



Teachers' Ideas about what and how they Contribute to the Development of Students' Ethical Compasses. An Empirical Study among Teachers of Dutch Universities of Applied Sciences

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Abstract

In this empirical study, we investigate *what* and *how* teachers in Dutch universities of applied sciences (UAS) think they contribute to the development of students' ethical compasses. Six focus groups were conducted with teachers across three programmes: Initial Teaching Education, Business Services, and Information and Communication Technology. This study revealed that teachers across the three different professional disciplines shared similar ideas about what should be addressed in the development of students' ethical compasses. Their contributions were grouped into three core themes: creating students' moral awareness, developing students' moral skills and promoting students' moral professional behaviour. The majority of the teachers used a wide range of planned and unplanned pedagogic–didactic actions (reflecting individual learning and cooperative and group learning) to enhance the development of students' ethical compasses. However, teachers' strategies were mostly unstructured and unreflective and depended on the individual teacher's ability and knowledge to address moral themes. Furthermore, the study revealed two incompatible ideals: as role models, the teachers aimed to exemplify explicitly how to be a professional with an ethical compass. However, they also wanted to adopt a neutral stance because they were afraid to manipulate the students' ethical compasses. Therefore, they avoided promoting *the* ethical compass that they believed to be the best.

Keywords Ethical compass · Teachers · Universities of applied sciences · Moral development

Introduction

The importance of becoming (and being) a moral professional is increasingly discussed in terms of developing (and having) an ethical or moral compass (see Van Stekelenburg et al., 2020a). This notion was also introduced in the mission of universities of applied sciences (UAS) in the Netherlands when they described their long-term strategy as developing students as responsible professionals, with a 'moral compass' that can help students navigate their

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thoughts and actions (The Netherlands Association of Universities of Applied Sciences, 2015, p. 5).

Throughout this article, we use the term *ethical compass* which we believe has an aretaic dimension (drawing on notions such as virtues and ideals) and a deontic dimension (referring to rules and duties about what professionals must or not must do) (Alexander, 2016). A previous literature review of how ethical compasses are defined in the literature, revealed that consensus is lacking regarding the meaning and function of the ethical compass (Van Stekelenburg et al., 2020a). Based on a synthesis from the literature on moral professionalism (e.g. Freidson, 2001; Kultgen, 1988; Pritchard, 2006), we defined a professional's ethical compass as the intrinsic motivation to act morally, particularly when confronted with ethical dilemmas, according to moral standards and, specifically, the moral standards of the profession (Van Stekelenburg et al., 2020a). An ethical compass shows professionals the right direction when they are, for example, tempted to bend the rules for their own interests or are confronted with colleagues or managers who justify dubious acts as 'standard professional practices'. Having a compass then provides the intrinsic motivation to adhere to the direction of the *moral* standards of the profession (Van Stekelenburg et al., 2020a).

Yet, little is known about the ethical compass as a developmental process. In a previous empirical study, *students' ideas* were investigated about being a professional with an ethical compass in three UAS programmes: Initial Teaching Education (ITE), Business Services (BS), and Information and Communication Technology (ICT) (Van Stekelenburg et al., 2020b). Most students had difficulties in defining an ethical compass and described it as a gut feeling that changes, depending on the situation. Moreover, the majority of students indicated that they could not remember particular courses in (professional) ethics or explicit attention to professional moral issues during their education. However, the students spontaneously mentioned that during their education a stimulating institutional learning environment, interconnectedness and social interaction, as well as various (real-world work) experiences in a diversity of contexts had contributed most to the development of their ethical compasses.

Since these influences have been found to contribute to becoming a professional with an ethical compass, we can expect that teachers might wield significant influence in the development of students' ethical compasses. This raises the question of what ideas teachers hold about the meaning of such a compass, what teachers consider important in the development of students' ethical compasses and how teachers (think they) act on these ideas in their teaching practices. By exploring these questions, this article seeks not only to further the academic debate on the *meaning* of the ethical compass, but also to develop key insights regarding the *implications* of the development of an ethical compass. These aspects have not received much attention in the literature so far and can bring together the different perspectives of previous research.

In this article, we first provide an overview of (empirical) studies relevant to our research and note the gaps in the academic literature, after which we present the guiding research (sub) questions for this study. Second, we describe the methods used. Third, we present the findings in relation to the research (sub)questions. Finally, we discuss the study's contributions to the existing academic literature and present a number of practical implications.

Background

According to educational theory, teachers play an influential role in shaping the ethical conduct of students (Jackson et al., 1993; Sanger & Osguthorpe, 2013). How teachers act conveys to students what is right, good and virtuous. Teachers' beliefs about what is of moral value shape how they deliver (moral) education, build relationships with their students and foster student's moral growth (Jackson et al., 1993, p. 14).

Two forms of teaching in moral education are distinguished: *teaching morally*, i.e., the teacher is *being* a good or righteous person and teaches "in a manner that accords with notions of what is good or right", and *teaching morality*, i.e., the teacher is *providing* to students "the means for becoming a good or righteous person" and conveys to students that which is good or right (Fenstermacher et al., 2009, pp. 8–9). According to Fenstermacher et al. (2009), the latter can be achieved through *content*, e.g. what moral issues are addressed in the education, and through *manner*, e.g. how teachers' make their morally upright manner the object of instruction via their conduct.

