# Designing Systems with Care: Responding to Inequality in an Online Course in South Africa

Govender, S., Immenga, C., Gachago, D.

Contemporary South Africa is a highly unequal society, emerging from a history of racial segregation, characterized by diversity along dimensions such as class, race, ethnicity, linguistic background, religion, culture and rural-urban locations (Czerniewicz et al., 2020). Informed by this diversity, higher education institutions attempt to “balance the pursuit of equity, quality and development goals” (Badat, 2020, p. 26). Over the last few years, in particular during COVID-19, care-oriented approaches that emphasise student wellbeing and belonging, such as humanizing online teaching, intentional hospitality, liberating structures,and trauma-informed design have gained traction in higher education. Drawing on three dimensions of human relations, namely affect, reciprocity and power associated with Bronfenbrenner’s ecological systems theory, we reflect on how adopting a care approach and working with trauma-informed pedagogies in a postgraduate course on blended and online course design was experienced by course participants. In this paper, we draw on voluntary participant interviews and our own reflections as course facilitators to make an argument for a caring learning design that intentionally creates caring learning experiences for a highly diverse group of students. Participants in this course come from geographically diverse locations, from secondary or corporate environments with differently positioned home institutions and diverse access to resources. Also, participants’ positionality and disciplinary backgrounds require different forms of care. We found that Tronto’s concepts of paternalistic and parochial care useful to reflect on our own care practices, as they highlight the importance of creating spaces where students can co-create the care relationship, while understanding how their different positionalities impact their voice and agency, but also remind us how important it is to understand how students’ context differ from our own and to set up caring relationships that suit their contexts.

## Introduction

Over the last decade, spurred initially by the Rhodes Must Fall and Fees Must Fall protests, subsequently, by the #MeToo and Black Lives Matter movements, and, most recently, in the face of the COVID-19 pandemic, educators and learning designers have sought approaches to teaching and learning that respond to inequity and center well-being. Increasingly educators and learning designers have turned to ideas such as pedagogy of care (Noddings, 2003, 2005; Tronto, 1993, 2011, 2012), compassionate learning design (Pallitt et al., 2022), and human- (Palalas, 2019) and trauma-centered approaches (Imad, 2021, 2022) to teaching and learning to respond to the inequitable and challenging conditions faced by students and staff. Despite enthusiastic and robust efforts within courses and classrooms to cultivate safer, more human-centered spaces, students and staff continue to experience high levels of stress and mental distress (Arday, 2022; Harriman et al., 2022).

In this paper, we explore what Bronfenbrenner’s ecological systems theory (2005) surfaces about participants’ and facilitators’ experiences of an online learning design course grounded in an ethic of care (Tronto, 1993, 2011, 2012), and the implication of these for future design choices. Bronfenbrenner (2005) encourages us to inquire not only about the people's experiences, but also about the precise characteristics of specific environments by directing our attention to how the individual develops within specific kinds of environments (Shelton, 2019). In particular, we utilise Bronfenbrenner’s three dimensions of relations, affect, power and reciprocity, that occur between parties within a microsystem to explore whether taking an ethics of care approach in relation to the dimensions could potentially create more caring and equitable learning spaces. In order to do this, we focus on the experiences of course participants and facilitators of EDN4501 Blended and Online Learning Design, a fully online course in a postgraduate diploma in educational technology. Drawing on interviews with participants, course materials, and recordings of our reflections as lecturers and designers on the course, we highlight emerging instances of care related to affect, reciprocity and power. However, we also reflect on where Bronfenbrenner’s work left us dissatisfied, in relation to what we see as a limiting view of power and suggest employing Tronto’s descriptions of paternalistic and parochial care to broaden our views of caring relationships.

We start with a brief review of the course and local context, and the trauma-informed pedagogies we adopted as a framework for our course design during and also after COVID-19, before sketching the literature on Bronfennbrener’s ecosystems theory. We then go on to briefly describe the methodology underpinning this research and then outline the various ways that care emerged, or failed to emerge, across the three dimensions of relations in Bronfenbrenner’s work (affect, reciprocity, and power). We finally reflect on how this view has helped us, but also where and how we would like to expand his work through Tronto’s ethic of care perspective.

## Context

South Africa has a long history of racialized inequality (Davids & Waghid, 2020), which expresses itself in a contemporary context as the society with the highest Gini coefficient in the world (Word Bank, 2022; Vlasov, 2021), wide-spread and persistent poverty (Ruswa & Gore, 2021), and deeply unequal access to life opportunities (Walker & Mathebula, 2020). Post-secondary education, and higher education in particular, is persistently if unhelpfully framed as the solution to this triple threat, particularly in documents such as the White Paper for Post-School Education and Training (Department of Higher Education and Training (DHET), 2013), and tasked with achieving the complex goals of improving ”the economic, social and cultural life of its people … to bring about social justice, to overcome the legacy of our colonial and apartheid past, and to overcome inequity and injustice whatever its origins'' (DHET, 2013, p. 75). Despite this, and alongside the widening of access to higher education to redress the historical exclusion of black people, higher education remains “chronically underfunded” (Motala et al., 2018, p. 1) and subject to a range of historical and contemporary dysfunctionalities

When our course, EDN4501 Online and Blended Learning Design, ran in 2021, South Africa was about 15 months into the pandemic. Locally, we experienced extensive and brutal lockdowns during which our students were required to return to their familial homes, often in rural and poorly resourced areas, and all aspects of life, including commerce, access to health care and education, and freedom of movement were deeply constrained by national restrictions. Having weathered, albeit bruised and battered, the emergency remote teaching of 2020, by 2021, some institutions were looking to expand on the constrained offerings of the previous year while others remained simply in survival mode, offering minimally designed, low-tech online learning opportunities to their students.

