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The winding road of student teaching: addressing uncertainty with core reflection

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ABSTRACT

The period of student teaching often creates crisis experiences in student teachers and can have various negative effects, but it also offers opportunities for deep learning. This study focused on the types of struggles student teachers encounter and on the effects of coaching aimed at the promotion of core reflection. Core reflection is an approach focusing on the tension between people's inner strengths and their inner obstacles, as a way to support growth. While previous research suggested that teachers were able to improve their classroom performance due in part to core reflection's influence, no study before this one has directly explored how core reflection addressed uncertainty experienced by student teachers. Additionally, this study indicates core reflection may aid student teachers with finding a personal, authentic way of teaching – a process one may call a Hero's Journey.

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Student teaching is often a difficult period for those enrolled in teacher education. In decades of research the phenomenon of the 'practice shock' has been well documented (e.g. Stokking et al. 2003), and also the many problems beginning teachers encounter (Veenman 1984). They often feel uncertain, not only about how to behave as a teacher and deal with practical situations, but also about themselves as a person (Helsing 2007). The winding road student teachers must traverse in addressing these uncertainties may be likened to what cultural anthropologist Joseph Campbell called a 'Hero's Journey.' We explore this possibility within the pages of this paper.

Teacher practice is one fraught with stress and uncertainty (Allas, Leijen, and Toom 2017; Forzani 2014), a reality for which pre-service teachers must be prepared (Floden and Buchmann 1993). Dotger (2015, 10) contends that 'uncertainty comes in two forms – from the visibility and accountability associated with one's professional responsibilities and from the realisation that one's profession is full of situations where decisions are based on often-partial knowledge and actions are taken real-time'. Yet, preparing pre-service teachers for this uncertainty seems to remain insufficiently addressed by teacher education programmes. Moreover, preservice teachers are desperate for 'tried and true strategies' to mitigate the uncertainty they may feel regarding their role as a teacher (Floden and Buchmann 1993). It is not hard to imagine preservice teachers aligning

themselves with ‘teaching moves’ (Green 2010) witnessed during student teaching that may address uncertainty, but may be misaligned with the ideals of the student teacher (Rozelle and Wilson 2012).

A recognition of a misalignment between ideals and reality may be viewed as a ‘call to adventure’ (a term used by Campbell) – an invitation to reflect deeper upon the meaning and implications of such a gap and take action. However, a lack of recognition of the gap or the inability to overcome it may lead to what Meijer, De Graaf, and Meirink (2011) call a *crisis experience*. Hence, a growing number of publications characterise the process of learning to teach as a personal quest. Therefore, the aim of our study was an in-depth investigation of the characteristics of this quest. More specifically, the *research question was: how does core reflection influence the quest of becoming a teacher?*

Review of the literature

Meijer, De Graaf, and Meirink (2011) describe the first period in the teaching profession as a stressful time, marked by *key experiences* influencing student teachers’ development. According to Yair (2008) these are ‘short and intense instructional episodes that students remember to have had a decisive effect on their lives’. From a study on student teachers, Meijer and her colleagues conclude that such key experiences are often crisis experiences, characterised by a feeling of not being able to meet certain challenges.

Crisis experiences may result in one or more of the following tendencies:

- (1) *Deficiency thinking*. As Britzman (2003) describe, student teachers’ feelings of not being able to teach the way they are expected to do, creates the idea of a deficiency (with regard to perceptions of themselves and their students), negative thoughts about competence, and doubts about oneself as a teacher.
- (2) *A focus on expectations and requirements*. Being enrolled in a teacher education programme with its requirements and evaluation criteria, naturally elicits the concern ‘will I pass or fail?’ As a result, student teachers tend to be keen on what is expected from them, and not only by the teacher education programme.
- (3) *A need to get advice and tips*. In line with these previous tendencies, there is a longing to get practical advice (‘please give me a quick solution to my problem’), again a tendency counterproductive to reflection and deep learning (Korthagen et al. 2001; Korthagen and Nuijten 2022).

On the other hand, crisis experiences may have many positive effects. They may enhance important changes that not only help student teachers to better cope with uncertainty, but also promote what Yair (2008) calls *identity development*. Building on Beijaard, Meijer, and Verloop (2004), Meijer, De Graaf, and Meirink (2011, 116) describe identity development as a combination of answers to questions about both personal (what kind of teacher do I want to be) and professional (what image of teachers emerges from theory or society) aspects of teaching.

However, a fruitful process of identity development generally does not emerge by itself, but it requires in-depth reflection and supportive coaching dialogues (Toom et al. 2019). Core reflection has the potential to assist with such a process of finding answers to questions of identity, particularly those raised by uncertainty (Korthagen, Kim, and Greene

2013). As many authors emphasise, this requires a balance between empowering, positive learning situation and more challenging ones (e.g. Allas, Leijen, and Toom 2020; Heikonen et al. 2017), which is an important principle in core reflection.

A number of studies suggest core reflection's transformational potential. For example, Korthagen, Kim, and Greene (2013) and Hoekstra and Korthagen (2011) showed that applying core reflection resulted in significant changes in teachers' classroom behaviour and in their professional identity. However, no study before this one has directly explored how core reflection addressed uncertainty experienced by student teachers, which was the aim of our study.

Core reflection coaching

As many authors state, teacher reflection is enhanced by *dialogue* (Allas, Leijen, and Toom 2017; Knezic et al. 2019; Toom et al. 2019). This idea is fundamental to *core reflection coaching*. Its goal is to help people find a deeper connection with their core qualities (i.e. personality strengths) and ideals, become aware of obstacles limiting this inner potential, and overcome these obstacles. Of course, obstacles often present themselves in the environment (as outer obstacles), but in core reflection coaching it is considered important to focus on inner obstacles (i.e. obstacles within the person that prevent core qualities and ideals from impacting behaviour). These considerations have led to the phase model of core reflection shown in Figure 1, which directs the steps to take in core reflection coaching.

