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Developing Scenarios for Exploring Teacher Agency in Universities: A Multimethod Study

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Abstract

Lecturers who are actively engaged in shaping their teaching and teaching practices demonstrate agency. Teacher agency has increasingly been described as a key factor in educational development at universities. Lecturers are expected to innovatively develop courses and continuously improve their teaching practices to respond to, for example, student needs and labor market demands. In this multimethod study, we examined the process of developing and validating scenarios for measuring teacher agency in universities. We conducted four studies to create 23 scenarios that capture the complex nature of teacher agency. First, we interviewed university lecturers to identify bumpy moments in their teaching practice, and so found scenarios based on real-life experiences. Then, we employed two expert panels, to evaluate and refine the scenarios, which enhanced their validity. Finally, we used a pilot study to standardize the data collection procedures. Our multimethod study has established reliability by triangulating methods and researchers, involving multiple stakeholders, and providing detailed descriptions of the research process. This project holds implications for research and practice. The scenarios can be used in professional academic development programs for the collection of research data and to promote self-reflection, peer consultation activities, and professional growth and agency among university lecturers.

Keywords: Teacher agency; university; qualitative scenario construction; vignettes; professional development

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Introduction

The importance of teacher agency for effective teaching practices has long been recognized (Aspbury-Miyanishi, 2022; Priestley et al., 2012; Pyhältö et al., 2013). Although most research on teacher agency relates to primary and secondary education (Cong-Lem, 2021), in recent years it has also become clear that teacher agency has a critical impact on teaching and learning at universities (Kusters et al., 2023; Vähäsantanen et al., 2020). At its core, teacher agency implies that lecturers shape their responsiveness to problematic situations (Biesta & Tedder, 2007). In an ecological approach, teacher agency entails that this 'responsiveness' is informed by lecturers' professional histories, oriented towards future objectives and aspirations, and enacted in concrete situations (Biesta & Tedder, 2007; Priestley et al., 2015). It is both constrained and supported by relational, structural, and material resources available to actors (Priestley et al., 2015).

Teacher agency is required when situations call for a considered solution. This means that a solution may not be imminent, but more options could work; it requires agency to consider which option is best given the broader purpose of the practice in which they work (Leijen et al., 2019; Priestley et al., 2015). Teacher agency is therefore not seen as static, but rather as a dynamic and context-dependent concept (Jenkins, 2019; Kusters et al., 2023), which constantly changes in response to various factors, such as educational environments, policy changes, and personal beliefs, values, and goals. It evolves in and adapts to the existing context (Biesta et al., 2015). This ongoing evolution and adaptation to contexts (or: *temporality*) raise significant concerns regarding the accurate methodologies to measure teacher agency.

Developing a tool for measuring teacher agency, therefore, brings challenges such as being able to do justice to the dynamic character and temporality that teacher agency entails. Previous methodologies, despite their utility, have demonstrated shortcomings in adequately addressing these aspects. To illustrate, teacher agency can be measured through self-report tools (Ghiasvand et al., 2023; Leijen et al., 2021; Vähäsantanen et al., 2019) as well as classroom observation methods (Hiver & Whitehead, 2018). Questionnaires measuring self-reported agency have the disadvantage of lacking context, and therefore not capturing aspects of considerations about participants' responses to the items. Although classroom observations provide valuable insights about actual behavior in a real-life context, they often take up time and resources and cannot capture the full scope of teacher agency in different, multiple contexts. Moreover, lecturers' reflections cannot be collected by mere observation, which means additional data collection is needed.

Alternatively, methodologies focused on utilizing real-life stimuli are suitable to effectively incorporate context at a given time. Because of our goal to develop scenario-based research that focuses on eliciting teacher agency, our methodological approach is based on the results observed in research using real-life stimuli (for examples see Sannino & Engeström, 2016; Yang, 2021, 2022). Recognizing the effectiveness of such studies, there is a need for tools that provide real-life teaching experiences to measure teacher agency in universities. To that end, we developed scenarios (i.e., short descriptions of situations that demand teacher agency) based on real-life teaching experiences at universities. In this project, we aim to present scenarios, developed in a trustworthy way and shaping internally valid conditions for measuring teacher agency in universities.

Defining Teacher Agency

Teacher agency within an ecological approach arises from the intricate interplay between individuals' abilities and environmental conditions. This underscores the importance of an instrument that not only measures lecturers' abilities but also elements from the past, future, and available resources in the present that affect the specific ecologies in which lecturers work (Priestley et al., 2015). Approaching teacher agency from an ecological perspective also recognizes agency's fluidity over time.

Given the conditions under which agency emerges and the implications for measuring teacher agency, the challenge is to address the context in which lecturers work (Emirbayer & Mische, 1998). Universities provide a diverse range of environments, with their own educational beliefs and values for lecturers (Gibson,

1986). Real-life teaching scenarios allow the exploration of teacher agency in various contexts and leave room for considerations (e.g., which affordances are perceived and/or why one solution is preferred over another) in the decision-making process. To understand lecturers' perceived affordances and considerations we have tried to represent real-life teaching situations through written scenarios.

Scenario definition and purpose

In methodological contexts, *scenarios* are descriptive representations of specific situations designed to simulate real events or problems (Hughes & Huby, 2004; Jeffries & Maeder, 2005; Jenkins et al., 2010). Scenarios can have different forms, such as image, video, audio, or written narrative, which research participants are requested to comment on (Hughes & Huby, 2002). Written scenarios are most effective when they range from 50 to 200 words (Jeffries & Maeder, 2005). They can revolve around people, situations, or events. Finch (1987) highlights the importance of employing scenarios in research in order to thoroughly investigate the central phenomenon under examination. By eliciting responses and encouraging discussion valuable information is gathered, providing insight into participants' beliefs, values, judgements, and attitudes. Scenarios are also valuable tools for gathering in-depth insights into participants' nuanced thoughts on varying topics (Simon & Tierney, 2011; Torres, 2009). Although in the literature the term *vignette* is often used (Skilling & Stylianides, 2020), we here intentionally use the term *scenario*. Vignettes evoke the idea of a snapshot or static image of a situation, but our goal in constructing the scenarios was to represent vivid, authentic situations.

Research on teacher agency is suited to a scenario study, because context-specific scenarios fit the context-dependent nature of teacher agency. They provide a powerful tool to explore and understand how lecturers demonstrate agency within different university teaching practices, and this approach ultimately contributes to better informed and contextually relevant educational policies and practices. The main consideration when developing compelling scenarios is whether they genuinely reflect the complex and varied educational learning situations that lecturers encounter in their professional roles (Stravakou & Lozgka, 2018). This type of study also prompts an examination of the reliability of the responses and decisions derived from these scenarios (Gould, 1996) as indicators of teacher agency among lecturers.

Aim of the project

The aim of the current project, consisting of four studies, was to develop and test a real-life instrument to measure teacher agency from an ecological perspective. As Rushton & Bird (2023) pointed out, elements of teacher agency are nonlinearly intertwined and thus do not act in isolation but rather interact with each other in situations, which led us to provide context-rich descriptions of situations for measuring agency. This type of research emphasizes the collection of in-depth, contextual data through methods to understand the complex and dynamic nature of human behavior, interactions, and structures within specific social and cultural contexts (Lave & Wenger, 1991).

In this methodological paper we report on the development of scenarios by which to capture the dynamic nature of teacher agency. The essential challenge for the current project here lies in ensuring that the scenario content accurately represents real-life teaching situations, particularly in terms of internal validity, an aspect that has often been overlooked in prior scenario-based research (Hughes & Huby, 2004). To address this challenge we relied on a framework that contains the critical elements needed for comprehensive scenario development introduced by Skilling and Stylianides (2020). The three key elements include the *conception* of the content, *design* of the scenarios, and *administration* of the protocol (Skilling & Stylianides, 2020). Moreover, in the design of the four studies we aimed for maximum trustworthiness of the research process. To that end we used four critical criteria as discussed by Guba (1981): *credibility* refers to the believability of the research findings; *dependability* is the consistency and stability of the research findings over time and in different circumstances; *confirmability* relates to the objectivity and neutrality of the research, ensuring that the researcher's biases or perspectives do not influence findings; and finally, *transformability* relates to the extent to which qualitative research findings can be applied or generalized to other contexts or settings. To best meet the above criteria, we had to consider which themes of the scenarios are of interest to university

lecturers, which writing format contributes most to recognition of the scenarios for participants, how experts assessed the quality of the scenarios, and which scenarios can best be used to make teacher agency measurable.