However, teachers are not always prepared for these moral forms of teaching (Sanderse & Cooke, 2021; Sanger & Osguthorpe, 2011). For example, a lack of professional and moral knowledge and language can prevent teachers from engaging in moral education, which may cause students to develop morally largely by means of implicit or hidden messages (Sanger & Osguthorpe, 2013). In recent studies, student teachers indicated that their education mainly focused on mastering subject specific content and didactical skills and that moral and pedagogical aspects of teaching did not receive enough attention (Sanderse & Cooke, 2021). Furthermore in (ongoing) professional learning, there is a lack of attention to teachers' ethical understanding as part of their professional knowledge (Bullough, 2011; Mahony, 2009). Students indicated that due to a lack of attention to the moral aspects of the profession and a lack of opportunities to apply (ethical) theory in practical situations, acting on moral reasoning is quite challenging (Sanderse & Cooke, 2021; Van Stekelenburg et al., 2023).

A minority of studies within higher education have investigated *students'* ideas about their learning experiences in which the *moral* aspects of students' professional development were included (e.g. Bandini et al., 2017; Gauferg et al., 2010; Hunter & Cook, 2018; Phillips & Clarke, 2012). Although these studies were conducted in the field of medicine, they were valuable for our research because they reveal the importance of role modelling in developing moral professional identities. Most students indicated that they adapted to their role models' behaviours and values while being transformed from learners to novices. However, the students also experienced that expected behaviours were rarely made explicit in their learning environments (Bandini et al., 2017; Gauferg et al., 2010). Therefore, students had to invest a lot of time in decoding messages, such as expectations and rules of conduct (Gauferg et al., 2010) while observing 'good' and 'poor' behaviours among their teachers and mentors (Bandini et al., 2017). Engaging these implicit influences confronted students with the moral dilemma of either assimilating "to the dominant culture or holding fast to personal and professional values" (Gauferg et al., 2010, p. 1714). Furthermore, empirical studies have shown that role models can function as important (moral) "guides on the road to professionalism" (Timmerman, 2009, p. 237). For example, in the field of teacher education, it was revealed that, regardless of the content of teacher education programmes, teachers' ideologies and practices influenced how student teachers *perceived* the roles and responsibilities of their future jobs (Izadinia, 2012). In particular, the attitudes of former secondary school role models were found to motivate teachers to *develop* these

in their own teaching style (Timmerman, 2009). Also in the early stages of a professional's career, ethical role models at work were found to impact how ethical leadership was perceived and leadership roles and responsibilities were developed (e.g., “communicating clear ethical standards and disciplining employees who violate them”) (Brown & Treviño, 2014, p. 594).

Empirical studies that have investigated *teachers'* ideas within higher education about their contributions to students' moral professional development are sparse. Therefore, we turn to a broader body of empirical research. For example, Willemse et al. (2005, 2008) examined how teachers designed and carried out a curriculum that prepared student teachers for moral education, and how they *actually* showed their values. Willemse et al. (2008) videotaped and discussed lessons of nine teachers, and revealed that preparing student teachers for moral education often depended on teachers' personalities and how they embodied their personal values and beliefs in their behaviours and attitudes. Most teachers had difficulties describing the ways in which they put values into action, and indicated that they found it difficult to plan in advance how to put their values into practice (Willemse et al., 2008, p. 455). Recently, Zhang et al. (2022) performed a review study into teachers' perceptions on the moral education curriculum. This review study showed that teachers across (non-)European countries and school systems lacked professional knowledge (e.g. teachers based values education in the personal self rather than in the professional self) and proactive approaches to address values education, as well as a professional meta-language that could help them reflect upon and explain their practices (Thornberg, 2008; Thornberg & Oğuz, 2013). Asif et al. (2020, p. 16), who investigated the practices and beliefs of university teachers of moral education (for sustainable development) in China and Pakistan, found that the majority of teachers “were confused in articulating the meaning of moral education” and that most learning and teaching practices were not conducive to students' moral development because teachers lacked knowledge about what activities to incorporate in their lectures and how to use moral dilemma technique(s).

Thus, there is a body of literature suggesting that teachers are not always prepared for values education. However, there are a number of reasons why more research is needed in this field. First, little attention has been given to the ideas that *teachers working in higher education* have about their contributions to students' moral development, such as students' readiness for the practical application of values and moral action in the workplace (e.g. during internships). Second, teachers' ideas about students' moral development have not been conceptualised in terms of developing an *ethical compass*. Investigating teachers' ideas about the moral aspects of their practices adds to the body of knowledge about teachers' perceptions of moral education within higher education and of the ‘ethical compass’. The compass metaphor is commonly used to denote the moral development of professionals (Rothenberg, 2009; Sunder, 2010) and is integrated into the curriculum of higher education institutions (Natale & Libertella, 2016; Peer & Schlabach, 2010). Third, while the importance of *role modelling* in developing moral professional identities is recognised, little is known about the ideas teachers in higher education have about how they serve as moral role models and exemplify being a professional with an ethical compass. A review on pedagogical and psychological literature on (the use of) role modelling as a teaching method (in secondary education) showed that role modelling is rarely used as an *explicit* method (Sanderson, 2013, p. 29). Investigating teachers' ideas about their role modelling practices adds to the body of knowledge of role modelling within higher education and the methods used. Furthermore, we investigate *multiple professional disciplines* as this might reveal both common and particular characteristics due to each discipline's social purposes, formal knowledge, market situations and societal expectations (Freidson, 2001).

Table 1 Overview of participants in the focus groups

Participating UAS	ITE teachers	BS teachers	ICT teachers	Total
UAS Eindhoven	7	5	8	20
UAS Rotterdam	6	5	-	11
UAS The Hague			4	4
Total	13	10	12	35

This study addressed the central research question: What and how do teachers in UAS think they contribute to the development of students' ethical compasses? This central research question was divided into four subquestions: (SQ1) How do teachers describe the ethical compass?, (SQ2) How do teachers set an example of being a professional with an ethical compass?, (SQ3) What messages do teachers think they send to students?, and (SQ4) How do teachers think these messages contribute to the development of students' ethical compasses?