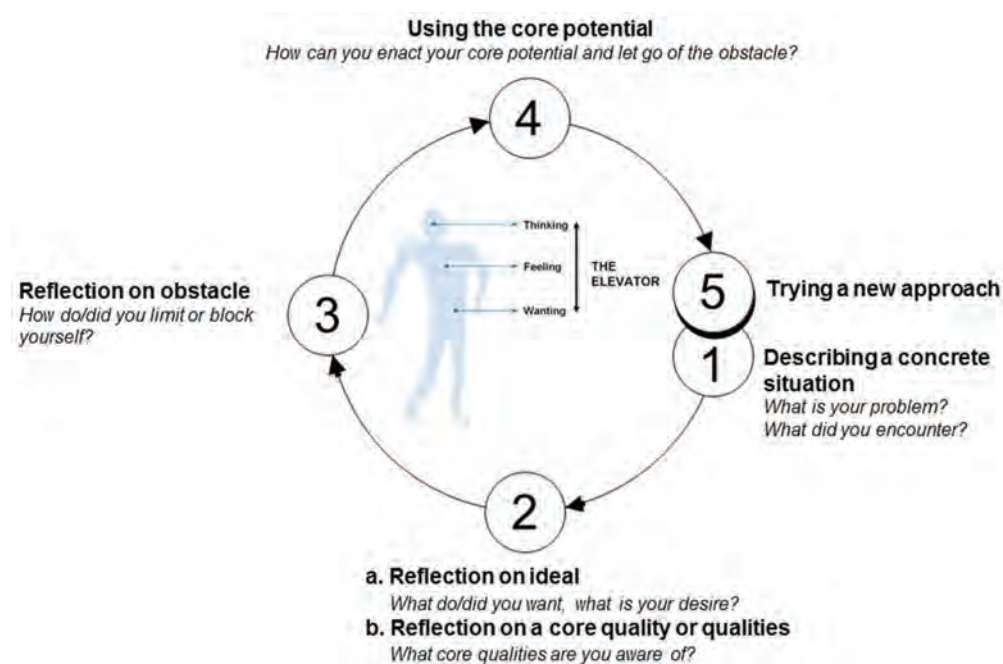


Figure 1. Steps of core reflection.

The picture in the middle of [Figure 1](#) refers to *the elevator principle*. The metaphor of an elevator is used to emphasise that three ‘floors’ in people are important sources of behaviour: their thinking, feeling, and wanting. Hence, reflection should not only focus on cognitive reasoning, but should include emotional and motivational aspects that are relevant in the learning process (Durlak et al. [2011](#)). The elevator principle is used in every phase of the core reflection model.

By using the elevator principle, the student teacher can then be supported in *feeling* the inner strength. As feeling this strength is often only a short-term effect, it is important to also give attention to obstacles limiting the person’s strength, specifically inner obstacles (phase 3 of the core reflection model). Again, it is crucial to not only think about the inner obstacle, but to also *feel* its negative effect, to connect with the *will* to no longer go along with the limiting pattern, and reconnect with the ideal and core qualities. The final aim of core reflection coaching is that the student teacher becomes autonomous in going through the core reflection phases, enabling shifts from problematic experiences and negative feelings to inner strength and effective behaviour.

To support the process of going through the core reflection phases, it is recommended that coaches use papers to be put on the floor. On these papers the four important elements of core reflection are written: (1) problem situation, (2) ideal, (3) core qualities, and (4) inner obstacle. It is helpful if the coach and the student teachers ‘walk along’ these papers during a coaching session, as the feelings and bodily senses connected with each of the four positions, become ‘anchored’ to the four positions. This helps the student teachers to more consciously feel important differences in their state of being related to the four positions.

Materials and methods

The goal of the present study was to further explore core reflection through an in-depth and theory-guided analysis of three student teachers in a US university. What we found was that core reflection was experienced by student teachers as a way to address to address uncertainties they experienced in the classroom and showed that the student teachers under study may have went through a process that resembles ‘The Hero’s Journey’, described by Campbell ([1973](#)). Below we explain how we arrived at this result.

Data collection

Participants were recruited by emailing all teacher candidates enrolled in a Midwestern US teacher education programme. Four student teachers volunteered to participate; all were white women in their early twenties. One participant could not be reached to validate our results; therefore her experiences have been excluded from this paper. The researchers had no prior interaction with these student teachers, nor did they have any other formal role in relation to them. Participants had no formal teaching experience prior to this study.

Data were collected through a combination of audio-recorded core reflection sessions and interviews (see Appendix). Over the course of twelve weeks, we conducted eight core reflection sessions with every participant, enabling the researchers to track key experiences, learning processes, and changes taking place in the student teachers. The semi-structured interviews, approximately one hour in length, took place three times. The first

interview was held prior to student teaching and aimed at understanding the participants' biographies and the kinds of activities they found inspiring. The second interview was held at the end of the first month of student teaching. At this point, participants were asked to describe their most inspiring, memorable, or influential experiences of student teaching. The final interview took place at the end of student teaching, focusing on the connection the student teachers perceived between the coaching and learning outcomes.

Data analysis

In the first stage of data analysis, all raw data were analysed and coded according to Carspecken's (1996) critical qualitative techniques. These analytical techniques include the construction of meaning fields and reconstructive horizon analysis. These two analytical techniques 'make explicit tacit beliefs, norms, and values' embedded in speech and thus help us know whether a research study is telling the truth. Carspecken (1996, 59) referred to meaning fields as 'consist[ing] of possible claims referenced by an act of meaning (...) meanings that other people in the setting might themselves infer, either overtly or tacitly' (95). The first author created meaning fields throughout data collection, though these meaning reconstructions did not extend far beyond the exact words spoken by participants.