To this end, in the inductive phase of this research we collected specific observations and data by which to identify general patterns and theories. Subsequently, in the deductive phase we tested the scenarios empirically.

This paper is structured around four separate but interconnected studies (Figure 1). These studies were intended together to contribute to answering the overarching research question: *In what ways can representative scenarios be developed to measure teacher agency in universities?*

The following sub-questions for each study were addressed:

Study 1: Which teaching scenario themes are representative of university teaching?

Study 2: Should valid scenarios for teacher agency be written in the first- or third-person perspective, and in open-ended or closed-ended format?

Study 3: How do experts evaluate the likelihood of specific scenarios actually eliciting teacher agency?

Study 4: To what extent do lecturers prefer particular scenarios, and which scenarios are useful for eliciting multiple solutions?

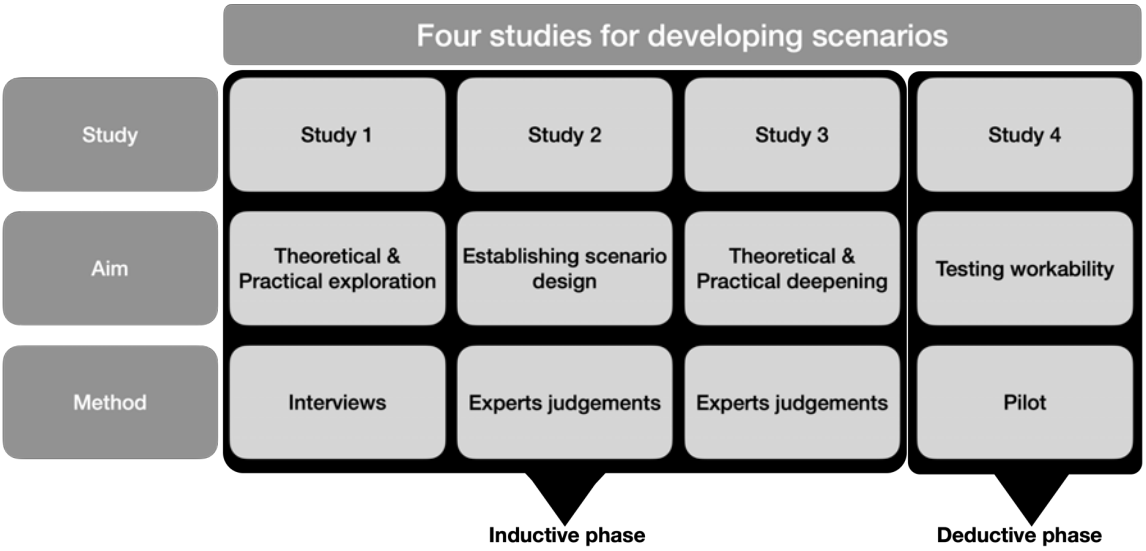

Figure 1: *Four studies for developing scenarios*

The first three studies were intended to construct the scenarios inductively, attempting to do justice to the key elements of *conception* and *design* (Skilling & Stylianides, 2020). In Study 1, interviews were conducted to determine the themes and content of the scenarios. In Study 2 and Study 3, expert panels determined writing style and perspective and the alignment of content with the research goal, respectively. Study 4 was a deductive pilot study intended to test the scenarios on lecturers, and this aim corresponded to the key element of *administration* (Skilling & Stylianides, 2020).

Below, we present the four studies. The institute's ethical review committee (ICLON-IREC 2021-02) gave approval for our research. In addition, participants provided consent for each study. Participants consisted of PhD candidates, post-doctoral fellows, assistants, associates, and full professors. Any names displayed are

fictitious so as to ensure participants' privacy. The four studies all had different participants. Table 1 lists the participants in each study.

Table 1

Characteristics of participants and occupational status

	Study 1	Study 2	Study 3	Study 4	Total
N	28	37	13	30	108
Nationality					
• Dutch	23	26	10	26	85
• Norwegian	3	0	1	0	4
• Finnish	2	0	1	0	3
• Other	0	11	1	4	16
Gender					
• Female	13	28	9	17	67
• Male	15	9	4	13	41
University	7	1	9	9	12*
Position					
• PhD candidate	0	22	2	0	24
• Lecturer	27	12	6	24	69
• Professor	1	3	5	6	15

**Note.* Participants came from 12 different universities in total. There is overlap between the universities used in the different studies.

Study 1

Study 1 focused on identifying key themes in which the complexity of teaching practice calls for agentic manifestations. To accomplish this, we conducted interviews with lecturers. The central question in Study 1 was: *Which teaching scenario themes are representative of university teaching?*

Method

Participants

Interviews were conducted with 28 lecturers from seven research-intensive universities in the Netherlands, Norway, and Finland (Table 1). To obtain a representative sample of the population, lecturers from various domains were approached via a brief introductory email explaining the purpose of the project. Later they received a letter with more information, also on the procedure of the project, along with an agreement to participate for them to sign. The authors recruited the lecturers through their professional networks, aiming to investigate *bumpy moments* for lecturers with both teaching and research duties. Only lecturers with a PhD were included because we wanted to exclude casual teaching staff, often hired temporarily for teaching assignments only. All participants had explicit teaching duties in their employment contracts along with their research tasks. They all had more than five years of teaching experience, teaching in small-group settings as well as giving lectures. During the interviews, participants were specifically asked about teaching context, i.e., working group or lecture.

Data collection

Data collection consisted of online interviews, each lasting approximately 60 minutes, with participants able to choose between English or Dutch as their preferred language of communication. In the interviews, participants were asked to recall situations from their teaching practice in which they had to make decisions: "Could you please indicate those moments when you acted in a particular way, and with hindsight feel that you could just as well have acted differently?" The term *bumpy moment* (Romano, 2006; Van Kan et

al., 2010) was employed to describe these challenging and dilemma-laden situations. The *bumpy moment* referred not to a situation where lecturers were unable to act, but to a situation that, in hindsight, could have provided several legitimate and competing courses of action. All interviews were recorded, allowing for later reviewing and in-depth analysis. Each interview was transcribed verbatim for data analysis and coding.

To ensure a comprehensive understanding of real-life teaching situations in the university context, participants were requested to contemplate their *bumpy moments* before the interview. They were asked to share at least two of these moments and supply brief descriptions, which helped the interviewer to prepare properly. In cases when participants did not provide their *bumpy moments* in advance, they were given some time to compile and identify specific incidents for discussion. Throughout the interview, the interviewer asked questions in order to clarify and delve deeper into the details of each moment, including circumstances, people involved, location, and underlying considerations. This approach made it easier to collect a diverse and extensive range of themes, thus providing deeper insights as a basis for developing scenario storylines.

Analysis

The transcribed interviews were analyzed by the principal investigator using Atlas.ti, and following a systematic approach to ensure a comprehensive examination. Interim and final results were discussed in consultation with the other authors. Initially, the researchers selected all relevant parts of the transcripts on the basis of the guiding questions, i.e., whether there was room for choices within the given scenario and whether it was possible for a teacher to change the situation. Having multiple options to act in teaching settings is a prerequisite given the definition of the ecological approach (Priestley et al., 2015). Interview fragments that met both criteria were then selected for further study using thematic content analysis (Silverman, 2020). Overarching themes were created using all the relevant fragments; the *bumpy moments* could then be subdivided according to these themes.

Findings

The interviews were intended to uncover the topics on which scenarios needed to be based. Each interviewee came up with an average of 2.6 *bumpy moments,* which resulted in 74 *bumpy moments* in total. The following fragment illustrates a code concerning “student preparation”.