Method

To examine the questions posed in this study, we employed a qualitative research approach. Focus group interviews were conducted as a means of collecting “a range of ideas and feelings that individuals have about certain issues, as well as illuminating the differences in perspective between groups of individuals” (Rabiee, 2004, p. 656).

Participants

In this qualitative study, six focus groups comprised of teachers were formed via convenience sampling (Etikan et al., 2016) (Table 1). First, UAS managers were emailed to request a focus group interview with teachers at their institution. Second, after obtaining approval, the first author used personal connections from a previous study in the ITE, BS and ICT programmes of UAS in Eindhoven and Rotterdam to gain access to potential participants (Van Stekelenburg et al., 2020b). Third, in each UAS, a teacher purposefully recruited colleagues. Specific knowledge of and experience with the topic of study was not requested. Since the recruitment of ICT teachers at UAS Rotterdam was unsuccessful for various reasons (e.g. teachers lacked time or were not interested), one focus group interview with ICT teachers was conducted at UAS The Hague. Altogether, 35 teachers participated in the study, 11 females and 24 males, with an average age of 44.5 years. Their work experience in a UAS ranged from 3 to 32 years, with an average of 10.9 years. All participants turned out to have a Dutch cultural background.

Focus Group Interviews

The focus groups were conducted at the teachers' own institutions between October 2021 and March 2022. Informed consent was sought in writing, and anonymity was guaranteed by using key codes that indicated each teacher's UAS and professional discipline. The semi-structured focus groups lasted approximately 120 min each and were recorded and transcribed. The sessions were moderated by the first author. The second author observed

the sessions and made detailed notes about the content of the discussion and the dynamics of the focus groups. Due to COVID-19, four focus groups were observed online.

Following Baarda et al. (2009), the interview protocol was based on the findings emerging from our previous empirical studies and from topics of a literature research (Appendix 1). The interview protocol was tested with teachers from the researchers' own UAS institution. Mind mapping was used to engage participants and ensure free thinking while visualising their concepts, ideas or tasks linked to and arranged around a central key word (Burgess-Allen & Owen-Smith 2010) (Appendix 2 for an example). Teachers were guided through a process of presenting their ideas on the mind map and responding to their colleagues' input. First, the participants were invited to draw a mind map of the question: How would you describe the ethical compass? Second, we provided the teachers our description of the ethical compass to ensure that teachers used the same concept while identifying their contributions to the development of students' ethical compasses. Next, the participants were invited to draw a mind map of the question: What and how do you think you contribute to the development of students' ethical compasses? Finally, teachers were asked to reflect on the subquestions: What messages do you think you send to students?, and How do you think that these messages contribute to the development of students' ethical compasses?

Analysis

The data were analysed using the Qualitative Analysis Guide of Leuven (QUAGOL) (Dierckx de Casterlé et al., 2011). The first author wrote an abstract of each interview to grasp the participants' stories (Dierckx de Casterlé et al., 2011). Starting the actual coding process, the qualitative data analysis software Quirkos was used to visualise the data and identify patterns within multiple datasets. For each research (sub)question, a group of three team members verified the coding process using random samples of transcripts. To ensure interrater reliability, in a three-stage cross-checking procedure, random samples of analysed data were compared until an agreement on the meaning, dimensions and characteristics of the *in vivo* coding that contained the participants' own words was reached (Dierckx de Casterlé et al., 2011; Miles et al., 2014). This procedure was repeated to find an agreement on the meaning, dimensions and characteristics of the categories in the *axial* coding (Dierckx de Casterlé et al., 2011; Miles et al., 2014). The first author integrated the categories of the axial coding into a conceptual framework of core themes (Miles et al., 2014). This framework was then checked by each research team member and discussed by the team to deepen the theoretical insights. This framework formed the basis of the design of Table 2 and the storyline from which the findings could be described.

Findings

First, in this section, we present teachers' ideas about the ethical compass (SQ1). Second, the data-analysis of the central research question is presented: what and how teachers think they contribute to the development of students' ethical compasses, including how teachers think they set an example of being a professional with an ethical compass (SQ2), what messages they think they send to students (SQ3), and how they think that these messages contribute to the development of students' ethical compasses (SQ4).

Table 2 What and how the teachers thought they had contributed to the development of students' ethical compasses

What teachers thought they contributed to the development of students' ethical compasses	How teachers thought they contributed to the development of students' ethical compasses: their pedagogic–didactic actions
1. (Creating) moral awareness	Individual learning
1a. Willingness to take responsibility for own life and choices	Asking the student to step into 'the arena' and take responsibility for own role (2x) Challenging the student to examine his/her own 'sense of urgency' Discussing with the student how he/she takes responsibility (or not) for own life and choices Discussing gut feelings and intuitions Promoting student's awareness of own life course 'Tossing a ball', in the hope that the student will catch it
1b. Awareness that behaviour has consequences	Discussing the consequences of student's behaviour (2x) Punishing cheating
1c. Development of moral awareness	Cooperative and Group Learning Playing the devil's advocate and provoking students (3x) Creating awareness of the effects of technology on people (2x) Holding up a mirror' for students (2x) Explaining how manipulation -in the news- works Deploying analogies Using examples in order to raise moral awareness (e.g. of the impact of technology on people) Using futurology and philosophy of technology Using historical cases that exemplify (un)ethical situations
2. (Developing) moral skills	Individual learning
2a. to change perspective	Motivating the student to expand views and perspectives (7x) Motivating students to accept that the other person may have different views (2x) Trying to elicit understanding of other points of views (3x)
2b. to form an opinion	Presenting challenging (hypothetical) situations for the student to discuss (6x) Explaining that the student has a choice (3x) Helping the student to explain personal arguments and draw conclusions (3x) Avoiding providing solutions as a teacher (2x) Engaging the student with own life experiences
2c. to think critically	Teaching the student to investigate: problematise, analyse and concretise (2x)
2d. to think in terms of solutions	Promoting pragmatism and (creative) thinking (2x)
2e. to deal with diversity	Cooperative and Group Learning Discussing diversity (specifically in relation to students' norms and values) (3x) Naming the differences between students' teachers (2x) Reflecting on how to deal with students' ethnic backgrounds