In the South African context, as is the case in many, particularly, developing world contexts, students and staff regularly encounter harms in addition to COVID—including widespread poverty coupled with food insecurity; intimate (parental, romantic, cohabiting) relationships marred by verbal, emotional and physical violence; social instability such as riots and protests; pervasive, violent crime; and the effects of climate change—drought, floods, heat-waves, and unseasonable cold. In the context of both deep-seated and relatively new traumas that often fell most heavily on those already marginalized and vulnerable in society, it felt absolutely essential that we, as we have always tried to do, create an intentionally caring course context.

Despite their relative advantages of employment and education, we were fairly sure that our participants would need soft places to land for themselves as educators and as students, and we were very interested in modelling for our participants what pedagogies of care (Motta & Bennett, 2018), humanizing online education (Pacansky-Brock et al., 2019; Palalas, 2019), compassionate learning design (Pallitt et al., 2022) and in particular trauma-informed teaching strategies (Imad, 2022; Minahan, 2019) might look like.

## Trauma-informed pedagogies

Trauma-informed pedagogies, as developed by educators such as Mays Imad (2021, 2022), suggest that trauma negatively affects learning: “when our nervous system is calm, [...] we are able to engage socially, be productive, and process new information in order to continue to learn and grow—and to feel we are living meaningful and fulfilled lives” (Imad, 2021, p. 2). Imad (2021), bringing the concept of trauma into Higher Education, argues that trauma-informed pedagogy involves awareness of students’ past and present experiences, and how this impacts their well-being and ability to learn. Therefore there needs to be space within the learning experience to engage and reflect on emotions. During COVID-19, this was particularly important, as both students and staff experienced trauma, such as sickness and loss of family and friends, loss of employment or isolation, and loss of contact. While trauma can be triggered by uncertainty, isolation, and loss of meaning, secondary trauma can be caused by bearing witness to trauma (Imad, 2021). Trauma-informed pedagogies aim to foster a sense of safety by reducing uncertainty, forging trust through regular communication, creating meaning through reaffirming or re-establishing goals to create meaning, cultivating community through intentional connections, and centering well-being and care (Imad, 2021). Furthermore, other trauma-informed approaches have emphasized paying careful attention to cultural, historical and gender inequalities, in order to attend to the maldistribution of power in the classroom.

## Bronfenbrenner’s Ecological Systems Theory

Bronfenbrenner’s Ecological Systems Theory (EST) (1979, 2005) offers a contextual framework for human development in order to map and change elements that hamper development. The developing person is understood to be in a mutual and reciprocal relationship with the environment: changing themselves and the environment (Shelton, 2019). Bronfenbrenner describes the interplay between the person and the context as

[…] the progressive, mutual accommodation throughout the life course, between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by relations between these settings, and by the larger contexts in which the settings are embedded (Bronfenbrenner, 1989, as cited in Shelton, 2019, p. 6).

For the purposes of this paper with its focus on a care approach, what is of importance in this definition is Bronfenbrenner’s emphasis on the developing human, in a continuously adapting relationship to the setting and other people in it. Furthermore, Bronfenbrenner asserts that these contexts are also subject to change by the developing human. This definition also asserts that the environment in which development occurs has various settings and the developing human only participates in some of those settings. The definition also recognizes that the mutual accommodations that occur between the developing human and the environment will be influenced by the relationships between the various settings of the environment as well as by the larger context of these settings, such as society, community, and culture (Shelton, 2019).

Bronfenbrenner’s framework subdivides the ecosystem of a developing human into four subsystems which are the microsystem, mesosystem, exosystem, and macrosystem, which operate over time in the chronosystem. These subsystems are interrelated and connected and change in one subsystem will result in the other subsystems adapting to the change, the subsystems therefore continuously influence each other. For this paper, we will focus on the microsystem which Bronfenbrenner defines as a “setting with particular physical and material characteristics” that contains the “pattern of activities, roles, and interpersonal relations experienced by the developing person” interacting in that setting (Shelton, 2019, p. 58). This definition recognizes the importance of relations with others in development. Bronfenbrenner viewed relations as transactions that take place when two or more people participate in the activities of the developing person. He goes on to describe these transactions as a “ping-pong game” (Shelton, 2019, p. 31) of mutually changing interactions that leave both parties altered in some way. It should be noted that in his writing, Bronfenbrenner focuses his theory on relations between two people, often a child (little p) and a parent (Big P), which he refers to as a dyad.

In attempting to understand the role of these transactions or relations in the process of human development, Bronfenbrenner posits that relations are characterized by three dimensions, namely affect, power, and reciprocity.

The affect dimension is defined as the feelings experienced by people within the microsystem. If the developing person has positive feelings towards others within the microsystem, they are more motivated to engage in activities within the microsystem and as a result development will occur. If there are negative feelings toward the particular microsystem then the developing person may wish to avoid participating in that space (Shelton, 2019).

In turning to the power dimension, Bronfenbrenner describes this dimension as the “relative strength of each person in the relationship, and [...] their influence on each other” (Shelton, 2019, p. 34). Bronfenbrenner views power as a continuum whereby relations could exist where one person could have all the power and the other none or where both parties could be equal in power.

Reciprocity, Bronfenbrenner’s third dimension refers “to the mutual sharing or transactional character of the activities and interactions that take place in the relation” (Shelton, 2019, p. 35). Reciprocity in relations also exists along a continuum where on the one end relations can exist with “complete reciprocity, mutuality, and sharing” (Shelton, 2019, p. 35), and on the other end, relations exist with no reciprocity. This could be because the parties do not share with each other at all or because one party initiates an action but remains unresponsive when the other party attempts to initiate it. Examples of reciprocity include engaging in conversation, sharing of information or alternating roles within the microsystem.