Reconstructive Horizon Analysis (RHA) was used to interpret data in ways that extended to more implicit aspects of verbatim speech. RHA follows the same procedure as meaning field construction, but it surfaces interpretations that are more implicit. It also divides these reconstructions of implicit meaning into four truth claims: objective, subjective, normative, and identity claims. In the first coding stage, foregrounded normative claims (i.e. a participant explicitly stating what they *should* or *shouldn't* do) appeared with greater frequency with regards to obstacles and core qualities. An additional round of coding and analysis filtered meaning fields found in these phases of core reflection through the research question. For each participant, this stage of coding and analysis included the extraction of themes relevant to the research question. Penultimate analysis revealed participants often wrestled with pedagogic uncertainty. In the final stage of analysis, the second author checked the trustworthiness of the coding process and its results. This led to some minor changes, in particular with regard to the second step of the core reflection.

Validity considerations

Next, multiple approaches were used to validate findings. Carspecken (1996, 141) particularly emphasised member checks as a way to validate 'reconstructions to equalise power relations'. Member checks consisted of an exchange of emails with the participants verifying major findings. The contents of the emails included an outline of findings and an audio recording describing the specifics of each theme. An audio recording of less than 15 minutes was used because this format allowed the first author to explain the findings in accessible terms while simultaneously giving participants a clear time frame for reviewing the findings. Participants reviewed these materials and agreed with the findings of the study.

Reconstructions were also validated through negative case analysis. During negative case analysis, the authors sought out incidents in the data that initially appeared to contradict findings. Data that seemed inconsistent with findings were resolved through applying additional reconstruction horizon analysis and member checks, both of which further validated the findings. Participant interviews before, during, and after student teaching also aided with negative case analysis. Findings also were validated through an iterative process of emailing literal utterances and reconstructions between authors. This type of peer debriefing helped validate reconstructed meanings of participants as the second author questioned any reconstructions that seemed inconsistent with literal utterances, which resulted in the first author seeking out additional utterances to support initial reconstructions.

Results

The aim of our study was an in-depth investigation of the research question: *how does core reflection influence the quest of becoming a teacher?* In this section we will answer this research question by connecting the data from each of the three cases with the steps of the core reflection model. To show this connection as clearly as possible, we will put the core reflection steps in *italics*. Concurrent with this, we will show how these core reflection steps can also be related to the stages of the Hero's Journey. This means that our presentation below shows *both* the core reflection steps *and* the connection with the Hero's Journey. For this goal we have condensed twelve stages to four of the pivotal moments described in the third edition of Joseph Campbell's *The Hero with a Thousand Faces* (1973). These pivotal moments are: Call to Adventure (becoming aware of a desire/ideal), Initiation (being challenged to enact the desire and overcome obstacles), Ultimate Boon (recognising an 'inner treasure'), and Freedom to Live (arriving in a 'new space'). Table 1 clarifies the connection between the two frameworks.

Beth

Beth attended a prestigious university music school to specialise in concert band. Her teacher preparation heavily emphasised pedagogical content knowledge. For her student teaching, she was placed in a school located in the same town as her university. Her cooperating teacher not only opened up his classroom to Beth from the very beginning of her student teaching, but also encouraged her to lead marching band practice.

Table 1. An alignment between the hero's journey and core reflection.

Pivotal Moments of the Mythical Hero's Journey (Campbell 1973)	Milestones of Core Reflection
Call to Adventure	Awareness of one or more inner obstacle(s) limiting the potential
Initiation	Feeling the tension between ideals and obstacles
The Ultimate Boon	Developing awareness of core qualities and ideals (the inner potential)
Freedom to Live	Self-directed core reflection

Call to adventure

Beth described her first weeks of student teaching as mostly 'great' and it seemed her positive experiences helped her become more aware of her *core qualities*. She also experienced her share of challenges. During the first few core reflection sessions, she became increasingly more aware of *obstacles* blocking her qualities. In the first session, she mentioned an obstacle to what she described as her 'teacher presence' that became recurrent throughout her student teaching:

B (Beth): I've been in high school when there were student teachers and [I recall thinking], 'This person is maybe three years older than me. They don't know much.' [So] I don't want to make mistakes and have them think, 'Oh my gosh, this girl knows nothing'.

Throughout student teaching, Beth mentioned her discomfort with her status as student teacher. She often assumed students who challenged her were doing so simply because of her role and inexperience. She confessed that during those moments she would wonder whether she had enough authority to act with the presence of a teacher. This thought seemed to be an invitation to further explore its impact on her teaching.

Initiation

The tensions Beth surfaced in the Call to Adventure stage seemed to typically revolve around whether she was seen as a teacher. During the Initiation stage she finally confronted the belief that she might be limiting herself with the perception that she is 'just a student teacher' who does not 'know anything'. By the fourth session of core reflection, Beth seemed to begin to *feel* this tension most acutely:

C (The coach): What are some of the things that are blocking you from having your qualities come out more?

B: [My student's] insecurity with being in the spotlight. And also I think my negligence to see that that was coming out. My preconceived notion that [my student] was doing it just to challenge me because I had seen him do that before. I think he felt embarrassed, even though there's nothing to be embarrassed about; a lot of people don't understand a lot of things.

C: We have external obstacles and these are all the things you're saying he's probably experiencing. And then you have all these internal obstacles related to all the preconceptions you have that he is going to be a certain way. So what do you think about those obstacles? Specifically the internal ones?

B: I felt he had a chip on his shoulder so if I come into a problem situation [assuming he is trying to challenge me], then it's gonna go south on both of us really fast, which it did. So I think the internal ones are obviously my fault. And I think they can just tank you no matter how prepared you are.

C: How do you feel about those obstacles?

B: I feel a little embarrassed that I thought that of him. I shouldn't have felt it was all about me. He wasn't doing this just for me. It was because he was feeling uncomfortable. I kind of thought 'Alright, he's gonna challenge me because I'm a student teacher.' I should have just left at the door and come to it with a clean slate. So I feel guilty, I guess.

The coach asked Beth if she wanted the embarrassed feeling that resulted from a confrontation with her *internal obstacle*, to which she replied, 'No'. Beth agreed that it would be better for everyone if she used her qualities instead of following a belief that she would be challenged due to her status as student teacher.

