication skills		
Analytical skills		
Team work		
Time management		
Professional attitude		

### **For the mentor:**

- After the student has completed the preceding exercise, please add a circle around both of the values that in your view best reflect the students' skills level.
- Have you also observed the student within your own tutorial: YES / NO
- How confident are you in your assessment of the student's skills level (on a scale from 0–10).

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**Afke Groen** was PhD Candidate at Maastricht University and the Amsterdam Institute for German Studies, where she worked on political parties and parliaments in the European Union. Recently, she defended her PhD on transnational party relations in the European Union. Afke was co-editor of the *FASoS Teaching and Learning Blog*, and researched skills training, interactive lecturing and social support in students' transition to higher education. Lately, she published in *Foreign Policy Analysis*, *Journal of Contemporary European Studies*, and contributed to *Parliamentary Cooperation and Diplomacy in EU External Relations: An Essential Companion* (Edward Elgar, 2019). Currently, Afke works as a researcher for the think tank *Mr. Hans van Mierlo Stichting*.

**Patrick Bijmans** is assistant professor at Maastricht University and former programme director of Maastricht University's Bachelor in European Studies. His research interests include media coverage of the EU, Euroscepticism, and issues related to students' transition to higher education and first-year experience. Patrick has recently published articles in *Comparative European Politics*, *Higher Education*, *Journal of Contemporary European Research* and *Journal of Contemporary European Studies*, and has contributed chapters to *The Routledge handbook of Euroscepticism* (Routledge, 2018) and *Euroscepticism, democracy and the media. Communicating Europe* (Palgrave, 2017).

**Johan Adriaensen** is assistant professor at Maastricht University. His research interests cover the role of member states in the European Union, inter-institutional politics, and regulatory governance. Policy-wise he studies international trade, a domain where all his research interests find fertile ground. He also has an interest in the Scholarship on Teaching and Learning where he primarily writes on skills training. He is the author of *National administrations in EU trade policy* (Palgrave, 2016) and the co-editor of *The Principal-Agent model and the European Union* (Palgrave, 2017). His work has been published by the *Journal of Common Market Studies*, *Regulation and Governance*, *Politics*, and *European Political Science*.