Table 2 (continued)

<u>What</u> teachers thought they contributed to the development of students' ethical compasses	<u>How</u> teachers thought they contributed to the development of students' ethical compasses: their pedagogic–didactic actions
2f. to discuss with others (e.g. about ethical dilemmas)	Using own ethical dilemmas to discuss with students (4x) Using the news and current events for discussions (4x) Trying to find a reasonable middle ground in discussions Conducting discussions with student and external stakeholders Discussing meaning of money versus values Including students of different cultures in the discussions Supporting students to discuss ethical dilemmas Teaching students to recognise ethical dilemmas
2g. to engage in dialogue	Encouraging students to engage in conversation with each other (4x)
2h. to learn from others and respect peers' viewpoints	Allowing everyone to speak in order to showcase as many different viewpoints as possible Teaching students to think in terms of similarities instead of differences
2i. to learn from professional practice and internships	Using authentic cases (9x) Using students' internship experiences to ask questions about professional practices (3x)
3. (Promoting) moral professional behaviour	Individual learning
3a. Acting courageously	Challenging the student to stand for own values Encouraging the student to formulate and articulate a personal vision about life and work
3b. Acting with integrity and cooperating in a professional way	Cooperative and Group Learning Asking students during group work what underlies the problems they face Provoking students to address the problems that they experience in teamwork
3c. Functioning as part of a group	Discussing the meaning of being connected in a group

The numbers (e.g. 2x) refer to the number of times a statement to the same effect was made by teachers

Ethical Compass

Although participants reported that the focus group interview was the first time they had exchanged ideas about the ethical compass metaphor with colleagues, all but one were able to describe and explain their views. While various interpretations were given, most of them could be grouped into four core themes.

The majority of the teachers associated the ethical compass with a *set of norms and values*. They referred to personal and professional norms and values (learned at home, and transmitted through work) and mentioned values such as honesty, openness and respect. Most teachers regarded certain norms, such as not cheating, not lying and not harming others, as universal (i.e., part of everyone's ethical compass).

Most of the teachers also associated the ethical compass with *self-knowledge*. Their discussions indicated that self-knowledge is created by an integration of multiple life

experiences gained in different situations and roles (e.g. ranging from a parent's death to positive and negative experiences with colleagues). This knowledge then contributes to a personal life vision, which forms the basis of an ethical compass.

Some teachers described the ethical compass as comprising both (*external*) rules and regulations and (*internal*) beliefs governing moral (professional) behaviour, which leads to personal leadership or responsible entrepreneurship.

Other teachers connected the ethical compass with *attitude(s)*, such as willingness to tune in to others and take their interests into account, or having a courageous, empathetic and transparent attitude. They also mentioned a mental attitude, such as having positive intentions or a professional attitude founded on being critical, responsible and reliable.

Beyond the four core themes, most teachers spontaneously expressed ideas about the characteristics of an ethical compass: its function, its 'north', and its significance. First, most teachers agreed that an ethical compass should function as a *tool* (or guide) to recognise ethical dilemmas and provide direction. A minority of teachers described this tool as the individual's moral development. Some others noted that the ethical compass is a tool for interaction and communication, assisting an individual to show respect for others' norms and values and reinterpret one's own frame of reference as one develops (moral) understandings about the world and one's environment.

Second, in contrast to a physical compass, most of the teachers characterised an ethical compass as dynamic, meaning without a fixed 'north'. As one teacher explained,

'That compass makes it visible for me immediately; it does give direction, but it keeps turning continuously, based on certain choices. As you make one choice, it will turn again so that you are confronted with other choices; it is constantly in motion.' (ITE6)

Third, the majority of the teachers agreed that development of an ethical compass is a significant foundational step for professionals, managers, administrators and entrepreneurs. As one teacher illustrated:

'Technology becomes outdated; knowledge becomes outdated very quickly [...]. It is precisely who you are as a person, which you bring to the company, that is becoming increasingly important. And that includes those ethical skills.' (ICT4)

While we did not find important differences among the teachers from the three professional disciplines on most issues, there was one exception. The ICT teachers focused more on the influence of technology on an individual's ethical compass. In particular, they identified algorithms that are used by websites, which reinforce users' own opinions and beliefs, pushing them further into ideological frames or 'filter bubbles'. The ICT teachers feared that these algorithms would morally frame the individuals in the filter bubbles, taking precedence over other factors that could shape the ethical compass. Therefore, the ICT teachers stressed the importance of paying attention to the development of students' ethical compasses in UAS.

Teachers' Contributions

When we asked the teachers to reflect upon their contributions to the development of students' ethical compasses, three core themes emerged: creating students' moral awareness, developing students' moral skills, and promoting students' moral professional behaviour. To facilitate these contributions, all teachers mentioned a wide range of pedagogic–didactic

actions. These actions were grouped into two categories: individual learning, and cooperative and group learning. Table 2 provides an overview of each core theme, presenting both *what* teachers thought they contributed to the development of students' ethical compasses, and *how* teachers thought they contributed based on the pedagogic–didactic actions they took.