James stated:

> *The question is always: should you assume that students have done the preparation that you have actually prescribed for them? And does that mean that you then stick to that or that the moment you find out, that that preparation hasn’t taken place sufficiently, that you then adjust on the spot and go back to what they should have studied? And that’s always a trade-off. Always the choice of flexibility on the one hand, on the other hand adapting to the information needs of the student, for which of course there is also a lot to be said. But then with that you send the signal: it’s okay not to be prepared, because they’re starting back at the beginning anyway. Important choice you keep running into.*

In this phase, we tried to list the content, context, and recurring themes in the data. Overarching content and similar elements (e.g., other fragments about “student preparation,” similar to the example above) found in multiple fragments formed the basis for the subsequent coding process. In this case, 24 codes were generated based on the overarching and similar content identified. Although some codes occurred more frequently than others (see Appendix A), each code served as a theme.

To sum up, in Study 1 we examined how to develop scenarios that reflected a realistic representation of teaching practice at universities. We chose an emic perspective to understand *bumpy moments* from the point of view of university lecturers in the field. We interviewed professionals in the field to get a realistic representation of the *bumpy moments* experienced by lecturers. This first part of our research provided valuable

insights into the complexity of teaching practice at universities. Through interviews and qualitative thematic content analysis we discovered a diverse array of 24 different themes on which to focus the scenarios.

Study 2

Building on the insights from the first study, Study 2 focused on the question of narrative perspective and design of the scenarios. The goal was to ensure that the scenarios were structured and written in a way that contributed to the lecturers' identification with the scenario. The literature does not provide a theoretical basis for determining these fundamental design principles (Skilling & Stylianides, 2020). First, we had to decide whether the scenarios should be written from a first- or third-person perspective. Second, as Skilling and Stylianides (2020) note in their framework, researchers must determine whether scenarios have an open or closed ending, depending on the goal. Therefore, in Study 2, we also determined the appropriate endings for the scenarios based on the research aims, as our objective was to accurately reflect real-life teaching practice within the scenarios. The guiding question here was: *Should valid scenarios for teacher agency be written from a first- or third-person perspective, and in an open-ended or closed-ended format?*

Method

Participants

In Study 2, 37 researchers with backgrounds in educational science, ranging from PhD candidates to full professors, participated as an expert panel (Table 1). All panel members had varying experiences with quantitative and qualitative research methods and were given information by the first author during a research group meeting. Participants were aware that participation in the panel was voluntary.

Data collection

For Study 2 and Study 3 we used *comparative judgement* (CJ). CJ has been proposed as an assessment technique that can produce consistent results (Pollitt, 2012). The CJ method relies on comparisons rather than absolute judgements. For this, panelists are shown pairs of draft scenarios, also called *appearances*, and asked to decide which of the two best suited to the topic being assessed. Researchers can then derive a scale value from these assessments. Using multiple assessors helps reduce individual bias and contributes to a more balanced and objective assessment. For this purpose, we used the Comproved software (see https://comproved.com/en/comparing-tool/) to rank panelists' judgements, by comparing two scenarios at a time and judging which one best fit the leading question. CJ is based on the Bradley-Terry-Luce model (BTL model; Bradley & Terry, 1952; Luce, 1959), a statistical model that provides a framework for analyzing CJ data. The model assumes that each item (draft scenario) has an underlying latent quality or preference score, and that the probability of choosing one item over another depends on the difference between their scores. The BTL model is formulated as follows:

$$p\left(x_{ij} = 1 \mid v_i, v_j\right) = \frac{e^{\left(v_j - v_i\right)}}{1 +_e^{\left(v_j - v_i\right)}},$$

where $x_{ij} = 1$ if appearance j is assumed to be superior to appearance i, and v_i and v_j are the estimated ability values, in logit scores, of the respective appearances (Verhavert et al., 2018).

The Comproved tool uses multiple assessors to rank scenarios according to certain evaluation criteria. Each assessor gets to see the same set of scenarios but in different and randomized combinations. In the end the tool consolidates all input received. The result is a quality scale ranking the scenarios, with their corresponding ability scores, in order of preference. The reliability of the scale is expressed in the Scale Separation Reliability (SSR), where SSR serves as a measure of the internal consistency of the assessment

results. A study by Verhavert et al. (2018) has demonstrated that the SSR can be used to estimate both inter-rater reliability and split-half reliability.

For Study 2, we selected the four most common themes from the 24 resulting from Study 1, and wrote four scenarios based on these themes. We used these to determine the best perspective for each scenario, and whether it should have an open- or closed-ending format. An open ending means that the scenario ends with: "So I knew I had to come up with a solution." A closed ending means that a solution was already given in the scenario. Each of the four scenarios was presented in four different ways: 1) first-person perspective with an open ending; 2) first-person perspective with closed ending; 3) third-person perspective with an open ending; and 4) third-person perspective with closed ending (for an example, see Appendix B). Thus, the dataset contained 16 documents (draft scenarios) in all. In Comproved two randomly selected draft scenarios were presented each time, from which the participant was asked to choose the one they were best able to identify with. Participants also indicated *why* they preferred one scenario over another, which allowed us to collect qualitative data and so gain insight into the participants' considerations. Participants made four comparisons per person (Verhavert et al., 2019), resulting in an SSR of .59, which can be considered low. Comproved also showed "misfit judges", i.e., assessors that diverged from the average. In this dataset three misfit judges were detected. By deleting these three assessors, we reached an acceptable SSR of .70. However, although with this modification slight changes in the ranking occurred, the main result did not change. Therefore, we decided to retain the misfit judges because their answers to the open questions gave valuable insights into the reasons behind their choices.

Analysis

The analysis focused on distinguishing the different forms, aimed at being able to empathize with the scenario. The most popular appearance form (i.e., the scenarios most likely to be selected as favorites) was included in the next study. The additional qualitative data explained why participants identified better with one form over the other.

Findings

Four scenarios were presented to the panel ($n = 37$) in four forms. In each case the panelists were asked to choose which of two scenarios they most identified with as participants. From this, we constructed a ranking (Table 2). The graph for the rankings (Figure 2) shows the extent to which a particular scenario is likely to win over another scenario. The results indicate that the top seven scenarios were all written in the first-person perspective. Although the ranking regarding the closings of the scenarios was less clear, the qualitative data were compelling – they indicated that an open-ended scenario, i.e., one without a given solution, worked best to promote recognizability. It turned out that if a solution was given panelists began to evaluate the solution instead of the rest of the scenario, and thought about whether they could identify with the solution rather than with the *bumpy moment.*

Emma, for instance, mentioned the following:

> *The solution given is totally improbable, something I would never go for. So, I do not identify with this.*

Table 2
Ranking of scenarios

Rank	Scenario	Perspective	Closing
1	F	1st perspective	Open
2	I	1st perspective	Closed
3	N	1st perspective	Open
4	E	1st perspective	Closed
5	J	1st perspective	Open
6	B	1st perspective	Open
7	M	1st perspective	Closed
8	O	3rd perspective	Closed
9	P	3rd perspective	Open
10	K	3rd perspective	Closed
11	G	3rd perspective	Closed
12	L	3rd perspective	Open
13	D	3rd perspective	Open
14	C	3rd perspective	Closed
15	H	3rd perspective	Open
16	A	1st perspective	Closed

Note. No. of assessors: $n = 37$

We attribute the fact that scenario A, ranked 16th, was written in the first person but finished last to the implausibility of the solution described. The qualitative data showed that panelists rarely chose this scenario because of its improbably worded ending. The content of this scenario is the same as scenario C which finished 14th.