Bronfenbrenner posits that relations characterized by positive affect, high levels of reciprocity and power balances that tend towards equality, yield the most positive influence on the developing person and result in change.

## Methodology

The project from which this paper emerges takes inspiration from ethnographic and autoethnographic approaches (Stahlke Wall, 2016; Bali, 2020). This allows the “complex relations between identity, emotions, agency and investment in professional lives” (Yazan et al., 2022, p. 3) to emerge from “the study of ourselves” (Roy & Uekusa, 2020; Gant et al., 2020), and in so doing, to reflect on wider social and educational issues. We are thus able to function as both participants in the course, and researchers of the course. As a result of our embedded positions, we were able to collect a wide variety of data, including semi-structured interview data, secondary data from course activities, and our own meeting notes, recordings, and reflections.

Our individual positionality shaped both the design of this research and the analysis of the data. The broader research team consists of four female researchers: S, of South African-Indian descent, is an experienced educator who joined academia after ten years of secondary school teaching and is working towards her doctorate. D is a white European woman, who has been working within the academic staff development space for more than 20 years and is a seasoned researcher. C is a white woman who works in student affairs and is currently completing her Master's studies. W, a Muslim woman of mixed-race descent and the research assistant who conducted the interviews, opted not to join the writing of this paper.

There are two types of participants in this study: students from the course, and course lecturers. The student participants were broadly representative of various categories of difference, and thus inequality in the local context. Of the 30 participants on the course, 13 volunteered: eight identified as black, three white, and one colored. Eight presented as male, and five as female. Furthermore, interviewees were based at differently positioned post-secondary institutions, including six universities, four universities of technology, and three private colleges. This offered a good representation of the diversity in the higher education landscape in South Africa, including urban and rural contexts, differently funded and resourced institutions, with a wide variety of geographical, cultural and historical influences. Three interviewees had newly transitioned into their current work, while others had more than a decade of experience. We have deliberately offered a general overview of this group, in order to limit the likelihood of course peers, employers and colleagues identifying respondents.

We collected three broad types of data in this project: semi-structured interviews, course artifacts, and facilitators’ reflections. These categories of data allow for student voices, lecturer voices and artifacts as embodiments of interactions to be available for study. Interviews, conducted by the research assistant, exceeded an hour and seemed to be frank and open discussions between the interviewer and the respondents. Collected data took the form of course artifacts, including video recordings of course sessions, video recordings of course meetings, emails between lecturers, responses to participants’ work, and reflective journals. Additionally, we, the lecturers on this course and the authors of this paper wrote reflections on our experiences, which were subsequently discussed as a group with our researcher. The reflections supplement our collected data from the course.

Interviews and recordings were transcribed, using an automated transcription service and then edited for accuracy as required. Following Roy and Uekusa who argue that self-reflexivity and dialogical analysis of narratives can be “a pathway for productive qualitative research” (2020, p. 385), we adopted an iterative approach to data analysis, where we repeatedly and collectively engaged with the interview data and artifacts. We identified emerging themes through careful engagement with the data, informed by the literature on care, and by an ecological systems approach to understanding development and learning.

## Designing with care in EDN4501

In this section we will explore how examining our design of EDN4501 through Bronfenbrenner’s three characteristics of relationships: affect, reciprocity, and power, surfaced complex expressions of care in the course. As mentioned before, both during the pandemic and after the pandemic, trauma-informed teaching and learning (Imad, 2021) have been critical to us. It is important to note that we use the word ‘trauma’ in a more collective sense as well in the pandemic context as a shared traumatic experience; given diverse positionalities, we know that individuals have been affected differently. The following reflections by us and our participants will show how we applied Imad’s seven principles of trauma-informed practices (2020) across affect, reciprocity, and power.

### Affect

Affect is not always a visible or deliberate element of course design; additionally, affect emerges spontaneously through interactions, and has significant implications for development. In EDN4501, we took a number of steps to design activities and practices that created space for a range of affective responses that we hoped would enhance the likelihood of authentic affective responses.

#### Intentionally making space for feelings and relationship building to foster trustworthiness and transparency

For many of our participants, especially the younger ones, concealing their emotions is a way of establishing their ‘professionality’. As one of our participants, Sara, explained: “I feel like when it comes to teaching and learning, you have to be able to put those things [feelings] aside. [...]” (Sara, Participant). For us, a key part of exercising care in higher education is creating space for, and acknowledging the importance of our affective lives. For example, in EDN4501, we specially allocated time at the beginning and end of each live session to bring the personal into the room, and to allow space for acknowledging how we were feeling - about the EDN4501 journey, about particular activities, about how studies and life were entangled. Each session started with a prompt that helped us all get to know each other better.

In our experience, EDN4501 participants are not always equally able to seek support from course peers or lecturers. The kind of sharing we were encouraging is not a shared cultural practice within our participant group, and gender, race, and linguistic background might influence how and what participants were willing to share. We deliberately wove this approach through the fabric of the course, moving incrementally towards increasing openness and vulnerability. We understand this to be linked to participants’ identities and the cultural diversity within the group.

#### Lean into safety to ensure students’ emotional, cognitive, physical, and interpersonal safety.

In addition to weaving opportunities for acknowledging feelings into course meetings, we encountered and created space for emotions (ours and our students) in more intimate settings, adopting trauma-informed pedagogies by leaning into safety and promoting predictability and consistency. In the last decade in the local context, there has been a strong tendency to foreground the notion of discomfort as a pedagogy, drawing on work by Michalinos Zembylas, and finding expression in the work of academic development practitioners in South Africa (Leibowitz et al., 2010), suggesting that “some discomfort is not only unavoidable in talking about issues such as race and racism but may also be necessary” (Zembylas & Papamichael, 2017, p. 3). However, in light of the moment during which the course was taught, and the experiences of the recent past and foreseeable future, we opted to “lean into safety”.