Ultimate boon

Beth and her coach often identified how her poised and professional demeanour was a result of her quality of 'teacher presence'. After the Initiation stage, she began to understand that *core qualities* such as initiative and empathy provided her a more robust teacher presence. Beth noticed these qualities helped her (and her students) better perceive her as a teacher. This realisation represented an 'ultimate boon' in her journey with uncertainty. Here she describes how she applies this new insight to address an uncertain situation involving a student who had previously challenged her:

B: I could say [to my student], 'Well why don't you [come in after class]..we can work on this together, it will get better, you can improve. You've already done it once and remember how you felt?' She might say, 'Oh, I was absent and I have this test to make up and I have this to do', which I understand, I mean in high school, that's how I felt too. I know that's difficult to balance, especially when all of your classes have high expectations.

For the remainder of the sessions, Beth returned to her three qualities (presence, empathy, and initiative) repeatedly whenever the coach asked her to create an *ideal* and/or asked her about core qualities. As she advanced into student teaching, she began to see herself combining and sequencing them so she could first establish her presence, take the initiative to engage a student, and use her empathy to relate to her students.

Freedom to live

As student teaching progressed, Beth came to the core reflection sessions with far fewer problems to discuss. She was able to be a teacher without worrying as much about her role of being 'just a student teacher' (and the uncertainty inherent in this identity). She attributed this change, in part, to her willingness to reconsider her beliefs:

B: I think as the semester kept going, I had less and less problems. So I think that was really cool to see: wow, [core reflection] actually works. [In a situation where] one of the teachers was like, 'Can you please do my bus duty for me?' I was like, 'Wait a second. This is kind of similar [to another situation where I was left feeling unprepared and uncertain]. This is ringing a bell from what we had talked about [during core reflection]. So I can proactively use [my qualities] so I don't get myself in the same mess I already did.' I think being able to reflect on it, as a whole, I was able to understand students on a different level and understand myself on a different level, instead of being so narrow-minded. (...) It was almost like having hindsight for the future.

When the coach asked her how she avoided 'a mess' during bus duty, she described a situation that mirrored a prior core reflection session where in which Beth felt as though a teacher had 'set her up for failure' by asking her to fill in as a substitute teacher. This time, the difference may have come down to her using her core qualities of 'teacher presence' and 'initiative'. These qualities seemed to empower her to directly ask a teacher what to expect, which she said later helped her feel as though she had the authority to intervene right away when witnessing a bullying situation during bus duty.

Madison

Madison's preparation prior to student teaching consisted of more time 'in the field' than Beth's. This was due, in part, to Madison's interest in teaching English Language Learners (ELL). As a requirement of seeking an elementary degree and an ELL certification, Madison's student teaching was split between two schools. The first ten weeks of her student teaching took place at a rural elementary school and the remaining six weeks were spent working in an ESL classroom at an urban middle school.

Ultimate boon

Unlike others in this study, Madison chose to reflect upon an inspirational teaching moment in her second week of student teaching. This suggests she had found an 'ultimate boon' early in her journey with uncertainty. Her inspirational story (which served as an ideal within core reflection) allowed us to identify Madison's *core qualities* of being personable and flexible in her interactions with her students:

M: I had been trying to get Juliet to open up and nothing had been working. I pulled her aside to tell her how she is going to do lit circle and let her choose the role. She was working on her discussion director protocol and I asked if she was almost done and she said, 'Yeah, I'm just adding details from the story' and I started writing and she goes, 'Do you like unicorns?' I said, 'I like horses. Horses are kind of like unicorns. Maybe I can find a book in the library about unicorns next Friday when we go back there to read for *Reading Counts* points'. [And she said,] 'You would look for a unicorn book?' And I was like, 'Yeah, if you like unicorns, why don't we pick one and maybe you can tell the class why you like unicorns.' And she said, 'Do I have to stand up, in front of everybody?' I was like, 'You can sit on the floor, wherever you are at and talk about it. But we have to work on using a louder voice because sometimes everyone else cancels you out when you're talking because you don't talk as loud.' She goes, 'Okay, I guess practice could make it better'. I said, 'Yeah, of course'. We went back in and we did lit circles and she did great.

Madison's face lit up as she told this story and for the remainder of her student teaching it provided her with strong evidence of the impact of her core qualities of being personable and flexible.

Call to adventure

As Madison advanced deeper into her student teaching, she began to encounter what she perceived as the limitations of her personable and flexible teaching identity. This represented a 'Call to Adventure' in her journey with uncertainty. When obstacles to using her qualities were investigated, she replied, 'A lot of kids who really need one-on-ones don't have work done. Sometimes we can have one-on-ones when everyone is quiet, but most of the time we are 'go-go-go.'" She seemed quick to return to a belief of 'I do not have the time' or 'students aren't ready for it' whenever blocked from using her quality of being personable and flexible with students.

Initiation

The tension between her *ideal* and her primary *obstacle* became most apparent while discussing a student who was causing disruptions during maths instruction:

M: It's really hard during maths for my personality to come out because I'm so focused on them [being tested] on this.

C: So is that what's happening when you're like, 'I have to put aside my personable nature because I have to focus on them getting through this and learning it. I cannot bring my quality out because that will not let them learn it'?

M: Having you say it sounds ridiculous. (*Laughs.*) But I think that's how I feel. I know I have a certain amount of time and I have to get through and they have to know how to do it.

C: So it sounds like you have this belief that, 'If I'm personable, they won't learn.' Is that a good summary of it?

M: I hope not! That's exactly what I said, but I just think our time with maths isn't as long as it should be and they don't stay quiet and I have to get through this. And I just feel like I don't have. I don't know, that sounds horrible, I don't think that. It's hard. I don't really know.

A growing awareness of the above limitations (*inner obstacles*) represented a potential turning point within Madison's journey with uncertainty. However, she seemed uncertain if being unable to be personable was an obstacle for her. It seemed hard for Madison to really become fully aware of this tension, perhaps because she did not allow herself to really *feel* how she blocked herself. This was most apparent when she provided more thoughts when she was asked how she *felt* about her limiting belief:

C: How do you feel about the idea that you can't be as personable?