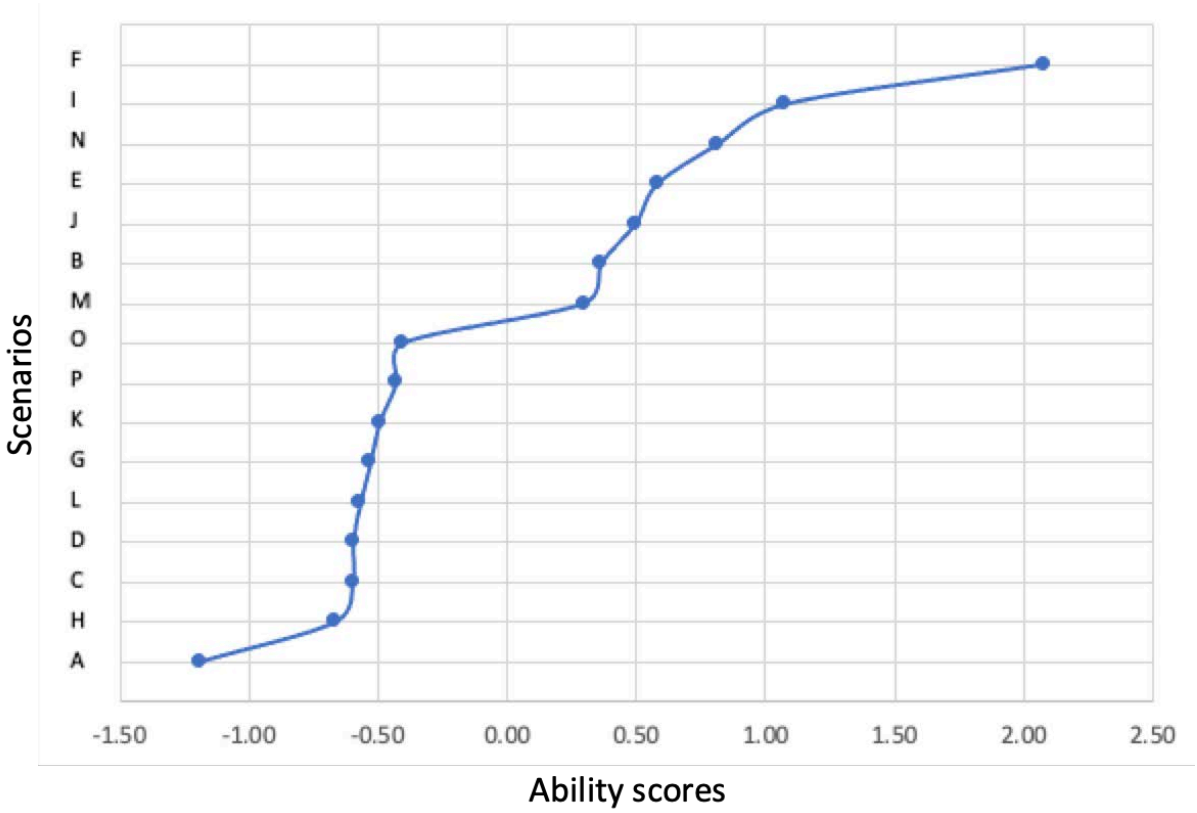

Figure 2 *Study 2: Ranking on the basis of ability scores*

To sum up, in Study 2, educational researchers were involved in a panel to determine the ideal perspectives and endings of the scenarios. Once we learned how best to write the scenarios in view of the main goal of recognizability, we were able to use experts in our research field to assess the content of the scenarios in Study 3.

Study 3

After the most appropriate perspectives and closings for the scenarios had been established, the third study then involved asking participants to rank the scenarios with respect to their purpose of eliciting teacher agency. For Study 3, all 24 themes were developed into scenarios written from the first-person perspective and with open endings. The central question underlying this third study was: *How do experts evaluate the likelihood of specific scenarios actually eliciting teacher agency?*

Method

Participants

In Study 3, an expert panel consisting of 13 educationalists specializing in teacher agency and/or higher education was assembled (Table 1). The panelists were selected from the Netherlands, Norway, Finland, and Hungary. The composition of the panel was expressly intended to focus on expertise and perspectives relevant to research on teacher agency manifestations in universities.

Data collection

As in Study 2, we used CJ to determine the content of the scenarios. The panel was presented with all 24 first-person, open-ended scenarios, requiring the experts to make the comparisons in the same way as the participants in the second study. As in Study 2, experts were also asked to explain why they preferred one scenario over another. These qualitative data played a central role in Study 3. Rather than relying solely on quantitative measures or numerical rankings, we sought to capture the nuanced perspectives and reasoning behind the experts' choices. The assignment for the panelists was to choose which of two scenarios was best for eliciting manifestations of teacher agency, based on the following definition by Priestley et al. (2015):

(…) teachers achieve agency when they are able to choose between different options in any given situation and are able to judge which option is most desirable in light of the wider purposes of the practice in and through which they act. Agency is not present if there are no options for actions or if the teacher simply follows routinized patterns of habitual behavior with no consideration of alternatives. (p. 141)

In this case, the participants made 20 comparisons per person because there were more scenarios and fewer assessors than in Study 2 (Verhavert et al., 2019). The SSR in this dataset was .70.

Analysis

Panelists chose which of two scenarios they thought most appropriate for eliciting teacher agency, and so indicated why one scenario they considered more suitable than the other. The main idea was to find the most appropriate scenario of two by comparing the chances of success or a favorable outcome. A positive score (above 0) suggests a likelihood of success greater than 50%, meaning that one scenario is more likely to be successful than the other. Conversely, a score below 0 indicates a likelihood of success lower than 50%, making the scenario less likely to succeed than the other. The greater the deviation from 0, whether positive or negative, the stronger the indication of success or failure in the scenario. Additionally, we analyzed the qualitative data to uncover why certain scenarios were favored over others. In the analysis of the open answers we compared the views of different experts on the suitability of the scenarios to elicit teacher agency, focusing on similarities and contradictions. This approach provided insight into the diversity of opinions. The

information gathered was used to create a comprehensive synthesis of the experts' key points and conclusions, leading to a better understanding of why scenarios are suitable for eliciting teacher agency.

Findings

The ranking resulting from the analyses (Figure 3) shows the ability score, indicating which scenario is most likely to win over another scenario.

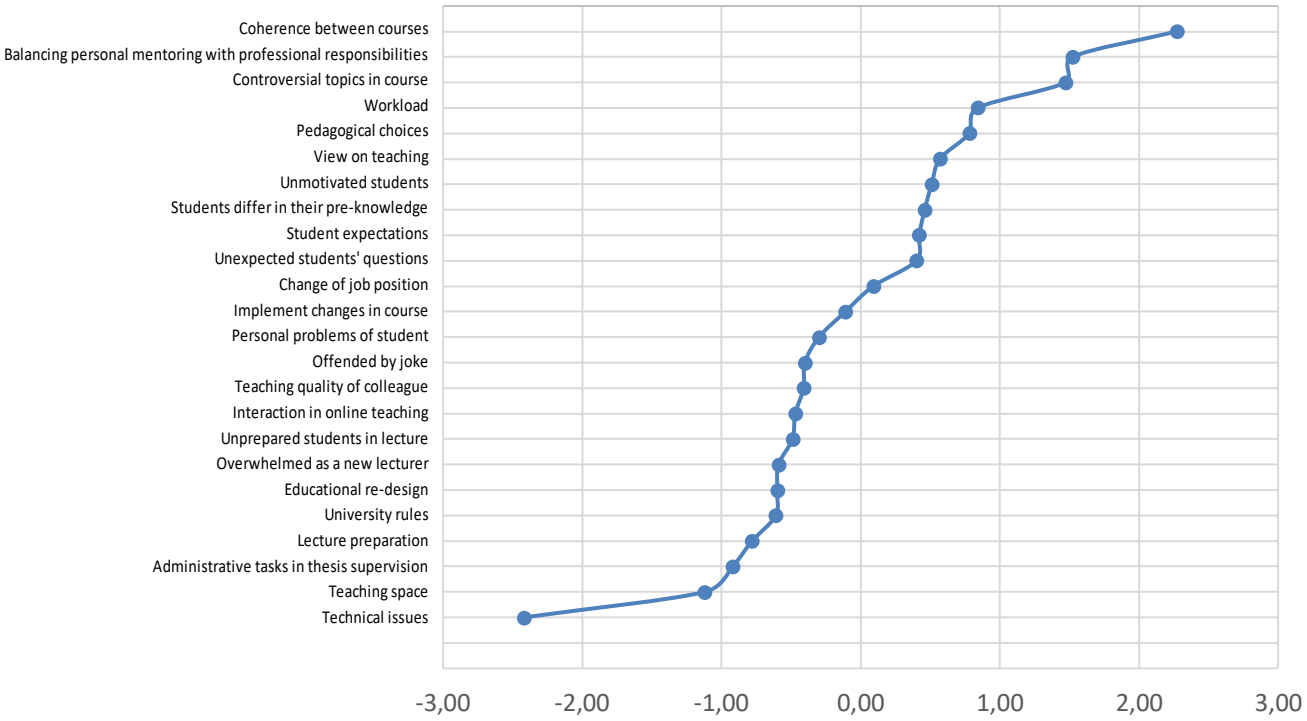

Figure 3
Study 3: Ranking on the basis of ability scores

The ability scores (also converted to odds and probability scores, see Table 3) show only slight variations. In particular, Figure 3 shows that the ability scores of scenarios 4 through 21 (inside the green rectangle in Table 3) were relatively close to each other, implying that the likelihood of eliciting teacher agency from these scenarios was nearly equal, i.e., the scenarios tested have similar qualities.