Not all our students experienced safety in the course in the same way. One of the participants we interviewed after the course explained that she found that the course created safe spaces to think. Referring specifically to the weekly reflections, she says:

…that's the part that I found the most helpful, just having a safe space to think about your thoughts and jotting down those thoughts that you're thinking about, without freaking out about how this is going to impact your marks. That this is going to be a train smash in the end, because you're not using the right words. And that was the best part for me. (Sara, Participant)

Another participant linked the ideas of compassion and safety, asserting the importance of creating a safe environment

What I mean by that is a place where they can be their true authentic self, where they don't have to think that if I say something, it's not good enough, or that's not what I'm supposed to say but allowing them to make mistakes. For me that's more compassionate learning because if they can make a mistake then they learn from it. And then they can go back and see why they didn't get it right and they can change. (Kagiso, Participant)

Creating safe spaces in the course felt like a constant tightrope walk, because creating safety for one person sometimes meant creating less safety or even a sense of risk for someone else, as Shanali, one of the facilitators, reflects here:

During one break-out room session, I was hovering in the main Zoom room. Jo, who had been in a small group discussion, suddenly popped up in the main room. When I offered to help them back into their breakout room, Jo declined, saying the conversation in their group was developing in an uncomfortable way. While I immediately invited Jo to stay and chat with me, I don’t think I did enough to create a safe space for them. Yes, I asked a few questions and asked if they’d like me to take it further, but obviously Jo didn’t - it would have put them in an awkward spot. (Shanali, Facilitator)

While painfully aware that creating truly “safe spaces” in the course was impossible, we strove, with varying degrees of success, to create spaces that were differently safe for different people at different moments.

#### Promote Predictability and Consistency

A key goal for the course has been to create a flexible and responsive teaching and learning environment. However, sometimes we experienced this as being in tension with a key principle of trauma-informed pedagogy - the need to provide predictability and consistency. “Consistency in routine and expectations when designing our course expectations” (2020, p. 80) are critical aspects of course design and facilitation (Pica-Smith & Scannel, 2020). One of our students echoed this sentiment when they said:

I really appreciate how[..] we'll always have weekly announcements every Friday, [...] and all the new materials were being posted on Friday. [...] So for me, the whole idea of knowing that, okay, every Friday, I'm getting something new to read or to work on. And there's an announcement to that, it really helped me because when I go into the weekend, before I come to class, I'm already preparing myself for the next class session. And when we begin that class session, we are touching on the task or the activities that we had to work on. And for me, it was really helpful, because everything was [there] that I needed. (Kagiso, Participant)

The same student also appreciated that we uploaded materials and activities on schedule, describing this as “a major highlight”, and a practice that they intend to replicate in their context.

### Reciprocity

Creating the conditions for reciprocity in highly diverse learning spaces requires intentional design, supplemented by deliberate and reflective implementation. Teaching and learning interactions are, most often, characterized by dimensions of difference: differences in role–teachers and students, differences in knowledge and experiences, age, gender, and race may also come into play. In this section, we reflect on how reciprocity emerged in participants’ micro-contexts. We look first at how design elements of the course, including our focus on compassion and trauma-informed teaching, an emphasis on building connection through group work, and the modelling of inclusive behaviors fostered opportunities for reciprocity.

#### Making trauma visible and responding with compassion to create trust and respect

Following Imad’s recommendations, the course sought to adopt an intentional awareness of participant experiences, including trauma, that acknowledged both individual and collective experiences. Luvuyo noted:

In terms of the approach, we are postgraduate students, most of us are working. And apart from work, we also have other things that are going on in our family circles. So sometimes meeting deadlines is not always possible. But the instructors showed a great deal of understanding and empathy, you know, which was then very easy to reciprocate…So there was a lot of respect and trust that the instructors accorded us as students, which then made the course even more enjoyable, and, you know, worth one's time. (Luvuyo, Participant)

Luvuyo further noted that this experience of being respected and trusted in the microsystem of the course impacted his practice in his work context, another micro-system. As lecturers, our interactions with him prompted him to rethink his students’ motivations when they missed a deadline:

I shouldn't just dismiss that as an act of maybe disrespectfulness, negligence or not being serious about their work. But it's always important to understand what informed the fact that the student missed the deadline. Like I said earlier that students are human beings and they need to be treated as such in a dignified way. (Luvuyo, Participant)

The high levels of positive affect - trust and respect - allowed not only for a positive experience within the microsystem of the course, but also created conditions for change outside the course, in Luvuyo’s workspace. Effectively, his ability to engage in complex teaching and learning activities, independently outside the course microsystem developed, allowing him to change the properties of other microsystems in which he functions.

#### Building connections through group work to foster mutual self-help and peer support

As part of the structure of the course, participants belonged to a “home” group. This group was supported by a lecturer, and was encouraged to meet regularly to build connections and work together. Reflecting on the group work experience, Luvuyo noted “It helped us to understand better because our class with people from different cultures, different races, different parts of the country, different countries”. Furthermore, he noted:

when we were given an opportunity to be in the breakout rooms, … you could freely talk to your colleagues or talk to anyone, and it was almost like those activities were hoping to break those little silos that we're having in the main course. And then by sending us to these breakout rooms, we were then able to work together and understand each other and understand who we are and what we're doing. (Luvuyo, Participant)

Reciprocity can be seen in conversational turn-taking, information sharing, and the alternating of roles (Shelton, 2019). Furthermore, reciprocity is seen as an interest in the thoughts, beliefs, experiences, and feelings of others. Luvuyo’s comment points to how, in the design and implementation of the microsystem of the course, students had opportunities to exercise reciprocity in their dealing with course peers–to “talk freely”, and to connect across perceived boundaries of race and nationality.