Creating Moral Awareness

Most teachers attempted to create students' moral *awareness* by helping individual students to take responsibility for their own lives and choices and become aware that behaviours have consequences. Several pedagogical–didactic actions were identified. Some teachers also spontaneously referred to their respective educational institution's vision and intentions, and to what these institutions considered to be good, desirable and valuable for the development of their students' ethical compasses. For instance, they discussed with the individual student how to take responsibility (or not) for their own live and choices and challenged them to examine their own sense of urgency.¹ Some other teachers reported confronting individual students with their misbehaviour and punishing those who had cheated.

The majority of the teachers also reported using cooperative and group teaching to create students' moral awareness. For example, when discussing historical cases that illustrated (un)ethical situations, some of the teachers said that they played the devil's advocate or held up a mirror. Other teachers recalled explaining to students how manipulation in the news works.

Developing Moral Skills

To develop individual students' moral *skills*, teachers reported using a variety of strategies. Most teachers noted that they motivated students to expand their views and perspectives in order to prevent students from getting fixed on their own ideas and to broaden the students' understanding of other viewpoints. To help students form opinions, most teachers reported presenting (hypothetical) challenging situations that could occur in their future professional environments. Some teachers reported explaining to students that they always have a choice in their lives. Others recalled helping students to clarify personal arguments and draw conclusions or teaching students to think critically, e.g. how to investigate, problematise, analyse and concretise (moral issues). To teach students to think in terms of solutions, some teachers promoted pragmatism and growth in creative thinking.

The majority of the teachers also reported using cooperative and group learning to teach students moral skills, and specifically how to deal with diversity. For example, through facilitation of group discussions and dialogues, teachers felt they guided students in acquiring skills of showing respect for peers' viewpoints and learning from others. Some reported using dialogues focused on current news and events to develop students' moral skills ; others reported sharing and discussing their own ethical dilemmas with students. To learn from professional practices, most teachers used authentic cases and students' internship experiences to ask questions about professional practices (e.g. behaviours of students'

¹ Urgency is a term used in the High Impact Learning (HILL) Model, which is rooted in multidisciplinary research on learning and development. Through High Impact Learning the teacher entrusts control of learning and development activities to the students themselves.

mentors). While allowing everyone to speak in order to showcase as many different viewpoints as possible, the teachers tried to avoid polarisation and maintain a reasonable middle ground in discussions.

Promoting Moral Professional Behaviour

Finally, most teachers aimed to promote students' moral professional *behaviour*. A teacher explained the importance of voicing one's values, particularly when they oppose the mainstream values of one's peers:

'Recognising moral problems is one thing, but in the process of maturing, as I see it, you also have to act, and those moral actions often take place in situations of power. That means, will you dare to voice those personal values? Will you dare to defend them?' (ICT4)

Some teachers stressed the importance of teamwork, through which the students experienced how to act with integrity and cooperate in a professional way. They indicated that working in teams was a learning experience in itself and that conflicts in teamwork were used as leverage for learning. Therefore, some teachers asked students to discuss the problems underlying their teamwork or to discuss with each other the meaning of being connected to a group and what it takes to function as (part of) a group.

In general, during the focus groups, the majority of the teachers became aware that they had already (but not always consciously) seized many opportunities to contribute to the development of students' ethical compasses. They were surprised by the number of planned pedagogic–didactic actions they had taken and by the spontaneous opportunities they had used, such as unplanned conversations during incidental encounters. However, they also realised that their strategies had been mostly unstructured and unreflective and had depended on the individual teacher's knowledge and ability to address moral themes. For example, one teacher explained:

'We talk about it too little, and we contribute in a structural way too little as well. So, I do it as a kind of hobby; I'm sort of a hobby ethicist. But my colleagues may or may not be doing it... I really don't know; we don't have that conversation together at all.' (BS4)

Some differences across the three professional disciplines also emerged. Some of the Business and ICT teachers mentioned that the development of students' ethical compasses had only received attention in courses such as sustainable business or digital ethics. Therefore, they observed that attention to ethics was rather segmented. In contrast, the majority of ITE teachers indicated that they had applied an integrated approach to developing students' ethical compasses. For instance, they reported explicitly addressing the moral challenges in life and work when students had shared (internship) experiences with them.

Being a role Model

When we asked the teachers how they exemplified being a professional with an ethical compass, most mentioned being aware that they *implicitly* set an example and influenced the development of students' ethical compasses. The majority of teachers also reported several ways in which they had *explicitly* exemplified how to be a responsible professional with an ethical compass.

First, most of the teachers reported explicitly exposing their identities to their students. As one teacher said:

'I work with a colleague and we are totally different, but we also show these differences to students [...] and name these differences regularly.' (ITE2)

The teachers explained that students were exposed to a number of potential 'identities' during their education. Therefore, teachers did not consider themselves *the* role model but rather *a* role model to their students. Despite the diversity of identities, most teachers noted the lack of cultural and gender diversity. Consequently, they thought that students had not been exposed to a sufficiently wide or diverse range of role models who could present them with varying perspectives on life and work.