M: I don't know. I feel like with maths, I feel like I just need to teach it to them. And they need to learn it.

In retrospect, perhaps the coach could have put more attention on helping Madison differentiate between cognition and emotion. Nonetheless, she seemed to perceive the tension, if only cognitively. Unfortunately subsequent sessions between Madison and the coach were interrupted by a car accident, a school holiday, and a transition to a new school. It would be three weeks before another core reflection session could occur. Madison did not ask to revisit this obstacle by the time she and the coach met again, so we cannot say whether she became aware of how (or if) it could limit her.

Freedom to live

During a final interview, Madison gave multiple examples of how she was able to actualise her personable and flexible identity with students. She singled out a student from her elementary teaching experience, Dalton (pseudonym), when asked about the ways she turned to core qualities throughout her student teaching. In addition to drawing upon her personable quality, she also cited flexibility as being important in her work with Dalton:

M: I think about my characteristics a lot when I'm teaching. I think about being flexible *a lot* with Dalton. I literally tell myself, just be flexible, he'll do it one way or the other. And just getting on his level and making sure he understands that I'm there for him and that if he needs anything that I'm right there.

Madison also was able to cite applying her qualities in other ways, such as bringing classroom materials her students could relate to personally rather than becoming so focused on her own teaching and learning preferences. What remained unclear, however, was whether Madison *felt* a belief of ‘I have to get through this’ was limiting her ability to be her ideal teaching self.

Emily

Emily attended the same teacher preparation programme as Madison, though Emily did not pursue ELL certification. Therefore, Emily’s preparation included fewer field experience hours. Emily’s student teaching took place at a medium sized elementary school, near a large Midwestern city. Her cooperating teacher eased her into taking full control of the class. This gave us ample space on the calendar to begin our weekly core reflection sessions once she had comfortably settled into her placement.

The call to adventure

Even though Emily became aware of important *core qualities* and saw the value of drawing on these qualities, she also interpreted her cooperating teacher’s suggestions ‘to be more stern’ as the ‘right’ way to teach. For this reason, Emily began her student teaching by erring on the side of ‘sternness’ and seemed blocked by a belief that ‘the right way of teaching’ was incompatible with her quality of empathy:

E: I feel I lose my sternness if I gain my empathy. [Sternness] is not necessarily something I want to use, but at the same time, I don’t want to be sitting there [with a student] being [empathetic]: ‘Oh, that just sucks, I’m so sorry you had such a rough day. Let’s just sit here.’ I take on those emotions so much that I think that would be hard to dwell on.

Despite her uncertainty regarding how empathy fit with her vision of what it is to be stern, she nonetheless felt called to be more empathic in her teaching.

Initiation

By the fifth reflection session, the tension between Emily’s belief that ‘all teachers must be stern’ and her quality of empathy became uncomfortably obvious to Emily:

E: I guess it’s scary to me to think, what’s authentic to me – what if that’s wrong? (*Sighs.*) What if what feels right to me is not right? What if it’s never gonna work? What if I can never find that just planning, just empathy – what if it never works?

C: Yeah, that’s definitely a *big* internal obstacle: ‘What if it *never* works?’

E: (*Laughs.*) I guess I have this passion to be a teacher, so why would I have these passions if I wasn’t meant to be a teacher? And so I feel like maybe it’s just a fear that is in the back of my brain, but at the same time, it’s still a fear and it’s still knocking [to remind me it is there].

Emily’s growing awareness of her *inner obstacle* represented a turning point in her student teaching. She confronted her feelings of uncertainty (e.g. ‘What if it never works?’) and began to speak of ‘not changing who I am’ (her *ideal*) while simultaneously recognising the paralysing nature of getting ‘caught’ in ‘what’s best.’ She referred to this as ‘letting myself in more’ rather than simply mimicking her cooperating teacher’s ‘stern’ demeanour.

Ultimate boon

In the latter stages of her student teaching, Emily more often discussed applying empathy and creativity as aids to classroom management. For example, in one session she employed empathy to notice student confusion and to then use creativity to think of ways to include students in her instruction rather than simply forging ahead without their input:

E: I'm going to use my empathy [to know to] pull up students who are giving me the 'What's going on?' [facial expression] and I would have them walk through it as the class watches as the class is following along. [Just] finding a way to not give into the fear [of]: 'Oh [my supervisor] is gonna be so mad if I don't get the exact lesson done.' Just kind of deviating if I have to.

Being able to address uncertainties associated with classroom management in an empathetic way represented an 'ultimate boon' in Emily's student teaching.

Freedom to live

At the beginning of her student teaching, Emily seemed fixated on 'doing the right thing', but at the conclusion of it she began to speak back to this belief by focusing on her empathy and creativity. Finally, she began to adopt her own empathetic classroom management style. In the final interview, rather than 'falling back' to the 'stereotypical' stern approach, she instead mentioned using 'I statements' to create an empathetic circuit between her and her students:

E: I would say, 'You guys are upsetting me because you're not listening and at the same time I'm worried we aren't going to get through this'... just to show them that I wasn't just being a drill sergeant telling them do this, this, and this.

By taking on this approach, Emily found herself able to use empathy while at the same maintaining the kind of orderly environment her cooperating teacher expected. By balancing her empathetic quality with her cooperating teacher's expectations, Emily was now able to address uncertainties that had initially plagued her in the early stages of her student teaching.

Discussion

Each participant's experience may illustrate an answer to our research question: *how does core reflection influence the quest of becoming a teacher?* Key experiences in the development (or quest) of each participant's teaching identity were found in our study – a process we present as a hero's journey. Addressing uncertainty seemed to play a central role in this quest, which concurs with Allas, Leijen, and Toom (2020). The uncertainties seemed to be associated with teaching competence, the 'right' kinds of teaching, and expectations of cooperating teachers and university supervisors. In this section, we discuss this process and the ways in which core reflection may have played a role in aiding participants in their journey to becoming teachers. We conclude with an overview of limitations and implications.