#### Exposure to inclusive practices to empower participants’ voices and choices by identifying and helping build on their strengths.

The course offers participants an opportunity to explore two key activities that allow participants to do learning design work to better understand their students' and their own experiences and contexts–working with empathy maps and personas. Annika noted that the personas and the empathy maps enabled her to focus on who she was designing for:

this is the person I'm designing for. And this, this is the student I'm designing for. That's the facilitator, I'm designing for that facilitator. (Annika, Participant)

Similarly, Ester noted that the empathy map exercise encouraged her to respond to educators in her design differently, in a way that she had not previously. This demonstrates the extent to which Ester is developing “progressively more complex reciprocal interactions” with “the persons, objects, and symbols in [her] immediate external environment” (Bronfenbrenner, 2005, p. 6).

Furthermore, a participant pointed out that the ways in which the teaching team conducted themselves in the microcosm of the course created a positive affect and modelled reciprocity:

the kinds of people they are, they were so caring, and they were quite involved, you know, you'd add them in your comment, and they will get back to you in no time. I liked that… it doesn't matter how many students you have, you just make time and make each student feel like they are special. And then again, group teaching - they were a team, even though we're online, they would give each other time and they would take turns, they would invite each other to comment. (Lindo, Participant)

Lindo’s comment insightfully picks up on a difference within the lecturing team. While we share some common commitments, we also have some substantially different orientations. For example, Shanali leans towards courses that are more clearly mapped out in advance; Daniela is inclined towards more emergent course processes. We managed this tension by always inviting opposing perspectives into the space, and recognizing that apparently opposing ideas could simultaneously be true.

### Power

Closely related to the question of reciprocity is the question of power. Who holds the power in a course system? How can we share power more equitably? Recently, learning design has moved away from focusing on the designer as decision-maker and inviting others into the space of co-creation. Drawing on both community-oriented participatory design processes (Retegi et al., 2019), and the more higher education-focused “Student as Partners” movement (Cook-Sather, 2020), learning design has become concerned with how to involve learners in all the aspects of course design, both before course start, but also during course delivery, and into the evaluation/assessment of course design processes. Similarly to Bronfenbrenner, we see this as a continuum of equity in participation, where depending on the context, power can be distributed from the designer to the students, to a point where students can be significant decision makers (Pallitt et al., 2022). Context is important here, as many factors influence the way participants in a design process are able to share power and decision-making. This may have to do with experience and say level of studies, as Bronfenbrenner argues: “As we develop, and gain more skill, we may acquire more ability to control an interaction or a situation, and we may be granted more permission to exercise control” (Shelton, 2019, p. 35). However, especially in higher education, it may also have to do with access to students, departmental, institutional, or industry requirements, and also culture and positionality of students (Pallitt et al., 2022).

#### Awareness of power and positionality

One of the first steps in any process of co-design is a reflection on one’s own positionality and how this may impact voice and decision-making power (equityXdesign, 2016). One of the first activities participants undertake in EDN4501 is the drawing of an empathy map, as mentioned above, to reflect on participants’ and facilitators’ conscious and unconscious beliefs around teaching, but also one’s intersectional positionality in terms of for example race, class, gender, culture but also disciplinary context. Participants mentioned the empathy map as one of the activities that helped them be more reflective and aware of how their own design practices can either support or harm their learners (Morris, 2021), but also develop compassion for their learners and for themselves, as Ester reflects here:

…these empathy maps, [...] made me understand that I need to pay attention to the teacher's personality, [...] to improve the academic experience of students [...] I was able to use this empathy map to map my characteristics as a teacher, and those of my colleagues who teach the same subject with me. So it's important to know the teacher of this, this course, that we are designing and taking into consideration these characters. [...] because the way the design will be implemented depending on the teacher , [...], the personality of the person who designing or who is teaching will influence a course design. (Ester, Participant)

These empathy maps help us visualize and externalize our teaching beliefs, which in turn help us elicit feedback from others, on possible blind spots or unconscious biases we may hold, as Luvuyo suggests:

I think it takes a lot of reflection, and also soliciting feedback from other people. Once you get to understand or once I get to understand how I deal with people or how people view my practice, it then makes it easy for me to make changes here and in my dealings with people. [...]. So, when I give feedback, am I giving feedback that helps students reflect, learn and be better in the future? Or am I giving feedback that is completely undermining to students, destructive and not really helping them to do better? So those areas to me are very important and they can help in terms of displaying empathy, sorry, compassion on a regular basis in our practice. (Luvuyo, Participant)

#### Responsiveness and co-design to promote collaboration and mutuality

In our design of EDN4501, we tried to be responsive to our students’ needs, by modelling a ‘design-on-the-go’ approach. While we agreed on a rough structure for the course, we met regularly to design the individual course weeks, as Christine, one of the facilitators reflects here:

I have always felt that working on EDN is like building a plane whilst flying. We have a structure and directions but we allow for flexibility depending on student feedback, inputs and latest trends in online learning design. In 2021 in particular, having taken in the lessons from the global pandemic that hit us in 2020, we modelled a very agile and responsive design process. (Christine, Facilitator)

In the course, we regularly invited feedback that shaped the focus of each iteration of the course. The students responded positively to the level of responsiveness that was modelled by facilitators, as Lindo shares with us:

I liked what [the facilitators] were doing, you know, that whenever you're suggesting something, they would add it right there and then in front of you, and that will be part of the course you know, for the following groups, that slide was going to be used. I liked that. So it changed my mind that one has not doesn't have to be rigid, they have to be flexible. (Lindo, Participant)

While many of the students are similarly positive about the flexibility in course design as displayed, flexibility might also mean uncertainty for others, as Shanali, another facilitator reflects the costs of flexibility:

it distributes responsibility in the classroom context [...] In designing for flexibility, I believe that we run the risk of placing the responsibility of design and the responsibility of creating a learning experience too fully on the shoulders of our students. (Shanali, Facilitator)

## Learnings, open questions, and Tronto’s ethic of care

Bronfenbrenner’s three dimensions of relations within a microsystem assisted us in understanding how embedding trauma-informed pedagogies within our course design potentially supported the development of our participants within our EDN4501 course. Reflections from our course participants show that they felt an affective connection vis-a-vis the course, their peers, and facilitators which in turn motivated them to continue actively participating in the course in difficult times. The intentional weaving of trauma-informed pedagogies into our course design as well as throughout our course delivery allowed for the relations within the course microsystem to be respectful and caring and created the necessary safety for participants’ development. This sentiment is shared by Luvuyo in describing the approach by the facilitators as making “the course even more enjoyable, and, you know, worth one's time”.

The reciprocity dimension was further encouraged by the positive affective dimension in that course participants experienced high levels of engagement and support from their peers in their design groups as well as the course facilitators. The participants refer to talking freely and working together in groups, developing a mutual understanding of one another as well as the facilitators modelling reciprocity by inviting each other to comment on particular aspects of the course. Additionally, they felt that their voice counted and could see how facilitators flexibly responded to their needs and input into the course design. While it is tempting to turn to ideas such as race and gender to respond to historical and contemporary inequalities, in reality, these broad categories proved poor proxies for participants’ intersecting needs. Creating safety in a fully online course with spaces out of the line of sight was particularly challenging. The commitments of our students to co-creating safe spaces with us became critical, with a number of students being in contact with us to let us know if things weren’t going well for their peers, and recruiting our support for the challenge at hand.

As much as we found it generative to think with Bronfenbrenner’s model about how we designed and facilitated with care in our EDN4501 course, there are also elements of his theory that do not sit comfortably with us. In particular, there are two main tensions that we see, when we reflect on our work through his writings. First, we struggle with the focus on the dyad. We see our practice as involving many partners and stakeholders, who should all have a say in course design. While our immediate relationship is with our participants, there are also important relationships between participants, between participants and their home institution, their teaching and learning context, their discipline, their colleagues, their departments, their HODs, and their family environment. One could argue all of these are microsystems that interact with each other, but the analytic unit of the dyad does not hold up as well in relation to adult development. As Tim Fawns (2022) writes:

Teachers may lead the choreography, but they have only limited control over how the dance plays out [...]. Furthermore, teaching, in this model, is not just done by teachers but by a range of stakeholders in a combined, mutual effort [...]. Each stakeholder may hold different values and purposes, and have different contextual forces acting upon them. Ideally, this could inform collaborative design and orchestration of the course, as well as helping students to reflect on and reconfigure their learning environments. Including stakeholders such as administrators, learning technologists, or employers, in these discussions, could help to make the different elements more explicit and visible.

The equitable inclusion of all stakeholders remains an ongoing challenge.

Our second point of discomfort is the clearly hierarchical arrangement of power between Bronfenbrenner’s ‘Big P’ and the ‘small p’ in the dyadic relationship. Bronfenbrenner’s initial conceptualizing of reciprocity is grounded in a developmental dyad where the developing person is a child. While McLinden points to a body of emerging literature that applies ecological systems theory to higher education, the notion of reciprocity is almost entirely ignored in this literature in favour of the “nested” spheres approach. Considering course design through the joint lenses of care and reciprocity, we come to ask about the relationship between them. Is it possible to talk about care without also asking about, and indeed, requiring our students some degree of reciprocity? In a higher education contest, this might look like showing up “interested in how the other feels, or what the other thinks” (Shelton, 2019, p. 35). But it might equally look like taking turns to give feedback, alternating between being a presenter and an audience. What remains difficult to explore in this data set, is the kind of reciprocity that might exist between lecturers and their students.

We engage with professional adults with their own disciplinary expertise and knowledge, who come into a course that offers potentially new knowledge and frameworks but which needs their disciplinary expertise to add life to these new concepts. We see our relationships with our students as more equitable than the ones Bronfenbrenner describes. Here, Joan Tronto’s (1993, 2011, 2012) work on the ethics of care offers a useful caveat to Bronfenbrenner’s work.

Tronto sees care both as a disposition and a practice, as deeply relational, but as larger than the dyadic care relationships that, for example, Bronfenbrenner bases his work on. Care ethics involves all stakeholders in decision making and as such necessitates careful negotiation and often competing care needs. She also sees care as something we can get better at, but also as something that is potentially dangerous. Tronto (1993, 2011, 2012) identified in particular paternalism and parochialism as constituting the dangers of care. Paternalism stems from the powerful position that a caregiver holds in relation to a care receiver in meeting the latter’s needs, and may thus have an overdeveloped sense of his or her own importance in solving problems leading to the caregiver assuming that he or she is all-knowing about the needs of the recipient of care Tronto (1993). Ultimately, the recipient of care (the participant in our case) becomes infantilized in the relationship. As Tronto (1993, p. 170) puts it, "especially when the care-givers' sense of importance, duty, career, etc., are tied to their caring role, we can well imagine the development of relationships of profound inequality." From our perspective in this article, this would mean that we as learning designers and facilitators of learning are overconfident in 'knowing' or deciphering the participants' needs, and consequently, students may in the process become infantilized and relationships of inequality may be an inevitable result of such a situation. As a result of this, we are intentional in our efforts to involve our participants in the course design, to see them as equitable partners in design decisions, as partners that we can learn as much from as they from us. We hold different types of knowledge and expertise, and it is our responsibility as course designers, to create spaces, where this knowledge and expertise can be shared–a relationship between two big ‘P’s?