Second, some teachers reported that they had explicitly demonstrated how to behave in a moral professional manner. For instance, one teacher stated:

'I find it difficult with regard to behaviour, but I think, ...if you want to teach students something about behaviour, then you can best achieve that by exemplifying it first...' (BS5)

This teacher reported articulating his ideals and showing students how these were being manifested in his life choices:

'I share my own experiences, and that gets students involved. I say, "I have solar panels, a hybrid car and vegan shoes." Then [a] student reacts, "That's a lot of work to sort that out." I say, "Yes, that's right, son, but I want to leave the world better than I found it."' (BS5)

Third, the majority of teachers reported that they explicitly displayed desirable attitude(s). For example, most teachers said they taught in a manner that displayed consideration for students' *sense of safety* -- they created environments in which students could freely ask questions and be heard without judgement. Most teachers also said they tried to be *accessible* and mentioned the significance of being approachable for students and being between and among them. Others highlighted the importance of being *authentic* by showing one's true self as a person and being genuine or *humble* by explaining to students that they themselves do not always get it right. Additionally, most teachers mentioned modelling how to be *trustworthy*; this included keeping their promises and giving students the benefit of the doubt. They also reported being *honest* and straight to the point, they tried to be 'hard on the content and soft on the person'. Some teachers indicated that they had made themselves *vulnerable* to then be able to discuss with students what their own vulnerability evoked in the students.

Although most teachers felt they had explicitly exemplified how to be a responsible professional with an ethical compass, they also claimed that they had avoided projecting their own ethical compasses onto students for fear of manipulating the students' ethical compasses. They pointed to the importance of safeguarding students' autonomy and expressed concerns about promoting *the* (best) ethical compass. As one teacher said:

'I think it's dangerous... projecting my compass to someone else. Because I don't know if my compass is the right one. I'm still tinkering [with] and revising it, so I don't want to create the illusion that I know everything.' (ITE2)

Consequently, some teachers reported trying to adopt a neutral stance. However, they admitted that neutrality was not feasible when serving as a role model, for instance:

'You can act so subtly, yet students will still feel that it is actually the norm.' (BS1)

Notably, the saying 'teach what you preach' was a common statement made only by the ITE teachers. They described the Droste effect (a *Mise en abyme*) in which the picture of a teacher, i.e., the exhibited behaviours ITE teachers expected from their student teachers (when working as teachers during internships), would recursively appear within the student teachers (who would then in turn exemplify it for their pupils). This illustrated ITE teachers' intentional engagement in moral education.

Impact of Messages from Teachers to Students

In addition, we asked teachers *what* other messages they thought they sent to students. Only a minority of the teachers were able to identify other messages and therefore this question did not yield many insights. Despite some difficulty in answering this question, a few teachers were able to identify subtle hints they had given to students, such as making comments about how the value of money pales in comparison to the value of moral principles. Others acknowledged that their feedback to students or their pedagogic–didactic actions contained various messages, as illustrated by a teacher:

'The choice of, for example, current affairs you want to discuss already contains a judgement. The moment you select something, there is a bit of your own prejudice in it, I think.' (BS2)

Most of the teachers found it difficult to identify *how* their messages had contributed to the development of their students' ethical compasses. One teacher argued:

'... you cannot determine what your influence will be on the ethical compass. You are not in charge and have no control over that. And I don't think you should want that either, but you can certainly notice whether it triggers something.' (ITE2)

Some teachers observed that students' portfolios, which included their detailed moral reflections on (their internship) experiences, had sometimes included references to the role the teachers had played during their internship. The teachers reported that this allowed them to see what they had contributed to their students' ethical compasses.

Conclusion and Discussion

To our knowledge, this is the first empirical study that explored higher education teachers' ideas about *what* and *how* they contribute to developing students' ethical compasses. In this section, we first present this study's main findings. Next, we discuss its contributions to the existing academic literature. Finally, we present the study's limitations and a number of practical implications.

Firstly, we found that during focus groups, the majority of the teachers became aware that they had seized (consciously and unconsciously) many opportunities to contribute to the development of their students' ethical compasses. These contributions had focused on three core themes: creating moral awareness, developing moral skills, and promoting moral professional behaviour. Secondly, the majority of teachers said they had stimulated students' individual learning and their cooperative and group learning through numerous pedagogical–didactic actions, such as having conversations and encouraging dialogue

and discussion about challenging (hypothetical) situations and ethical dilemmas. Thirdly, we found that teachers felt their strategies were mostly unstructured and unreflective and depended on the individual teacher's knowledge and ability to address moral themes. Fourthly, our study revealed two incompatible and competing ideals -- while teachers said they wanted to explicitly exemplify how to be a professional with an ethical compass, they also expressed a desire to appear *neutral* because they were afraid of manipulating their students' ethical compasses. Fifthly, we noted that while most teachers were able to identify messages they had explicitly sent to students, they had difficulty identifying more implicit messages they had conveyed. Sixthly, we found that most of the teachers were uncertain how their contributions and messages had influenced their students' ethical compass development.

In addition to these key findings, three issues were only addressed by particular groups of teachers. ITE teachers reported a Droste effect, and expressed that they intentionally exhibited the behaviours expected of their students, when working as pre-service teachers during internships (for they hoped that their students would in turn be an example for their pupils). Business and ICT teachers observed that their colleagues' attention to ethics seemed rather segmented, and ethics only received attention in separate courses such as sustainable business or digital ethics. Finally, ICT teachers drew attention to the influence of algorithms used on websites that could influence (the development of) the individual's ethical compass.

Comparing this study's findings with the academic literature, we observed four notable outcomes. First, participants' ideas confirmed a finding from our previous analysis of the literature, namely that there is no agreement about the meaning of the ethical compass (Van Stekelenburg et al., 2020a). For instance, some of the ethical compass interpretations the teachers gave in our study corresponded with interpretations in the literature, such as the notion that an ethical compass should navigate a particular value or cluster of values (e.g. Pettit, 2014). However, other interpretations made by the teachers were found incomplete when compared to interpretations in the literature. For example, one of the teachers emphasised the importance of *knowing* oneself, including awareness of (external) rules and (internal) beliefs that determine one's moral professional behaviour, and *showing* courageous, empathetic, and transparent attitudes, which are important (developmental) ethical compass components. While this interpretation corresponds with the literature to a degree, it omits one additional aspect. Bell (2011, pp. 185–186) also attributes the components of *knowing* and *showing* to a "moral compass", but she also argues that *being* (a person's moral character) should be at the heart of such a compass. Although some teachers in our study interpreted the ethical compass as a professional attitude and mentioned associated character traits such as being critical, responsible and reliable, they did not explicitly describe the ethical compass in terms of (developing) a person's moral character.