Table 3
Ability, odds, and probability scores

Rank	Scenario	Ability (logit)	Odds	Probability
1	Coherence between courses	2.27	9.7	0.91
2	Balancing professional responsibilities	1.52	4.6	0.82
3	Controversial topics in course	1.47	4.3	0.81
4	Workload	0.84	2.3	0.70
5	Pedagogical choices	0.78	2.2	0.69
6	View on teaching	0.57	1.8	0.64
7	Unmotivated students	0.51	1.7	0.62
8	Students differ in their pre-knowledge	0.46	1.6	0.61
9	Student expectations	0.42	1.5	0.60
10	Students' unexpected questions	0.40	1.5	0.60
11	Change of job position	0.09	1.1	0.52
12	Implement changes in course	-0.11	0.9	0.47
13	Personal problems of student	-0.30	0.7	0.43
14	Offended by joke	-0.40	0.7	0.40
15	Teaching quality of colleague	-0.41	0.7	0.40
16	Interaction in online teaching	-0.47	0.6	0.38
17	Unprepared students in lecture	-0.49	0.6	0.38
18	Overwhelmed as a new lecturer	-0.59	0.6	0.36
19	Educational re-design	-0.60	0.5	0.35
20	University rules	-0.61	0.5	0.35
21	Lecture preparation	-0.78	0.5	0.32
22	Administrative tasks in thesis supervision	-0.92	0.4	0.28
23	Teaching space	-1.12	0.3	0.25
24	Technical issues	-2.42	0.1	0.08

The qualitative data provided insight into how the scenarios could be improved, for instance the importance of a clear description of the *bumpy moment*. To illustrate, one of the panelists said:

The person appreciates the freedom – that seems to be the most important part – "Sometimes it feels that everyone is working on their own island." According to this formulation, this seems to be only a minor problem.

This panelist indicated that the *bumpy moment* "lecturers are working on their own island" could be phrased more sharply. In this way we were able to tighten up several scenarios that, as evidenced by the experts' responses, sometimes did not adequately reflect the *bumpy moment*. Panelists were unanimous only in the case of the *Teaching space* scenario; as became clear from their explanations regarding the open-ended questions, this scenario did not elicit teacher agency. For this reason, we eliminated it. For the remaining 23 scenarios the experts gave arguments as to why one scenario was superior to the other. We used the qualitative data to further sharpen up some of the scenarios; in two cases, we specified the *bumpy moment* more clearly and in two cases we modified the title. The final 23 scenarios can be found in Appendix C.

To sum up, Study 3 was designed to shed light on expert opinions and the factors influencing their judgements on the potential of scenarios to elicit teacher agency. The combination of the rating system and qualitative data collection allowed for a robust exploration of the expert opinions, ultimately contributing to a more complete understanding of the research question. In particular, the qualitative data provided insight into

the reasons why participants believed certain scenarios were appropriate. We were also able to use the input from the data to modify scenarios if, for example, it appeared that the *bumpy moment* was unclear, the wording was not exact enough, or the title did not seem to cover the main message. This validation method resulted in 23 scenarios, which we tested in a pilot study.

Study 4

Finally, Study 4 was a pilot study deductively testing the scenarios created in the inductive phase. The primary focus here was to obtain insight into which scenarios resonated most with actual participants, and to determine the operational feasibility and usability of these scenarios for research purposes. A scenario must, first, be recognizable to a participant, and second, elicit multiple solutions if it is to be an effective tool for providing a differentiated indication of teacher agency. This criterion corresponds with the definition of teacher agency, which states that lecturers can choose between different options in a situation and can assess which option is the most desirable (Priestley et al., 2015). In this fourth study we tested the scenario set using two quality criteria: which scenarios participants prefer, and whether scenarios elicit multiple responses. The central question in Study 4 was: *To what extent do lecturers prefer particular scenarios, and which scenarios are useful for eliciting multiple solutions?*

Method

To examine the usability of the scenarios, think-aloud sessions were needed to reveal whether participants were able to devise multiple solutions, thus indicating teacher agency. If for a specific scenario participants came up with multiple solutions, we assumed that the answer to that scenario was not obvious. Non-obviousness is a prerequisite for an effective scenario, because teacher agency can only be achieved if there are multiple options for action (Priestley et al., 2015).

Participants

The think-aloud sessions were conducted with 30 lecturers from 9 research-intensive universities in the Netherlands. These were tenured lecturers with PhD degrees. Their roles involved both teaching and research responsibilities. They were responsible for at least delivering lectures or instructional sessions to students, and engaged in research activities. All lecturers had more than five years of university teaching experience.

Data collection

Data were collected in two stages. First, prior to the think-aloud sessions participants were asked to select five scenarios they wanted to address based on recognizability. Participants received the 23 scenarios in random order to avoid order bias, prior to the sessions. We then collected the participants' selections. Second, during the think-aloud sessions, the lecturers were asked questions about possible solutions to a specific scenario and corresponding considerations. Each session, monitored on site by the principal investigator, lasted a maximum of 60 minutes, in which an average of 3.3 scenarios could be covered. Participants received the scenarios printed out and laminated on an A6 sheet. The participant read one of the chosen scenarios aloud, each scenario ending with the phrase, “So I knew I had to come up with a solution.” At that point the thinking aloud began, in which the participant had to think of possible solutions to address this scenario. The researcher only asked clarifying questions about whether other solutions were conceivable. When no further solutions were found, a new scenario was presented. The think-aloud sessions were recorded for later transcription and analysis.

Analysis

The analysis consisted of two parts. First, we counted how often participants put each scenario in their top five, in order to determine their preferences for the scenarios. Because we did not want to demand too

much time or concentration from the participants, we kept to one-hour sessions and for that reason also kept track of which scenarios had been covered during the session. Second, we wanted to gain insight into participants' repertoire of solutions, and hence calculated the average number of solutions they came up with.

Findings

Preference for scenarios

To determine which scenarios resonated most with the participants, we analyzed the frequency with which each scenario was chosen in the participants' selections (Table 4).

Table 4

Frequency choices, coverage, and average solutions

Scenario	Frequency chosen (%)	Frequency covered	Average solutions
1. Students' personal problems	16 (10.8)	13	3.8
2. Workload	15 (10.0)	9	2.6
3. Coherence between courses	12 (8.0)	7	2.4
4. Technical issues	12 (8.0)	6	3.7
5. Student expectations	12 (8.0)	5	4.3
6. Students differ in prior knowledge	10 (6.7)	7	3.0
7. Unprepared students in lecture	9 (6.0)	7	2.9
8. Students' views on teaching quality of colleague	9 (6.0)	5	3.2
9. Educational re-design	8 (5.3)	7	2.7
10. Implementing changes in course	8 (5.3)	4	3.0
11. Students' unexpected questions	6 (4.0)	2	4.0
12. Balancing professional responsibilities	5 (3.3)	4	3.3
13. Lecture preparation	4 (2.7)	4	3.5
14. View on teaching	4 (2.7)	4	3.5
15. Interaction in online teaching	4 (2.7)	3	3.0
16. Administrative tasks in thesis supervision	3 (2.0)	3	2.7
17. Controversial topics in course	3 (2.0)	2	4.5
18. Being overwhelmed as a new lecturer	3 (2.0)	1	2.0
19. Taking offense at joke	2 (1.3)	2	3.0
20. Unmotivated students	2 (1.3)	1	4.0
21. Change of job position	1 (0.7)	1	5.0
22. Pedagogical choices	1 (0.7)	1	4.0
23. University rules	1 (0.7)	1	3.0
Total	**150**	**99**	**3.4**

Note. Five scenarios for each of the participants (n =30); percentage is number of times chosen relative to the total of 150 choices

The findings indicate that participants had different preferences for the scenarios presented. *Students' personal problems* and *Workload*, with popularities of 10.8% and 10.0% respectively, emerge as favorites among all options, with the note that although they are the most preferred choices, only approximately one in ten participants selected one of the two. These findings shed light on the diversity of interests and priorities

among the participants in our study, and highlight the need for a flexible and adaptive approach when these scenarios are used to elicit manifestations of teacher agency.