In our course, which deals with designing blended and online learning, the use of technology, in particular, is socially and materially situated and relates to the traditions, practices, culture, policy, and infrastructure in which they are embedded, as Fawns reminds us (2019). This speaks to another danger of care that Tronto talks about parochialism. The parochial and partial nature of care focuses only on those close to us rather than distant others or little-known strangers. To care only for those near to one, would in Tronto's (2013) consideration, be a form of privileged irresponsibility, in that it would exclude a concern for more distant others. In our case that would mean designing a course for students that are similar to us, embedded in a context similar to ours, dealing with students, similar to the ones we engage with. As we know, this is not the case. Our students are highly diverse and engage in a highly diverse context, with highly different students, traditions, practices, cultures, policies, and infrastructures. Not taking this into consideration would be another form of bad care. Iris Young's (2011) notion of a socially connected responsibility also encourages a morality that links responsibility for issues of social justice across distances to institutional and structural relations that are socially connected and affect all, thus breaking free of a parochial form of care and social justice. As such, the design decisions we make must take into account our diverse learners’ needs and expectations. This can only be achieved through an intense co-design process, with all stakeholders involved, and a sharing of our diverse experiences and expertise, while recognizing our own positions of power.

While we are highly committed to a trauma-informed, equity-oriented learning design process, we are not certain we succeeded in incorporating all of these perspectives into our design and subsequent facilitation. In attending to how deeply challenging experiences might emerge as trauma in our participants, we were also not always able to pay attention to how it showed up in us. Tronto helps us here, as she argues that in a care relationship responsibility for care is shared among all participants in the care relationship, and as such our participants could sometimes carry the burden of care for us. Bronfenbrenner’s ecosystem of micro-, meso-, macro-, and exo-systems, paired with the characterization of relationships according to three dimensions, namely affect, power, and reciprocity, offered a useful initial framework to examine relationships in the microsystem of classrooms. However, when examining particularly, the dimensions of power, we found Tronto’s ethics of care a useful lens through which to consider the nature of interactions.

## References

Arday, J. (2022). No one can see me cry: understanding mental health issues for Black and minority ethnic staff in higher education. Higher Education, 83(1), 79-102.

Badat, S. (2020). Reproduction, transformation and public South African higher education during and beyond Covid-19. Transformation: Critical Perspectives on Southern Africa, 104(1), 24-42.

Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Harvard University Press.

Bronfenbrenner, U. (2005). Making human beings human: Bioecological perspectives on human development. Sage.

Christensen, J. (2016). A critical reflection of Bronfenbrenner's development ecology model. Problems of Education in the 21st Century, 69, 22-28.

Cook-Sather, A. (2020). Respecting voices: how the co-creation of teaching and learning can support academic staff, underrepresented students, and equitable practices. Higher Education, 79(5), 885–901. <https://doi.org/10.1007/s10734-019-00445-w>

Czerniewicz, L., Agherdien, N., Badenhorst, J., Belluigi, D., Chambers, T., Chili, M., ... & Wissing, G. (2020). A wake-up call: Equity, inequality and Covid-19 emergency remote teaching and learning. Postdigital Science and Education, 2(3), 946-967. <https://doi.org/10.1007/s42438-020-00187-4>

Davids, N., & Waghid, Y. (2020). Higher education transformation, inequality and educational leadership-in-becoming. In I. Rensburg, S. Motala, & M. Cross (Eds.), *Transforming universities in South Africa: Pathways to higher education reform* (pp. 60–73). Brill Sense.

Department of Higher Education and Training. (2013). White paper for post-school education and training: Building an expanded, effective and integrated post-school system. Government Printers. <https://www.gov.za/documents/white-paper-post-school-education-and-training-building-expanded-effective-and-integrated>

equityXdesign (2019, January 30). Racism and inequity are products of design. they can be redesigned. Medium. Retrieved July 7, 2021, from <https://medium.com/equity-design/racism-and-inequity-are-products-of-design-they-can-be-redesigned-12188363cc6a>

Fawns, T. (2019). Postdigital education in design and practice. Postdigital Science and Education, 1(1), 132–145. <https://doi.org/10.1007/s42438-018-0021-8>

Fawns, T. (2022). An entangled pedagogy: Looking beyond the pedagogy—technology dichotomy. Postdigital Science and Education, 4, 711-728. <https://doi.org/10.1007/s42438-022-00302-7>

Gant, V., Cheatham, L., Di Vito, H., Offei, E., Williams, G., & Yatosenge, N. (2019). Social work through collaborative autoethnography. Social Work Education, 38(6), 707-720.

Guetl, C., & Chang, V. (2008). Ecosystem-based theoretical models for learning in environments of the 21st Century. *International Journal of Emerging Technologies in Learning*, *3*(1). <https://doi.org/10.3991/ijet.v3i1.742>

Harriman, N. W., Williams, D. R., Morgan, J. W., Sewpaul, R., Manyaapelo, T., Sifunda, S., ... & Reddy, S. P. (2022). Racial disparities in psychological distress in post-apartheid South Africa: results from the SANHANES-1 survey. Social psychiatry and psychiatric epidemiology, 57(4), 843-857.