Second, our study showed that most of the teachers were able to verbalise clear ethical compass development goals (e.g. developing moral skills) and objectives (ranging from critical thinking, perspective taking or dealing with diversity) and could recall their pedagogical–didactic actions (e.g. reflecting dialogic learning). Additionally, the teachers communicated executing both planned contributions such as facilitating discussions about historical cases that exemplify ethical or unethical situations, and seizing unplanned spontaneous opportunities, like engaging in conversations with students in the hallway. These findings seem to contrast with the findings of other researchers in this field. For example, Willemsse et al. (2008) reported that teacher educators experienced difficulties in describing how they put their values into practices due to the lack of a common language and a plan of how to bring values into practice, and Thornberg and Oğuz (2013) reported that

some teachers found it hard to verbalise what they 'felt' would be good in values education practices. In comparison, our findings showed that during the focus groups, the ethical compass metaphor (and corresponding criteria) stimulated the teachers' imaginations and structured how they perceived, thought of and made choices in moral education. Consequently, the teachers in our study were able to identify and articulate their contributions to students' ethical compass development. Another contrast we found between our study results and those from the literature centered around teachers' planning of moral education. Willemse et al.'s (2008) found that teachers' contributions to the preparation of student teachers for moral education occurred largely implicitly and unplanned, and Thornberg and Oğuz (2013, p. 49) found that values education was mainly "embedded in the stream of social interactions". In contrast, our study revealed that teachers could also give examples of explicit and planned contributions to the development of students' ethical compasses. Such examples included teaching students to investigate (problematise, analyse and concretise) moral issues, presenting challenging (hypothetical) situations for students to discuss, and challenging students to stand up for their own values. Nevertheless, we also noted that the teachers' efforts were mostly individual, unstructured and unreflective. This latter finding corresponds with an observation made by Willemse et al. (2005, p. 214), who found that the practices of individual teachers were "hardly directed by any systematic and critical analysis."

Third, an interesting finding of this study was that teachers across the three different professional disciplines shared similar ideas about what should be addressed in the development of students' ethical compasses. In contrast to Asif et al.'s (2020) findings that teachers were confused about the aim of moral education and what methods should be used, this study revealed that most teachers had a rather clear vision on moral education. Teachers in this study (unconsciously) contributed to the development of students' (inter)personal and group skills, focusing on creating moral awareness, developing moral skills and promoting moral professional behaviour. According to Peer and Schlabach (2010, p. 56), who elaborated an integrated approach for the development of a 'moral compass', the ultimate goal of ethics education is to "maximize individual knowledge and skills" so that each student is able to merge theory into practice and transfer values into professional practice, for example when confronted with ethical dilemmas. Therefore, they argue, ethics education should also provide a strong theoretical foundation and transcends the curriculum. However, similar to the results of Asif et al. (2020, p. 15), our study showed that the majority of the teachers selected their methods based on "general ideas, common sense [and] personal experience", not on any theoretical foundation as recommended by Peer and Schlabach. These results also correspond with findings from Thornberg (2008, p. 1793) and Thornberg and Oğuz (2013) who reported that teachers' approaches and methods of values education were personal and seemed to lack professional knowledge about, for example, "educational and behavioural scientific theories and research". As a result, most teachers in this study were uncertain about the *impact* of their individual approaches to students' ethical compasses development.

Fourth, in this study teachers told that they explicitly expose their identity to students. As role models they demonstrated how to behave (in a moral professional manner), and displayed desirable attitude(s). These findings are in line with other studies indicating that role modelling is seen by teachers as fundamental for values education (Sanger & Osguthorpe, 2013; Thornberg & Oğuz's, 2013). However, this study nuances Willemse et al. (2008) findings that the moral education practices of teachers primarily *depend* on the individual (teacher) educators' personalities as most teachers in this study also explained to students they were just *an* example. Moreover, they wanted to help students to reflect

on the identities they were exposed to during their education and on the kind of professional the students themselves wanted to be(come). Although it is important that teachers secure students' autonomy by helping them to articulate their own moral (professional) identity (Hunter & Cook, 2018; Poom-Valickis & Löfström, 2019), promoting just a particular moral professional identity may have drawbacks as it might leave *professional* moral values, norms and ideals represented in the various role models unidentified (Sanger & Osguthorpe, 2013). In addition, and elaborated upon in a previous article (Van Stekelenburg et al., 2020a), an ethical compass that differs from teacher to teacher may encourage students to just choose an interpretation they like. This scenario could feed a subjectivist/relativistic position which is, according to Mahony (2009), "a key source of confusion for teachers". Indeed, we found that teachers in this study reported difficulties in teaching morality and making their "morally upright manner" the object of instruction (Fenstermacher et al., 2009, p. 9). Sanderse (2013, p. 35), therefore argues that teachers should raise questions concerning the effect their modelling "brings about in learners," and concerning what effect they think modelling "should bring about."

Limitations and Implications

Several limitations of this study need to be acknowledged. First, the selection process might have created a self-selection bias, attracting participants who were already committed to the research topic. Second, all participants had a Dutch cultural background, so our findings might have been different if there had been a more diverse teacher population. Third, we focused on teachers' self-reported contributions instead of investigating what they *actually* contributed to the development of their students' ethical compasses. Future research should use observational research methods to build new knowledge that could advance the understanding of teachers' actual contributions to their students' ethical compasses.