Participants' experiences of the various crises seem to echo what we discussed in the literature review. The student teachers in our study, however, framed these crises around a central question of 'What do I do in this situation?' Beth's uncertainty seemed to be centred upon competency, namely whether her status as student teacher would result in

her students assuming she 'knew nothing'. Madison and Emily's uncertainty, conversely, may have been more focused on approaches to teaching. At times, Emily seemed unsure if her style of teaching was 'right' and Madison wondered if it was possible to simultaneously be personable *and* help her students prepare for standardised tests. All three seemed to initially surface these uncertainties during the 'Call to Adventure' stage before confronting these uncertainties as a possible crisis of identity during the 'Initiation' stage.

It is worth mentioning that we noticed the Initiation stage tended to occur halfway through student teaching. Perhaps it was at the halfway point when the student teachers in this study finally confronted a crisis of identity that had been brewing for some time. This seemed particularly true for Beth and Emily as the Initiation stage represented a moment in their teaching journey upon which they finally leaned into their core qualities as a way to address uncertainty. While Madison seemed to rely on her core qualities of being personable and flexible as a way to address uncertainty, it is unclear whether she experienced the same level of identity transformation as others in this study. It is possible that Madison did not become fully aware of the limiting power of her belief that she could not be personable while teaching maths or if she just perceived it as an unchangeable reality of teaching. *Feeling* the obstacle may have helped. As brain researcher Damasio (1999) stated, people have feelings constantly, but many people do not *feel* their feelings. In such cases, becoming aware of one's feelings is a learning process in itself.

The Initiation stage (i.e. the key experience associated with crisis) represents one of the key experiences we noticed and it may have accelerated the process of identity transformation. This may illustrate the positive aspects of navigating crises associated with uncertainty, particularly when core reflection is part of this process. Core reflection seemed to play an important role in aiding participants with questions of development, particularly the question: 'what kind of teacher do I want to be'. Each participant, to varying degrees, seemed to value being an empathetic and open teacher. Madison coupled this with being personable, while Beth and Emily sought to incorporate being proactive and creative, respectively.

Our study showed that core reflection may aid in the hero's journey of addressing uncertainty. This may be due to the symmetry between the primary stages of each. While core reflection has more than four steps, it could be said to have four primary 'milestones' that align with the Hero's Journey. The Call to Adventure seems to align with the stage in which student teachers in our study understood the tension between their potential and inner obstacles and the need to act upon their potential, but may have been too worried or uncertain to do so. The next stage, Initiation, was when their greatest fears were triggered by a decisive situation in which they really had to act upon everything they had learned about themselves, in spite of their fears or concerns (i.e. they had to rely on their inner potential). The Ultimate Boon was overcoming an important inner obstacle, and a transformation to a new state, with feelings of strength and deep insights about themselves as a teacher. Freedom to Live was characterised by an important new challenge, which at first seemed to be different from previous challenges, but required the same insights and actions that were associated with the inner potential. At this stage, the student teacher *felt* they had really grown.

Each of these stages can occur within one core reflection session, although this study suggests that a particular step of core reflection may be felt more deeply depending on where a student teacher is in their journey in addressing uncertainty. For example, Emily was invited to feel the tension between her ideal and obstacles in each one of her eight core reflection sessions, but she seemed to not reach the Initiation stage of her journey in addressing uncertainty until she deeply felt the tension held within the uncertainty of 'What if being empathetic is *never* going to work?' The recurrent nature of this belief through the first half of her student teaching suggested that it was only in the Initiation Stage that she truly perceived the consequences of focusing on the limiting belief as well as the possible consequences of being committed to 'letting herself in more' while teaching. The Ultimate Boon may have represented that moment when the consequences of actualising core qualities in the classroom were perceived. Each participant, except perhaps Madison, may have experienced this arc. Core reflection seemed to play in an important role in this process and this possibility may have implications for those who may be attempting to assist student teachers with crisis experiences.

This study has its limitations, including: a coach's influence on core reflection outcomes, a small number of participants, and a limited space in which to report each case in detail. Though qualitative studies with a small number of participants are not intended to be generalisable, they nevertheless can provide an in-depth analysis of exemplary processes. Therefore, this study may yield some general guidelines. For example, it illuminates the need to be sensitive to common experiences surrounding student teaching, particularly with regard to addressing uncertainty. Developmental and/or stage theories, however, are not without limitations. Stage theories (for example, the 'stages of child development') rightly have been criticised for the way they may essentialise processes that are often idiosyncratic (Pelaez, Gewirtz, and Wong 2008). We anticipate that the stages we outline in this paper, if applied rigidly, may run a similar risk. Instead we present these stages as one of many possible heuristics so that teacher educators may have additional tools to assist student teachers in their journey in addressing uncertainty. Furthermore, the research literature suggests that core reflection is flexible enough to work with anyone interested in learning to teach, especially those who do not fit neatly into a stage.

This study set out to explore student teacher's experiences of core reflection during the process of navigating uncertainty. While each student teacher took their own path on this journey, we found that their experiences seemed to fit the stages of the Hero's Journey. While our exploration of the Hero's Journey within education is not the first of its kind (see Brown and Moffett 1999; Mayes 2010), we feel our study is an important contribution to both research and practice because we explored the Hero's Journey 'in real time' as it occurred with student teachers using core reflection.

More awareness of the Hero's Journey may help both teacher educators/supervisors and student teachers to understand the step-by-step process of learning how to deal with uncertainty. In addition, the core reflection framework appears to offer concrete guidelines for supporting this process, by enhancing awareness of core qualities, ideals, and the inner obstacles creating uncertainty and a loss of strength. Most importantly, this study showed that the core reflection approach has the potential to support student teachers in dealing with these inner obstacles and thus with the cause of their uncertainties.