Repertoire of solutions

Our second aim was to investigate if the scenarios did indeed elicit multiple solutions. To achieve this, we quantified the solutions provided by each individual for each scenario. The average solutions per scenario are shown in the last column of Table 4. The data show that there is not one scenario in which the solution is evident, so that all the scenarios seem suitable for eliciting teacher agency. The results indicate that when faced with scenarios, a lecturer is likely to generate an average of two or more solutions. This means a participant must make an informed choice between at least two possible solutions. Because we left the choice of scenarios to the participants in this pilot, not all scenarios could be tested equally well; nevertheless, we can say that Study 4 has shown that all scenarios proved their purpose at least once. Below, we provide a fragment of a think-aloud session to show how we measured what we understood by multiple solutions:

> Scenario: Student expectations
> As a lecturer, I notice that students increasingly expect individual feedback and guidance. Students' expectations seem to have changed since my own student days, and this has put additional pressure on me as a lecturer. I appreciate that students value feedback and guidance, I understand that this is a crucial part of their learning process, and I do my best to meet their expectations. But one day, I felt completely overwhelmed by the large number of emails I received from students who asked for feedback or a one-on-one meeting. So I knew I had to come up with a solution.

Below we show Olivia's response, with her solutions underlined to clarify how we analyzed them:

> "Yeah, so there are options out there that you can consider. You can organize feedback in different ways. You can try to [1] put less pressure on individual students for feedback and instead focus on providing collective feedback that benefits everyone. Another approach is to [2] narrow down your feedback focus. For instance, you could delve deep into specific parts of students' work and provide more general feedback for the rest. This way, you can frame your feedback more efficiently. This is a viable choice. Alternatively, you can [3] incorporate other types of feedback, such as peer feedback. This way, students can give feedback to each other, reducing the feedback burden on you. Also, you can [4] communicate with students, explaining the limitations of time you have as a teacher to fully meet all their needs. You can clarify that due to the available time, it's challenging to address every aspect perfectly. This helps them understand that you're doing your best within the given constraints. These are the options I see in front of me."

In this example, Olivia read the scenario aloud and discussed the preferred options for dealing with this problem by thinking aloud. Because there are several affordances – four in this case (see underlining) – and it is unclear which option is best, we can deduce that this scenario does elicit agentic manifestations. The participant can then determine which option is the best in the given situation.

To sum up, Study 4 allowed us to examine whether the scenarios we developed and implemented proved useful. Our analysis focused on the breadth and purpose of this method: are we able to develop scenarios that reflect educational practice and on which lecturers' decision space is tested? The review provided valuable insights into the effectiveness of these scenarios and shed light on their applicability and impact on practice. Although not all scenarios could be tested more than once, simply because of the participants' freedom of choice and the limited time during the sessions, the results of this fourth study indicate that the scenarios constructed did lead to manifestations of teacher agency. We arrived at this conclusion because every scenario that was tested elicited multiple solutions. Therefore, we can assume that the procedure for developing scenarios as described and applied here produces valuable and usable scenarios by which to measure indications of teacher agency.

Discussion

This paper focuses on the main research question: *In what ways can representative scenarios be developed to measure teacher agency in universities?* To answer this question, we described four studies, each designed to help with an aspect of developing valid scenarios in a trustworthy way (see Figure 1). Our investigation was aimed at developing and evaluating scenarios designed to elicit teacher agency in the context of university teaching practice. In the course of the four studies we developed 23 scenarios, suitable for eliciting multiple affordances that seem to capture the nature of teacher agency better than other traditional measurement tools.

Reviewing prior research made it particularly clear that measurement tools mostly deliver generic statements about agency and cannot adequately incorporate context. Moreover, in questionnaire studies there is little or no room for reflection on and consideration of particular answers. For example, Vähäsantanen et al. (2019) note that it is important to consider how professional agency dimensions may vary over time and in different contexts. Our project builds on this observation by creating context-specific and qualitative scenarios that allow a deeper exploration of these varied contexts, as suggested by Skilling and Stylianides (2020). Leijen et al. (2021) developed a robust conceptual framework for their instrument, but the generic items of their survey raise the question of whether more specific formulations would yield similar results, as responses to the items may depend on the context considered by the participant. We addressed this issue by developing our instrument for specific situations based on real-life experiences (Hughes & Huby, 2004). To better understand the context of the responses given, and so better measure the agency of teacher educators (a subset of university lecturers), Ghiasvand et al. (2023) suggest using qualitative tools such as focus group interviews and reflective journal writing. Our research incorporates this qualitative approach and provides contextual frames in the scenarios. In a vignette study by Louws et al. (2020), the authors note uncertainty about the influence of situational characteristics on school leaders' choice of leadership instruments. The scenarios we developed allow us to explore nuanced relationships between context and decision-making (cf. Skilling & Stylianides, 2020), providing a more comprehensive perspective on agency than offered in previous studies.

Considering all this, we argue that the measurement tools currently available, both qualitative and quantitative, cannot fully capture the dynamic nature of teacher agency due to the lack of real-life context dependencies. Studies on teacher agency can only provide relevant findings if the teaching-specific context is explicitly embedded in the design of the study. Only by embedding context can researchers develop a deep understanding of the reasons why teachers do or do not demonstrate agency in a meaningful situation (Engeström, 2011). The set of scenarios developed in this project could be utilized as real-life stimuli, as demonstrated in intervention studies aimed at measuring teacher agency (cf. Yang, 2021). This means that the set of 23 scenarios can indeed be used in follow-up studies. Our project contributes to the existing literature by introducing real-life teaching contexts as a metaphorical kaleidoscope for research on teacher agency in universities.

Reflections on the inductive and deductive research processes

It was essential to develop qualitatively strong and internally valid scenarios to be used for follow-up research (Hughes & Huby, 2004). Although developing scenarios for research is not new, it is often only the procedural and practical aspects of using scenarios that are described. However, in this way the theoretical frameworks underlying the phenomena being studied, and the research paradigm related to the content of the scenario material, are neglected (Hughes & Huby, 2004; Skilling & Stylianides, 2020). Therefore, as promised in the Introduction, we will now reflect briefly on the way our four studies contributed to trustworthy scenarios that meet Guba's (1981) criteria.

During the first three studies, constituting the inductive phase, we explicitly focused on increasing credibility, dependability, and confirmability (Guba, 1981) of our research. *Credibility* (the degree of

believability of the findings) was enhanced by employing a multimethod approach to gather data from various sources, such as interviews and expert panels. By adopting this approach, we aimed to represent lecturers' experiences and views in a trustworthy way. Study 1 stands out as particularly solid because scenarios were derived directly from real-life situations, which reinforced the authenticity of our results. Moreover, this credibility is emphasized in Study 4, demonstrating the usability of the tested scenarios. Regarding high *dependability* (the consistency and stability of the research process and findings over time), expert panels provided input on the design and methodology. In addition, regular consultation between the authors helped maintain consistency in the interpretation of data, and the application of research methods ensured a consistent and trustworthy research process. These steps led to our scenarios being designed in such a way that each respondent received similar information, which promoted consistency and stability in the presentation of situations and ensured that participants considered similar contexts when responding to the scenarios. To ensure *confirmability* (the objectivity and neutrality of the research findings), multiple researchers were involved in the analysis and interpretation of the data during the inductive phase. This collaborative approach helped minimize individual biases and promoted an objective understanding of the findings.