Imad, M. (2020). Leveraging the Neuroscience of Now. Inside Higher Ed. Retrieved from <https://www.insidehighered.com/advice/2020/06/03/seven-recommendations-helping-students-thrive-times-trauma>

Imad, M. (2021). Transcending adversity: Trauma-informed educational development. To Improve the Academy, 39(3). <https://doi.org/10.3998/tia.17063888.0039.301>

Imad, M. (2022). Trauma-informed education for wholeness: Strategies for faculty and advisors. New Directions for Student Services, 2022(177), 39-47. <https://doi.org/10.1002/ss.20413>

Leibowitz, B., V. Bozalek, P. Rohleder, R. Carolissen, & L. Swartz. (2010). “‘Ah, but the whiteys love to talk about themselves’: Discomfort as a Pedagogy for Change.” Race, Ethnicity and Education, 13(1), 83–100.

McLinden, M. (2017). Examining proximal and distal influences on the part-time student experience through an ecological systems theory. Teaching in Higher Education, 22(3), 373-388.

Minahan, J. (2019). Trauma-informed teaching strategies. Educational Leadership, 77(2), 30-35.

Morris, J. (2021). A problem-posing learning design. Retrieved from <https://www.seanmichaelmorris.com/problem-posing-learning-design/>

Motala, E., Vally, S., & Maharajh, R. (2018). Education, the state and class inequality: The case for free higher education in South Africa. New South African Review, 6, 167-182.

Motta, S. C., & Bennett, A. (2018). Pedagogies of care, care-full epistemological practice and ‘other’ caring subjectivities in enabling education. Teaching in Higher Education, 23(5), 631-646.

Noddings, N. (2003). Caring: A feminine approach to ethics and moral education. University of California Press.

Noddings, N. (2005). The challenge to care in schools: An alternative approach to education. (2nd ed.). Teachers College Press.

Pacansky-Brock, M., Smedshammer, M., & Vincent-Layton, K. (2019). Humanizing online teaching to equitize higher education. Retrieved from <https://www.scribd.com/document/557053965/HumanizingOnlineTeachingToEquitize-PrePrin>

Palalas, A. (2019). Mindfulness for human-centred digital learning. Argentinian Journal of Applied Linguistics, 7(2), 110-125.

Pallitt, N., Gachago, D., & Bali, M. (2022). Academic development as compassionate learning design: Cases from South Africa and Egypt (Version 2). University of Cape Town. <https://doi.org/10.25375/uct.20028431.v2>

Pica-Smith, C., & Scannell, C. (2020). Teaching and learning for this moment: How a trauma informed lens can guide our praxis. International Journal of Multidisciplinary Perspectives in Higher Education, 5(1), 76-83.

Retegi, A., Sauvage, B., Predan, B., Tomás, E., Schosswohl, G., Kaltenbrunner, M., & Draganovská, D. (2019). The co-create handbook for creative professionals. Co-Create Consortium. <http://www.cocreate.training>

Roy, R., & Uekusa, S. (2020). Collaborative autoethnography: “Self-reflection” as a timely alternative research approach during the global pandemic. Qualitative Research Journal, 20(4), 383-392. <https://doi.org/10.1108/QRJ-06-2020-0054>

Ruswa, A. S., & Gore, O. T. (2021). Rethinking student poverty: perspectives from a higher education institution in South Africa. Higher Education Research & Development, 41(7), 2353-2366. <https://doi.org/10.1080/07294360.2021.2014409>

Shelton, L. (2019). The Bronfenbrenner primer: A guide to develecology. Routledge.

Stahlke Wall, S. (2016). Toward a moderate autoethnography. International Journal of Qualitative Methods, 15(1). <https://doi.org/10.1177/1609406916674966>

Tronto, J. (2010). Creating caring institutions: Politics, plurality, and purpose. Ethics and Social Welfare, 4(2), 158–171. <https://doi.org/10.1080/17496535.2010.484259>

Tronto, J. (2011). A feminist democratic ethics of care and global care workers: Citizenship and responsibility. In R. Mahon, & F. Robinson (Eds.), Feminist ethics and social policy: Towards a new global political economy of care. UBC Press.

Tronto, J. (2013). Caring democracy: Markets, equality and justice. New York University Press.

Vlasov, A. (2021). Neoliberalism and higher education in South Africa. Academia Letters, Article  
3081. <https://doi.org/10.20935/AL3081>

Walker, M., & Mathebula, M. (2020). Low-income rural youth migrating to urban universities in South Africa: opportunities and inequalities. Compare: A Journal of Comparative and International Education, 50(8), 1193-1209.

World Bank. (2022). The World Bank in South Africa.

Yazan, B., Pentón Herrera, L. J., & Rashed, D. (2023). Transnational TESOL practitioners’ identity tensions: a collaborative autoethnography. TESOL Quarterly, 57(1), 140-167. <https://doi.org/10.1002/tesq.3130>

Young, I. (2011). Responsibility for justice. Oxford University Press.

Zembylas, M., & Papamichael, E. (2017). Pedagogies of discomfort and empathy in multicultural teacher education. Intercultural Education, 28(1), 1-19.

[1] For a very accessible introduction, see Maha Bali’s blog post, Pedagogy of Care: Covid-19 Edition May 28, 2020. <https://blog.mahabali.me/educational-technology-2/pedagogy-of-care-covid-19-edition/>

[2] Coloured in the South African context refers to a heterogeneous South African ethnic group, with diverse ancestral links. Ancestry is likely to include some combination of European settlers, Khoi and San and Xhosa people, political exiles and slaves imported from the Dutch East Indies, and migrants from various Asian countries (or a combination of all).

Read this online at <https://edtechbooks.org/jaid_12_2/designing_systems_with_care__responding_to_inequality_in_an_online_course_in_south_africa>