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References

- Allas, R., Ä. Leijen, and A. Toom. 2017. "Supporting the Construction of Teacher's Practical Knowledge through Different Interactive Formats of Oral Reflection and Written Reflection." *Scandinavian Journal of Educational Research* 61 (5): 600–615. doi:[10.1080/00313831.2016.1172504](https://doi.org/10.1080/00313831.2016.1172504).
- Allas, R., Ä. Leijen, and A. Toom. 2020. "Guided Reflection Procedure as a Method to Facilitate Student Teachers' Perception of Their Teaching to Support the Construction of Practical Knowledge." *Teachers and Teaching* 26 (2): 166–192. doi:[10.1080/13540602.2020.1758053](https://doi.org/10.1080/13540602.2020.1758053).
- Beijaard, D., P. C. Meijer, and N. Verloop. 2004. "Reconsidering Research on Teachers' Professional Identity." *Teaching and Teacher Education* 20 (2): 107–128. doi:[10.1016/j.tate.2003.07.001](https://doi.org/10.1016/j.tate.2003.07.001).
- Britzman, D. 2003. *Practice Makes Practice*. revised ed. Albany, NY: SUNY Press.
- Brown, J., and C. Moffett. 1999. *The Hero's Journey: How Educators Can Transform Schools and Improve Learning*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Campbell, J. 1973, original publication 1949. *The Hero with a Thousand Faces* third, Novato, CA: New World Library.
- Carspecken, P. 1996. *Critical Ethnography in Educational Research*. New York, NY: Routledge.
- Damasio, A. 1999. *The Feeling of What Happens*. London: Heinemann.
- Dotger, B. 2015. "Core Pedagogy: Individual Uncertainty, Shared Practice, Formative Ethos." *Journal of Teacher Education* 66 (3): 215–226. doi:[10.1177/0022487115570093](https://doi.org/10.1177/0022487115570093).
- Durlak, J. A., R. P. Weissberg, A. B. Dymnicki, R. D. Taylor, and K. B. Schellinger. 2011. "The Impact of Enhancing Students' Social and Emotional Learning: A Meta-analysis of School-based Universal Interventions." *Child Development* 82: 405–432.
- Floden, R., and M. Buchmann. 1993. "Between Routines and Anarchy: Preparing Teachers for Uncertainty." *Oxford Review of Education* 19 (3): 373–382. doi:[10.1080/0305498930190308](https://doi.org/10.1080/0305498930190308).
- Forzani, F. 2014. "Understanding "Core Practices" and "Practice-based" Teacher Education: Learning from the Past." *Journal of Teacher Education* 65 (5): 357–368. doi:[10.1177/0022487114533800](https://doi.org/10.1177/0022487114533800).
- Green, E. 2010, March. "Building a Better Teacher." *New York Times Magazine*. www.nytimes.com/2010/03/07/magazine/07Teachers-t.html/
- Heikonen, L., A. Toom, K. Pyhältö, J. Pietarinen, and T. Soini. 2017. "Student-teachers' Strategies in Classroom Interaction in the Context of the Teaching Practicum." *Journal of Education for Teaching* 43 (5): 534–549. doi:[10.1080/02607476.2017.1355080](https://doi.org/10.1080/02607476.2017.1355080).
- Helsing, D. 2007. "Regarding Uncertainty in Teachers and Teaching." *Teaching and Teacher Education* 23 (8): 1317–1333. doi:[10.1016/j.tate.2006.06.007](https://doi.org/10.1016/j.tate.2006.06.007).

- Hoekstra, A., and F. A. J. Korthagen. 2011. "Teacher Learning in a Context of Educational Change: Informal Learning versus Systematic Support." *Journal of Teacher Education* 62 (1): 76–92. doi:[10.1177/00224871110382917](https://doi.org/10.1177/00224871110382917).
- Knezic, D., P. Meijer, A. Toom, Å. Leijen, J. Mena, and J. Husu. 2019. "Student Teachers' Self-dialogues, Peer Dialogues, and Supervisory Dialogues in Placement Learning. European." *Journal of Teacher Education* 42 (5): 539–556.
- Korthagen, F. A. J., and E. E. Nuijten. 2022. *The Power of Reflection*. New York: Routledge.
- Korthagen, F. A. J., J. Kessels, B. Koster, B. Lagerwerf, and T. Wubbels. 2001. *Linking Practice and Theory: The Pedagogy of Realistic Teacher Education*. Mahwah, NJ: Lawrence Erlbaum.
- Korthagen, F. A. J., Y. M. Kim, and W. L. Greene, Eds. 2013. *Teaching and Learning from Within: A Core Reflection Approach to Quality and Inspiration in Education*. New York/London: Routledge.
- Mayes, C. 2010. *The Archetypal Hero's Journey in Teaching and Learning: A Study in Jungian Pedagogy*. Madison, WI: Atwood Publishing.
- Meijer, P. C., G. De Graaf, and J. Meirink. 2011. "Key Experiences in Student Teachers' Development." *Teachers and Teaching: Theory and Practice* 17 (1): 115–129. doi:[10.1080/13540602.2011.538502](https://doi.org/10.1080/13540602.2011.538502).
- Pelaez, M., J. Gewirtz, and S. Wong. 2008. "A Critique of Stage Theories of Human Development." In *Comprehensive Handbook of Social Work and Social Welfare, Vol 2. Human Behaviour in the Social Environment*, edited by B. A. Thyer, K. M. Sowers, and C. N. Dulmus, 503–518. New York: Wiley.
- Rozelle, J., and S. Wilson. 2012. "Opening the Black Box of Field Experiences: How Cooperating Teachers' Beliefs and Practices Shape Student Teachers' Beliefs and Practices." *Teaching and Teacher Education* 28 (8): 1196–1205. doi:[10.1016/j.tate.2012.07.008](https://doi.org/10.1016/j.tate.2012.07.008).
- Stokking, K., F. Leenders, J. De Jong, and J. Van Tartwijk. 2003. "From Student to Teacher: Reducing Practice Shock and Early Dropout in the Teaching Profession." *European Journal of Teacher Education* 26 (3): 329–350. doi:[10.1080/0261976032000128175](https://doi.org/10.1080/0261976032000128175).
- Toom, A., M. Tiilikainen, L. Heikonen, Å. Leijen, J. Mena, and J. Husu. 2019. "Teacher Candidate Learning of Action-oriented Knowledge from Triggering Incidents in Teaching Practice." *Teachers and Teaching* 25 (5): 536–552. doi:[10.1080/13540602.2019.1652162](https://doi.org/10.1080/13540602.2019.1652162).
- Veenman, S. 1984. "Perceived Problems of Beginning Teachers." *Review of Educational Research* 54 (2): 143–178. doi:[10.3102/00346543054002143](https://doi.org/10.3102/00346543054002143).
- Yair, G. 2008. "Key Educational Experiences and Self-discovery in Higher Education." *Teaching and Teacher Education* 24 (1): 92–103. doi:[10.1016/j.tate.2007.04.002](https://doi.org/10.1016/j.tate.2007.04.002).