The practical implications of our study have the potential to apply across a broad range of professional programmes. The first implication is that teachers' multiple planned and unplanned spontaneous contributions to students' ethical compasses should be *valued*. Today's contributions by UAS teachers across three professional disciplines can be related to three dimensions of what most teachers in this study believed should be addressed in the development of students' ethical compasses, namely creating moral awareness, developing moral skills, and promoting moral professional behaviour. Furthermore, the ways in which teachers *teach morally*, i.e., their efforts to *be* a good or righteous person and to teach in a manner "that accords with notions of what is good or right" (Fenstermacher et al., 2009, p. 8), should be valued. The second implication is that teachers' ideas about what should ideally be transmitted in classrooms while teaching morality should be *developed*. Based on our findings that teachers' contributions to the development of students' ethical compasses tend to be individual, unstructured, and unreflective and that their methods rest on personal preferences, we recommend that institutes implement an integrated ethics education programme. According to Peer and Schlabach (2010, p. 56), such a programme should transcend the entire professional curriculum if it is going to promote the transfer of ethics learning to practice and help students make "a conscious choice to engage in activities that promote ethical behaviors by connecting what they know about ethical theory and personal/professional values." Moreover, our ethical compass criteria proved to be valuable in the focus group interviews for informing teachers' moral education practices in higher education. Therefore, we advise that a training be offered to provide teachers with: a theoretical knowledge base about what it means and implies to develop students' ethical compasses,

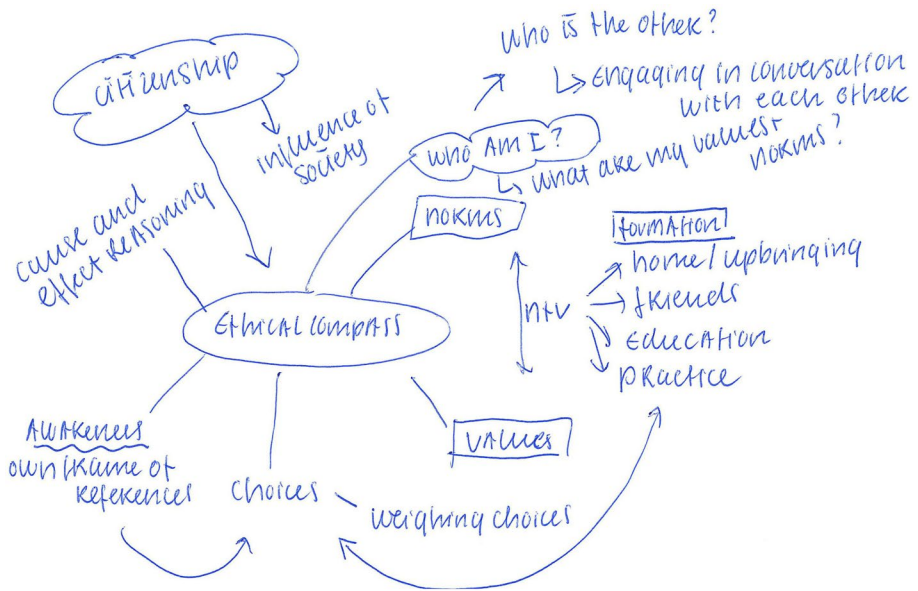
guidelines from codes of conduct of their respective professional discipline, and ethical theories which they could integrate into their moral practices. Specifically, our ethical compass criteria and conceptual framework of ethical compass proposals could be used as a theoretical knowledge base to investigate the ethical compass concept more closely (Van Stekelenburg et al., 2020a). In addition, the disciplinary differences revealed in this study could be used to make a training 'tailor-made'. For example, a training for business and ICT teachers could focus on how to make attention to ethics less segmented (e.g. by intentionally exhibiting the behaviours expected of their students, as is done by ITE teachers). Moreover, training in all disciplines could address an issue that ICT teachers in our study raised, namely that attention should be paid to the impact of technology on students' ethical compasses and strategies to prevent algorithms from taking precedence over other factors that may shape their ethical compasses. The third implication is that teachers' practices regarding how to make their "morally upright manner" the object of instruction through their conduct should be *revised* (Fenstermacher et al., 2009, p. 9). If role modelling is perceived as an explicit method, professional programmes should promote deliberative dialogue among teachers and encourage moral reflection about what (morally upright) manners should be integrated into their instruction and part of their behaviours and attitudes. If professional programmes aim to develop their students' ethical compasses in intentional, planned, organised and reflective ways, then these strategies might provide guidance to further develop teachers' contributions to this moral mission.

Appendix 1: Interview Protocol

- (1) How would you describe an ethical compass? [Teachers draw a mind map]
 - (2) *What* and *how* do you think you contribute to the development of students' ethical compasses? [Teachers draw a mind map]
 - (3) (How) do you believe you exemplify being a professional with an ethical compass?
 - (4) What messages do you think you send to students?
 - (5) How do you think that these messages contribute to the development of students' ethical compasses?
-

Appendix 2: Examples of Mind Maps (these are a Translation of the Original Mind Maps in Dutch)

1. How would you describe an ethical compass? [Teachers draw a mind map]



2. What and how do you think you contribute to the development of students' ethical compasses? [Teachers draw a mind map]



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Declarations

This research has been approved by the ethical committee of research of Fontys University of Applied Science under file number [FCEO 07-07].

Competing Interests We (the authors) declare that we have no competing interests to declare that are relevant to the content of this article.

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