Finally, the pilot (Study 4) was intended to ensure increasing *transformability* (the extent to which research findings can be applied). Ensuring this factor involved examining how broadly the research conclusions could be used in or adapted to different situations or people. Because the pilot was deductive in nature this allowed us to gain insight into the generalizability of the conclusions in order to assess usability among participants.

Limitations

Caution should be taken in the interpretation of our findings because of two limitations. The first is that we used a convenience sample in Study 4, which may limit the external generalizability of our findings. The sample may not adequately represent the population because it consisted of lecturers who voluntarily chose to participate and are actively involved in educational innovation and improvement. This sampling may have biased our findings, as not all university lecturers are similarly involved in teaching. For example, we used committed lecturers who are highly involved in educational innovation and, therefore, have been able to think about improving university teaching more and could come up with more solutions than less engaged lecturers. This selection may have led to an overestimation of the number of solutions.

Second, the follow-up questioning in Study 4 may have been a limitation. We used a strict think-aloud protocol, in which free association was vital to getting as accurate solutions to the scenarios as possible. At the same time, we also wanted to challenge lecturers to look beyond their initial ideas. Therefore, we asked, “Can you think of more solutions?” These types of follow-up questions may lead to more solutions but hinder free association. Therefore, the extent to which the solutions proposed are still agentic needs to be elucidated. Follow-up research should investigate whether the solutions lecturers come up with in response to a follow-up question are still relevant.

Implications and conclusions

We tested the scenarios and found that they did serve their purpose for research on eliciting teacher agency. Besides research purposes, the scenarios can be used for professional lecturer development programs for academic growth and in job interviews. For example, scenarios can be used in a card-sorting game-based activity during teacher training, as an individual reflection activity, as a start for a collegial consultation round, or as a collaborative activity to develop lecturers’ repertoire of solutions. Reflecting on teaching scenarios together with colleagues or potential teaching staff creates a fertile environment in which experiences are shared, underlying values and beliefs come to the surface, insights are deepened, and collective knowledge is built. Research consistently emphasizes the benefits of self-reflection on teaching behavior (Van Beveren et al., 2018). Using the diverse set of scenarios as conversation starters – rather than as a measurement tool as we intended – can serve as a way to contribute to deep introspection and promote self-awareness and growth. Conversations or reflections through scenarios can reveal relationships and structures in this way, which is important in developing agency (Priestley et al., 2015; Rushton & Bird, 2023).

Moreover, these scenarios appear to fit ideally within the Scholarship of Teaching and Learning (SoTL) framework. SoTL refers to a systematic approach built on reflection on and publication of the educational process, in order to improve the quality of education and contribute to the knowledge base of effective teaching practices (Kreber & Cranton, 2000). Within SoTL, the scenarios can be considered not only tools for personal reflection but also valuable sources for generating knowledge about effective teaching practices (Gilpin & Liston, 2009). For example, lecturers can use the scenarios to critically analyze their teaching practices, share insights with colleagues, and jointly explore new approaches to teaching. This process contributes to lecturers' individual professional development and the broader community of educational professionals.

To conclude, in this paper we have described how teacher agency can be measured and how to make manifestations of agency visible and accessible. The scenarios listed reveal considerations regarding actions, informed decisions, and the lecturers' decision space. This contributes to faculty professionalization for the purpose of an engaged, innovative teaching staff within universities. Empowering faculty members to reflect on their actions, and conduct peer reviews and supervision contributes to forming a faculty community focused on engagement, continuous development, and innovation in university teaching.

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Appendices

Appendix A. All codes and how often they are applied.

	Code	Applied
1	dealing with rules and requirements of university	7
2	difference in pre- knowledge	7
3	insufficient preparation of students	6
4	passive unmotivated students	5
5	dealing with conflicts with colleagues and management	4
6	no suitable teaching space or organizational preconditions	4
7	dealing with complaints and unexpected questions from students	4
8	dealing with workload	4
9	too little time for teaching preparation	3
10	technical problems	3
11	managing student expectations	3
12	administration	2
13	student hurt by joke	2
14	being thrown in at the deep end	2
15	dealing with controversial topics in college	2
16	dealing with individual (problems) student	2
17	not enough seats for students	2
18	too little time for educational innovation	2
19	much freedom per individual but little coherence between courses	2
20	implement changes in course	2
21	difference in teaching drive between colleagues	2
22	balancing workload and offer personal guidance	2
23	didactic choices	2
24	change of job position	1

Appendix B. Four different forms of one scenario.

	First- person	Third- person
Open-ended	TITLE: Unprepared students in lecture The third lecture of my course was about to begin. As usual, students had to read an article to prepare for the lecture. During the lecture, there came little response to my questions. Only the few students who always actively participate made any attempt to answer my questions. When I tried to involve others in the discussion, I didn't succeed. I asked who had read the article I had sent in advance, but it turned out that only a handful of students had prepared as instructed. I realized that most students had not prepared the lecture, so I knew I had to come up with a solution.	TITLE: Unprepared students in lecture The third lecture of Dr. Johnson's course was about to begin. As usual, students had to read an article to prepare for the lecture. During the lecture, there came little response to Dr. Johnson's questions. Only the few students who always actively participate made any attempt to answer Dr. Johnson's questions. When Dr. Johnson tried to involve others in the discussion, he didn't succeed. Dr. Johnson asked who had read the article he had sent in advance, but it turned out that only a handful of students had prepared as instructed. Dr. Johnson realized that most students had not prepared the lecture, so he knew he had to come up with a solution.
Completed	TITLE: Unprepared students in lecture The third lecture of my course was about to begin. As usual, students had to read an article to prepare for the lecture. During the lecture, there came little response to my questions. Only the few students who always actively participate made any attempt to answer my questions. When I tried to involve others in the discussion, I didn't succeed. I asked who had read the article I had sent in advance, but it turned out that only a handful of students had prepared as instructed. I realized that most students had not prepared the lecture and decided to use the situation as a learning opportunity by suggesting discussion groups to encourage future preparation and simplifying the content to re-engage the entire class.	TITLE: Unprepared students in lecture The third lecture of Dr. Johnson's course was about to begin. As usual, students had to read an article to prepare for the lecture. During the lecture, there came little response to Dr. Johnson's questions. Only the few students who always actively participate made any attempt to answer Dr. Johnson's questions. When Dr. Johnson tried to involve others in the discussion, he didn't succeed. Dr. Johnson asked who had read the article he had sent in advance, but it turned out that only a handful of students had prepared as instructed. Dr. Johnson realized that most students had not prepared the lecture and decided to use the situation as a learning opportunity by suggesting discussion groups to encourage future preparation and simplifying the content to re-engage the entire class.

Appendix C. The final 23 scenarios.

TITLE: Students' personal problems
I'm a lecturer at this university. During one of my courses, I noticed that one of my students had been struggling in class for some time. The student was not meeting the deadlines, seemed unmotivated, and hardly interacted with other students. I had a conversation with the student, and she told me that things were going badly at home and that was why she couldn't keep her attention in class. I knew I had to come up with a solution.

TITLE: Workload
As a lecturer, I experience constant pressure to teach, conduct research, publish articles, and attend conferences. It feels like a constant struggle to get everything done within the tight deadlines set by the university. I am aware that this pressure is a result of both the high standards set for university teachers and our own passion for the job. It feels like there are never enough hours in a day, and at times I feel overwhelmed. I know I have to come up with a solution.

TITLE: Coherence between courses
One of the things I appreciate most about teaching at the university is the freedom I have to develop my own courses and shape my teaching in the way I feel best. I take pride in developing courses that can inspire and challenge my students, and I enjoy creating a unique learning experience for them. At the same time, sometimes it seems my colleagues and I are all working on our own "island." It seems that this individual freedom comes at the cost of a lack of coherence and consistency across the curriculum. So I knew I had to come up with a solution.

TITLE: Technical issues
Well in time, I arrived in class to get everything ready for my lecture. However, the computer was very slow in starting up and eventually crashed completely. While my students entered the class, I tried to restart the computer. My heart rate accelerated as I watched the clock tick away and realized how much time we were losing. I realized how dependent we are on technology nowadays! I knew I had to come up with a solution.