Appendix

Interview Protocol before Student Teaching

Interviews are semi-structured and the interviewer will not be reading the questions verbatim, but will use them as focal points.

Domain of Interest

- Primary Record
- Biography
- Mission of Teaching
- Core Qualities

Lead-off Question(s):

Can you give me a brief narrative of your life story up to this point? Please do so, focusing on some of the most memorable moments of your life leading up to the present.

Covert Categories of Interest:

- Core Qualities
- Conceptions of Teaching
- Perceptions of Student Teaching
- Mission of Teaching

Possible Follow-Up Questions:

(1) Possible questions triggered by response to the lead-off question:

- Describe your favourite teacher in middle school or high school; why were they your favourite?
- How did they influence you to be a teacher? What did you appreciate about this teacher (regardless of whether it was different or similar)?
- Describe your least favourite teacher? Why were they your least favourite?
- If you were to guess: What do you think was the mission or guiding rationale for how your favourite and least favourite teachers behaved?
- Do you have a metaphor for what teaching is like? Fill in this phrase 'Great teaching is like _____' or 'When I am teaching at my best, I am like _____' What are some of the positive and negative aspects of this metaphor?
- Let's say you were to go back to the school you went to as a student, but now were back as a teacher: which teachers would you be excited to work with or avoid? Why?
- What kind of teacher do you see yourself as (e.g. creative, caring, 'laid back,' authoritarian, etc.)? Why?
- Besides teachers, who do you think influenced you the most? Why? What kinds of people tend to influence you the most (e.g. family, friends, philosophers, religious figures, celebrities, athletes, artists, historical figures, etc.)
- If you could live the life of anyone (or step into the shoes of anyone), who would it be and why?
- What kinds of activities do you feel most fulfilled doing? Why do you think this is?
- If you could do any kind of career and know it would pay for whatever you need to live – what would that job be? What kinds of tasks or skills would it involve? How would it fulfill you as a person?
- What ultimately motivates you to be a teacher? How does this fit in with your mission or rationale for life in general? How did your teacher preparation influence this?
- What excites you about student teaching?
- What about student teaching might make you apprehensive?
- What are you uncertain about regarding student teaching?
- What are your overall thoughts regarding student teaching?

Interview Protocol during (and after) Student Teaching

Interviews are semi-structured and the interviewer will not be reading the questions verbatim, but will use them as focal points.

Domain of Interest

Participant Experiences of Agency during Student Teaching

Lead off Question(s)

Look back over your entire student teaching experience. What are some memorable ways in which core reflection influenced your teaching and/or ways of interacting with students and/or colleagues? Look back at this or these experiences with a focus on what you did in the situation and how you did this. And how did you feel, what were you thinking?

Covert Categories of Interest:

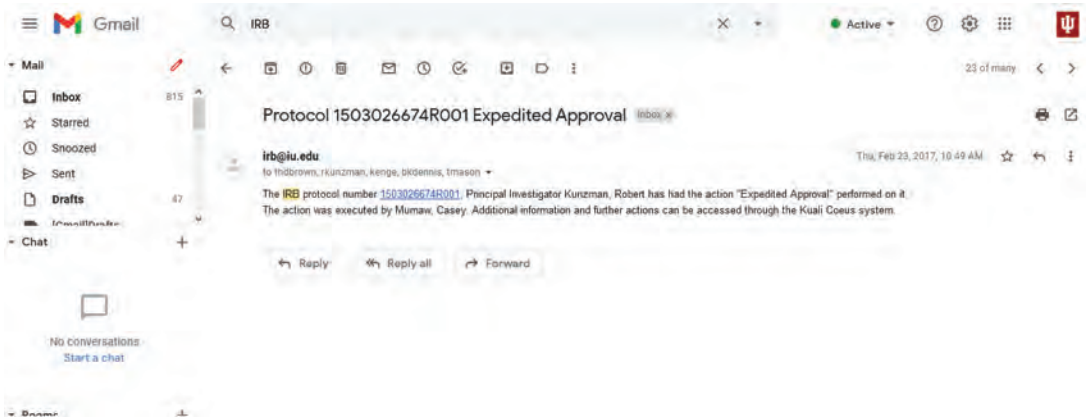
- Congruency between identity and behaviour during teaching
- Teacher Socialisation
- Power relations
- Sense of control versus sense of disempowerment

Possible Follow-Up Questions:

(1) Possible questions triggered by response to the lead-off question:

- Now go back to a situation that was less pleasant or that was difficult, or perhaps even a situation in which you felt stuck. What was so unpleasant or difficult in this situation? What happened within you? What did you think? How did you feel?
- Regarding the unpleasant or difficult situation, was there a possibility to use one of your personal strengths more?

- Identify an ideal that you have in your student teaching and try to find two or three core qualities within yourself that are connected to this ideal.
- Core quality examples: perseverance, analytic strength, goal-directedness, handiness,



creativity

- Identify at least one belief about yourself that often obstructs your functioning. How would your life be if you would no longer have this belief?
- How does reflection influence your teaching?
- How has Core Reflection informed the above experiences? If it has had an influence, please share a story from student teaching that illustrates core reflection's influence.