TITLE: Student expectations
As a lecturer, I notice that students increasingly expect individual feedback and guidance. Students' expectations seem to have changed since my own student days, and this puts additional pressure on me as a lecturer. I appreciate that students value feedback and guidance. I understand that this is a crucial part of their learning process, and I do my best to meet their expectations. But one day, I felt completely overwhelmed by the large number of emails I received from students who asked for feedback or a one-on-one meeting. So I knew I had to come up with a solution.

TITLE: Students differ in prior knowledge
I walked into the classroom, ready to start my subject's introductory lecture. It was the first lecture of the new academic year. First, I did a small recap of the basics, assuming these were still familiar to the students, and then introduced some new definitions and concepts. However, as I looked around the room, I noticed that many of my students struggled to keep up with the content. Some of them just stared blankly at their notes; others flipped desperately through their textbooks; only a few students were able to keep up. To verify whether students indeed struggled to keep up, I asked which of the students were familiar with the basic concepts. It turned out that there was a large variety with regard to their prior knowledge. For some, the new concepts were easy to understand, but for others, even

the basic information was completely new. When I realized these differences in students' prior knowledge, I knew I had to come up with a solution.

TITLE: Unprepared students in lecture
The third lecture of my course was about to begin. As usual, students had to read an article to prepare for the lecture. During the lecture, there was little response to my questions. Only the few students who always actively participated made any attempt to answer my questions. When I tried to involve others in the discussion, I didn't succeed. I asked who had read the article I had sent in advance, but it turned out that only a handful of students had prepared as instructed. I realized that most students had not prepared for the lecture, so I knew I had to come up with a solution.

TITLE: Students' views on teaching quality of colleague
As a lecturer, I see it as my responsibility to put time and energy into the preparation of my classes and constantly look for ways to improve and innovate my teaching. However, I am told by students from other groups that their instructor is often poorly prepared, cannot provide appropriate answers to questions, and has already failed to meet the promised review deadline a couple of times. I hesitate to bring this up with my colleague: on the one hand, I do not think it is my responsibility, but on the other hand, my professionalism tells me that students have the right to a quality education. So I know I have to come up with a solution.

TITLE: Educational re-design
As a lecturer, I'm ambitious to keep improving my teaching and engage my students more, but constraints from the curriculum and my department hinder what I can achieve. There is no real incentive to improve teaching, nor are proper facilities provided. Still, I see it as part of my job to constantly look for ways to improve my teaching, so I know I have to come up with a solution.

TITLE: Implementing changes in course
I'm teaching a new course in which I want to experiment with some new teaching methods. However, the university requires me to send in the course description and grading procedures far in advance because of the long and tedious procedures for creating the study guide. Since I am currently busy teaching other courses, I feel hampered in implementing these innovations. On the one hand, I see it as my duty to further develop my teaching; on the other hand, I feel that my current teaching also deserves full attention. I know I have to come up with a solution.

TITLE: Students' unexpected questions
The students were in their seats, and I welcomed everyone. Before I actually began the lecture, a student raised her hand and asked a question unrelated to the lecture's topic. However, when I listened to the question, I found it an interesting question nonetheless, and, as I appreciated the idea that the student asked the question, I wanted to accommodate the student. I knew I had to come up with a solution.

TITLE: Balancing professional responsibilities
I value the personal mentoring of my students, as I believe personal attention contributes significantly to their success and well-being. I enjoy taking the time to have one-on-one meetings with my students and provide individual feedback, but I find that this becomes increasingly difficult as my student numbers increase. I find myself in a tight spot and have to make choices between my mentoring role and other duties, such as teaching and research. I struggle with this balance, so I know I have to come up with a solution.

TITLE: Lecture preparation
At the last moment, I had taken over a lecture from a colleague. When I started with the lecture, I soon realized that important slides were missing. I felt like I was thrown into the deep sea without a life jacket. I hadn't had enough time to prepare the lecture because my colleague hadn't saved all the slides. This frustrated me because I knew how important it was to provide students with a well-structured and organized lecture. I knew I had to come up with a solution.

TITLE: View on teaching
It was the first time my colleague and I taught a particular current course. To prepare for the course, we divided the topics among ourselves. Beforehand, I was very excited to teach the course with my colleague. However, I discovered that we held completely different views on what good teaching entails. Conflicts arose over things like whether class attendance would be compulsory, the amount of feedback we would give, the method of grading, etc. These were long and exhausting debates; discussions ran high, and we struggled to understand each other. I knew I had to come up with a solution.

TITLE: Interaction in online teaching
I stared at my computer screen in frustration as I tried to lead an online discussion with my students. I found it hard to feel the same energy and connection as I did in the physical classroom. I missed the spontaneous conversations, body language, and in-person conversations with my students. I felt isolated and uncomfortable in this new environment. Still, I didn't want to give up because I felt I should be able to teach my classes properly even in this situation. So, I knew I had to come up with a solution.

TITLE: Administrative tasks in thesis supervision
As a lecturer, I find the administrative hassle surrounding thesis supervision particularly time-consuming and frustrating. It feels like it never ends. I have to fill out all kinds of forms, keep track of deadlines, prepare reports, answer countless emails, and attend meetings. It seems more like an administrative job than supervising students. I would like to spend more time giving feedback and guidance to students instead of being stuck in a bureaucratic system. It is time for a more efficient way of working. I know I have to come up with a solution.

TITLE: Controversial topics in course
I taught a course that included some highly contested and controversial topics. I knew that these topics could lead to heated debates and even division among the students in class. Although I felt I was usually well-able to lead class discussions about sensitive issues, it seemed to become increasingly difficult to maintain an atmosphere of respect and understanding in class. What I feared did indeed happen: students felt attacked, and discussions got out of hand. I knew I had to come up with a solution.

TITLE: Being overwhelmed as a new lecturer
As a starting lecturer, I felt overwhelmed. The first period of teaching felt like a big pandemonium, full of challenges, like supervising students, preparing and delivering courses, and doing that in an inspiring way. Although I understood that it is normal to experience these challenges and I still had to build routines, it also felt like I was thrown into the deep end, and I had no idea where to start or how to manage all of these tasks. I knew I had to come up with a solution.

TITLE: Taking offense at joke

A student came up to me after the lecture. He said he felt offended by a joke another student had made during class. I felt uncomfortable because I was not aware of this situation, but I knew it was important to create a safe learning environment where students feel safe and free to express themselves. I took the student's concerns seriously because he was genuinely upset. I knew I had to come up with a solution.

TITLE: Unmotivated students

I have been teaching at this university for several years now and have encountered many difficult students, but I had never experienced a class like this one before. Many students seemed uninterested in the material. Some students were sleeping; others were looking at their phones or talking to each other. When I asked who was interested in the subject, only a few hands went up. When I realized that the subject did not interest students at all, I knew I had to come up with a solution.

TITLE: Change of job position

I have accepted the position of educational director and find it difficult to be the manager of former colleagues. I feel I am in an awkward position and don't really know how to handle this situation. It occurs to me that my attitude toward my former co-workers has changed and that I am struggling to make choices that affect them. I want to find a way in my new role and find the right balance between collegiality and leadership. Still, I notice from the side of colleagues and myself that there is friction because of my new role. I know I have to come up with a solution.

TITLE: Pedagogical choices

As a lecturer, I feel I need to continuously develop. This means that I have to use new pedagogical approaches. But I'm reluctant to change my pedagogical choices too drastically, since I am afraid that the students will not understand it and therefore will not perform as well. I still want to keep looking for ways to improve my teaching and challenge my students without disadvantaging them through poor teaching, but traditional ways of teaching feel more comfortable and may be safer. I know I have to come up with a solution.

TITLE: University rules

I'm an enthusiastic and dedicated lecturer, but I feel restricted by the rules and requirements of the university where I work. I have to follow a strict protocol for deviating from an exam date. Currently, a good student of mine is unable to take the exam due to personal circumstances. I want to accommodate her by offering another date, but because of all the rules of the university, she has to take the retake. Neither of us wants that, so I know I have to come up with a solution.